

2017 – 2021 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 proposed 2017–2021 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 (SGR) 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 SGR 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 SGR 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 from a five to an eight-year plan. The 2017-21 CIP presented here includes the first five programmed years of the Authority's Capital Program, with out-year projects, covering 2022–2024, under preliminary development.

ORGANIZATION OF THE CAPITAL IMPROVEMENT PLAN

This chapter contains the 2017-2021 Capital Improvement Plan of the Authority. The first year reflects the Board approved RTA Capital and RTA Development Fund budget appropriations for the FY 2017 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. The size, age, and service requirements of the bus and rail fleets are used in support of capital projects including the ongoing Bus Improvement Programs and maintenance needs of the Rail Fleets. Similarly, the age, purpose and maintenance history of the RTA's facilities provide a basis for reconstruction and rehabilitation decisions as the CIP is developed. Development of a Transit Asset Management (TAM) database that will assist in refining this process by providing a basis to prioritize the needs of capital assets based on their condition remains underway.

This chapter describes the planning process for the capital program, including 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). During this process, 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. It will also discuss the impact of capital investment decisions on the Operating Budget.

The final section is devoted to the details of the 2017 Capital Improvement Budget and the four out-years of the overall 2017-2021 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 2017–21 CIP focuses on attaining a State of Good Repair (SGR) for the Authority’s capital assets. Highlights include completion of the 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 95. These facilities and others are briefly discussed on the following pages.

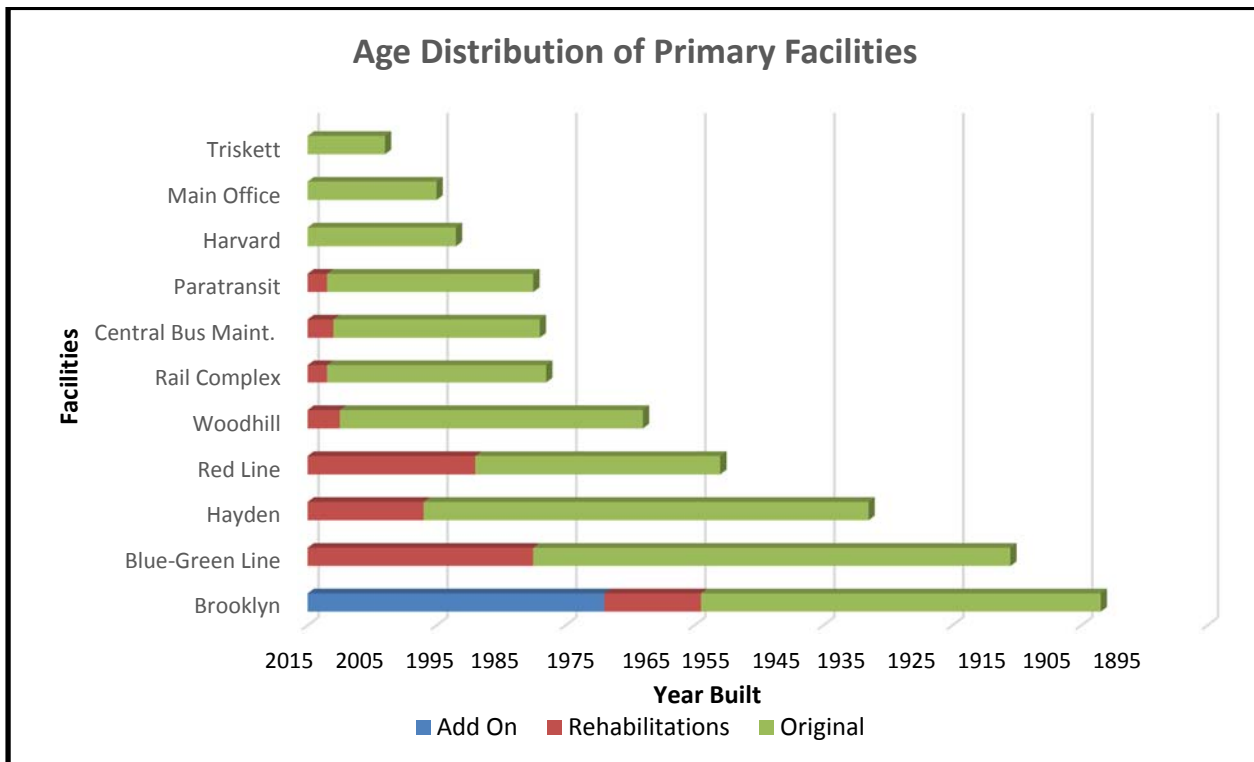


Figure 95: Age Distribution of GCRTA Primary Facilities

FACILITIES

BROOKLYN GARAGE FACILITY

The Brooklyn Garage was originally built in 1895 with additions in both 1955 and 1969. It remained in service as a bus facility until 2003. The facility is under a regular maintenance schedule and awaiting a potential buyer.

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.

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 SGR 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 is underway to address remaining CNG related building improvements with completion scheduled in FY 2017. 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 SGR grant award, were completed in 2014. Work is underway on remaining CNG building improvements at this facility with completion scheduled in FY 2017.

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.

HARVARD GARAGE FACILITY

The Harvard Garage opened for service as a bus garage in 1995 and has not been used as an operating district since 2010. In FY 2014, the Authority entered a License Agreement with Cuyahoga County renting a portion of the facility to help defray cost. The facility is under regular schedule maintenance and currently being used to store transit vehicles and host training classes.

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 related 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 all major commuter corridors within Cuyahoga County. As such, the GCRTA provides over 8,300 parking spaces at 21 of its rapid stations and operates seven bus Park-N-Ride lots in Berea, Brecksville, Rocky River, Strongsville, North Olmsted, Euclid and Westlake with more than 1,680 parking spaces.

PASSENGER SHELTERS

There are approximately 1,400 bus shelters located throughout the Authority's bus system at the close to 6,100 bus stops that are cleaned, maintained or replaced on a regular basis throughout the year.

RAIL DISTRICT COMPLEX

The Rail District Complex, located at 6200 Grand Avenue, went into service in late 1982. It houses 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 implemented 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.

TRANSIT CENTERS

Transit Centers provide heated customer waiting areas and roadways to allow several bus routes to meet and transfer passengers. RTA has six Transit Centers located in Fairview Park at Westgate Shopping Center, Euclid, North Olmsted, Maple Heights at Southgate Shopping Center, Parma at the Parmatown Mall, and near Cleveland State University (Stephanie Tubbs Jones Transit Center) with more than 900 combined parking spaces.

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 underwent 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 of light rail and thirty-eight miles of heavy rail track. 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 SGR 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 was reconstructed between 1980 and 1984.

