



# 2021-2025 CAPITAL IMPROVEMENTS PROGRAM

*Approved by the Board of Trustees January 27, 2021*

*Resolution 2021-05*

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# 1 | Introduction

## BOARD OF TRUSTEES

Chair	Craig Treneff Appointed by Franklin County Commissioners
Vice-Chair	Marlon Moore Appointed by the City of Columbus
Trustee	Trudy A. Bartley Appointed by the City of Columbus
Trustee	Cathy DeRosa Appointed by the City of Dublin
Trustee	Jennifer Gallagher Appointed by the City of Columbus
Trustee	Steven D. Gladman Appointed by City of Grandview Heights
Trustee	Thomas Grote Appointed by the City of Gahanna
Trustee	Amy M. Landino Appointed by the City of Columbus
Trustee	Timothy Skinner Appointed by the City of Columbus
Trustee	Julie Sloat Appointed by the City of Columbus
Trustee	Michael H. Stevens Appointed by the City of Columbus
Trustee	Kumi Walker Appointed by City of Bexley

*\* As of January 1, 2021*

## ADMINISTRATION

President/CEO	Joanna M. Pinkerton	Deputy CEO	Emille Williams
Chief of Transit Operations	Matthew Allison	Chief Development Officer	Terry Foegler
Chief Innovation Officer	Sophia Mohr	Chief Financial Officer	Angel Mumma
Chief People Officer	Sindy Mondesir	Chief Legal/General Counsel	Christina Wendell
Chief Marketing & Experience Officer	Alexis Yamokoski	AVP, Government Affairs & Corp. Communications	Patrick Harris

*\* As of January 1, 2021*

## ANNUAL CAPITAL IMPROVEMENT PROGRAM PROCESS

The Capital Improvement Program (CIP) represents a long-term financial plan, including resources available to fund the proposed expenditures. It establishes priorities and serves as a planning document for COTA's investment in capital infrastructure. However, the approval of the annual CIP does not appropriate money. The annual Resolution authorizing appropriations for the upcoming calendar year provides the actual funding authority for the capital projects.

While the 2021 – 2025 Capital Improvements Program represents the first comprehensive five-year capital plan developed by the organization, there was no established timeline followed in its' preparation. In planning for future CIP's, the following timeframes will be established:

Timeframe	Action
TBD	Board of Trustees annual goal setting retreat
TBD	Leadership Team annual goal setting retreat
March 1	Memo distributed to Staff providing direction in preparation of the upcoming five-year CIP
April 30	Staff submittal deadline for CIP project
May	Review of all CIP requests by the Capital Planning Committee
June	Leadership Team review of the CIP requests
July	Presentation of the Five-Year CIP to the Strategic & Operational Planning Committee
July	Presentation of the Five-Year CIP to the Board of Trustees for Approval
September*	Presentation of the Five-Year CIP to the Strategic & Operational Planning Committee
September*	Presentation of the Five-Year CIP to the Board of Trustees for Approval
December	Approval of the Resolution authorizing appropriations for the next fiscal year, including the first year of the adopted five-year CIP

\*If additional time is needed

## FINANCIAL GUIDELINES

The Five-Year Capital Improvements Program (CIP) establishes the Authority's blueprint for investment in its' capital infrastructure. This document is used as a tool to help ensure the Authority's long and short-term capital investments are made in the context of careful consideration of the Authority's needs as well as the resources available to fund all projects.

The financial guidelines used in the preparation of the CIP will provide assurance the Authority can meet, in a full and timely manner, both the debt service obligations and all other obligations competing for the available resources. It is our objective to complete as many needed capital improvement projects as financially possible while maintaining flexibility and the ability to adapt to changes as they occur.

There are several key guidelines that are utilized in determining the Authority's fiscal capacity to complete capital projects over the next five years. These are summarized as follows:

- The five-year plan will be updated annually in accordance with the annual budgetcalendar.
- 20 percent of the Authority's permanent quarter percent sales tax revenue shall be made available to fund capital improvements.
- Of the total sales tax revenue that is utilized for capital improvements, 60 percent of that amount will be allocated to fund long-term debt, and 40 percent to fund projects and capital expenses on a cash basis. The reasons for this guideline are:
  - a) Funding projects with long-term debt obligates the use of public funds for 20-30 years in most cases. The more long- term debt which is incurred now significantly reduces the options available in the future to fund needed projects.
  - b) Paying cash for projects where financially possible (pay-as-you-go financing) increases future flexibility. In utilizing pay-as-you-go financing, revenue projections and estimated fund balances will be reviewed and evaluated to assure that sufficient reserves are maintained.
  - c) It is not economical to issue debt for some projects.
  - d) The estimated life of some projects does not meet the criteria to issue long- term debt.
- The Authority's philosophy for projecting sales tax revenue is to be conservative, given that it represents over 80% of the authority's operating revenue.
- Pursuant to the Authority's Debt Policy, the maximum amount of debt service shall not exceed 75% of the allocation of sales tax revenue allocated to pay debt service. This limitation provides an additional buffer in the event that sales tax revenues fall short of projections or that an unexpected increase in interest rates occur.
- As a matter of general policy, COTA will pursue federal, state and local assistance in the form of grants, low-interest loans, cost-sharing, etc.in order to fund projects to serve the community.

