2020 - 2024 CAPITAL IMPROVEMENT PLAN

INTRODUCTION

Providing cost-effective, safe, clean, and reliable public transportation services depends on the maintenance and upkeep of the Authority's capital assets. The capital-intensive nature of the Authority's operations make long term financial planning indispensable. In turn though, the ability to fund these capital needs must continually be weighed against the financial resources required to support the regular operations of the Authority.

The 2020–2024 Capital Improvement Plan (CIP) continues the Authority's ongoing process to align available financial resources with programmed capital projects directed towards achieving a State of Good Repair (SOGR) throughout its

vehicle fleets, capital assets, and infrastructure. Effective planning helps facilitate this process by providing a framework to schedule capital improvements based on the condition or SOGR of capital assets, the availability of financial resources, and the evaluation of requested capital projects. The current process prioritizes capital infrastructure requests and needs and aligns its ongoing capital program with available Federal, State, Local and non-traditional funding resources.

The financial demands to meet a SOGR throughout the Authority's capital assets remain at a high level, but the decision to balance scheduled activities with funding limits the number of budgeted projects in any given year end, in essence, has moved the CIP to a five-year plan.



ORGANIZATION OF THE CAPITAL IMPROVEMENT PLAN

The first year reflects the Board approved RTA Capital and RTA Development Fund budget appropriations for the FY 2020 capital projects. The following four years of the CIP highlight planned, but not yet approved, out-year capital projects of the Authority. Capital projects and their associated budgets included in these out-years are subject to change based on financial circumstances, revised project time- lines or in capital priorities.

A summary of the Authority's capital assets will help put these projects into perspective. In FY 2019, an extensive evaluation of the Authority's rail fleet (HRV/LRV) was completed. It was determined that the HRVs have an estimated 5 years life remaining, while the LRVs have 10 years remaining life. The cost for replacement of the of the rail vehicles is estimated at \$102 million for 34 HRVs and \$96 million for the fleet of LRVs. An additional \$42 million is needed to accommodate the Authority's current rail facilities and infrastructure. By the end of 2019, the Authority will have identified approximately \$108.0 million for this project, which include ODOT's Ohio Transit Partnership Program (OTP2) \$5.0 million and \$29 million local match. Development of a Transit Asset Management (TAM) database providing a basis to prioritize the needs of capital assets based on their condition.

The planning process for the capital program includes the method for establishing budget appropriation authority. It explains the chain of events involved and its relationship to the development of the Transportation Improvement Program (TIP). The Capital Improvement Financial Policies and Criteria help focus the plan on the priority areas that guide decision making during the Capital Improvement process. The Financial Capacity section explains Federal, State and Local funding



sources and debt management as it relates to the Authority, as well as the impact of capital investment decisions on the Operating Budget.

The final section is devoted to the details of the 2020 Capital Improvement Budget and the four out-years of the overall 2020-2024 CIP. Smaller, locally-funded projects included in the RTA Capital Fund are listed in Department order, while the larger, grant and/or locally funded capital projects included in the RTA Development Fund projects are organized by capital project categories and reflect specific funding sources, supporting those projects.

CAPITAL ASSETS

The principal share of expenditures planned within the 2020–24 CIP focuses on attaining a State of Good Repair (SOGR) for the Authority's capital assets. Highlights include completion of the last ADA Key Station program, an on-going track rehabilitation plan, reimbursement of preventive maintenance and other expenses generated within the Operating Budget, and the maintenance and upgrade of capital assets throughout the Authority. It continues to emphasize the backlog of needed capital improvements throughout the Authority's infrastructure and facilities. The age of the Authority's primary facilities, including their history in terms of original in-service dates, rehabilitations, and additions are shown below in Figure 85. These facilities and others are briefly discussed on the following pages.

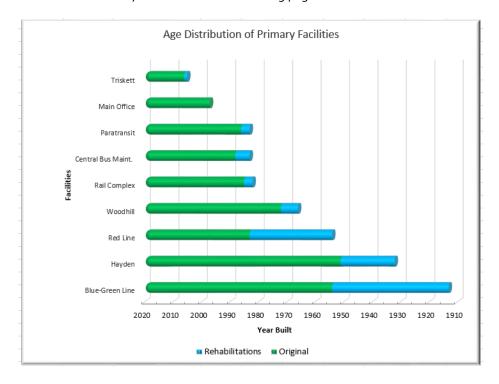


Figure 85: Age Distribution of GCRTA Primary Facilities



FACILITIES

BUS DISTRICT GARAGE FACILITIES

The Authority has two active large bus district garages:

TRISKETT GARAGE is located at 13405 Lakewood Heights Boulevard. It was originally put into service in 1958 with a new replacement garage opening in 2005 at this location. West side service and trolley operations are operated from this garage. Installation of a CNG Fueling station was completed in FY 2019 to fuel future CNG fleets to operate out of the Triskett Garage. The design for the Triskett Garage maintenance bay has been completed as well, with construction to begin in FY 2020.

HAYDEN GARAGE at 1661 Hayden Avenue was constructed in 1932, with two major additions in 1952 and 1968. It was rehabilitated in 1998 and a SOGR project that included the replacement of six hydraulic lifts, fire suppression and HVAC systems, and 16 overhead doors was completed in FY 2014. Installation of a CNG fueling station was completed in FY 2015 and work was complete to address remaining CNG related building improvements in FY 2018. In FY 2019, 3 CNG Dispensers were replaced with new units to resolve safety issues with the original units. East side service and the Health Line buses are operated from this garage.

CENTRAL BUS MAINTENANCE FACILITY

The Central Bus Maintenance Facility (CBM), at 2500 Woodhill Road, was put into service in 1983 and houses a remanufacturing division, diagnostic center, bus service & maintenance area, and central inventory stores. Various facilities improvements and lift replacements, funded from a Federal SOGR grant award, were completed in 2014. CNG building improvements at this facility were completed in FY 2018. In FY 2019, paint booth exhaust fans were installed to meet CNG compliance issues installation of four fall protection units to help improve safety efforts while maintaining vehicles.

CUSTOMER SERVICE CENTERS

The GCRTA has two Customer Service Centers located at the Tower City Rapid Station Rotunda in downtown Cleveland and on the first floor of the GCRTA Main Office Building. In FY 2019, construction on Lost & Found and the construction on the new Customer Service Center was completed with minor punch list items remaining for FY 2020.

MAIN OFFICE BUILDING

The Main Office Building, a renovated warehouse in the downtown Cleveland Warehouse District, located at 1240 West Sixth Street, opened in September of 1997. This facility houses the administrative functions of the Authority and the Authority's Central Communication Center.

PARATRANSIT FACILITY

The Paratransit Facility, at 4601 Euclid Avenue, was completed in 1983 and houses all Paratransit functions including scheduling, dispatching and both revenue and non-revenue vehicle repairs. In FY 2014, a propane fueling station was installed at the Paratransit Garage and in FY 2015 related propane building enhancements and a 24-month rehabilitation project, including various facilities and equipment upgrades were completed.

PARK-N-RIDE LOTS

One objective of the GCRTA is to provide rail and/or bus Park-N-Ride services for major commuter corridors within Cuyahoga County. As such, the GCRTA provides over 4,400 parking spaces at 23 rapid stations. RTA also operate three large bus Park-



N-Ride lots in Strongsville, North Olmsted, and Westlake. These three stations provide a combined 2,527 parking spaces for customers.

PASSENGER SHELTERS

There are approximately 1,000 bus shelters throughout the Greater Cleveland area, providing a place to wait for buses. GCRTA currently offers an "Adopt a Shelter" program, providing members of the community to help the authority maintain these shelters.

RAIL DISTRICT COMPLEX

The Rail District Complex, located at 6200 Grand Avenue, went into service in late 1982. It houses the Rail Headquarters, the Central Rail Maintenance Facility (CRMF), which handles all mechanical, body, and electrical repairs for the rail fleet, the Central Rail Service Building, the RTA Rail Yards, and is the location of the Authority's Transit Police Headquarters. In FY 2014, a total roof replacement project for these facilities was completed. In FY 2015, a multi-year Central Rail Lift Rehab program was completed to replace and upgrade rail car lifts at this facility to ensure safety and to meet operational needs. In FY 2016, the Exterior Carwash and Track Crossing was repaired and replaced to ensure continual operation of the car wash bay and transfer table, minimizing service interruptions of down cars.

TRANSIT CENTERS

Transit Centers provide heated customer waiting areas and roadways to allow several bus routes to meet and transfer passengers. RTA has four Transit Centers located in Fairview Park at Westgate Shopping Center, Maple Heights at Southgate Shopping Center, Parma at the Parmatown Mall, and Stephanie Tubbs Jones Transit Center, near Cleveland State University.

WOODHILL GARAGE FACILITY

The Woodhill Garage opened in 1966 as a bus garage and remained in service until 1998. It is currently being used as a training facility and houses the Authority's Print Shop operations. In 2015, this facility under went rehabilitation to remodel a portion of the facility to expand work areas for the electronic repair shop, operators training classroom, and print shop equipment enhancements.

RAIL SYSTEM

RIGHT-OF-WAY

RTA owns 65 miles of rail lines (32.5 miles of joint rail) used for the operation of its rapid transit system including twenty-seven miles for light rail and thirty-eight miles for heavy rail. To address potential issues related to MAP-21 and the new FAST Act requirements, the Authority is involved in a multi-year program that will establish SOGR needs throughout its rail system that will help to prioritize on-going rehabilitation programs. The right-of-way of the Rail System includes 63 track bridges, 53 passenger stations, 17 propulsion power substations, overhead electrical catenary wires, signals, switches, and associated rail infrastructure all of which are included in a regular maintenance program to maintain a state of good repair.

BLUE, GREEN & WATERFRONT LINES (LIGHT RAIL)

The Blue, Green and Waterfront Lines comprise the RTA's Light Rail (LR) System. From the downtown Tower City Station, the Blue and Green lines run on shared track east to Shaker Square, where they separate. From there, the Blue Line follows Van Aken Boulevard to its termination at Warrensville-Center Road, while the Green Line travels along Shaker Boulevard



and terminates at Green Road. The Waterfront Line runs from Tower City through the Flats East Bank development area, near First Energy Football Stadium and the Rock and Roll Hall of Fame, and terminates at the Muni Parking Lot.

Most of the 13.5-mile LR lines, with the exception of the 2.2-mile Waterfront Line extension added in 1996, were originally constructed between 1913 and 1920. The Authority's Light Rail System has 35 stations; including three it shares with the Red Line at Tower City, the East 34th/Campus and East 55th Street Stations. The entire Light Rail System, including tracks, infrastructure, and stations were reconstructed between 1980 and 1984.

In FY 2016-2018, nine Light Rail Crossings were rehabbed and completed in 3 phases on the Green Line. This included reconstruction of two Green Line Stations at Warrensville/Shaker Blvd. and Lee Road/Shaker Blvd. and the reconstruction of East 116th St. Light Rail Trunk Line Station. In FY 2019 the Farnsleigh Station reconstruction was completed.

RED LINE (HEAVY RAIL)

The RTA's Heavy Rail (HR), or Red Line, runs on joint tracks for 19 miles from its eastern terminal at the Louis Stokes Station at Windermere, located in East Cleveland, through the Tower City Station in downtown Cleveland to its western terminal at Cleveland Hopkins International Airport. There are 18 stations along the line, eight east of downtown, one at Tower City in downtown Cleveland, and nine west of downtown. Fifteen of the Red Line stations were originally constructed between 1954 & 1958. The remaining three stations, including the Line's western terminal at the Cleveland Hopkins Airport, were put into service in 1967.

During FY 2018-Present, improvements continued along the Redline, at West 30^{th} – West 98^{th} Street Station and the West 117^{th} – Westpark Station. During this period the Westpark Diamond was completed and also the emergency repair to the S-



Curve Retaining Wall. The final Red Line track reconstruction will continue in FY 2020 to complete track rehabilitation of track from Westpark Station to Airport Tunnel.

The 2020-24 CIP of the Authority continues to commit a significant amount of resources towards achieving a SOGR in its Light & Heavy Rail Systems infrastructure including the reconstruction, rehabilitation and upgrades to train stations, power substations and electrical systems, train controls.

BRIDGES/TUNNELS

The GCRTA is responsible for the maintenance and inspection of 63 track bridges owned within its right-of-way. This includes four station bridges, eight highway bridges, nine service/access bridges, one transit tunnel, five fly-over bridges on the Red Line, and the ¾ mile long viaduct bridge over the Cuyahoga River. The GCRTA also has joint responsibility for inspecting and maintaining the substructures of 100 city and county highway bridges that span the rail tracks. A majority of these bridges were built before 1930 and now require major repairs.