In FY 2013, a reconstructed Woodhill Station was opened, in FY 2015 a completed reconstruction of Lee/Van Aken Station, and the phase two of the Light Rail Crossings rehabilitation of three crossings one on the Green Line at Southpark Blvd and

two on the Waterfront line at Robert Lockwood Dr. and St. Clair Avenue, and the completion of the multi-year Shaker Square Crossings and Junctions rehabilitation project. In FY 2016, three additional Light Rail Crossings were completed at Main Street on the Waterfront Line, at Southington Road and West Park Boulevard on the Green Line, which also included completed construction 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.

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.

Since 2000 the Authority has completely renovated or reconstructed ten of its Red Line Station, with two, Cedar – University and Little Italy – University Circle Rapid Station recently completed. In FY 2015 other infrastructure projects that were finished including the rehabilitation of Red Line track from the S-Curve to W. 117th St. Station and from Kinsman Ave. to the Cedar-University Station. During FY 2016 completion of track reconstruction of Track 7 & 8 at Tower City Station; and work commenced on a \$15.1 million reconstruction of Brookpark Station, and a combined budget of \$10.7 million is programmed for heavy rail projects including the first of two years for the East 34th Street Station reconstruction for \$4.5 million and \$6.2 million for improvements at the Brookpark, Puritas and W. 65th Substations.

The 2017-21 CIP of the Authority continues to commit a significant amount of resources towards achieving a SGR in its Light & Heavy Rail Systems infrastructure including the reconstruction, rehabilitation and upgrades to train stations, power substations and electrical systems, train controls, and its on-going track and station rehabilitation programs.

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.

Since 2000, 18 track bridges, seven street bridges, including the shared Light Rail Trunk Line Bridge, and the Airport Tunnel have been completely rehabilitated and the closed Rockefeller Bridge demolished. In FY 2015, the rehabilitation of CRMF Road Bridge at East 37th and East 81st & 83rd Street were completed. After completion of engineering & design services programmed in prior year for track bridges, construction work begin on three track bridges in FY 2016 including a combined \$10.5 million for the reconstruction of track bridges at East Blvd., East 92nd Street, and completion of Phase I rehabilitation work on the Viaduct Track Bridge- Concrete & Repairs. The out-years of this CIP includes engineering & design services and reconstruction work on five track bridges, the first construction phase on the Viaduct Bridge, track bridge rehabilitation of W.117th Street, Ambler Avenue, Canal Road, Lorain Avenue and 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, \$8.90 million was programmed for the rehabilitation of Platform 7 (to serve as a temporary station) and the reconstruction of Track 8 (west-bound track) located under Tower City 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.

REVENUE VEHICLE FLEETS

CONVENTIONAL BUSES

There were 496 vehicles in the GCRTA bus fleet at the end of 2016. Compared to the prior year, 68 vehicles have been retired or are in the process of being replaced under the bus improvement program. During FY 2015, 90 new 40-FT CNG vehicles were placed in daily operation, and in FY 2016, 12 Trolleys were placed into services at mid-year programming an additional 16 40ft CNG buses and 29 diesel vehicles to arrive late 2017. The Authority's current fleet includes 218 40-foot transit buses; 40-foot articulated diesel buses; 24 60-foot articulated hybrid bus rapid transit (BRT) vehicles; 23 45-foot commuter buses; 12 29-foot trolley buses; and 90 40-foot CNG vehicles. 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 2016. The age distribution of the Authority's large bus fleet is shown in Figure 96 on the next page.

The Authority's goal is to replace approximately 1/14 of its large bus fleet every year (30 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 2017– 21 CIP continues a planned bus replacement program, begun in 2013, that should average close to 35 buses per year over a five-year period.

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 End of 2016

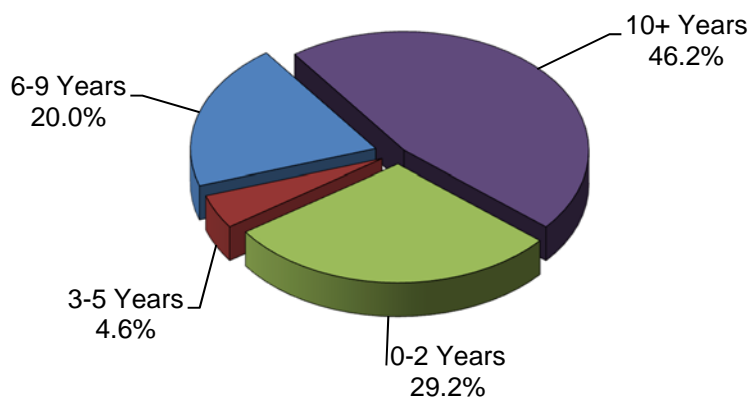


Figure 96: Age Distribution of Bus Fleet

Programmed orders in future years of this CIP depends upon the availability of non-formula funding, but they are expected to further lower the average age of the Authority's big bus fleet to approximately 6.4 years at the end of 2020. 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

The Authority's Paratransit Program transports senior citizens and disabled persons on an advanced reservation basis. Including twenty propane fueled vehicles there are 89 ADA compliant, wheelchair-equipped buses in active service in the Paratransit fleet with an average age of 4.9 years at the end of FY 2016. In mid FY 2016, 20 MV-1 vehicles was delivered and placed into service. If the replacement of buses continue at this rate, it is anticipated that the average age of Paratransit fleet will be approximately 2.4 years by the end of FY 2018. 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.

RAIL VEHICLES

RTA owns a combined 108 heavy and light rail vehicles for its rail operations. The average age of the Authority's combined rail fleet at the end of 2016 was 35 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 25 to 30 years, but in the near future, the Authority will be facing significant replacement costs for both of its rail fleets.

There are 60 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 18 cars, while special events require 36 cars. The 48 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 13 cars, and 28 cars are required for special event services.

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 97 on the next page, depicts the revised Capital Improvement and TIP planning cycles for the 2017-21 Capital Improvement Plan (CIP). The process began in March, 2016 when the Office of Management and Budget (OMB) reviewed the budgeting policies and set the parameters for the Capital Budget, and concluded in August with the Board Adoption of the recommended 2017-21 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 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 that 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 May, June and early July, 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, efficiencies, 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 2017-21 CIP were finalized.

This was followed, in July, by a comprehensive mid-year review that assessed the status of the current year's Capital Improvement Budget. Based on the mid-year review, the CIP for 2017-21 was finalized and presented to the Board of Trustees' Finance Committee in August for discussion and review at which time approval was given.