## REVENUE PROJECTIONS

Funding for the 2021-2025 CIP is derived from four main sources: sales tax revenue, grants, interest income, and a one-time transfer from the Operating Fund.

### SALES TAX REVENUE

	2021	2022	2023	2024	2025
<b>Estimated Sales Tax Revenue</b>	\$ 134,148,220	\$ 135,489,702	\$ 136,844,599	\$ 140,265,714	\$ 143,772,357
Revenue for Capital Projects (10%)	\$ 13,414,822	\$ 13,548,970	\$ 13,684,460	\$ 14,026,571	\$ 14,377,236
Available for Cash Funding (40%)	\$ 5,365,929	\$ 5,419,588	\$ 5,473,784	\$ 5,610,629	\$ 5,750,894
Long-Term Financing (60%)	\$ 8,048,893	\$ 8,129,382	\$ 8,210,676	\$ 8,415,943	\$ 8,626,341

### GRANT REVENUE

A significant portion of 2021 – 2025 CIP is funded through grant revenue; grants that have already been received but not utilized, and projected grant revenue anticipated to be received during the five-year period. The largest and most reliable source of federal grant funding is through the Urbanized Area Formula Funding program (49 U.S.C. 5307) (“5307 funding”), which makes federal resources available to urbanized areas for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census.

In addition to 5307 funding, Federal resources are available under the Bus and Bus Facilities program (49 U.S.C. 5339) (“5339 funding”). These funds can be used for replacement, rehabilitation and purchase of buses and related equipment as well as the construction of bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.

For the purposes of allocating grant funding to the projects incorporated within the 2021 – 2025 CIP, grant revenues that had been previously awarded yet unspent were first allocated, with the estimated grant awards for 2021-2025 being based on a five-year average.

Other funding for capital projects includes existing grants from the Ohio EPA, the Mid-Ohio Regional Planning Commission (MORPC) and the state of Ohio.

Of the \$185.6 million in grant revenue utilized to fund the 2021 – 2025 CIP, \$97.8 million or nearly 53% is based on future estimates of 5307 and 5339 funding.

## DEBT

This section provides information on the long-term debt obligations projected to be outstanding during each year of the 2021 – 2025 CIP.

	2021	2022	2023	2024	2025
Principal Outstanding (as of 1/1)	\$0	\$ 16,200,000	\$ 34,209,638	\$ 37,618,779	\$ 36,753,924
Proposed New Debt	\$ 16,200,000	\$ 18,349,068	\$ 4,150,000	\$0	\$ 5,384,698
Principal Retired	\$0	\$ 339,430	\$ 740,859	\$ 864,855	\$ 908,098
Principal Outstanding (as of 12/31)	\$ 16,200,000	\$ 34,209,638	\$ 37,618,779	\$ 36,753,924	\$ 41,230,524

All debt service is projected to be repaid using sales tax revenue.

The projects proposed to be funded through the issuance of long-term debt, as well as the amount to be financed and year of financing is as follows:

*McKinley Facility Renovations (\$23,824,068)*

\$6,600,000 – 2021  
\$14,574,068 – 2022  
\$2,650,000 – 2023

*Land Acquisition (\$4,800,000)*

\$900,000 – 2022  
\$1,500,000 – 2023  
\$2,400,000 – 2025

*Fields Avenue Renovations (\$9,600,000)*

\$9,600,000 – 2021

*East/West Corridor (\$2,984,698)*

\$2,984,698 – 2025

*Rickenbacker Mobility Center (\$2,875,000)*

\$2,875,000 - 2022

The issuance of long-term debt to finance capital projects may not necessarily occur in the year reflected in the CIP. In order to minimize issuance costs, projects may be consolidated into one or more bond packages and issued at an appropriate time. For example, one bond package for the McKinley Facility Renovation will likely be issued encompassing the entire \$23.8 million in costs not funded through other sources as opposed to three annual bond issues in the amounts noted above.

Approval of the annual CIP does not authorize the Authority to issue bonds for any project. Resolution(s) specifically authorizing the sale of bonds to finance a particular project in a specified dollar amount will be brought forward for consideration by the Board of Trustees when appropriate.

## 2 | Vehicles & Equipment



	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
<b>Vehicles</b>					
Electric Buses	\$2,200,000	\$8,800,000	\$0	\$0	\$0
Annual Bus Buy	\$16,537,400	\$10,618,070	\$17,011,000	\$17,521,330	\$18,047,000
Non-Revenue Vehicles	\$390,950	\$295,000	\$340,000	\$221,000	\$228,000
Mobility Vans	\$2,367,700	\$2,438,650	\$2,511,900	\$2,587,000	\$2,665,000
COTA//Plus Vehicles	\$1,041,000	\$1,267,000	\$1,305,000	\$1,344,000	\$1,384,500
<b>Total Vehicles</b>	\$22,537,050	\$23,418,720	\$21,167,900	\$21,673,330	\$22,324,500
<b>Equipment</b>					
Miscellaneous Equipment	\$85,000	\$90,000	\$95,000	\$95,000	\$95,000
Scrubber	\$0	\$21,000	\$0	\$0	\$-
Sweeper	\$59,000	\$0	\$0	\$0	\$0
Skid Steer	\$71,500	\$0	\$0	\$0	\$0
Flatbed with Crane	\$192,500	\$0	\$0	\$0	\$0
<b>Total Equipment</b>	\$408,000	\$111,000	\$95,000	\$95,000	\$95,000
<b>Total Vehicles &amp; Equipment</b>	\$22,945,050	\$23,529,720	\$21,262,900	\$21,768,330	\$22,419,500