The out-years of this CIP includes engineering & design services and reconstruction work on four track bridges, the first construction phase on the Viaduct Bridge, track bridge rehabilitation of W.117th Street, Ambler Avenue, Canal Road and Waterfront Bridge plus an on-going inspection program to monitor the condition of each track bridge owned by the Authority.



TOWER CITY STATION

The Tower City Station, is the only downtown station for both the Heavy (Red Line) and Light Rail (Blue, Green, and Waterfront Lines) systems and operates as the main connection point for the Authority's rail lines. Originally constructed and opened in 1930 for passenger rail service, modified in 1955 to accommodate the Authority's rail services, it was completely reconstructed in the late eighties as part of an overall re-development of the entire Tower City complex.

In FY 2016, \$8.9 million was programmed for the rehabilitation of Platform 7 (to serve as a temporary station) and the reconstruction of Track 8 (west-bound track) was completed at 2016 fiscal year end. Construction work was also completed at Tower City Station to replace two sets of escalators (long and short) in time to host the Republican National Convention in mid-2016. FY2020 will see the continuation of track work at Tower City Station with tracks 10 & 13 planned to undergo reconstruction.

REVENUE VEHICLE FLEETS

CONVENTIONAL BUSES

There were 430 vehicles in the GCRTA bus fleet at the end of 2019. Compared to the prior year, 9 vehicles have been retired or are in the process of being replaced under the Bus Improvement Program (BIP). During FY 2019, no new buses were placed into service. At the end of FY 2019, the Authority's total fleet mix includes 430 vehicles, of which 139 40-foot diesel CNG buses; 114 40-foot diesel transit buses; 40 60-foot articulated diesel buses; 21 60-foot articulated hybrid bus rapid transit (BRT) vehicles; 21 diesel commuter buses; 3 60-foot diesel articulated BRT buses; 12 35-foot diesel trolley buses. The FTA defines the useful life of a bus to be the lesser of 12 years or 500,000 miles and the average age of the large bus fleet was 7.6 years at the end of FY 2019. The age distribution of the Authority's large bus fleet is shown in Figure 86 on the next page.

The Authority's goal is to replace approximately 1/14 of its large bus fleet every year (25 to 35 buses) and to accommodate any increases in peak vehicle requirements. This hasn't been possible until recent budget years due to the lingering impact of the recession and other higher priority capital needs of the Authority, but the 2020–24 CIP continues a planned bus replacement program, begun in 2013, that will continue until the entire fleet is replaced. In FY 2020 the authority is expecting the delivery of 12 MCI Commuter Coaches and 25 40 ft CNG buses be placed in service.

A regular bus replacement program will:

- Reduce operating maintenance costs;
- Improve the reliability of the fleet;
- Distribute maintenance efforts more evenly;
- Reduce the Authority's vulnerability to large groups of bus defects; and
- Prevent one-time large purchases.



Age Distribution of Large Bus Fleet

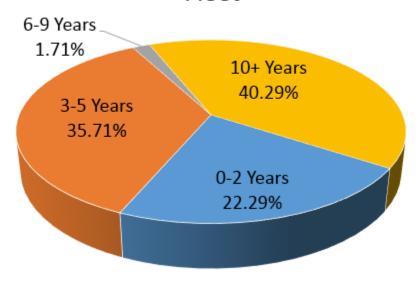


Figure 86: Age Distribution of Bus Fleet

Programmed orders in future years of this CIP depends upon the availability of non-formula funding and competitive grants, but they are expected to further lower the average age of the Authority's big bus fleet to approximately 6.2 years at the end of 2024. All current and future ordered GCRTA buses are compliant with the Americans with Disabilities Act (ADA) and, with the exception of the trolley buses and BRT vehicles, are equipped with bicycle racks.

PARATRANSIT BUSES

In 1991, the Board adopted a policy to provide for the integration of fixed rail and bus services with Paratransit services into a network of services comparable to what is available to the general public. This continuing policy is designed to maintain full system accessibility and provide compliance with ADA and U.S. Department of Transportation Regulations.

The Authority's 20 Paratransit Program transports senior citizens and disabled persons on an advanced reservation basis. Including propane fueled vehicles there are 80 ADA compliant, wheelchair-equipped buses in active service in the Paratransit fleet with an average age of 3.9 years at the end of FY 2019. In FY 2013 – 20 propane buses and 3 Dodge Caravans were placed into service, FY 2016, 20 MV-1 vehicles, and in FY 2017-30 gasoline Paratransit buses, 7 25-foot Jitney buses were added. Future replacement plans have a total of 13 vehicles being replaced in 2020 that will bring the average life of the Paratransit fleet to 3.7 years old by the end of 2020.

RAIL VEHICLES

RTA owns a combined 90 heavy and light rail vehicles for its rail operations. The age of the Authority's rail fleet ranges between 34 and 38 years old. In recent years a midlife overhaul of the Authority's Light Rail (LR) and Heavy Rail (HR) fleets was completed, and in prior year 2015 an interior overhauls was implemented and completed. Both mid-life projects were initiated to economically extend the useful life of the Authority's rail vehicle fleets approximately 12 years beyond their normal expected operating life of 30 years, but in the near future, the Authority will be facing significant replacement costs for both of its rail fleets.



There are 40 active Tokyo HR vehicles, purchased in 1984 and 1985, which operate on the Red Line. The peak service requirements for the Red Line during rush hours are 24 cars, while special events require 36 cars. The 34 active Breda LR vehicles, acquired between 1981 and 1983, run on the Blue, Green, and Waterfront Lines of the Authority. Vehicle requirements for LR peak rush hour service are 9 cars, and 28 cars are required for special event services. During the pillar studies, a value of \$240 million was determined as the cost needed to replace both rail car fleets. HRV cars were stated to have around 5 years of useful life left while LRV cars were determined to have around 10 years of useful life left before replacement is needed. In 2020, GCRTA will begin the process of procuring new HRV's by acquiring engineering consultant services to assist in developing technical specifications for an RFP to purchase new cars. Services will also include program management, quality assurance, technical support, car-builder management, testing and integration.

CAPITAL IMPROVEMENT PLANNING CYCLE

The Capital Improvement Planning Cycle is longer than the operating budget process due to the preparation, scope, and cost involved with the projects. Grant-funded projects must be identified well in advance of planned execution so that applications can be filed and approved. Furthermore, construction projects must be preceded by preliminary engineering and design work to determine the scope and specifications of the project.

The Calendar of Events (figure 12, page 29&30) depicts the revised Capital Improvement and TIP planning cycles for the 2020-24 Capital Improvement Plan (CIP). The process began in August, 2018 when the Office of Management and Budget (OMB) reviewed the budgeting policies and set the parameters for the Capital Budget, and concluded in May 2019 with the Board Adoption of the recommended 2020-24 CIP followed by submission to NOACA for inclusion in the TIP/STIP.

At the start of the CIP development process, an initial review is done by OMB and various departments to assess the status of projects included in the current year's Capital Improvement Program Budget. This review includes any variances with programmed project timelines, availability of grant funds, and an inter-departmental review of data and resources required for the upcoming CIP. The Authority's Divisions and Departments are then provided a detailed set of instructions and follow-up meetings with staff are held. Meetings include a review of the information required for capital project requests, clarification of Department and Division requests and an overview of anticipated funding for the upcoming capital budget year.

In February, 2019, OMB staff and the Capital Program Working Group (CPWG) reviewed all submitted capital project requests for consistency with the needs of the Authority's infrastructure, funding availability, the Authority's Long Range Plan, the current Transportation Improvement Plan (TIP), and the annual strategic planning process. Projects were then prioritized in accordance with RTA's capital priority areas- state of good repair, health & safety, mandates, environmental impact, and ridership transit oriented development and in turn forwarded to the Capital Program Oversight Committee (CPOC) which includes the Executive Management Team of the Authority. The CPOC was formed to develop and monitor the Capital Program and to authorize the five-year Capital Program with projected grant, local and non-traditional revenue sources. After initial meetings with the Department Directors at the division level and with the General Manager and the Executive Management Team at the organizational level, the recommended Capital Budgets for the 2020-24 CIP were finalized.

A new budget schedule was set to better align with the NOACA Board review to assure funding would be in place. The CIP for 2020-24 was finalized and presented to the Board of Trustees' Operational Planning & Infrastructure Committee in May for discussion and review at which time approval was given.

TRANSPORTATION IMPROVEMENT PROGRAM

The planning cycle for grant-funded projects begins with the development of the Authority's CIP for incorporation into the Transportation Improvement Program (TIP). The TIP documents transportation related capital projects within the region



for which Federal funding will be requested. Projects must appear in the TIP to receive funding consideration. The Northeast Ohio Area-wide Coordinating Agency (NOACA) is responsible for bi-annually preparing the four-year plan for this area with GCRTA responsible for preparing the transit component of the plan for Cuyahoga County.

The GCRTA Long-Range Plan and its related five-year Strategic Plan guides the CIP and TIP. These plans articulate the types of services and markets the Authority expects to serve. The Authority's preparation of projects for inclusion in the TIP began in May when departments request revisions, additions, or deletions to the previous year's CIP. The Budget Calendar of Events reflects the TIP process and how it corresponds to the Capital Improvement planning cycle. Capital project requests are prioritized by the Capital Projects Working Group (CPWG) and, in turn, are submitted to the Capital Program Oversight Committee (CPOC) for review and approval.

The proposed Capital Budgets for the upcoming calendar year are presented to the Board of Trustees committees; further defined depending on funding allocations for the new Federal fiscal year and any revisions to the original Capital Budgets will be submitted for Board approval in May and through NOACA, incorporated into the current four-year TIP prior to the new Federal Fiscal Year. Revisions to existing projects and/or amendments to add new projects are submitted on a quarterly basis for review and inclusion in the revised TIP/STIP. The budget process culminates when the Board approves the budget and establishes appropriation authority for the upcoming Fiscal Year. With respect to the Capital Budget, appropriation authority varies depending on which of the two Capital Improvement Funds, either the RTA Capital or the RTA Development Fund, supports the project.

CAPITAL BUDGET APPROPRIATIONS

The RTA Capital Fund includes capital projects funded from the Sales & Use Tax revenue. In general, these capital projects are less than \$150,000, have a useful life of less than 5 years, are routine in nature, and usually directly tie to daily operations. This Fund is subdivided into Routine Capital projects, for the acquisition of non-revenue vehicles and equipment, and Asset Maintenance projects, that include minor rehabilitation projects at Authority facilities.

The RTA Development Fund primarily includes capital projects with a value greater than \$150,000, a useful life greater than five years, and includes all of the large multi-year rehabilitation/reconstruction and expansion projects of the Authority. All grant-funded projects are accounted for in the RTA Development Fund and projects in this Fund are normally supported through various combinations of Federal and State of Ohio grants, local matches for these grants, debt service and/or 100 percent local funds.

Budget authority for both RTA Capital and RTA Development Fund projects are established when the Board of Trustees approves the annual Capital and other Fund Budgets of the Authority. The Board also approves grant applications and the acceptance of awards, which commits the Authority to providing matching funds when grant funds are drawn. Once approved, the Authority may draw against the grant until the project is completed or the time limit on the grant has expired. Grant awards can only fund projects specified in the application unless the Federal Transit Administration (FTA) or grantor agency approves an amendment.



CAPITAL IMPROVEMENT FINANCIAL POLICIES

The Board of Trustees has established a set of financial policies including some to ensure that adequate funds are regularly invested in maintaining the Authority's capital assets. These policies, which are highlighted in the Budget Guide, are used as goals for planning and controlling. They are as follows:

- An amount equivalent to at least 10 percent of Sales & Use Tax revenues shall be allocated to the Capital Improvement Fund on an annual basis.
- Capital Improvement Funds shall be used to account for the construction and acquisition of major capital facilities, vehicles, and equipment.
- The percent of capital maintenance outlay to capital expansion outlay will be a minimum of 75 percent and a maximum of 90 percent.
- The Authority will strive to take advantage of all available Federal and State grants and other financing programs for capital improvements.

CAPITAL IMPROVEMENT CRITERIA

Capital project requests for consideration in the 2020–24 CIP far exceeded available resources. As a result, established guidelines are used to prioritize project requests for funding. The following criteria provide a basis for preliminary capital investment decisions and include:

THE VALUE AND USEFUL LIFE OF THE CAPITAL ASSET

To be included in the Capital Improvement Plan, the asset must have a value of \$5,000 or more and have a useful life exceeding one year. If financed by debt, the useful life should exceed the term of the bond.