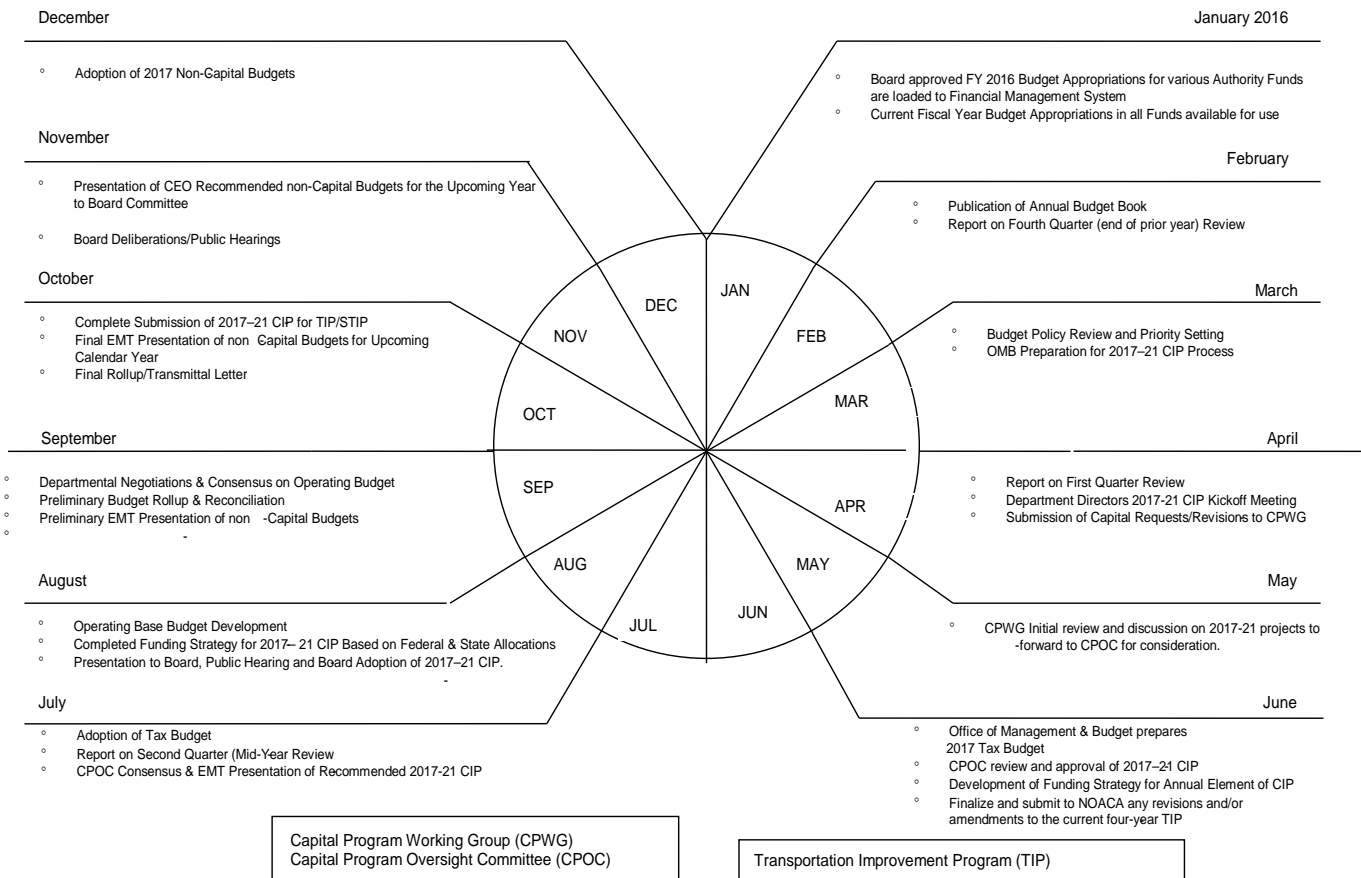


Figure 97

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 the 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 March 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 December 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.

CAPITAL BUDGET APPROPRIATIONS

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.

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 and not more than 15 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 15 percent and a maximum of 85 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 2017–21 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.

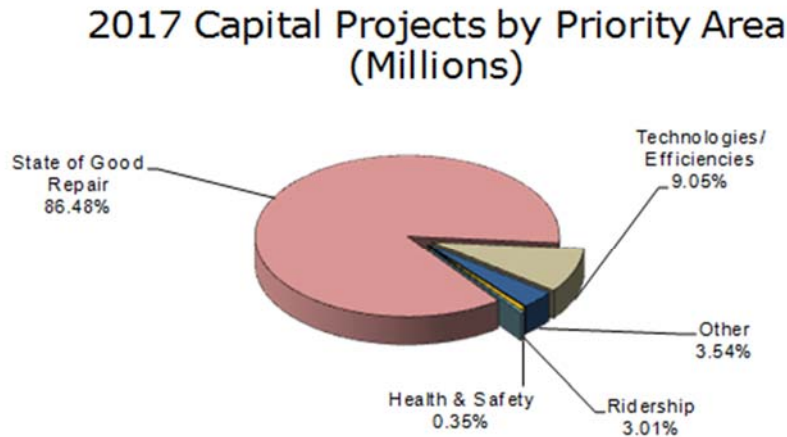
PRIORITY AREAS

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:

- **Health and Safety** – Ensuring the physical well-being of the Authority’s customers, employees, and the general public
- **Mandates** – Ensuring compliance with Federal and State mandates such as the Clean Air Act and Americans with Disabilities Act
- **State of Good Repair** – 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
- **Ridership Transit Oriented Development** – 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.
- **Technologies / Efficiencies** – Instituting improvements which can produce operating efficiencies and make better use of resources or implementing projects which minimize additional operating expenses
- **Environmental Impact** – Investing in equipment, adapting facilities or enhancing service infrastructure to support overall environmental benefits such as improved air quality

Figure 98 reflects the distribution of approved 2017 Capital Improvement projects by capital priority area. The largest portion of the 2017 Capital Budget appropriations, \$55.4 million or 86.5 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 Technologies/Efficiencies category that includes projects that have an environmental impact, are for mandated programs, or for transit oriented development with \$5.8 million, or 9.1 percent, with the remaining categories making up the balance of the budgeted capital projects.



Priority Area	2017 Budget	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2017-21
Ridership	\$0.37	\$0.35	\$0.35	\$0.35	\$0.35	\$1.77
Health & Safety	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$1.13
State of Good Repair	\$55.43	\$73.55	\$78.86	\$61.24	\$63.88	\$332.96
Technologies/Efficiencies	\$5.80	\$12.33	\$11.44	\$3.89	\$3.24	\$36.70
Other	\$2.27	\$2.27	\$2.27	\$2.27	\$2.27	\$11.35
Total	\$64.10	\$88.73	\$93.15	\$67.98	\$69.97	\$383.91

Figure 98: 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 will exceed \$18.5 million in FY 2017 for existing debt service.