## Electric Buses

The funds provided for in 2021 and 2022 will allow for the procurement of ten electric buses and necessary infrastructure for this pilot program. Two buses will be received in April 2021 and will be tested during all weather conditions, with an additional eight anticipated to be received in late 2022 or early 2023.

COTA has been moving from a diesel fleet to CNG; however, there is wide speculation that electric propulsion buses will be the choice in the future. Other transit entities are also moving forward with pilot programs or investing in electric vehicle technology.

## Annual Bus Buy

Beginning in 2013, COTA began the process of transitioning its fleet from diesel to CNG, with the intent to replace 28 coaches annually so that all diesel vehicles were replaced by 2025. Funding requested provides for the purchase of up to 28 vehicles each year (offset by the 10 electric buses purchased in 2021 and 2022), resulting in an entire fleet comprised of either CNG or electric vehicles.

The annual coach replacement program is based on replacing coaches at the end of their useful FTA life of 12-years/500,000 miles.

## Non-Revenue Vehicles

Non-revenue vehicles include vehicles used by Transit System Supervisors, vehicle maintenance, operations managers, facilities, security, planning, and others in support of COTA's operations. These vehicles get operators where they need to go, allow supervisors to respond to issues, get mechanics on the scene of breakdowns, and meet many other critical daily requirements. This program was deferred in 2019 (partially) and 2020 (in its entirety). Funding in 2021 provides for 8 previously deferred vehicle purchases. All of these replacements are well beyond their planned service life of 5 years/100,000 miles.

## Mobility Vans

Funding each year between 2021 and 2025 will provide for the replacement of up to twenty (20) vans used by Mobility Services to serve ADA customers. These replacement vehicles will replace models that have exceeded their useful FTA life of 5 years or 150,000 miles.

Five additional vans are included in the 2021 budget, reflecting the replacement of vehicles that were transferred to COTA/Plus service in 2019. These vehicles were ordered in 2020 but due to manufacturer production delays, are not available for delivery until 2021.

## COTA/Plus Vehicles

As of November, 2020, the COTA/Plus fleet consisted of 12 vans (6 ADA compatible and 6 non-ADA passenger vans) supporting zones in Grove City and Westerville. According to COTA's Short Range Transit Plan (SRTP), the expected and planned expansion takes the fleet size to 70 vans with 40 in service during 2021, 55 in service in 2022, and 70 in service in 2023 and thereafter. In order to meet the plan goals, COTA needs to acquire 28 additional vans to meet the business need (60% non-ADA & 40% ADA capable). In 2022 and 2023, funding is requested to acquire an additional 15 vans annually. During 2024, the first group of 2018 COTA/Plus vans will have reached their end of life and need replaced. The forecast includes 15 replacements annually starting in 2024.

## **Miscellaneous Equipment**

This annual allocation is to ensure funds are available should miscellaneous equipment need to be purchased throughout the year which are not otherwise planned for.

### **Scrubber**

Funding in 2022 is to replace a McKinley Avenue facility scrubber that will have exceeded its useful life.

### **Sweeper**

Funding in 2021 is to replace a McKinley Avenue facility sweeper that has exceeded its useful life. The equipment is routinely out of service and is unreliable to assist in the cleanliness of our facilities.

### **Skid Steer**

Funding in 2021 is to replace a skid steer that is at its end of life.

### **Flatbed with Crane**

In order to more safely and efficiently remove and install the increasing number of shelters and stop amenities, a flatbed trailer with crane will be purchased in 2021.