The availability of resources to fund the Capital Improvement, including grant resources.

The availability of grant resources against which local funds can be leveraged greatly enhances the likelihood of approval.

THE AGE AND CONDITION OF THE CAPITAL ASSET

Assets that are older and in poor condition generally rank higher on the rehabilitation or replacement list. Specific vehicle rehabilitation or replacement programs have been established for buses, rail cars, and non-revenue vehicles.

THE RELATIVE COST TO THE AUTHORITY FOR THE BENEFIT OBTAINED

Benefits may be measured in terms of avoided cost or the ability of the improvement to recover the capital investment within a given period.

VALUE ENGINEERING CONSIDERATIONS WITH REGARD TO THE SCHEDULING/ORDER OF PROJECTS

The relationship between projects is an important consideration in the scheduling of construction projects. For example, major rehabilitation to a bridge on a rail line might coincide with a track rehabilitation to achieve economies and avoid a duplication of effort.



PRIORITY AREAS

In addition to these criteria, all capital projects must relate to one of the following priority areas to be considered for approval. Capital projects, which address multiple priority areas, have a greater likelihood of approval.

During this planning cycle, priority areas of the Authority were defined as:

- State of Good Repair (25%) Maintaining the Authority's current 'core business' through investments in projects which are necessary in order to operate the existing infrastructure or add an additional dimension/mode to existing systems.
- **Health and Safety (20%)** Ensuring the physical well-being of the Authority's customers, employees, and the general public.
- Mandates (20%) Ensuring compliance with Federal and State mandates such as the Clean Air Act and Americans with Disabilities Act.
- Ridership Transit Oriented Development (15%) Invest in equipment, opportunities for private investment, increased revenues, encourage partnerships with other organizations. Stimulate the development of current property for the benefit of customer satisfaction to maintain current ridership and attract new customers.
- Operating Budget Impact (15%) Investing in projects that will result in a direct positive impact on reducing operating expenses or improving operational efficiencies of the Authority.
- Environmental Impact (5%) Investing in equipment, adapting facilities or enhancing service infrastructure to support overall environmental benefits such as improved air quality.

Figure 87 reflects the distribution of approved 2020 Capital Improvement projects by capital priority area. The largest portion of the 2020 Capital Budget appropriations, \$98.2 million or 97.1 percent, are for projects included within the State of Good Repair category that maintain or improve existing Authority capital assets. This is followed by the other category with \$2.1 million, or 2.0 percent, with the remaining categories making up the balance of the budgeted capital projects.

PRIORITY CATEGORIES - Combined	2020	2021	2022	2022	2024	TOTALS
PRIORITY CATEGORIES - Combined	2020	2021	2022	2023	2024	2020-2024
RIDERSHIP	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$1.75
HEALTH & SAFETY	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$1.15
STATE OF GOOD REPAIR	\$98.17	\$118.18	\$116.27	\$118.78	\$119.60	\$571.00
TECHNOLOGIES/EFFICIENCIES	\$0.42	\$0.66	\$2.31	\$1.57	\$0.23	\$5.19
OTHER	\$2.09	\$2.09	\$2.09	\$2.09	\$2.09	\$10.45
SUB-TOTAL: COMBINED CAPITAL	\$101.26	\$121.51	\$121.25	\$123.02	\$122.50	\$589.54



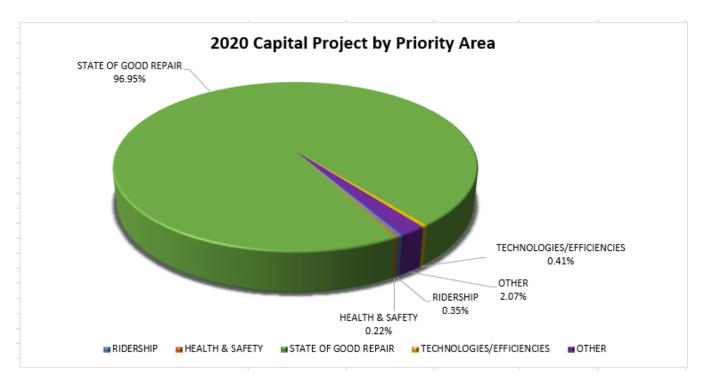


Figure 87: Capital Projects by Priority Area

FINANCIAL CAPACITY

The nature of public transit requires that the Authority pursue a capital-intensive budget. The Authority's capacity to support its ongoing CIP depends on the availability of governmental grants, local matching funds, and the ability to issue bonds. During the eighties and through the mid-nineties, the RTA favored a pay-as-you-go method, maximizing the benefits of Federal and State grant programs, and utilizing debt financing sparingly. Beginning in the mid-nineties, the use of debt significantly increased to meet the financial needs of an extremely aggressive Capital Improvement Program. This led to a significant increase in the overall debt service of the Authority – one that requires principal and interest payments that total \$15.1 million in FY 2019 for existing debt services.

In FY 2019, \$30 million of debt was issued and will be used as the local match for programmed grant funded capital projects or for locally funded capital projects. With this additional debt, the Authority has outstanding debt totaling \$160.4 million.

In addition to determining the method of financing a project, capital investment decisions by the Authority also take into account a project's impact on operating costs. If a new facility is built, the operating budget must be capable of supporting any additional costs or be positioned to take advantage of any efficiencies.

FEDERAL SOURCES

As reflected in Figure 88, Federal grants provide an estimated \$63.9 million, or nearly 80.6 percent of the Authority's capital improvement revenue stream during FY 2020. Over the five-year CIP period, Federal funding may provide approximately 70.1 percent of the needs for the Authority's programmed capital projects. Most major Federal grant programs require a local match, normally 20 percent, though in some isolated grant awards a 10 percent or no local match is required. Through FFY 2013, Federal grant programs were modified by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), and confirmed by both the Transportation Equity Act for the Twenty First Century (TEA-21) and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) adopted in 2005.



SAFETEA-LU was extended several times since, and in FY 2012 a new Transportation Act, Moving Ahead for Progress in the 21st Century (MAP-21), was approved by Congress. MAP-21 established some certainty over available FTA funds for future transit construction projects. Changes in Federal formula calculations for grant awards, inclusion of new census data in the determination of formula grants, incorporation of operating statistics relative to all transit agencies, and consolidation and/or elimination of some grant programs had a an unfavorable impact upon financial resources for the Authority's capital improvement program.

The changes brought on by MAP-21 legislation impacted the Authority's Rail Systems capital programming. Prior to MAP-21 the Rail Modernization grant was allocated through a formula favorable to the Authority and other "older" rail systems in America. Rail formula funds are currently allocated through a STATE OF GOOD REPAIR (SOGR) program, which incorporates both population and operating statistics into the formula allocations resulting in a reduction of formula funds

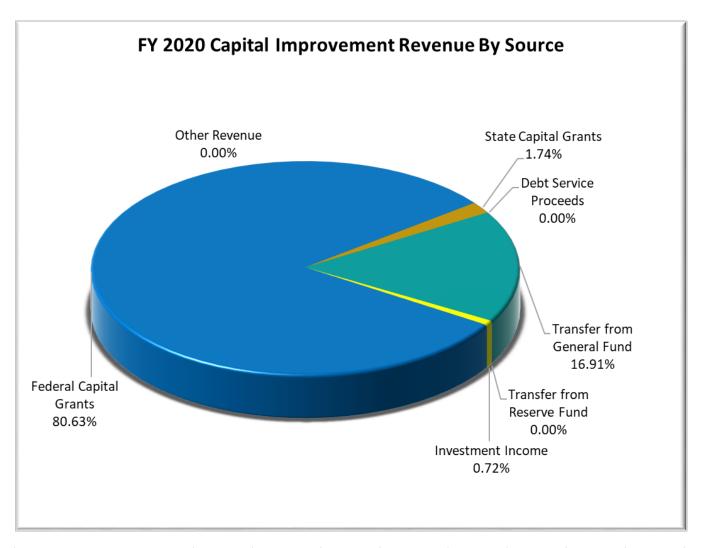
for the rail system. While the MAP-21 legislation clarified available financial resources in the short-term, the long-term Federal funding commitment to public transportation remains uncertain.

At the end of 2015, a new Transportation Act titled "FIXING AMERICA'S SURFACE TRANSPORTATION" (FAST) ACT is expected to be approved by Congress. The FAST Act will incorporate current MAP-21 initiatives and focus on SOGR strategies. The FAST Act is also expected to impact the Authority's formula funding allocation in the CIP by an annually projected increase of \$2 million, most of which is prioritized for Rail SOGR projects.



On July 26, 2016 FTA made its "Final Ruling" reaffirming that transit agencies must establish a Transit Asset Management System Plan to monitor and manage public transportation assets to improve safety and increase reliability and performance. The "Final Ruling" sets the objective to achieve a state of good repair (SOGR) by creating a business model using transit asset condition ratings to guide capital planning decisions and optimize funding resources.





	2017	2018	2019	2020	2021	2022	2023	2024
	Actual	Actual	Actual	Proposed Budget	Plan	Plan	Plan	Plan
Transfer from General Fund	\$10.27	\$15.26	\$12.01	\$13.40	\$7.91	\$8.53	\$8.69	\$10.84
Transfer from Reserve Fund	\$0.00	\$2.00	\$0.00	\$0.00	\$2.40	\$5.20	\$25.60	\$0.00
Investment Income	\$0.33	\$0.32	\$0.98	\$0.57	\$0.77	\$0.57	\$0.77	\$0.77
Federal Capital Grants	\$48.46	\$56.53	\$42.08	\$63.89	\$67.75	\$65.97	\$68.79	\$68.61
State Capital Grants	\$0.00	\$0.83	\$1.38	\$1.38	\$1.38	\$1.38	\$1.38	\$1.38
Debt Service Proceeds	\$0.00	\$0.00	\$30.00	\$0.00	\$25.00	\$0.00	\$25.00	\$0.00
Other Revenue	\$0.33	-\$0.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenue	\$59.39	\$74.91	\$86.45	\$79.24	\$105.21	\$81.65	\$130.23	\$81.60

Figure 88: Capital Improvement Revenue by Source

URBANIZED AREA FORMULA - SECTION 5307

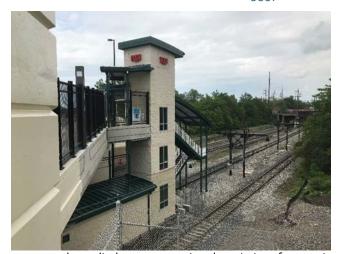
Urbanized Area or Capital grants were originally provided under Section 5307 of the Urban Mass Transportation Act of 1964. Resources are allocated to urban areas according to a formula and matched on an 80 percent Federal and 20 percent local basis. This program has continued under the new MAP-21 legislation, though several changes were made leading to a small reduction in the annual award of funds. Additionally, changes due to MAP-21 included the elimination of the Job Access &



Reverse Commute (JARC) Section 5316 program, which provided over \$12.2 million in local match for operating costs associated with this program over a six-year period. The JARC program was incorporated into the Section 5307 formula award as an eligible reimbursement in the MAP-21 and FAST legislations, but no additional resources are provided to continue the program.

In FY 2016, with local match include the Authority received \$33.4 million and \$34.0 in FY 2017 from its Section 5307 award, a slight increase from the prior FY 2015 amount of \$29.1 million. FY 2018 allocations under the FAST Act legislation are at \$34.5 million, near the amount currently received under the MAP-21 legislation and increasing in FY2019 to an amount of \$35.3 million. In FY 2020 the Authority will receive \$35.6 million.

STATE OF GOOD REPAIR - SECTION 5337



Since ISTEA, Federal participation for the former Section 5309 award program is distributed at the Federal Transit Administration's (FTA) discretion on an 80 percent Federal, 20 percent local basis. The ISTEA also instituted a multi-tier formula to allocate Section 5309 Rail Modernization grants, one that historically favored the older established rail systems including the GCRTA. This formula allocation remained the same in the now expired SAFETEA-LU legislation.

The MAP-21 legislation replaced the Section 5309 Rail Modernization award program with the Section 5337 State of Good Repair (SOGR) grant program. It also replaced the historical Section 5309 funding formula allocation with a

program that relied upon operational statistics of a transit agency compared to the industry statistics, as well as use of the 2010 UZA Census data. The new formula favors agencies serving growing populations and expanding transit services over those with a relatively static UZA population and service, resulting in the loss of more than \$700,000 for rail formula award funds from FY 2018 to FY 2019 for the Authority.