At the end of FY 2016, the Authority will have a combined \$120.0 million of outstanding debt among nine outstanding debt issues. They are, along with their original amounts, \$35.0 million of bonds issued in 2008, a \$25.0 million issuance and \$17.4 million refunding issuance in 2012, a \$29.4 million refunding issuance in 2014, and a combined \$51.4 million issuance and refunding issuance in 2015. Current plans are to issue \$30 million of additional debt in late FY 2017 or early FY 2018 that will be used as the local match for programmed grant funded capital projects or for locally funded capital projects.

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 99, Federal grants provide an estimated \$59.4 million, or nearly 56.7 percent of the Authority's capital improvement revenue stream during FY 2017. Over the five-year CIP period, Federal funding may provide approximately 63.3 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.

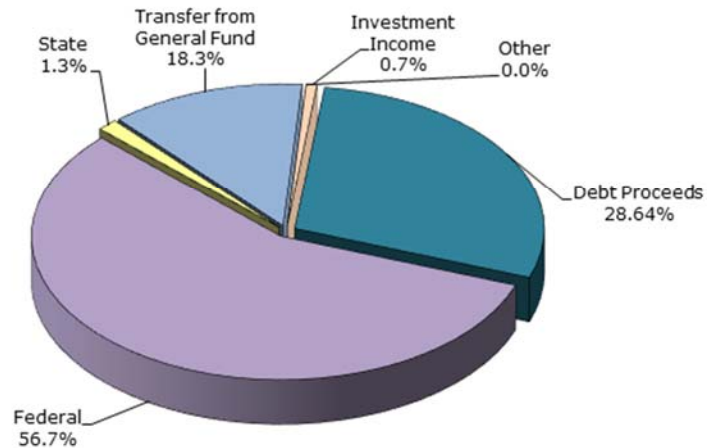
[SAFETEA-LU](#) was extended several times since, and in FY 2012 a new Transportation Act, Moving Ahead for Progress in the 21st Century (MAP-21), was approved by Congress. MAP-21 established some certainty over available FTA funds for future transit construction projects. Changes in Federal formula 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 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 (SGR) by creating a business model using transit asset condition ratings to guide capital planning decisions and optimize funding resources.

FY 2017 Capital Improvement Revenue By Source (Millions)



	2014 Actual	2015 Actual	2016 Estimate	2017 Budget	2018 Plan	2019 Plan
Transfer from General Fund	\$15.87	\$15.51	\$9.47	\$13.28	\$13.47	\$14.31
Investment Income	\$0.07	\$0.21	\$0.73	\$0.73	\$0.63	\$0.72
Federal	\$58.20	\$75.82	\$61.25	\$59.35	\$62.79	\$71.29
State	\$2.05	\$0.53	\$1.38	\$1.38	\$1.38	\$1.38
Debt Proceeds	\$0.00	\$30.00	\$0.00	\$30.00	\$0.00	\$25.00
Other	\$0.07	\$0.09	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$76.26	\$122.16	\$72.83	\$104.74	\$78.27	\$112.70

Figure 99: 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 \$12.21 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 FFY 2015, with the local match included, the Authority received \$29.08 million and \$29.62 in FY 2016 from its Section 5307 award, a slight increase from the prior FY 2014 amount of \$28.97 million. Prior to that, Section 5307 grant awards for the Authority totaled \$27.78 million in FFY 2013 and \$28.70 million in FFY 2012. Future allocations under the upcoming FAST 21 legislation are estimated at \$29.62 million, near the amount currently received under the MAP-21 legislation.

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 (SGR) 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 close to \$4.0 million for rail formula award funds over the last two years 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 FFY 2012 totaled \$17.26 million. Since then, the Authority has received \$14.16 million in FFY 2013, \$15.38 million in FFY 2014 and \$15.10 million in FFY 2015. Under the new FAST Act, the Authority received \$17.38 in FY 2016, meeting the projected \$2.0 million increase needed for state of good repair for capital projects. While a significant increase, the Authority 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 \$2.33 million received in FFY 2013, \$2.43 million in FFY 2014, and again in FFY 2015. Under the FAST Act, this amount slightly decreased to \$2.30 million with similar amounts to be received in future years of the CIP.

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 \$3.17 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 SGR capital projects as competitive grant awards become available.

The Authority recently 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 \$15.63 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 \$8.69 million for the Clifton Boulevard Transit Enhancement project. Earlier in FY 2012, the Authority received two competitive grant awards; One for \$3.96 million for improvements at the Brookpark & Windermere Red Line Stations and the Strongsville Park-N-Ride, and a second for \$1.61 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. In the proposed 2017–2021 Capital Improvement Plan (CIP), projects are identified within the plan to seek competitive awards of \$3.8 million for rehabilitation of Red Line Track West (W.75th – W.98th) and \$11.9 million for Radio CAD/AVL System Replacement. 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 past, the State contributed State grants in this form. 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 2012, the Ohio Transit Preservation Partnership Program (OTPPP) awarded \$2.6 million of Federal funds for the reconstruction of the Red Line Airport Tunnel and \$1.89 million of Federal funds in FY 2013 for the Authority's

Revenue Vehicle Camera and DVR program. In FY 2014, the Authority received a \$2.62 million of OTPPP award for replacement of 40-Ft buses, and in FY 2015 executed a \$1.96 million award for four replacement trolley buses. In future budget 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

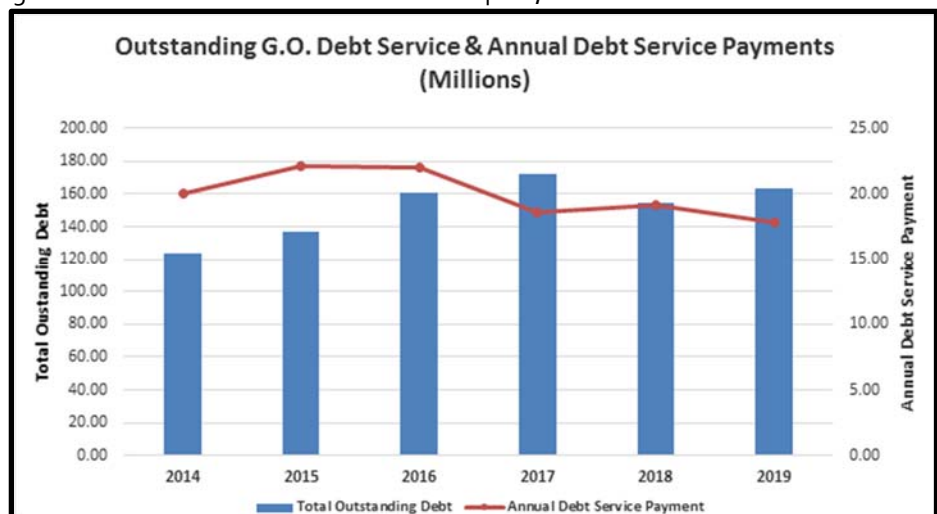
The Capital Improvement Budget requires local resources to support the match for most grant-funded projects, as well as support 100 percent locally funded projects in both the RTA Capital and RTA Development Funds. In FY 2017, the combined local contribution for the Authority’s capital program of \$32.92 million are sourced from two transfers included within the General Fund. The first is a \$13.64 million transfer to the RTA Capital Fund to cover locally funded capital expenditures within the Capital Funds. The second, a \$19.28 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 grew from \$36.36 million in FY 2014, to \$38.13 million in FY 2015, decreasing to \$31.35 in FY 2016, and are expected to increase slightly and remain steady into future budget years.