	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
<b>Maintenance</b>					
Annual Pavement Maintenance Program	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000
Pedestrian Access/ADA Connections	\$209,000	\$88,000	\$0	\$77,000	\$0
<b>Total Maintenance</b>	\$1,109,000	\$988,000	\$900,000	\$977,000	\$900,000
<b>Renovations/Improvements</b>					
Linden Transit Center Roof Replacement	\$0	\$0	\$0	\$192,500	\$0
25 E. Rich Street Overhead Doors	\$0	\$0	\$93,500	\$0	\$0
McKinley Renovations	\$23,400,000	\$37,000,000	\$2,650,000	\$0	\$0
4242 Stelzer Rd. – Replace RTUs	\$0	\$93,500	\$0	\$0	\$0
33 N. High Street Improvements	\$1,500,000	\$1,300,000	\$1,200,000	\$1,200,000	\$0
1333 Fields Avenue Improvements	\$0	\$0	\$1,500,000	\$1,500,000	\$1,500,000
Near East Transit Center RTU/BAS	\$0	\$0	\$121,000	\$0	\$0
Fields Avenue Renovation	\$10,750,000	\$0	\$0	\$0	\$0
Spring Street Restroom	\$100,000	\$0	\$0	\$0	\$0
1325 Essex – Pole Barns	\$80,000	\$385,000	\$0	\$0	\$0
Reynoldsburg Park & Ride	\$0	\$0	\$2,200,000	\$0	\$0
Worthington Turnaround and Layover	\$0	\$550,000	\$0	\$0	\$0
Easton and Linden CEC Upgrades	\$0	\$300,000	\$0	\$0	\$0
Transit Stop Improvement Program	\$792,500	\$625,000	\$323,500	\$0	\$0
Park & Ride Signage	\$500,000	\$500,000	\$0	\$0	\$0
Mobility Hub Infrastructure	\$50,000	\$50,000	\$0	\$0	\$0
Mobility Lab Upgrades	\$620,000	\$0	\$0	\$0	\$0
Mobility Innovation Testing (MIT)	\$0	\$92,900	\$0	\$130,900	\$0
Rickenbacker Mobility Center	\$1,000,000	\$5,750,000	\$0	\$0	\$0
EV Chargers	\$329,850	\$543,300	\$509,200	\$0	\$0
Shelters	\$323,400	\$323,400	\$323,400	\$83,000	\$83,000
Mound Street Pylon	\$66,000	\$0	\$0	\$0	\$0
BRT Shelters	\$0	\$0	\$241,000	\$0	\$
BRT Pylon	\$0	\$66,000	\$0	\$0	\$0
<b>Total Renovations/Improvements</b>	\$39,511,750	\$47,579,100	\$9,161,600	\$3,106,400	\$1,583,000
<b>Total Facilities</b>	\$40,620,750	\$48,567,100	\$10,061,600	\$4,083,400	\$2,483,000

## Annual Pavement Maintenance Program

COTA maintains approximately 40 acres of pavement at 33 Park & Ride and turnaround locations in addition to six transit centers and two transit terminals. This funding allows for pavement to be maintained at a safe operating condition in a predictable phased approach.

## Pedestrian Access / ADA Connections

Funding is requested in 2021, 2022 and 2024 to provide ADA accessibility and pedestrian connections at new and existing bus stop locations. Funds will be used to provide short distances of an accessible pedestrian path where one does not exist for accessibility to and from the stop location. This will allow for ADA compliance and improved accessibility.

## Linden Transit Center Roof Replacement

Due to age the roof at the Linden Transit Center, the roof is anticipated to need replacement in 2024.

## 25 E. Rich Street Overhead Doors

Funds are programmed in 2023 for the phased replacement of overhead doors at the South Terminal due to the doors being at the end of service life.

## McKinley Renovations

The scope of this project includes the renovations of the McKinley facility for COTA administration, maintenance and operations, training facilities, paint and body, brake and tire, and CNG inspection. The current building conditions are significantly dated given that they are 40-years old. Design is expected to be completed in 2021 with construction commencing in the same year, lasting through 2023.

## Replacement RTU at 4242 Stelzer Road

Funding is requested in 2022 for end of life replacement of the Roof Top Unit (RTU) HVAC equipment at the Easton Day Care Center, located at 4242 Stelzer Road.

## 33 North High Street Improvements

Funding is requested each year between 2021 and 2024 for modernization of COTA's administrative offices at 33 North High Street. A master space plan was completed in 2020 to reflect the departmental needs of a changing organizational structure working toward a new vision for COTA. The requested funding renovates two to three floors annually of the ten-floor building and allows for end of service life replacement of mechanical systems that were largely installed new in 2009.

## 1333 Fields Avenue Improvements

In 2023 through 2025, funds are requested for the Fields Avenue facility for end of life replacement of vehicle maintenance equipment and building components not replaced in the 2019/2020/2021 CNG project.

## Near East Transit Center RTU/BAS

2023 funds are requested for the phased replacement of Roof Top Unit (RTU) HVAC systems as well as integration of the Near East Transit Center mechanical systems into COTA's Building Automation System (BAS) to enable remote monitoring and more responsive, predictive maintenance capabilities.

## Fields Avenue Renovation

COTA is entering year 8 of a 12-year commitment to convert the bus fleet to CNG, while phasing out the diesel buses. COTA has taken advantage of the data collected by our strategic partners as well as taking advantage of the federal GGE CNG rebate incentives, both of which have proven CNG to be more cost effective and cleaner fuel than diesel. To provide efficient operations and balance our fleet requirements between the two COTA facilities (Fields Avenue and McKinley Avenue), a new CNG station at Fields Avenue is necessary to support a regular bus purchase program. The funds programmed in 2021 are for the final phase of the project.

## Spring Street Restroom

The single Spring Street Terminal restroom does not provide adequate facilities for peak operational needs. This request is for the detailed design, permitting, and construction of an additional restroom. Along with the restroom amenities, it is recommended the current signage information be updated with the new COTA logo.

## 1325 Essex Pole Barns

Funds are requested in 2021 (design) and 2022 (construction) for a storage facility at COTA's Essex Street & Remote maintenance facility. The increased number of transit shelters and the addition of large BRT shelter components has created a need for more covered storage along with space to assemble and maneuver shelter systems for transport or delivery.