The last Federal allocation for the Section 5309 – Rail Modernization Award was an indication of the financial impact the Authority faced under the MAP-21 legislation. Including the 20 percent local share, the last Rail Modernization award in FY 2012 totaled \$17.26 million. Since then, the Authority has received \$15.4 million in FY 2016, \$15.1 million in FY 2017, \$17.4 million in FY 2018 and \$22.2 million in FY 2019 under the new FAST Act. The Authority will once again receive \$21.3 million in FY 2020. The authority's level of funding remains below the actual need to maintain a state of good repair.

BUS & BUS FACILITIES - SECTION 5339

Section 5339 grant funding is a smaller formula award that provides additional capital funding for the replacement, rehabilitation, purchase of buses and related equipment, and the construction of bus-related facilities. Funding for this award under the MAP-21 Act remains relatively stable with \$2.43 million received in FY 2014 and FY 2015, a slight increase to \$2.9 million in FY 2016, and \$3.0 in FY 2017. Under the FAST Act, this amount slightly decreased to \$2.8 million with similar amounts received in FY 2019. FY 2020 funding increased from prior years to \$3.8 million.



NON-TRADITIONAL FEDERAL SOURCES

Non-traditional Federal awards, including competitive and earmark grants, are beyond the scope of the previously discussed programs, but are impacted by the MAP-21 and subsequent FAST legislation. Additionally, grant award funding for an annual ADA Reimbursement grant award, which reimbursed the Operating Budget an average of \$3.2 million between FY 2011 – 2015 has lapsed resulting in a loss of revenue for the General Fund.

The Authority remains successful in competing for and being awarded non-traditional or competitive awards that provide the necessary resources enabling a number of important capital projects to be completed. The Authority will continue to seek and submit applications for needed SOGR capital projects as competitive grant awards become available.

The Authority was recently awarded non-traditional funding for several projects under the proposed 2020-2024 Capital Improvement Plan (CIP). In FY 2019, GCRTA received non-traditional funding in the amount of \$2.6 million in discretionary funds for rehabilitation of the Triskett Bus District to accommodate CNG-fueled buses. The Authority also received \$336,000 in discretionary funds for Transit Oriented Development Planning, in the W.25th Street corridor. GCRTA, along with its



partners, will create a holistic plan for development along the entire corridor to support full development of a Bus Rapid Transit (BRT), now branded as the MetroHealth line. FY 2018 non-traditional funding was received from the Diesel Mitigation Trust Fund in the amount of \$2 million, Transit Oriented Development Planning in the amount of \$360,000, and \$471,333 from the TSA National Explosives Detection Canine Team Program. Projects identified are for track rehabilitation of Red Line Track West (W.117-West Park) \$6.6 million, \$11.6 million for Radio CAD/AVL System Replacement

from the Federal Highway Association, and Triskett Building Compliance Facility upgrades for \$3.3 million. In FY 2017 the authority received competitive funds totaling \$4.0 million for continuous improvement of Red Line West at W.75th – W.98th, received non-traditional funding for the Career Pathways Development award of \$985,754 received in FY 2015 to be used by the Authority for a work force development program. In FY 2013 a TIGER III grant award for \$15.6 million was received for construction work on the Little Italy - University Circle Station & rehabilitation of the Mayfield Road Track Bridge, and two non-formula awards were executed totaling a combined \$8.7 million for the Clifton Boulevard Transit Enhancement project. Earlier in FY 2012, the Authority received two competitive grant awards; One for \$4.0 million for improvements at the Brookpark & Windermere Red Line Stations and the Strongsville Park-N-Ride, and a second for \$1.6 million for the rehabilitation & expansion of the Southgate Park-N-Ride lot, and rehabilitation of the Triskett, North Olmsted Park-N-Ride, and Sprague/Fair parking lots. The capital funding from non-traditional Federal source grants are used to support years' worth of unfunded programmed capital projects identified in the CIP.

STATE SOURCES

Administered through the Ohio Department of Transportation (ODOT), the State contributes up to one-half of the local match portion of Federal grant programs. In the current years the authority has been awarded various competitive grants under the Ohio Transit Preservation Partnership Program (OTPPP), Urban Transit Program (UTP) and Diesel Emission Reduction Grant (DERG) grant awards. Recently it has focused on contributions that are project-specific rather than for local match contributions, and it utilizes available Federal rather than State awards. In FY 2020, GCRTA received \$4.5 million through ODOT's UTP, requiring a 20% local match. Funding will be used to purchase replacement commuter coaches. The Authority also received \$11.7 million through ODOT's Ohio Transit Partnership Program (OTP2), with no local match required. Funding will be used for the following projects: Rail car replacement (\$5 million); Preventive Maintenance (\$6 million); and Property Acquisition (\$660,000). GCRTA also has an application for funding through the Ohio EPA's 2020 DERG that is pending. In FY 2016, the OTPPP awarded \$4.0 million for rehabilitation of Red Line West 75th – W.98th, \$2.6 million was awarded under UTP and DERG grants for 40ft CNG buses. In FY 2017, OTPPP awarded \$5.2 million for continuous



improvement of the Red Line West 117th –West Park, \$1.6 million was awarded under UTP for MCI diesel buses, and \$2.8 million awarded under DERG for 40ft CNG buses. In FY 2014-2015 executed a combined \$4.6 million OTPPP award for four replacement trolley buses and 40-Ft buses. In FY 2013, \$2.0 million OTPPP award for replacement trolley buses and in FY 2012, \$2.6 million to reconstruct the Red Line Airport Tunnel. In future years, the Authority will continue to submit applications to the State in support of the multi-year bus improvement and track reconstruction programs.

LOCAL SOURCES

The Capital Improvement Budget requires local resources to support the match for most grant-funded projects, as well as support 100 percent locally funded projects in both the RTA Capital and RTA Development Funds. In FY 2020, the combined local contribution for the Authority's capital program of \$27.1 million are sourced from two transfers included within the General Fund. The first is a \$13.4 million transfer to the RTA Capital Fund to cover locally funded capital expenditures within the Capital Funds. The second, \$13.7 million transfer from the General Fund to the Bond Retirement Fund, covers projected debt service payments for the upcoming year. In recent years, these two transfers totaled \$32.4 million in FY 2017, decreased to \$27.1 million in FY 2018, and \$25.3 million at the end of FY 2019.

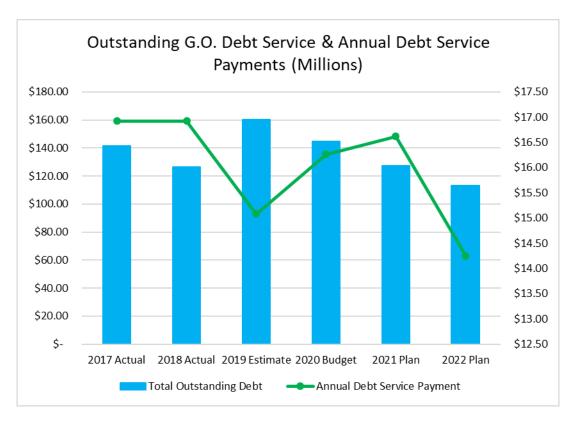
DEBT MANAGEMENT

Although major capital improvements are mostly funded by Federal and State capital grants, the Authority is required to pay a percentage of most grant-funded projects from its own local sources. Debt sales are used for this purpose as well as to pay for major 100 percent locally funded projects. In FY 2015 Revenue Bonds (RB) were issued for \$30.0 million in new debt and \$21.4 million in a refunding issuance. All of the Authority's outstanding debt at the end of FY 2018 will mature by December 2039. The \$160.4 million balance of outstanding debt at the end of 2019 will require principal and interest payments of \$16.26 million in 2020. The principal and interest will increase to \$16.6 million after FY 2020.

DEBT LIMITATIONS

As a regional transit authority, Ohio law permits the Authority to issue both un-voted and voted general obligation bonds. In the past, only un-voted general obligation bonds were issued. As the name implies, un-voted debt is issued without the vote of the electorate, within the limitations provided under State law. General Obligation bonds are secured by a pledge of the 'full faith and credit' of the Authority, which is backed by the power to levy and collect ad valorem property taxes. Current debt obligations do not require the use of ad valorem property taxes to pay debt service, but are supported by the Authority's sales tax revenue.





Debt Service	201	7 Actual	201	18 Actual	201	9 Estimate	202	20 Budget	2021 Plan	20	22 Plan
Annual Debt Service Payment	\$	16.92	\$	16.92	\$	15.08	\$	16.26	\$ 16.62	\$	14.25
Total Outstanding Debt	\$	141.41	\$	126.48	\$	160.41	\$	144.51	\$127.53	\$	113.28

Figure 89: Outstanding G.O. Debt Service & SIB Loan and Annual Debt Service Payments

THERE ARE THREE LIMITATIONS RELATED TO THE AUTHORITY'S ABILITY TO ISSUE GENERAL OBLIGATION DEBT:

- 1. Section 306.40 of the Ohio Revised Code LIMITS THE PRINCIPAL AMOUNT OF BONDS that are supported by property taxes to five percent of the assessed valuation within the Authority's territory. The assessed valuation of property within Cuyahoga County applicable to the GCRTA at the end of 2018 of \$30.5 billion limits the amount of available debt to \$1.50 billion. This limitation is not currently very restrictive to the Authority in view of the large dollar limit and its applicability only to debt supported by property taxes.
- 2. The second limitation, also contained in Section 306.40 of the Ohio Revised Code, RESTRICTS ANNUAL PRINCIPAL AND INTEREST PAYMENTS ON THE AUTHORITY'S UNVOTED GENERAL OBLIGATION BONDS to one-tenth of one percent (0.1 percent) of the assessed valuation. Based on the assessed valuation of \$30.50 billion, annual debt servicing capacity would be close to \$30.50 million. This provision applies to all debt issued by the Authority and is the most restrictive of the limitations, though it exceeds current debt payment levels.
- The third constraint derives from both the Ohio Constitution and the Ohio Revised Code. Article XII, Section 11, of the Constitution REQUIRES THAT ANY POLITICAL SUBDIVISION INCURRING DEBT MUST PROVIDE FOR THE LEVYING OF TAXES sufficient to pay principal and interest on that debt. Section 2 of the same Article and Section 5705.02 of the Ohio Revised Code limits to ten mills (one mill equals \$1 of tax for each \$1,000 of assessed valuation) for the amount of taxes that may be levied without a vote of the citizens.

This 'indirect' limit on un-voted debt prohibits the county and all political subdivisions from jointly levying property taxes above ten mills without a vote of the people. Thus, the ability of the Authority to issue un-voted general obligation debt is



'shared' with overlapping political subdivisions. As these entities issue debt subject to the 10-mill limitation, the amount of room available for other subdivisions' debt is reduced. Political subdivisions include Cuyahoga County, various municipal corporations, school districts, and townships within the taxing district.

At 8.6654 mills, total outstanding debt issued by various public entities within the County exceeds the un-voted ten-mill limit, restricting the Authority's ability to issue any General Obligation Bonds. The Authority's ability to issue more general obligation debt remains limited under the third constraint, in that the total outstanding debt issued as of year-end 2018 by various public entities within the County exceeds the un-voted ten-mill limit. Due to this restraint in previous years, the Authority issued new debt of \$30.0 million in Revenue Bonds, rather than General Obligation Bonds, in 2019.