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 2016 will mature by December 2034. The \$160.03 million balance of outstanding debt at the end of 2016 will require principal and interest payments of \$18.57 million in 2017.

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 other revenue sources.



Debt Service	2014 Actual	2015 Actual	2016 Estimate	2017 Budget	2018 Plan	2019 Plan
Annual Debt Service Payment	20.01	22.12	22.07	18.57	19.12	17.81
Total Outstanding Debt	123.94	136.88	160.33	172.40	154.43	163.28

Figure 100: 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 2016 of \$27.62 billion limits the amount of available debt to \$1.39 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 \$27.62 billion, annual debt servicing capacity would be close to \$27.62 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.
3. 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 10.754 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 2016 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 \$25.0 million in Revenue Bonds, rather than General Obligation Bonds, in 2012 and a new issuance of \$30 million in 2015.

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 2017 Operating Budget in a number of ways such as the following:

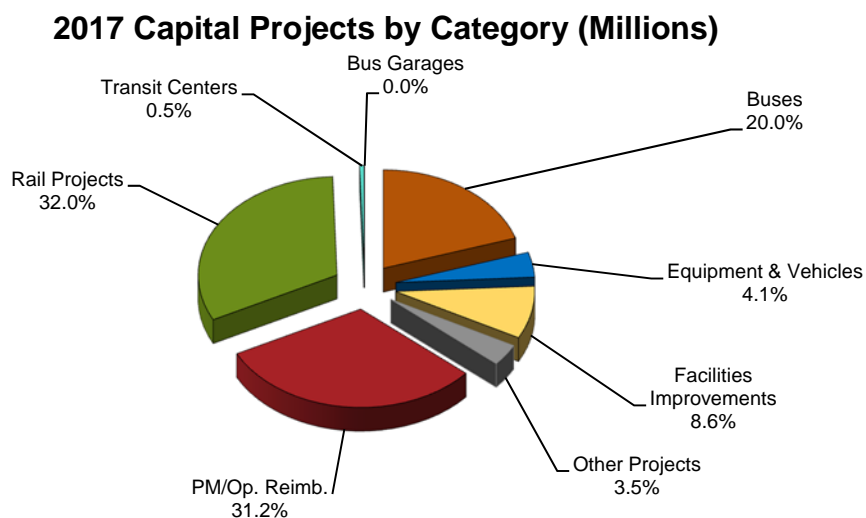
- The Trustees' commitment to balancing sales & use tax revenues between the Capital Improvement Fund and supporting operation needs. In the upcoming year, transfers to the Capital Fund are budgeted in the amount of \$13.28 million.
- In tandem with increased capital requirements to achieve a SGR, the 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 \$18.57 million will require a General Fund transfer to the Bond Retirement Fund to offset the debt in FY 2017, 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 2017, this activity will result in a projected \$1.0 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, \$141.19 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 \$75.39 million, then redirected for needed capital improvements. In FY 2016, PM activities are expected to end the year at \$21.20 million as budgeted. In FY 2017, PM activities are budgeted to decrease slightly to \$20.0 million as the service needs of the Operating Budget draw resources from the Capital program.
- 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 2017 General Fund or Operating Budget are supported by \$3.92 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 2017–2021 Capital Improvement Plan (CIP) totals \$383.91 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 2017 CIP, two categories comprise \$40.50 million, or 63.2 percent, of the combined \$64.10 million capital budget appropriations. The largest with \$20.50 million is the Rail Project category, followed by the Preventive Maintenance/Operating Expense projects category with \$20.0 million. These are followed by the Bus Improvement category with \$12.84 million, and four remaining categories totaling \$10.75 million within the approved capital budget as shown in Figure 101.

Reflecting the challenging financial picture the Authority faces, the largest budgeted category over the five-year CIP is the grant funded reimbursements of preventive maintenance and other operating expenses with \$100.00 million, or 26.04 percent of the CIP budget over the five years. This is followed by Bus Improvement Programs with \$98.80 million, 25.5 percent, and the Rail Projects with \$95.16 million, or 24.78 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	2017 Budget	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2017 - 21
Bus Garages	\$0.00	\$2.40	\$5.45	\$0.00	\$0.00	\$7.85
Buses	\$12.84	\$21.96	\$20.00	\$20.00	\$24.00	\$98.80
Equipment & Vehicles	\$2.63	\$8.06	\$7.10	\$4.85	\$4.29	\$26.94
Facilities Improvements	\$5.53	\$8.77	\$12.81	\$7.24	\$7.93	\$42.28
Other Projects	\$2.27	\$2.27	\$2.27	\$2.27	\$2.27	\$11.36
PM/Oper. Reimb.	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$100.00
Rail Projects	\$20.50	\$24.97	\$25.21	\$13.32	\$11.18	\$95.16
Transit Centers	\$0.32	\$0.30	\$0.30	\$0.30	\$0.30	\$1.52
Total	\$64.09	\$88.73	\$93.14	\$67.98	\$69.97	\$383.91

Figure 101: 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 103 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 2017 will include \$13.27 million of programmed transfers from the General Fund and investment income of \$20,000. The transfer amount, in combination with the General Fund transfer of \$19.28 million to the Bond Retirement Fund, brings the total commitment to Capital to \$32.55 million, or 15 percent of the projected 2017 sales & use tax revenue.

Budgeted FY 2017 expenditures within the RTA Capital Fund of \$13.64 million include \$1.90 million for Asset Maintenance or facilities projects, \$2.20 million for Routine Capital or equipment purchases, and a \$9.54 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 2017 ending balance of \$2.03 million is a decrease from prior years due to an increase in asset capital to maintain a state of good repair of facilities and sustain ongoing operations at various districts throughout the Authority.