## Reynoldsburg Park & Ride

Funding in 2023 will provide for the renovation of the most utilized COTA Park & Ride to accommodate the number of buses that must be able to queue up at this location. The current turning circle only allows for approximately three buses at time with the last bus not being able to pass the first two. High frequency and express routes share the Park & Ride location making for a mix of stop and layover lengths. The proposed renovation increases the parking capacity, creates a building for operator amenities that do not exist today such as restrooms and small break area, and creates a long bus pull-off that will accommodate current and future operations with causing conflicting or unsafe bus operations. The design was completed in 2019.

## Worthington Turnaround/Layover

2022 funds are requested for construction of a future layover/turnaround to support fixed route bus operations in the Worthington area. COTA continues to work with the City of Worthington to identify a suitable layover location.

## Easton and Linden Customer Experience Center Upgrades

2022 funds are requested for customer experience related improvements at the Easton and Linden Transit Centers. These improvements will include the installation of interactive kiosks for information and trip planning as well as yet to be determined fare purchase options.

## Transit Stop Improvement Program

This project is a direct effort to improve the customer experience in line with COTA's vision and Strategic Plan. Deploying amenities such as shelters, lighting, and real time communication devices at the most highly utilized stops on the network directs COTA's resources to impact as many customers as possible. This project aims to install shelters at all stops that meet COTA's planning criteria for shelters – 35 daily boardings. These stops account for 70% of COTA trip originations. To achieve this, COTA plans on adding 50 new shelter locations per year in 2021, and 2022. New shelter locations include ADA loading areas, a concrete shelter pad, and a trash receptacle location.

## Park & Ride Signage

Funding in 2021, 2022 and 2023 will provide for standardized monumental signs at all COTA owned Park & Rides. The new sign design will incorporate the new COTA logo and will consider renewable energy sources for backlighting to improve the customer experience when using our Park & Ride facilities. There are currently 16 Park & Rides where COTA owns the property, all of which have different styles of signage.

## Mobility Hub Infrastructure

COTA has been engaging multiple private mobility companies in a coordinated effort to enhance both private and public transportation in central Ohio. Some mobility strategic partners may include: Rome, Share, Bird, Lyft, COGO, Lime, Spin, Flix, and Yellow Cab. A placeholder is requested in 2021 and 2022 for any infrastructure needed for future project plans. Some initial location discussions are East Main, Northland, Broad Street, and Franklinton.

## Mobility Lab

Funding requested will provide for state-of-the-art technology for collaboration, innovation, and communication in COTA's GO! Mobility Lab. These essential technology components will bring the vision of COTA's collaborative shared work space to fruition.

## MIT

Funding in 2022 and 2024 will allow for COTA to launch one or more MITs (Mobility Innovation Tests). MIT's use low cost and/or temporary materials to demonstrate known strategies to improve mobility in coordination with various municipal partners and/or private interests. Tests will focus on improving COTA transit speed, reliability, and accessibility, but be multimodal in spirit.

## Rickenbacker Mobility Center

A new, mixed use Rickenbacker Transit Center is being proposed to serve the major regional logistics hub and jobs center that is the greater Rickenbacker Airport area. The proposed 10-acre lot location will be near the intersection of Groveport and London-Groveport Road.

Funding in 2021 provides for the design of the facility with construction programmed in 2022. COTA has received \$1 million in funding from the State of Ohio for the construction, with other funding partners anticipated, lowering COTA's total contribution.

## EV Chargers

The scope of this project is to provide electric vehicle charging stations at selected COTA locations. These charging stations will be accessible to the public. EV chargers help reduce the emission levels and promote a cleaner environment. A total of three to four locations will be evaluated each year for the placement of EV Chargers. In coordination with MORPC, a goal of 10 locations is to be reached.

## Shelters

Funding in each year of the five years will provide for the purchase and installation of shelters. These shelters are end-of-life replacements for existing shelters as well as new shelter installations at new locations determined by planning. Planning is establishing up to 50 new locations based on ridership for the next 3 years. Funding in 2024 and 2025 is for up to 15 locations which need replacement, new locations etc.

## **Mound Street Pylon**

This project has been established for the placement of a COTA CMAX Pylon to be placed at Mound Street and High Street in downtown Columbus. This stop is currently without a pylon due to ongoing road construction. As an established BRT spot, this location should be distinguishable and provide real-time display. This request for funds will cover any installation, permitting, minor engineer and design, and construction; the pylon itself has already been purchased.

## **BRT Shelters**

Funding provided in 2023 will be used to purchase replacement BRT shelters, to be used as needed on the CMAX line.

## **BRT Pylon**

Funding provided in 2022 will be used to purchase replacement BRT pylons, to be used as needed on the CMAX line.