OPERATING IMPACTS

A benefit of considering the Operating and Capital Budgets concurrently is the ability to gauge the impact of Capital Improvement decisions on the Operating Budget. Financial requirements and programmed activities within the Authority's capital program will impact the 2020 Operating Budget in a number of ways such as the following:

- The Trustees' commitment to balancing sales & use tax revenues between the Capital Improvement Fund and supporting operation needs. The estimated transfers to Capital Fund during FY 2020 is \$27.1 million.
- In tandem with increased capital requirements to achieve a SOGR, the challenges with securing needed grant award funds from Federal, State and other intergovernmental agencies places continual pressure on the General Fund to contribute increasingly significant amounts of financial resources to the Capital Improvement Fund.
- Estimated debt service and interest payments of \$16.3 million will require a General Fund transfer to the Bond Retirement Fund to offset the debt in FY 2020, further limiting the amount available for operating expenditures.
- Some Operating Budget expenditures, primarily personnel costs across the Authority, are incurred in support of ongoing activities spurred by capital construction projects. Eligible costs are reimbursed to the General Fund as revenue from the RTA Development Fund. In FY 2019, this activity will result in a projected \$5.2 million in grant funded reimbursements to the General Fund.
- Formula grant funds are eligible to reimburse preventive maintenance (PM) activities with the Operating Budget. For the five fiscal years covering FY 2006 thru FY 2010, \$141.2 million of Federal formula capital grants were used for this purpose. In the following five fiscal years, 2011 2015, the improved financial position of the Authority reduced need of formula funding for preventive maintenance activities to \$75.4 million, then redirected for needed capital improvements. In FY 2016, PM activities ended the year at \$20.0 million. In FY 2017, PM activities decreased slightly to \$17.0 million, and FY 2018 increased slightly to \$20.0 million as the service needs of the Operating Budget draw resources from the Capital program. In FY 2019 PM activities stayed steady a \$20.0 million and expected to remain at \$20.0 million in FY 2020.
- The capital program helps to maintain the Authority's capital assets in a state of good repair that facilitates improved delivery of transportation services and helps to reduce maintenance costs incurred in the operating budget.
- Daily activities within the FY 2020 General Fund or Operating Budget are supported by \$3.00 million of budget appropriation for various capital projects included within the RTA Capital Fund. These generally include smaller (less than \$150,000) equipment & non-revenue vehicle purchases and facilities maintenance activities, and are exclusively supported by local funds from Sales & Use Tax revenue.



CAPITAL PROJECT CATEGORIES

The combined 2020–2024 Capital Improvement Plan (CIP) totals \$589.6 million of capital budget appropriations over the five year plan with projects sorted among eight capital project categories – Bus Garages, Buses, Equipment & Vehicles, Facilities Improvements, Other Projects, Preventive Maintenance/Operating Reimbursements, Rail Projects, and Transit Centers. For the approved 2020 CIP, three categories comprise \$82.3 million, or 81.2 percent, of the combined \$101.3 million capital budget appropriations. The largest with \$40.95 million is the Rail Project category, second largest with \$21.31 million under Bus Project Category, followed by Preventive Maintenance/Operating Reimbursements category with \$20.00. The five remaining categories totaling \$19.0 million within the approved capital budget are shown in Figure 90.

Reflecting the challenging financial picture, the Authority faces, the largest budgeted category over the five-year CIP is the Rail Projects with 282.5 million, or 47.9 percent of the CIP budget over the five years. This is followed by Bus Project with \$107.2 million, 18.2 percent, and Preventive Maintenance/Operating Reimbursements at \$100.00 million, or 17.0 percent, followed by the other remaining categories to a lesser degree as prioritized by the needs assessment and corresponding allocation of available capital funds.

CATEGORY	2020	2021 Plan	2022 Plan	2023 Plan	2024 Plan	2020-2024
Bus Garages	\$0.00	\$0.00	\$0.70	\$4.31	\$1.66	\$6.67
Buses	\$21.31	\$21.91	\$22.06	\$20.96	\$20.96	\$107.20
Equipment & Vehicles	\$1.46	\$1.65	\$3.07	\$1.14	\$0.95	\$8.27
Facilities Improvements	\$14.78	\$13.91	\$12.21	\$15.00	\$15.22	\$71.12
Other Projects	\$2.50	\$2.46	\$2.46	\$2.46	\$2.46	\$12.34
Preventive Maint./Oper. Rei	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$100.00
Rail Projects	\$40.95	\$61.28	\$60.45	\$58.84	\$60.94	\$282.46
Transit Centers	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$1.50
TOTALS	\$101.30	\$121.51	\$121.25	\$123.01	\$122.49	\$589.56



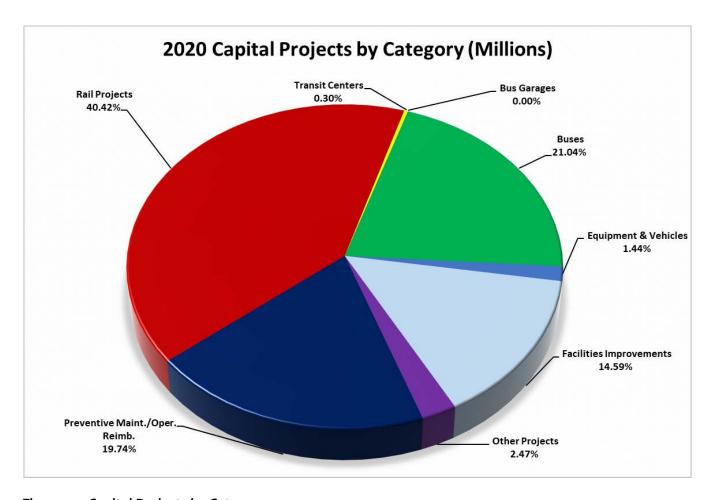


Figure 90: Capital Projects by Category

RTA CAPITAL FUND

The RTA Capital Fund supports smaller capital projects and includes more routine expenditures. Projects within this fund are generally less than \$150,000 and have a useful life not exceeding five years. The RTA Capital Fund is 100 percent locally funded, almost exclusively through transfers of sales & use tax revenue from the Operating Budget. Items included in the RTA Capital Fund are segregated into two types:

- Routine Capital, which includes the acquisition of non-revenue vehicles and small equipment
- Asset Maintenance, which covers small rehabilitation projects to maintain the Authority's existing assets.

Figure 91 trends the annual fund balance for the RTA Capital Fund. Other than a small amount of investment income, the main source of revenue is the sales & use tax revenue transfer from the General Fund to the RTA Capital Fund, which began in 1989. Anticipated revenue in FY 2020 will include \$13.4 million of programmed transfers from the General Fund and investment income of \$65,000. The transfer amount, in combination with the General Fund transfer of \$13.71 million to the Bond Retirement Fund, brings the total commitment to Capital to \$27.1 million, or 12.6 percent of the projected 2020 sales & use tax revenue.

Budgeted FY 2020 expenditures within the RTA Capital Fund of \$13.7 million include \$1.5 million for Asset Maintenance or facilities projects, \$1.5 million for Routine Capital or equipment purchases, and a \$10.7 million transfer into the RTA Development Fund for use on providing the local match on grant awards and 100 percent locally funded projects. The estimated 2020 ending balance of \$2.7 million is a decrease from prior years due to an increase in transfers to Development Fund.



RTA Capital Fund Balance Analysis

	2017	2018	2019	2020	2021	2022
	Actual	Actual	Actual	Proposed Budget	Plan	Plan
Beginning Balance	3,074,133	1,299,482	3,214,558	2,965,353	2,773,912	1,659,247
Revenue						
Transfer from General Fund	10,271,331	15,259,919	12,005,225	13,397,525	7,914,580	8,527,908
Investment Income	41,632	62,161	60,000	65,000	65,000	65,000
Other Revenue	0	1,855	0	0	0	0
Total Revenue	10,312,963	15,323,935	12,065,224	13,462,525	7,979,580	8,592,908
Total Resources	13,387,096	16,623,417	15,279,781	16,427,869	10,753,492	10,252,155
Expenditures						
Asset Maintenance	2,322,492	1,920,700	1,405,000	1,510,000	1,755,000	1,710,000
Routine Capital	2,920,867	2,053,904	1,925,183	1,459,702	1,304,990	1,243,000
Other Expenditures	0		0	0	0	0
Transfer to RTA Development Fund	6,844,255	9,434,255	8,984,255	10,684,255	6,034,255	5,884,255
Reimbursement to FTA	0	0	0	0	0	0
Total Expenditures	12,087,614	13,408,859	12,314,438	13,653,957	9,094,245	8,837,255
Ending Balance	1,299,482	3,214,558	2,965,343	2,773,912	1,659,247	1,414,900

Figure 91: RTA Capital Fund Balance

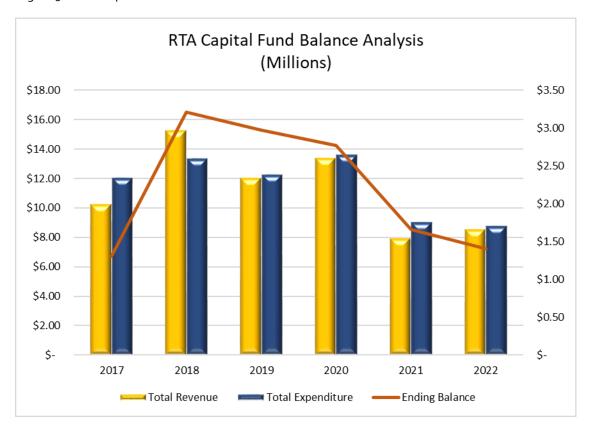


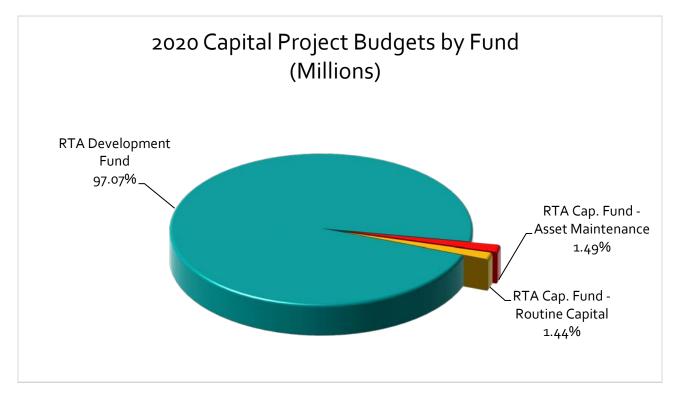
Figure 92: RTA Capital Fund Balance Trends



ASSET MAINTENANCE PROJECTS

Asset Maintenance consists of locally funded projects that maintain, repair, or rehabilitate an existing facility of the Authority. These include projects of smaller scope, duration and expense than those included in the RTA Development Fund. The duration of these projects is often less than one year with the cost generally not exceeding \$150,000, and a useful life of less than five years.

The FY 2020 budget appropriation for Asset Maintenance projects is \$1.5 million, representing 1.5 percent of the overall FY 2020 Capital Improvement Budget as represented in Figure 93. Most of this amount is budgeted within two organizational areas of the Authority; Engineering & Project Development and Asset & Configuration Management. Engineering & Project Develop is responsible for coordinating larger construction-related asset maintenance projects throughout the entire Authority, which lends to managing a majority of Asset Maintenance Funds at an amount of \$800,000 or 53.0 percent. Asset and Configuration Management manages \$450,000, or 29.8 percent of all Asset Maintenance projects, budgeted within the smaller cost facilities projects within the Operations Division and the Main Office. Remaining budgeted projects within Asset Maintenance are for location specific facilities projects, focused energy efficiency or lighting retrofits throughout the Authority, or in the Asset Maintenance Contingency project for unanticipated facilities improvements needed throughout the year.



		2020		2021 20		2022	2023		2024	20)20-24
	В	udget		Plan		Plan		Plan	Plan	2(J2U-24
RTA Cap. Fund - Asset Maintenance	\$	1.51	\$	1.76	\$	1.71	\$	1.61	\$ 1.61	\$	8.20
RTA Cap. Fund - Routine Capital	\$	1.46	\$	1.30	\$	1.24	\$	1.14	\$ 0.95	\$	6.09
RTA Development Fund	\$	98.29	\$	118.35	\$	118.20	\$	120.17	\$ 119.84	\$	574.75
Total	\$	101.16	\$	121.41	\$	121.15	\$	122.92	\$ 122.40	\$	589.04

Figure 93: Capital Project Budgets by Fund



ROUTINE CAPITAL PROJECTS

This category includes the purchase of vehicles and equipment, where each unit has a value of at least \$5,000 and a useful life greater than one year. Furthermore, these items are generally less than \$150,000 in cost, in many cases have a useful life of five years or less, and are designed to efficiently meet the identified operational equipment needs within the General Fund or Operating Budget. As such, the expectation for Routine Capital projects is the approved budget appropriations are fully committed, if not expensed within the calendar year.

As indicated in Figure 93, the budget appropriation for Routine Capital projects accounts for \$1.5 million, or 1.4 percent, of the 2020 CIP Budget. Reflecting the support of daily operations, the greatest portion of the budget appropriation for Routine Capital projects in the 2020 CIP is within the Operations Division, which has \$604,702 for equipment pool projects throughout various Operating Division Departments, followed by \$390,000 programmed for the non-revenue vehicle lease or replacement program. The remaining \$465,000 budgeted throughout the Authority Administrative departments and contingencies.