RTA Capital Fund Balance Analysis

	2014 Actual	2015 Actual	2016 Estimate	2017 Budget	2018 Plan	2019 Plan
Beginning Balance	1,731,677	1,522,919	2,114,010	2,371,815	2,031,294	2,090,214
Revenue						
Transfer from General Fund	15,874,829	15,509,273	9,472,060	13,276,384	13,477,501	14,313,188
Investment Income	13,200	21,847	20,000	20,000	20,000	20,000
Other Revenue	72,916	0	0	0	0	0
Total Revenue	15,960,744	15,531,120	9,492,060	13,296,384	13,497,501	14,333,188
Total Resources	17,692,421	17,054,039	11,606,070	15,668,209	15,528,795	16,423,400
Expenditures						
Asset Maintenance	1,827,996	1,415,840	1,850,000	1,900,000	2,000,000	1,900,000
Routine Capital	2,807,251	1,874,934	2,250,000	2,200,000	1,750,000	1,800,000
Transfer to RTA Development Fund	11,734,255	11,649,255	5,334,255	9,536,915	9,688,581	10,580,555
Total Expenditures	16,169,502	14,940,029	9,234,255	13,636,915	13,438,581	14,260,555
Ending Balance	1,522,919	2,114,010	2,371,815	2,031,294	2,090,214	2,162,845

Figure 102

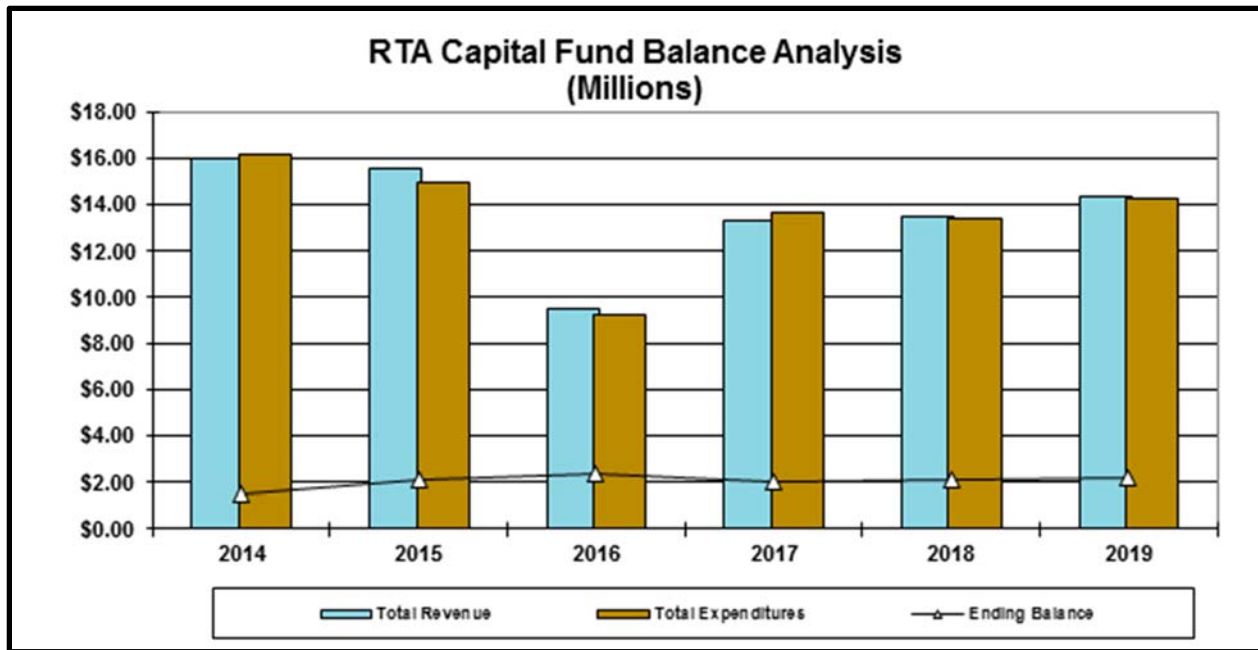


Figure 103

	2014 Actual	2015 Actual	2016 Estimate	2017 Budget	2018 Plan	2019 Plan
Beginning Balance	\$1.73	\$1.52	\$2.11	\$2.37	\$2.03	\$2.09
Total Revenue	\$15.96	\$15.53	\$9.49	\$13.30	\$13.49	\$14.33
Total Resources	\$17.69	\$17.05	\$11.60	\$15.67	\$15.52	\$16.42
Total Expenditures	\$16.17	\$14.94	\$9.23	\$13.64	\$13.43	\$14.26
Ending Balance	\$1.52	\$2.11	\$2.37	\$2.03	\$2.09	\$2.16

Figure 103: RTA Capital Fund Balance Analysis

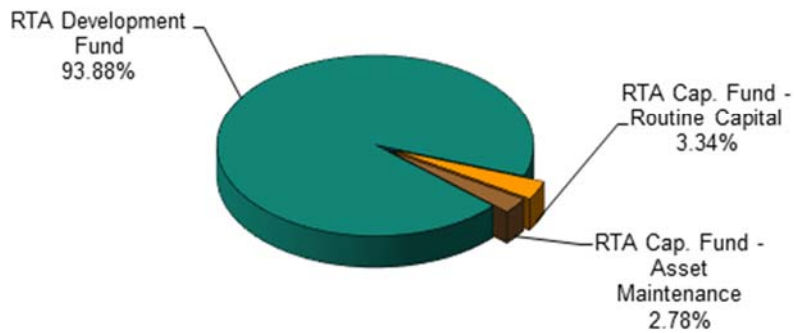
ASSET MAINTENANCE PROJECTS

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 2017 budget appropriation for Asset Maintenance projects is \$1.78 million, representing 2.8 percent of the overall FY 2017 Capital Improvement Budget as represented in Figure 104. 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 \$850,000, or 47.9 percent. Asset and Configuration Management manages \$410,000, or 23.1 percent of all Asset Maintenance projects, budgeted within the for 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.

2017 Capital Project Budgets by Fund (Millions)



	2017 Budget	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2017-21
RTA Cap. Fund - Routine Capital	\$2.14	\$1.52	\$1.63	\$1.53	\$1.47	\$8.29
RTA Cap. Fund - Asset Maintenance	\$1.78	\$1.83	\$1.76	\$1.77	\$1.71	\$8.85
RTA Development Fund	\$60.18	\$85.37	\$89.76	\$64.68	\$66.79	\$366.78
Total	\$64.10	\$88.72	\$93.15	\$67.98	\$69.97	\$383.92

Figure 104: 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 CIP-8, the budget appropriation for Routine Capital projects accounts for \$2.14 million, or 3.3 percent, of the 2017 CIP Budget. Reflecting the support of daily operations, the greatest portion of the budget appropriation for Routine Capital projects in the 2017 CIP is within the Operations Division, which has a combined \$1.57 million, or 73.5 percent, of the total. More than half, \$825,000 is programmed for the non-revenue vehicle lease or replacement program followed by \$524,000 for equipment pool projects throughout various Operating Division Departments, and a budgeted Transit Police Department security pool program of \$225,000.