	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Allocation for IT	\$0	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
Data Closet Upgrades at Near East Transit Center	\$52,000	\$0	\$0	\$0	\$0
Smartyard AVM	\$1,176,000	\$0	\$0	\$0	\$0
Trapeze Upgrades	\$744,000	\$0	\$0	\$0	\$0
Datacenter Management	\$100,000	\$0	\$0	\$0	\$0
Enterprise Phone Upgrade	\$0	\$234,000	\$0	\$0	\$0
Copier and Printer Replacement	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Digital Bus Stop Signs	\$0	\$1,400,000	\$0	\$0	\$0
Vehicle Connectivity Upgrade	\$1,000,000	\$0	\$0	\$0	\$0
ITS System Upgrade	\$300,000	\$0	\$0	\$0	\$0
RMIS Upgrade	\$200,000	\$0	\$0	\$0	\$0
Core Infrastructure Upgrades	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000
Trapeze Vehicle Intelligence	\$422,000	\$0	\$0	\$0	\$0
Exterro Software	\$50,000				
ERP System Upgrade Implementation	\$4,000,000	\$0	\$0	\$0	\$0
Bus Stop Manager Software	\$0	\$250,000	\$0	\$0	\$0
Fare Management System	\$1,515,000	\$0	\$0	\$0	\$0
Fleet Security Camera and Recorder System	\$5,000,000	\$0	\$0	\$0	\$0
Data & Analytic Hardware and Software	\$120,000	\$100,000	\$80,000	\$0	\$0
CRM / Salesforce	\$400,000	\$0	\$0	\$0	\$0
New Employee App	\$300,000	\$0	\$0	\$0	\$0
<b>Total Technology</b>	<b>\$17,979,000</b>	<b>\$6,334,000</b>	<b>\$4,430,000</b>	<b>\$4,350,000</b>	<b>\$4,350,000</b>

## Allocation for Information Technology

This annual allocation is to earmark funds for projects that have not been identified beyond the first year of the CIP.

### Data Closet Upgrades

Within the Near East and Linden transit centers are rooms which house both critical technology to transmit data within these buildings, as well as chemicals, cleaning supplies, and items which are a potential threat to the technology in the room. This request is to build a small area to which the technology housed to eliminate any potential risk that exists.

### Smartyard AVM

Funding requested in 2021 will complete the final phase of this multi-year project which will leverage technology to communicate with the operators and provide automated instruction as to where the coaches need to be parked.

### Trapeze Upgrades

This is a multi-year project based upon the technology available through Trapeze and will provide upgrade to the following systems: Info-IVR, PASS-IVR & PASS-Web, Blockbuster; PASS-Service (Service Infractions) and OPS Web.

### Datacenter Management

Funding allocated in 2021 will replace and upgrade systems to allow maximum performance for both internal and external customers. COTA has made a significant investment in its switching, routing and wireless infrastructure. These technologies permeate our work regardless of being in the office or at home, they impact our customers' lives on a daily basis with WiFi and the supporting technologies on the mobile fleet. The breath of our network has grown greatly to support the technology requirements of both our employees, guests, and customers. The new technology proposed in this project will provide COTA IT staff with better management and visibility to our core backbone.

### Enterprise Phone Upgrade

This project will finalize the installation of new telephony features (Spanish IVR) and consolidation of VOIP services into a single integrated instant messaging solution and allow for multipoint video conference between locations and external parties.

### Copier and Printer Replacement

The current fleet of copiers and printers are either at or near their end of life cycle. While we are making attempts to curb printing within the organization, an allocation will be set aside each year to replace printers if they break down and are deemed as necessary and are cost prohibitive to repair.

### Digital Bus Stop Signs

Funding in 2022 will provide real-time arrival information at locations outside the BRT corridor, where stops lack the power and connectivity to deploy the same style of signs.

## Vehicle Connectivity Upgrade

In 2016 COTA made an investment in 4G LTE devices on the vehicle fleet. These devices are dated and restrict the capabilities of our vehicles. As IT seeks to provide a better customer experience by being able to proactively handle issues with Wi-Fi, Trapeze, or the fareboxes, our current technology actively restricts our access when a vehicle is not in one of the barns. The proposal is to replace the current bus routers to allow for more efficient access to the devices on our network. By completing the upgrade not only will we be able to provide better support for our riders, we will also be able to explore new technologies for a variety of areas including safety and security with the potential for "Live Look In" on various platforms in real time.

## ITS System Upgrade

This project will replace existing Trapeze equipment on coaches to V8 so that all coaches have the same equipment. This cost includes installation and required adapters. Upgrading the necessary equipment will provide a consistent experience for our operators, staff and customers across the COTA service area.

## RMIS Upgrade

The funds in 2021 will provide for the purchase of new risk management software. The current system has been in use for several years and has several limitations which have resulted in an increase in administrative labor and additional storage space in COTA organizational and personal drives.

## Core Infrastructure Upgrades

Each year, some infrastructure must be replaced do to the nature of aging hardware. Additionally, as demand has increased, when replacements occur, scaling must be included to handle the additional workload. As COTA continues to become more data and analytics driven, the computational, storage, and networking requirements grow exponentially.