	GREATER	R CLEVEL	AND REG	SIONAL T	RANSIT	AUTHOR	ITY								
	20	20 - 2024	CAPITAL	IMPROV	EMENT P	LAN									
			RTA CAP	ITAL FUN	ND.										
		ASSET MAI	NTENANCE	(FACILITIE	S) PROJEC	TS									
		Project	2020	2021	2022	2023	2024	2020-24							
	Department / Project Name	Number	Plan	Plan	Plan	Plan	Plan	Total							
<u>33</u>	Asset & Configuration Mgt.														
	Administration Facilities Maint. Pool	P32335X59	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000							
	Elevator/Escalator Maintenance Pool	P32335X59	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,200,000							
	Operating Facilities Maintenance Pool	P32335X59	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000							
	Passenger Facilities Maintenance Pool	P32335X59	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000							
		1	\$450,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,450,000							
39	39 Fleet Management														
	Bus Districts Lift Rebuilds/Rehab's	P47395X59	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000							
			\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000							
<u>57</u>	Programming & Planning														
	Transit Waiting Environment	P28575059	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000							
			\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000							
80	Engineering & Project Dev.														
	Facilities - ADA Projects	P32805X49	\$95,000	\$125,000	\$150,000	\$150,000	\$150,000	\$670,000							
	Passenger Facilities Maint. Pool	P32805X49	\$240,000	\$330,000	\$330,000	\$330,000	\$330,000	\$1,560,000							
	Operating Facilities Maint. Pool	P32805X49	\$465,000	\$470,000	\$470,000	\$470,000	\$470,000	\$2,345,000							
	Paratransit Parking Lot Expansion	P32805189	\$0	\$170,000	\$0	\$0	\$0	\$170,000							
								\$0							
			\$800,000	\$1,095,000	\$950,000	\$950,000	\$950,000	\$4,745,000							
<u>67</u>	OFFICE OF MGT. & BUDGET														
	Energy Retrofits	P32675X39	\$100,000	\$0	\$100,000	\$0	\$0	\$200,000							
	Asset Maintenance Contingency P49995059 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$500,000														
			\$200,000	\$100,000	\$200,000	\$100,000	\$100,000	\$700,000							
TO	TAL ASSET MAINTENANG	`=													
101	AL ASSET WAINTENANG	,C	\$1,510,000	\$1,755,000	\$1,710,000	\$1,610,000	\$1,610,000	\$8,195,000							



	Project	2020	2021	2022	2023	2024	2020-24
Department / Project Name	Number	Plan	Plan	Plan	Plan	Plan	Total
1 Paratransit							
Paratransit District Equipment Pool	P47310179	\$15,750	\$5,940	\$0	\$17,784	\$0	\$39
		\$15,750	\$5,940	\$0	\$17,784	\$0	\$39
2 Rail District							
Rail District Equipment Pool	P47320149	\$126,800	\$20,000	\$45,000	\$30,000	\$0	\$221
		\$0	\$0	\$0	\$0	\$0	•
		\$126,800	\$20,000	\$45,000	\$30,000	\$0	\$221
4 Transit Police							
Security Improvements Pool	P44340249	\$205,000	\$205,000	\$205,000	\$205,000	\$205,000	\$1,025
TP Protective Gear & Equipment	New	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$110
		\$227,000	\$227,000	\$227,000	\$227,000	\$227,000	\$1,135
9 Fleet Management							
Non-Revenue Vehicle Imp. Program	P46390159	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	\$1,750
NRVIP - Lease Payments 5yr Opt.	P46390169	\$40,000	\$0	\$0	\$0	\$0	\$40
Fleet Management Equipment Pool	P47390349	\$109,152	\$142,000	\$86,000	\$24,200	\$0	\$361
<u> </u>		\$499,152	\$492,000	\$436,000	\$374,200	\$350,000	\$2,151
6 Hayden District							
Hayden District Equipment Pool	P47460169	\$40,000	\$50,000	\$0	\$30,000	\$0	\$120
		\$40,000	\$50,000	\$0	\$30,000	\$0	\$120
9 Triskett District							
Triskett District Equipment Pool	P47490159	\$86,000	\$45,050	\$0	\$20,000	\$0	\$151
· ·		\$86,000	\$45,050	\$0	\$20,000	\$0	\$151
1 Information Technology							
IT Systems Development Pool	P42610149	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$650
PC Replacement Program	P42610169	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250
Thin Client Replacement II	P42610179	\$0	\$0	\$100,000	\$10,000	\$10,000	\$120
Laser Printer Replacement Program	P42610299	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$175
Oracle EBS Point Release Upgrade	New	\$0	\$0	\$70,000	\$70,000	\$0	\$140
F/C Mobile Ticketing e-validation	New	\$100,000	\$100,000	\$0	\$0	\$0	\$200
_		\$315,000	\$315,000	\$385,000	\$295,000	\$225,000	\$1,535
2 SUPPORT SERVICES							
Office Equipment/Furniture Pool	P43620149	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250
		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250
7 OFFICE OF MGT. & BUDGET							
Routine Capital Contingency	P49990159	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500
		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500
OTAL DOUTING CARTA							
OTAL ROUTINE CAPITAL		\$1,459,702	\$1,304,990	\$1,243,000	\$1,143,984	\$952,000	\$6,103

RTA DEVELOPMENT FUND

The Authority's Capital Improvement Funds are used to account for the acquisition, construction, replacement, repair, and renovation of major capital facilities and equipment. The RTA Development Fund is the larger capital fund that includes rehabilitation & expansion projects that are greater than \$150,000 and have a useful life of more than five years. This Fund is primarily, but not exclusively, supported through Federal grant awards providing 80 percent of the project funds, and requiring a 20 percent local match.

Federal Capital grants received by the Authority normally requires local match funds, normally 20 percent, be set aside and available for Capital Improvement projects. During the budget process, local match requirements, as well as potential locally



funded projects, are reviewed and resources provided through Sales &Use Tax contributions transferred from the RTA Capital Fund, available proceeds from debt sales, and interest income.

In 2017, \$6.8 million was transferred from the RTA Capital Fund to the RTA Development Fund to provide the local match to cover capital expense and to cover other locally funded expenditures within the RTA Development Fund. The transfer increased to \$9.4 million in FY 2018, and in FY 2019 to \$8.9 million. The transfer amount will increase again in FY 2020 to \$10.7 million due to the financial demands of the Authority's capital budget.

RTA Development Fund Balance Analysis

	2017	2018	2019	2020	2021	2022
	Actual	Actual	Actual	Budget	Plan	Plan
Beginning Balance	30,037,486	20,136,261	18,099,415	36,608,688	14,776,584	23,289,906
Revenue						
Debt Service Proceeds	0	0	30,000,000	0	25,000,000	0
Transfer from RTA Capital Fund	6,844,255	9,434,255	8,984,255	10,684,255	6,034,255	5,844,255
Transfer from the Reserve Fund	0	200,000	0	0	2,400,000	5,200,000
Investment Income	284,557	258,572	875,565	500,000	700,000	500,000
Federal Capital Grants	48,455,538	56,531,115	42,082,188	63,887,602	67,750,869	65,973,700
State Capital Grants	0	827,365	1,384,658	1,384,658	1,384,658	1,384,658
Other Revenue	329,920	-32,530	0	0	0	0
Total Revenue	55,914,270	69,018,777	83,326,666	76,456,515	103,269,782	78,942,613
Total Resources	85,951,756	89,155,038	101,426,081	113,065,203	118,046,367	102,232,519
Expenditures						
Capital Outlay	65,815,495	71,055,623	51,219,600	98,288,619	94,756,451	92,270,909
Other Expenditures	0	0	0	0	0	0
Total Expenditures	65,815,495	71,055,623	51,219,600	98,288,619	94,756,461	92,270,909
Ending Balance	20,136,261	18,099,415	50,206,481	14,776,584	23,289,906	9,961,610

Figure 94: RTA Development Fund Balance Analysis

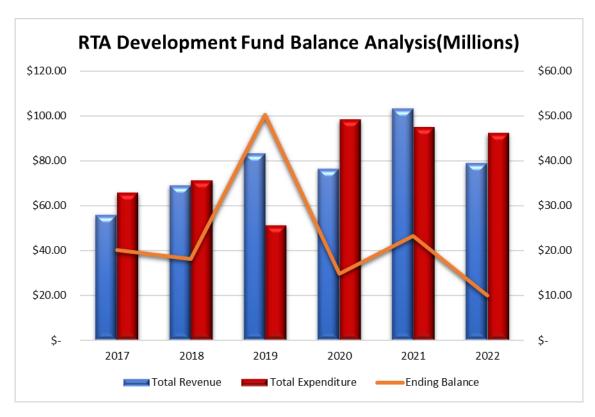
Other local funding sources include debt service, revenue bonds, and interest income. The Authority last issued debt, \$30.0 million of Revenue Bonds, in FY 2019, with no additional debt service is expected in FY 2020. Interest income has varied over the years from a high of \$260,886 in FY 2016 to an estimated \$500,000 in FY 2020 due to fluctuations in the interest rates and fund balance over the years

Figure 95, presents the fund balance analysis for the RTA Development Fund. The balance typically fluctuates depending upon new debt service issuances, the Authority receiving a competitive non-formula grant award, and scheduled construction activities for the year. Capital construction activities over the following years drew the fund balance down as it declined to \$20.1 million at the end of FY 2017 due to the issuance of Revenue bonds and decreased again to \$18.1 million at the end of FY 2018. Fund balance increased to \$36.6 million at the end of FY 2019 due to a \$30 million bond issuance. In FY 2020 is expected to decrease to \$14.8 million.

Federal funding resources flow into the Authority through the FTA Grant funds. When grant-funded capital improvements are made, funds are paid to the Authority from the Federal Government via wire transfer. Payments to vendors are then paid from the Authority, and the assets acquired are accounted for in the capital funds. A similar process is in place to draw down State grant funds.



As reflected in the fund balance statement Figure 94, various funding sources including Federal capital grants, a planned debt service, State Capital grants, and 100-percent local funds will help support expected expenditures or cash outlays of \$98.3 million in 2020. Of particular note, the expenditures within the Fund Balance Analysis are presented on a cash basis and represent estimates of the actual cash flow.



	2017 Actual	2018 Actual	2019 Actual	2020 Budget	2021 Plan	2022 Plan
Beginning Balance	\$ 30.04	\$ 20.14 \$ 69.02	\$ 18.10	\$ 36.61	\$ 14.78 \$ 103.27	\$ 23.29
Total Revenue Total Resources	\$ 55.91 \$ 85.95	\$ 69.02 \$ 89.16	\$ 83.33 \$ 101.43	\$ 76.46 \$ 113.07	\$ 103.27	\$ 78.94 \$ 102.23
Total Expenditure	\$ 65.82	\$ 71.06	\$ 51.22	\$ 98.29	\$ 94.76	\$ 92.27
Ending Balance	\$ 20.14	\$ 18.10	\$ 50.21	\$ 14.78	\$ 23.29	\$ 9.96

Figure 95: RTA Development Fund Analysis Trend



RTA DEVELOPMENT FUND PROJECTS

The total budget appropriation of \$98.3 million for RTA Development Fund projects accounts for 97.1 percent of the Authority's Capital Improvement Budget as allocated for 2020, as seen in Figure 94. The inclusion of capital projects within this fund is based upon the establishment of budget appropriation authority and includes projects that may have already received grant-funding, projects in the preliminary application stage, those included in the Transportation Improvement Program (TIP), larger projects supported by 100 percent local funds, or projects without an identified funding source.



The following highlights some of the larger programmed RTA Development Fund Improvement Projects programmed for FY 2020. Please refer to pages at the end of this section for a complete list of projects included within the five-year RTA Development Fund CIP.

BUS GARAGES - \$0.00 MILLION

FY 2020 does not allocate any new funding for the Bus Garages owned by GCRTA. In 2019, Triskett CNG Building Compliance and installation of Fall Protect equipment at Central Bus Maintenance Facility were the two projects programmed within the Bus Garages category. These projects will allow for bus maintenance and fueling station for future CNG fleets.

BUS/PARATRANSIT IMPROVEMENT PROGRAMS - \$21.31 MILLION

The 2020 CIP focuses vehicle reliability improvements through a multi-year bus spare parts program, which meets objectives for bus replacements and the SOGR. In FY 2019, the Authority purchased 25 40 ft CNG buses and a total of 12 MCI Buses which will be delivered in FY 2020. The programmed capital budget include funds to purchase 15 40 ft CNG's, 8 60 ft BRT Articulated Buses, and 10 25ft paratransit vehicles in FY 2020. Over the next five years, 53 40' buses, 6 45' Commuter Diesel Buses, and up to 23 60' Low Floor Artic buses are planned to be replaced.