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA CAPITAL FUND**

ASSET MAINTENANCE (FACILITIES) PROJECTS

Department / Project Name	Project Number	2017 Budget	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2017-21 Total
<u>31 Paratransit District</u>							
Interior Garage Cleaning/Painting	P32315079	\$125,000	\$0	\$0	\$0		\$125,000
		\$125,000	\$0	\$0	\$0	\$0	\$125,000
<u>32 Rail District</u>							
WFL Booth Replacements (5)	P32325079	\$75,000	\$0	\$0	\$0	\$0	\$75,000
		\$75,000	\$0	\$0	\$0	\$0	\$75,000
<u>33 Asset & Configuration Mgt.</u>							
Administration Facilities Maint. Pool	P32335159	\$60,000	\$60,000	\$70,000	\$70,000	\$70,000	\$330,000
Elevator/Escalator Maintenance Pool	P32335259	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Operating Facilities Maintenance Pool	P32335359	\$125,000	\$125,000	\$135,000	\$135,000	\$160,000	\$680,000
Passenger Facilities Maintenance Pool	P32335459	\$125,000	\$125,000	\$135,000	\$135,000	\$160,000	\$680,000
		\$410,000	\$410,000	\$440,000	\$440,000	\$490,000	\$2,190,000
<u>39 Fleet Management</u>							
Install High Speed Doors (#15 & #19)	P32395079	\$115,000	\$0	\$0	\$0	\$0	\$115,000
Replace Skylights & Smoke Hatches	P32395089	\$0	\$172,000	\$0	\$0	\$0	\$172,000
Bus Districts Lift Rebuilds/Rehab's	P47395059	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
		\$165,000	\$222,000	\$50,000	\$50,000	\$50,000	\$537,000
<u>57 Programming & Planning</u>							
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
<u>80 Engineering & Project Dev.</u>							
Facilities - ADA Projects	P32805049	\$100,000	\$125,000	\$125,000	\$150,000	\$150,000	\$650,000
Passenger Facilities Maint. Pool	P32805149	\$250,000	\$300,000	\$300,000	\$325,000	\$325,000	\$1,500,000
Operating Facilities Maint. Pool	P32805249	\$500,000	\$525,000	\$525,000	\$550,000	\$550,000	\$2,650,000
Paratransit Parking Lot Expansion	P32805189	\$0	\$0	\$170,000	\$0	\$0	\$170,000
		\$850,000	\$950,000	\$1,120,000	\$1,025,000	\$1,025,000	\$4,970,000
<u>67 OFFICE OF MGT. & BUDGET</u>							
Energy Retrofits	P32675339	\$0	\$100,000	\$0	\$100,000	\$0	\$200,000
Asset Maintenance Contingency	P49995059	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
		\$100,000	\$200,000	\$100,000	\$200,000	\$100,000	\$700,000
TOTAL ASSET MAINTENANCE		\$1,775,000	\$1,832,000	\$1,760,000	\$1,765,000	\$1,715,000	\$8,847,000

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA CAPITAL FUND**

ROUTINE CAPITAL (EQUIPMENT) PROJECTS

Department / Project Name	Project Number	2017 Budget	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2017-21 Total
<u>12 Executive</u>							
NOACA Dues	P49120149	57,700	58,500	58,500	58,500	59,000	292,200
CLE Works Dues	P49120249	30,000	30,000	30,000	30,000	30,000	150,000
Outside Legal Services - Leg. Review	P49120349	90,000	90,000	91,500	91,500	92,500	455,500
		177,700	178,500	180,000	180,000	181,500	897,700
<u>32 Rail District</u>							
Rail District Equipment Pool	P47320149	222,000	90,000	90,000	30,000	20,000	452,000
		222,000	90,000	90,000	30,000	20,000	452,000
<u>34 Transit Police</u>							
Security Improvements Pool	P44340249	225,000	225,000	225,000	225,000	225,000	1,125,000
		225,000	225,000	225,000	225,000	225,000	1,125,000
<u>39 Fleet Management</u>							
Non-Revenue Vehicle Imp. Program	P46390159	125,000	125,000	150,000	150,000	150,000	700,000
NRVIP - Lease Payments	P46390169	400,000	400,000	400,000	400,000	400,000	2,000,000
Overhead Catenary Repair Vehicle	P46390279	300,000	0	0	0	0	300,000
Fleet Management Equipment Pool	P47390349	82,000	60,000	35,000	35,000	40,000	252,000
		907,000	585,000	585,000	585,000	590,000	3,252,000
<u>46 Hayden District</u>							
Hayden District Equipment Pool	P47460169	185,000	0	50,000	40,000	50,000	325,000
		185,000	0	50,000	40,000	50,000	325,000
<u>49 Triskett District</u>							
Triskett District Equipment Pool	P47490159	35,000	0	20,000	35,000	20,000	110,000
		35,000	0	20,000	35,000	20,000	110,000
<u>61 Information Technology</u>							
IT Systems Development Pool	P32805189						
IT Systems Development Pool	P42610149	125,000	130,000	130,000	130,000	130,000	645,000
PC Replacement Program	P42610169	50,000	50,000	50,000	50,000	50,000	250,000
Thin Client Replacement Program	P42610179	75,000	0	0	0	0	75,000
Kiosk Replacement Program	P42610189	0	125,000	125,000	75,000	25,000	350,000
Laser Printer Replacement Program	P42610299	0	0	35,000	35,000	35,000	105,000
		250,000	305,000	340,000	290,000	240,000	1,425,000
<u>62 SUPPORT SERVICES</u>							
Office Equipment/Furniture Pool	P43620149	40,000	40,000	40,000	45,000	45,000	210,000
		40,000	40,000	40,000	45,000	45,000	210,000
<u>67 OFFICE OF MGT. & BUDGET</u>							
Routine Capital Contingency	P49990159	100,000	100,000	100,000	100,000	100,000	500,000
		100,000	100,000	100,000	100,000	100,000	500,000
TOTAL ROUTINE CAPITAL		2,141,700	1,523,500	1,630,000	1,530,000	1,471,500	8,296,700
RTA CAPITAL FUND TOTAL		3,916,700	3,355,500	3,390,000	3,295,000	3,186,500	17,143,700

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 include 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 2014, \$11.73 million was transferred from the RTA Capital Fund to the RTA Development Fund to provide the local match for Operating Budget expense reimbursements and to cover other locally funded expenditures within the RTA Development Fund. The transfer decreased slightly to \$11.65 million in FY 2015, and again in FY 2016 to \$5.3 million. The amount remained relatively stable in FY 2017 at \$9.54 million, and \$9.69 million in FY 2018 before increasing to \$10.56 million in FY 2019 due to the financial demands of the Authority's capital program.