The focus in 2021 will be on refreshing the remaining servers that were not upgraded in 2020. We will seek new technologies to improve performance and availability to both our internal and external customers. We will also be installing additional switches, UCS servers and updating wireless access points to handle the increased load of new SMRT technologies as well as for projects like the vehicle CCTV offloads. In addition to these components, we are also proposing the uplift of our core storage environment to handle the increased load of data analytics. We will also be updating our firewall protection to increase system security. Finally, we will be adding additional capacity to our current storage systems to replace aging disks and increase available resources. Additional spend includes upgrading our highly available storage with a pool of SSD disks to allow for data warehousing operations, replacement of existing server infrastructure that will exceed 5 years of age, the purchase of multi-gig switches to move data within the organization without creating bottlenecks from our wireless infrastructure.

## Trapeze Vehicle Intelligence

This project is to assist in the modernization of the maintenance program for the COTA fleet of transit vehicles. This program will gather and analyze data from each vehicle's network, and assist in pro-actively maintaining vehicles; increasing mean time between failures; and forecasting maintenance requirements.

## Exterro Software

The Exterro software provides an on-line platform that will modernize and streamline the way that public record requests are received, tracked and responded to. It will also modernize the internal legal service request process. Currently all requests are received in paper format or via email and provided in the same manner. Paper files are maintained for auditing purposes. The Exterro platform allows requests to be made

electronically through a portal. The request is assigned to appropriate staff to complete and requestors can receive documents through that same portal securely. All files can be maintained electronically for audit purposes. This greatly improves the current process for any requests for videos, which are currently burnt to a DVD and provided through the mail or in-person pick-up. A method to provide public record requests electronically is especially important given COVID-19. This streamlined process will also increase efficiency as all current requests are tracked and maintained manually.

## **ERP System Upgrade**

COTA is currently operating its ERP system using Infor Lawson's on-premise system for Financials, Supply Management, Human Resources Management and Payroll, and Enterprise Asset Management. The funding requested in 2021 is to upgrade all applications to version 11 and shift from an on-premises environment to a cloud-based environment. The implementation will provide an opportunity for COTA to improve upon its business processes and implement the new version using industry best practices and ensure complete understanding of relationships between product lines (for example, the integration of supply management with the accounts payable function in Financials). From an accounting and financial reporting standpoint, the upgrade will allow COTA to take advantage of a governmental accounting structure that is available in version 11.

In addition to the technology consulting services, Infor will provide a holistic suite of services including organizational change management consulting and end-user training consulting services. These services will better enable COTA to manage its operations using Infor software long-term, and in a sustainable way as the organization's needs evolve.

## **Bus Stop Manager**

2022 funding is requested for implementation of the Bus Stop Manager product from Trapeze. This package will enable planning and facilities teams to tie together ridership data, repair history, condition data, and a host of other data points such as accessibility, amenities, and site photos for COTA's network of over 3,000 transit stop locations. Currently, stop inventories are managed by spreadsheet – as more stops are added, more amenities are added, and more unique stops and BRT systems are added with special maintenance requirements, stop management software will be critical for safe and efficient operations

## **Fare Management System**

The Board of Trustees approved a contract with Masabi in October 2020 for an update to the fare management system. This expected to be fully expended in 2021, with funding programmed in alignment with the executed contract.

## **Fleet Security Camera and Recorder System**

The camera systems deployed throughout COTA's vehicles are heavily relied upon by numerous internal business groups and external partners. Our ability to reliably capture high quality video of criminal acts, motor vehicle crashes, passenger accidents, and employee policy violations is vital to our ability to perform our mission, and deliver best in class service to our community. This project is intended to replace our current vehicle camera system recorders, cameras and components, server and client software, and all necessary wireless accessories to a more sustainable and reliable platform.

## **Data & Analytic Hardware and Software**

Funding provided will allow COTA to engage with external consultants to assist with the configuration and setup of the chosen software package to extend our data and analytics capabilities.

## **CRM Analysis / Salesforce**

Funds will be used to conduct a needs analysis and assessment to determine the appropriate solution and implementation needed to enhance the customer experience. The analysis will leverage internal subject matter expertise and external consultants with industry experience. The outcome will identify the appropriate business processes and technical solutions for the desired customer experience.

## **Employee App**

As part of achieving organizational excellence, COTA has programmed funds in 2021 for the initial build-out of an employee application that will serve as a more efficient and direct way to communicate with employees, especially those on the front line. However, cost consideration and future maintenance is under consideration as to whether this will be an extension of current COTA software, or investment in new software.



	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Strategic Land Purchases	\$10,450,000	\$1,800,000	\$3,000,000	\$0	\$3,000,000
Cleveland Avenue TOD	\$0	\$2,000,000	\$0	\$0	\$0
East/West Corridor Design/Engineering	\$20,000,000	\$0	\$0	\$0	\$0
East/West Corridor Construction	\$0	\$0	\$3,000,000	\$88,000,000	\$90,000,000
Property Development Opportunities	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
<b>Total Development</b>	<b>\$30,700,000</b>	<b>\$4,050,000</b>	<b>\$6,250,000</b>	<b>\$88,250,000</b>	<b>\$93,250,000</b>

## Strategic Land Purchase

2021 funding is requested to complete a strategic land purchase related to a possible downtown convergence of existing and future transit routes. Future years funding is requested to support other acquisitions that may be geared toward land purchases at key development nodes related to corridor projects, future operating facilities, right-of-way assembly, or otherwise rare opportunities that may pose significant future benefit to COTA.