EQUIPMENT & VEHICLES - \$0.00 MILLION

FY 2020 does not allocate for any replacement of Equipment and Vehicles, Budget appropriation within this category in the past have included improvements to the Data Center, Intranet Development, and Network improvements.

FACILITIES IMPROVEMENTS - \$13.27 MILLON

The Facilities Improvements budget consists of appropriations of \$6.2 million for East Portal Concrete Repairs at Tower City, \$4.6 million for Track Bridge Rehabilitation of West 117th Street, and \$1.5 million for Phase One of Viaduct Bridge Rehabilitation. Funding has been set aside in the amount of \$536,577 for State of Good Repairs and \$475,000 for the Track Bridge Inspection Program.



OTHER PROJECTS - \$2.46 MILLION

The 2020 budget for this project category includes two projects – a \$2.0 million budget contingency project and a \$459,576 for various transportation studies depending upon the availability of grant funds.

PREVENTIVE MAINTENANCE / OPERATING BUDGET REIMBURSEMENTS - \$20.00 MILLION

This category includes the preventive maintenance reimbursements to the General Fund. This category includes formula and non-formula grant funded reimbursements for various eligible activities within the General Fund with a 2020 budget appropriation of \$20.00 million.

RAIL PROJECTS- \$40.95 MILLION

In FY 2020, the Rail Projects category includes a wide diversity of capital projects and, is one of the largest of the CIP. Major programmed areas within this category include a combined \$20.9 million for track rehabilitation for the Light Rail Trunk line, Rail Profile Grinding, Rail Infrastructure, and LR Retaining Wall. \$2.1 million for rail station rehabilitation at Van Aken Warrenville Platform and Comfort Station, and \$10.9 million for Rail Car Design, Rail Infrastructure, and Spiker Machine.

Another \$7.0 million has been programmed for signal system and overhead catenary system upgrades to maintain a state of good repair to the rail infrastructure.

TRANSIT CENTERS / BUS LOOPS - \$0.30 MILLION

The 2020 capital budget includes \$300,000 for various grant funded passenger enhancements throughout the Authority. Many of the enhancement funds are allocated for Bus Shelter, Landscaping, and ADA Access.

TRANSIT 2025 LONG RANGE PLAN

The purpose of the Long Range Plan of the Authority is to support its Mission and Policy goals by providing a guidance for developing a balanced, multi-modal transit system that meets the mobility needs of Cuyahoga County residents and all visitors safely, efficiently, and cost-effectively.

The current GCRTA Strategic Plan was adopted by the Board of Trustees in 2012. The goals of the Plan are to guide GCRTA in choosing projects that are consistent with its goals and also result in increasing ridership, revenues, and the state of good repair while being grounded in the economic and financial reality of public transportation funding in Northeast Ohio. It covers the period from 2010-2020

Some of the key elements of the plan are:

- Identification of the Priority Transit Corridors in the GCRTA network;
- Completing analysis of the Priority Transit Corridors to explore the feasibility of major transportation projects that increase capacity, ridership, and development along them;
- Initiation of Transit Oriented Development projects;
- Continuing and expanding Implementation of the Transit Waiting Environment Program;
- Completion of the Rapid Transit Station as part of the FTA ADA Key Station Voluntary Compliance Agreement.

GCRTA is in the process of developing a new Strategic Plan for the next 10 years. The plan is underway and is scheduled to be adopted by the Board of Trustees during 2020.



ANTICIPATED FUNDING SOURCE	1,			-			
ANTICIPATED FUNDING SOURCE		1					
	PROJECT						TOTALS
CATEGORY / PROJECT NAME	NUMBER	2020	2021	2022	2023	2024	2020-2024
BUS GARAGES							
BUS GARAGES							
Hayden Gas Detection System	P22460X20	0	0	500,000	500,000	0	1,000,000
FFY 2021 Federal Formula Grant 500,0	00						
FFY 2022 Federal Formula Grant 500,0	00						
Hayden-Fire Protection System Upgrades	P22460X20	0	0	200,000	0	0	200,000
FY 2022 Local Funds 200,0		-					
					-		
Hayden District Bus Wash Replacement	P224501X0	0	0	0 "	1,278,665	0	1,278,665
FFY 2022 Federal Formula Grants 1,278,6	65						
Hayden 60' Lift Replacement	P22460X30	0	0	0	1,654,000	0	1,654,000
FFY 2022 Federal Formula Grant 1,654,0	00						
		_	_	_			
Hayden 40' Lift Replacement FFY 2022 Federal Formula Grant 880,0	P22460X30	0	0	0	880,000	720,000	1,600,000
FFY 2023 Federal Formula Grant 880,0							
12030							
Paratransit 9 Bus Lifts	P22460X30	0	0	0	0	942,800	942,800
FFY 2023 Federal Formula Grant 942,8	00						
TOTAL - BUS	GARAGES	0	0	700.000	4,312,665	1.662.800	6,675,465
	I				.,0.2,000	1,002,000	5,5.5,155
BUS REPLACEMENTS							
BUS IMPROVEMENT PROGRAM							
2018-2020 Bus Replacement Program 20,000,0	00	0	0	0	0	0	0
SFY 2020 ODOT CMAQ Grant 5,578,7	25 P11390X00	20,000,000					20,000,000
SFY 2020 ODOT UTP Award 3,000,0		20,000,000					20,000,000
FFY 2019 Federal Formula Grants 9,061,4	23						
FY 2020 Local Funds 125,0							
FY 2020 (TBD) 2,235,4	52						
2021-2023 Bus Replacement Program 80,000,0	00 P11390X10		20,000,000				20,000,000
SFY 2021 ODOT CMAQ Grant 5,519,5	00						
SFY 2021 ODOT UTP Award 3,000,0							
FFY 2020 Federal Formula Grants 9,015,0							
FY 2021 Local Funds 150,0 FY 2021 (TBD) 2,315,4							
F1 2021 (10D) 2,313,4		ļ.					



ANTICIPATED FUNDI	NG SOURCE							
		PROJECT						TOTALS
CATEGORY / PROJECT NAME		NUMBER	2020	2021	2022	2023	2024	2020-2024
BUS REPLACEMENTS -C	ontinued							
BUS IMPROVEMENT PROGRAM								
2021-2023 Bus Replacement Program		P11390120	0	0 💆	20,000,000	0	0	20,000,000
SFY 2022 ODOT CMAQ Grant	8.387.500							
SFY 2022 ODOT UTP Award	3,000,000							
FFY 2021 Federal Formula Grants	3,439,654							
FY 2022 Local Funds	0							
FY 2022 (TBD)	5,172,846							
2024-2026 Bus Replacement Program								
SFY 2023 ODOT CMAQ Grant	8,387,500	P11390X30				20.000.000	0	20,000,000
SFY 2023 ODOT UTP Award	3,000,000						•	
FFY 2022 Federal Formula Grants	5,633,404							
FY 2023 (TBD)	2,979,096							
SFY 2024 ODOT CMAQ Grant	8,387,500						20,000,000	20,000,000
SFY 2024 ODOT UTP Award	3,000,000						20,000,000	20,000,000
FFY 2023 Federal Formula Grants	3,439,654							
FY 2024 (TBD)	5,172,846							
	Sub-Total: Bus Improvem	ent Program	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,000
PARATRANSIT REPLACEMENT PROG	SRAM_							
Paratransit Buses-NOACA 5310		P12390170	805,000	1,406,000	1,562,000	960,000	960,000	5,693,000
FY 2020 (TBD)	805,000							
FY 2021 (TBD)	1,406,000							
FY 2022 (TBD)	1,562,000							
FY 2023 (TBD)	960,000							
FY 2024 (TBD)	960,000							
	tal: Paratransit Improvem	ent Program	805,000	1,406,000	1,562,000	960,000	960,000	5,693,000
BUS SPARE PARTS PROGRAM								
BRT Capital Spare Parts Program		P16390150	500,000	500,000	500,000	0	0	1,500,000
FFY 2019 Federal Formula Grant	500,000							
FFY 2020 Federal Formula Grant	500,000							
FFY 2021 Federal Formula Grant	500,000							
	Sub-Total: Bus Spare Pa	arts Program	500,000	500,000	500,000	0	0	1,500,000
	TOTAL	- BUSES	21,305,000	21,906,000	22,062,000	20,960,000	20,960,000	107,193,000

		DE VELOI I		1.0			
ANTICIPATED FUNDING SOURCE							
	PROJECT	Г					TOTALS
CATEGORY / PROJECT NAME	NUMBER	2020	2021	2022	2023	2024	2020-2024
FACILITIES IMPROVEMENTS							
BRIDGE REHABILITATION							
Track Bridge Rehab Viaduct Bridge Rehab: Phase 1	P2080046	0 1,447,105	10,064,565	0	0	0	11,511,670
	,447,105						
FFY 2020 Federal Formula Grant 10	0,064,565						
Track Bridge Inspection Program	P2080027	0 475,000	0	475,000	0	475,000	1,425,000
FY 2020 Local Funds	475,000	·					
FY 2022 Local Funds	475,000						
FY 2024 Local Funds	475,000						
Track Bridge Rehab West 117th Street	P2080029	0 4,581,000	0	0	0	0	4,581,000
FFY 2019 Federal Formula Grant 3	3,981,000						
FY2020 Local Funds	600,000						
Track Bridge Rehabilitation - Conrail	P20800X1	0	275.000	3.420.000	0	0	3,695,000
	215,000	•	,	-,,			0,000,000
FY2021 Local Funds	60,000						
FFY 2021 Federal Formula Grant 2,	750,000						
FY2022 TBD	670,000						
Track Bridge Rehabilitation - Access Rd. Bridge at CRMF	F P2080039	0	0	500,000	0	0	500,000
	500,000			,			
Rehab of Track Bridge -Brookpark	P20800X2	0	0	275,000	4.780.000	0	5,055,000
FY 2022 Local Funds	275,000		v	270,000	1,700,000	Ū	0,000,000
	780,000						
Rehab of Track Bridge Ambler Strike Protection	P20800X3	0	0	0	300,000	3,770,000	4,070,000
FY 2023 Local Funds	300,000		ŭ	· ·	222,000	2,2,000	.,2. 2,000
	770,000						
Sub-Total:	Bridge Rehabilitation	on 6.503.105	10.339.565	4.670.000	5.080.000	4.245.000	30,837,670



ANTICIPATED FUNDING SOURCE							
	PROJECT						TOTALS
CATEGORY / PROJECT NAME	NUMBER	2020	2021	2022	2023	2024	2020-2024
FACILITIES IMPROVEMENTS - Continu	ıed						
FACILITIES IMPROVEMENTS							
HVAC System Improvement Program	P32800X10	0	400,000	1,431,565	2,370,000	3,800,000	8,001,565
	0,000						
FFY 2021 Federal Formula Grant 1,43	,565						
FFY 2022 Federal Formula Grant 2,37	,000						
FFY 2023 Federal Formula Grant 3,800	,000						
Pavement Improvement Program	P32800X20	0	0	1,530,000	1,530,000	2,500,000	5,560,000
FFY 2021 Federal Formula Grant 1.53			Ü	1,000,000	1,000,000	2,000,000	0,000,000
FFY 2022 Federal Formula Grant 1,53							
FFY 2023 Federal Formula Grant 2,500							
Roofing Improvement Program	P32800X20	0	0	2,600,000	3,474,500	2,074,500	8,149,000
FFY 2021 Federal Formula Grant 2,60	0,000						
FFY 2022 Federal Formula Grant 3,474	1,500						
FFY 2023 Federal Formula Grant 2,074	1,500						
SYSTEM-WIDE FACILITIES							
Tower City - East Portal Concrete Repairs	P26800570	6,230,000	0	0	0	0	6,230,000
FFY 2019 Federal Formula Grant 6,23	0,000						
State of Good Repair Projects	P32800290	536,577	1,419,034	272,529	937,830	1,000,000	4,165,970
	5.577	000,011	1,110,001	2,2,020	001,000	1,000,000	1,100,010
FFY 2020 Federal Formula Grant 1,41	4 -						
· · · · · · · · · · · · · · · · · · ·	2,529						
FFY 2022 Federal Formula Grant 93	7,830						
FFY 2024 Federal Formula Grant 1,000	0,000						
Sub-Total: Syst	em-Wide Facilities	6,766,577	1,819,034	5,834,094	8,312,330	9,374,500	32,106,535
TOTAL - FACILITIES IMPR	OVEMENTS	13,269,682	12,158,599	10,504,094	13,392,330	13,619,500	62,944,205

		INIA DI	LVLLOI IVII					
ANTICIPATED FUNDING SO	DURCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2020	2021	2022	2023	2024	2020-2024
EQUIPMENT & VEHICLES								
MANAGEMENT INFORMATION SYSTEM								
Enterprise Content Management		P42610X20	0	0	1,635,507	0	0	1,635,507
FFY 2021 Federal Formula Grant	1,635,507							
Transit Police Radio Replacement		P44340X10	0	340.428	187.180	0	0	527,608
FY 2021 Local Funds	340,428			2 ,	,		-	,
FY 2022 Local Funds	187,180							
Sub-Total: Management Information S		ation System	0	340,428	1,822,687	0	0	2,163,115
TOTAL - EQUI	PMENT & V	EHICLES	0	340,428	1,822,687	0	0	2,163,115
OTHER PROJECTS								
OTHER								
Planning Studies (Transportation for Livable	e Communities)	P49570360	93,750	93,750	93,750	93,750	93,750	468,750
FY 2020 (TBD)	93,750	1 4007 0000	30,700	30,700	30,700	50,700	30,700	400,700
FY 2021 (TBD)	93,750							
FY 2022 (TBD)	93,750							
FY 2023 (TBD)	93,750							
FY 2024 (TBD)	93,750							
RTA Development Fund Contingency	TBD	P49990XX0	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	9,500,000
2020 - 24 (TBD)								
Thrive 105 Transit Enhancements 2020 - 24 (TBD)	TBD		100,000	100,000	100,000	100,000	100,000	500,000
NOACA Unserve Areas - 5307 CUA		P51670XX0	365.826	365.826	365.826	365.826	365,826	1,829,130
FFY 2019 Federal Formula Grant	365,826	3.0.0.0.0	555,525	555,520	330,020	000,020	555,520	1,020,100
FFY 2020 Federal Formula Grant	365,826							
FFY 2021 Federal Formula Grant	365,826							
FFY 2022 Federal Formula Grant	365,826							
FFY 2023 Federal Formula Grant	365,826							
TOTAL	- OTHER PR	OJECTS	2,459,576	2,459,576	2,459,576	2,459,576	2,459,576	12,297,880



GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2020 - 2024 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND

ANTICIPATED FUNDING SOURCE

ANTICII ATED I GNDIN	OOOKOL							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2020	2021	2022	2023	2024	2020-2024
PREVENTIVE MAINTENAN	ICE/OPERATING	REIMBUR	SEMENTS					
			<u></u>					
PREVENTIVE MAINTENANCE/OPERATI	NG REIMBURSEMENTS	DE4070\000	00 000 000	00 000 000	00 000 000 🔻	00 000 000	00 000 000	400 000 00
Preventive Maintenance Expenses	20,000,000	P51670X00	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,000
FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant	20,000,000							
FFY 2020 Federal Formula Grant	20,000,000							
FFY 2022 Federal Formula Grant	20,000,000							
FFY 2023 Federal Formula Grant	20,000,000							
TTT 2020 Todotal Formula Grant	20,000,000							
TOTAL - PREVENTIVE MA	INT./OPERATING	REIMB.	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,00
RAIL PROJECTS								
ELECTRICAL SYSTEM								
·		P21320180	0.000.000	0.000.000	0.000.000	4 000 000	4 000 000	44.000.00
OCS Replacement and Upgrade Plan FFY 2019 Federal Formula Grant	2,000,000	P21320180	2,000,000	2,000,000	2,000,000	4,000,000	4,000,000	14,000,000
FFY 2020 Federal Formula Grant	2,000,000							
FFY 2021 Federal Formula Grant	2,000,000							
FFY 2022 Federal Formula Grant	4,000,000							
FFY 2023 Federal Formula Grant	4,000,000							
	1,000,000							
Substation Improvement Program		P2180X00	3,900,000	3,850,000	3,850,000	0	0	11,600,000
FFY 2019 Federal Formula Grant	3,849,990	P2100X00	3,900,000	3,030,000	3,000,000	U	U	11,600,000
FY 2020 Local Funds	50,010							
FFY 2020 Federal Formula Grant	3,850,000							
FFY 2021 Federal Formula Grant	3,850,000							
	Sub-Total: Elec	trianal Countains	5,900,000	5,850,000	5,850,000	4,000,000	4,000,000	25,600,000
TRAIN CONTROL / CIONAL C	Sub-Total: Elec	trical System	5,900,000	5,650,000	5,650,000	4,000,000	4,000,000	25,600,000
TRAIN CONTROL / SIGNALS								
Signal System Upgrade Program		P26800X00						
FFY 2019 Federal Formula Grant	1,125,000		1,125,000	0	2,797,680	1,125,000	2,000,000	7,047,680
FFY 2021 Federal Formula Grant	2,797,680							
FFY 2022 Federal Formula Grant	1,125,000							
FFY 2023 Federal Formula Grant	2,000,000							
	Sub-Total: Train Cor	trol / Signals	1,125,000	0	2,797,680	1,125,000	2,000,000	7,047,68
		, O.ga.o	.,.20,000		2,. 0. ,000	.,0,000	_,000,000	.,0,000

ANTICIPATED FUNDING SOL	URCE							
	1	PROJECT						TOTALS
CATEGORY / PROJECT NAME		NUMBER	2020	2021	2022	2023	2024	2020-2024
RAIL PROJECTS - Continued								
TRACK REHABILITATION								
Rail Profile Grinding Program	F	23320170	1,489,000	0	0	0	0	1,489,000
FFY 2019 Federal Formula Grant	1,489,000							
Rail Infrastructure Program	F	P23320X00	1,000,000	1,000,000	1,000,000	1,000,000	500,000	4,500,000
FFY 2019 Federal Formula Grant	1,000,000							
FFY 2020 Federal Formula Grant	1,000,000							
FFY 2021 Federal Formula Grant	1,000,000							
FFY 2022 Federal Formula Grant	1,000,000							
FFY 2023 Federal Formula Grant	500,000							
On-Call Rail Engineering Services	F	23800240	200,000	200,000	200,000	200,000	200,000	1,000,000
FFY 2019 Federal Formula Grant	200,000							
FFY 2020 Federal Formula Grant	200,000							
FFY 2021 Federal Formula Grant	200,000							
FFY 2022 Federal Formula Grant	200,000							
FFY 2023 Federal Formula Grant	200,000							
LR Retaining Wall - Buckeye/Woodhill - Shaker S	Sq.: Ph. 2	P23800X00	1,441,000	0	0	0	0	1,441,000
FFY 2019 Federal Formula Grant	1,441,000							



GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2020 - 2024 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FLIND

ANTICIPATED FUNDING SOURCE							
	PROJECT						TOTALS
CATEGORY / PROJECT NAME	NUMBER	2020	2021	2022	2023	2024	2020-2024
RAIL PROJECTS - Continued							
TRACK REHABILITATION							
Light Rail Rehabilitation Program	P24800X00	16,772,875	21,782,081	18,600,000	20,367,286	0	77,522,242
FFY 2019 Federal Formula Grant 1,772,875							
SFY 2020 OTPPP 15,000,000							
FFY 2020 Federal Formula Grant 6,782,081							
SFY 2021 OTPPP 15,000,000							
FFY 2021 Federal Formula Grant 3,600,000							
SFY 2022 OTPPP 15,000,000							
FFY 2022 Federal Formula Grant 5,367,286							
SFY 2023 OTPPP 15,000,000							
Red Line East Track Rehabiliation Program							
FFY 2023 Federal Formula Grant 5,580,181						20,580,181	
SFY 2024 OTPPP 15,000,000						20,560,161	
31 1 2024 311 11							
Sub-Total: Track I	Rehabilitation	20,902,875	22,982,081	19,800,000	21,567,286	21,280,181	106,532,423
RAIL STATION REHABILITATION							
V AL W 11 0 (10)	Do 4000\/00	555.000					555.000
Van Aken Warrensville Comfort Station	P24800X00	555,000	0	0	0	0	555,000
FFY 2019 Federal Formula Grant 555,000							
Van Aken/Warrensville Platform	P24800X00	1,600,000	0	0	0	0	1,600,000
FFY 2019 Federal Formula Grant 1,600,000							
Westpark Station E. Train Platform	P24800X30	0	0	0	150,000	1,908,900	2,058,900
FFY 2022 Federal Formula Grant 150.000	1 24000700		· ·	Ü	100,000	1,500,500	2,000,000
FFY 2023 Federal Formula Grant 1.908.900							
11 1 2020 1 Caciai 1 Cililaia Ciaite 1,500,000							
Sub-Total: Rail Station F	Rehabilitation	2,155,000	0	0	150,000	1,908,900	4,213,900
RAIL VEHICLE FLEET							
Rail Capital Spare Parts Program	P16390X00	750,000	750,000	750,000	750,000	500,000	3,500,000
FFY 2019 Federal Formula Grant 750,000				,		,	-,,
FFY 2020 Federal Formula Grant 750,000							
FFY 2021 Federal Formula Grant 750,000							
FFY 2022 Federal Formula Grant 750,000							
FFY 2023 Federal Formula Grant 500,000							
000,000							

ANTICIPATED FUNDING	SOURCE							
		PROJECT						TOTALS
CATEGORY / PROJECT NAME		NUMBER	2020	2021	2022	2023	2024	2020-2024
RAIL PROJECTS - Continued	1							
	4							
Spiker Nipper Machine		P45390X00	370,379	0	0	0	0	370,379
FFY 2019 Federal Formula Grant	370,379							
Rail Prime Mover Utility Vehicle		P46390X00	1,751,108	448,892	0	0	0	2,200,000
FFY 2016 Federal Formula Grant	1,751,108		, - ,	-,				,,
FFY 2020 Federal Formula Grant	300,000							
FY2021 Local Funds	148,892							
RAIL CAR REPLACEMENTS								
RAIL CAR REPLACEMENT PROGRAM								
2021-2024 HRV Rail Replacement Program		P14390X00	8.000.000	31.250.000	31,250,000	31,250,000	23,250,000	125.000.000
FFY 2019 Federal Formula Grant	3,070,166						-,,	
FY 2020 (TBD)	4,929,834							
FFY 2020 Federal Formula Grant	3,036,683							
FY 2021 (TBD)	25,813,317							
NOACA (TBD)	2,400,000							
FFY 2021 Federal Formula Grant	10,175,475							
FY 2022 (TBD)	18,674,525							
NOACA (TBD)	2,400,000							
FFY 2022 Federal Formula Grant	3,901,725							
FY 2023 (TBD)	24,948,275							
NOACA (TBD)	2,400,000							
FFY 2023 Federal Formula Grant	3,901,725							
FY 2024 (TBD)	16,948,275							
NOACA (TBD)	2,400,000							
2024-2029 LRV Rail Replacement Program		P13390X40	0	0	0	0	8,000,000	8,000,000
FFY 2023 Federal Formula Grant	2,694,650							
FY 2024 (TBD)	2,905,350							
NOACA (TBD)	2,400,000							
	Sub-Total: Rail	Vohiolo Elect	10.871.487	32.448.892	32.000.000	32.000.000	31.750.000	139,070,379
			-,- , -	- , .,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. ,,	, ,	
TO	TAL - RAIL PR	OJECTS	40,954,362	61,280,973	60,447,680	58,842,286	60,939,081	282,464,382



GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY 2020 - 2024 CAPITAL IMPROVEMENT PLAN RTA DEVELOPMENT FUND										
ANTICIPATED FUNDING SOURCE										
CATEGORY/PROJECT NAME	PROJECT NUMBER	2020	2021	2022	2023	2024	TOTALS 2020-2024			
FFY 2019 Federal Formula Grant 30 FFY 2020 Federal Formula Grant 30 FFY 2021 Federal Formula Grant 30 FFY 2022 Federal Formula Grant 30	P49800X00 0,000 0,000 0,000 0,000 0,000 0,000	300,000	300,000	300,000	300,000	300,000	1,500,000			
TOTAL - TRANS	IT CENTERS	300,000	300,000	300,000	300,000	300,000	1,500,000			
TOTAL RTA DEVELOR	MENT FUND	98,288,619	118,445,576	118,296,037	120,266,857	119,940,957	575,238,046			
TOTAL RTA CA	PITAL FUND	2,969,702	3,059,990	2,953,000	2,753,984	2,562,000	14,298,676			
TOTAL CAPITAL IMPROVE	MENT PLAN	101,258,321	121,505,566	121,249,037	123,020,841	122,502,957	589,536,722			