## Cleveland Avenue TOD

2022 funding is requested for the local match associated with a potential federal grant related to Transit Oriented Development (TOD) along the Cleveland Avenue (CMAx) corridor. If successful in winning this grant, COTA's local match would contribute to transit supportive development at one or more key nodes along the corridor.

## East/West Corridor Design, Engineering and Construction

This project is related to the design and construction of an East/West Corridor High Capacity Transit (HCT) system serving the Central Ohio Region. The initial scope will consist of design efforts, coordination with multiple municipalities and utilities, and extensive public engagement to determine the most efficient route layout – a “locally preferred alternative” (LPA). Federal processes for participation in the competitive Capital Improvements Grant (CIG) program guide this project.

Early estimates reflect nationwide averages on typical BRT projects only. The project development and construction estimates will be revised as the LPA progresses and the scope of the project begins to form.

Funding for design are programmed in 2021. Funds must be allocated up-front to fund the multi-year Project Development effort. This is a guarantee that the transit agency has funds available and assigned to the design effort at the time of entry into the CIG program for project development. Work will include an alternatives analysis resulting in defining the LPA, financial planning, entry into project development, and the start of the design effort working toward a 30% design. This will continue to include extensive municipal coordination, ROW investigation, utility coordination, and EPA investigations toward an environmental impact determination for the project.

A significant milestone in 2022 will be submission of a financial plan detailing the reasonable methods for producing the local match for the federal grant.

Design will be completed in 2023, at which time FTA will rate the project for a final determination on inclusion in the CIG program. Utility relocation work is projected to commence along with construction beginning in 2024 and will include the roadway, station construction and specialized facilities and amenities.

## Transit Oriented Development Support

This funding will help aid in providing transit opportunities and/or improvements to local areas and municipalities. The work involved could be for pavement repairs, sidewalks, other site civil work, and/or mobility opportunities to non-owned/leased properties. Additional work could be for the establishment of concrete bus pads for local municipalities.

## COTA Property Development Opportunities

This annual allocation is to provide funding that can be utilized if unplanned opportunities arise during the course of the year on existing COTA properties.



	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Allocation for Innovation Projects	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
<b>Total Administration</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>

## Allocation for Innovation Projects

This annual allocation is to provide funding that can be utilized for unplanned projects or initiatives that arise during the course of the year.



	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
<b>Capital Revenues</b>					
Allocation from Operating Fund	\$ 45,000,000	\$0	\$0	\$0	\$0
Sales Tax Allocation – Cash	\$ 5,365,929	\$ 5,419,588	\$ 5,473,784	\$ 5,610,629	\$ 5,750,894
Sales Tax Allocation - Debt	\$ 8,048,893	\$ 8,129,382	\$ 8,210,676	\$ 8,415,943	\$ 8,626,341
Grants	\$ 55,398,477	\$ 36,286,171	\$19,895,724	\$ 38,829,693	\$ 37,393,801
Investment Income	\$0	\$ 596,587	\$ 260,758	\$ 127,792	\$ 47,455
Debt Service Proceeds	\$ 16,200,000	\$ 18,349,068	\$ 4,150,000	\$0	\$ 5,384,698
Other	\$ 7,500,000	\$ 2,875,000	\$ 2,250,000	\$ 66,000,000	\$ 67,500,000
<b>Total Revenue</b>	<b>\$137,513,299</b>	<b>\$ 71,655,797</b>	<b>\$40,240,942</b>	<b>\$118,984,056</b>	<b>\$124,703,190</b>
<b>Capital Expenditures</b>					
Vehicles & Equipment	\$ 22,945,050	\$ 23,529,720	\$21,262,900	\$ 21,768,330	\$ 22,419,500
Facilities	\$40,620,750	\$48,567,100	\$10,061,600	\$4,083,400	\$2,483,000
Technology	\$ 17,979,000	\$ 6,334,000	\$ 4,430,000	\$ 4,350,000	\$ 4,350,000
Development	\$ 30,700,000	\$ 4,050,000	\$ 6,250,000	\$ 88,250,000	\$ 93,250,000
Administration	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
	\$113,244,800	\$ 83,480,820	\$43,004,500	\$119,451,730	\$123,502,500
Debt Service	\$ 405,000	\$ 1,608,157	\$ 2,555,091	\$ 2,745,794	\$ 2,880,411
<b>Total Expenditures</b>	<b>\$113,649,800</b>	<b>\$ 85,088,977</b>	<b>\$45,559,591</b>	<b>\$122,197,524</b>	<b>\$126,382,911</b>
Surplus/(Shortfall)	\$23,863,499	\$(13,433,180)	\$(5,318,649)	\$(3,213,468)	\$(1,679,722)
<b>Beginning Fund Balance</b>	<b>\$0</b>	<b>\$23,863,499</b>	<b>\$10,430,319</b>	<b>\$5,111,670</b>	<b>\$1,898,202</b>
<b>Ending Fund Balance</b>	<b>\$23,863,499</b>	<b>\$10,430,319</b>	<b>\$5,111,670</b>	<b>\$1,898,202</b>	<b>\$218,480</b>

**Capital Expenditures  
2021 - 2025**