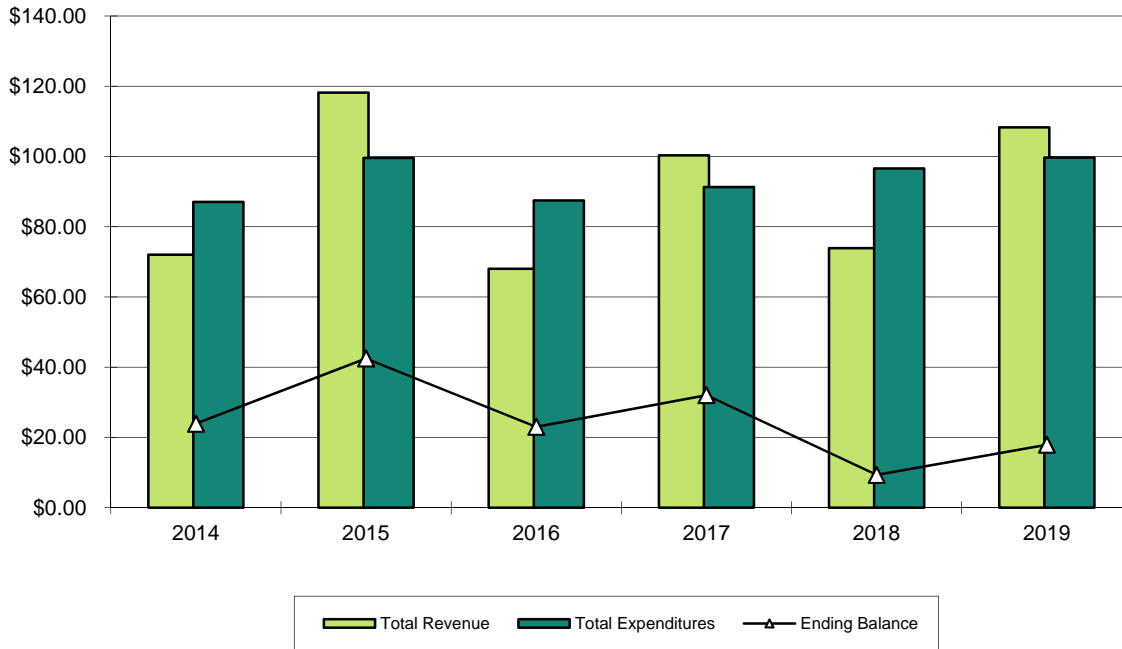
Other local funding sources include debt service, revenue bonds, and interest income. The Authority last issued debt, \$25.0 million of Revenue Bonds, in FY 2016 to support capital project activities and an additional debt service of approximately \$30.00 million is expected in FY 2017. Interest income has varied over the years from a high of \$185,574 in FY 2015 to an estimated low of \$53,000 in FY 2017 due to fluctuations in the interest rates and fund balance over the years

Figure CIP-9 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. At the end of FY 2013, the fund balance was \$38.92 million. Capital construction activities over the following years drew the fund balance down as it declined to \$23.91 million at the end of FY 2014. It increased in FY 2015 due to the issuance of Revenue bonds and decreased to \$23.02 million at the end of FY 2016. It is expected to again increase to \$32.04 million in FY 2017 due to a planned debt service in that year.

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 105, 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 \$91.3 million in 2017. Of particular note, the expenditures within the Fund Balance Analysis are presented on a cash basis and represent estimates of the actual cash flow. Thus, the expenditure estimates differ from the budget appropriations included in the 2017-21 CIP, which are based upon the establishment of the necessary budget appropriation for the capital projects.

RTA Development Fund Balance Analysis (Millions)



	2014 Actual	2015 Actual	2016 Estimate	2017 Budget	2018 Plan	2019 Plan
Beginning Balance	\$38.93	\$23.91	\$42.49	\$23.02	\$32.04	\$9.35
Total Revenue	\$72.03	\$118.19	\$68.03	\$100.32	\$73.91	\$108.28
Total Resources	\$110.96	\$142.10	\$110.52	\$123.34	\$105.95	\$117.63
Total Expenditures	\$87.05	\$99.61	\$87.50	\$91.30	\$96.60	\$99.70
Ending Balance	\$23.91	\$42.49	\$23.02	\$32.04	\$9.35	\$17.93

Figure 105: RTA Development Fund Balance Analysis

RTA Development Fund Balance Analysis

	2014 Actual	2015 Actual	2016 Estimate	2017 Budget	2018 Plan	2019 Plan
Beginning Balance	38,924,890	23,911,529	42,499,967	23,021,880	32,041,453	9,347,692
Revenue						
Debt Service Proceeds	0	30,000,000	0	30,000,000	0	25,000,000
Transfer from RTA Capital Fund	11,734,255	11,649,255	5,334,255	9,536,915	9,688,581	10,560,555
Investment Income	54,038	185,574	53,000	53,000	43,000	52,000
Federal Capital Grants	58,199,720	75,819,587	61,250,000	59,345,000	62,790,000	71,285,500
State Capital Grants	2,046,063	534,487	1,384,658	1,384,658	1,384,658	1,384,658
Other Revenue	0	9,000	0	0	0	0
Total Revenue	72,034,076	118,197,903	68,021,913	100,319,573	73,906,239	108,282,713
Total Resources	110,958,966	142,109,432	110,521,880	123,341,453	105,947,692	117,630,405
Expenditures						
Capital Outlay	87,047,437	99,609,466	87,500,000	91,300,000	96,600,000	99,700,000
Other Expenditures	0	0	0	0	0	0
Total Expenditures	87,047,437	99,609,466	87,500,000	91,300,000	96,600,000	99,700,000
Ending Balance	23,911,529	42,499,967	23,021,880	32,041,453	9,347,692	17,930,405

RTA DEVELOPMENT FUND PROJECTS

The total budget appropriation of \$60.18 million for RTA Development Fund projects accounts for most of the Authority's Capital Improvement Budget as allocated for 2017,, as seen in Figure CIP-8. 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 2017. 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 - \$0.0 MILLION

There are various ongoing projects within this category, including those preparing the Hayden Garage and the Central Bus Maintenance Facility for the CNG fueled buses and bus storage lots at the Hayden and CBM Garages. No new projects are included in the 2017 CIP, but the out years of the 2017-21 CIP includes two projects to prepare the Triskett Garage for the introduction of CNG fueled buses currently scheduled for FY 2018.

BUS/PARATRANSIT IMPROVEMENT PROGRAMS - \$12.85 MILLION

The 2017 CIP focuses vehicle reliability improvements through a multi-year bus spare parts program, which meets objectives for bus replacements and the SGR. Programmed capital budget appropriations include \$10.04 million to purchase twenty nine (29) Diesel engine buses, 20 Paratransit MV1's and \$552,000 for bus and Bus spare parts. Depending upon the success in securing additional non-formula grant funds for replacement buses, there is a possibility the Board will be requested to approve an increase of budget appropriation to this category in the second half of 2017.

EQUIPMENT & VEHICLES - \$670,600

All budget appropriation within this category of the RTA Development Fund in FY 2017 are for the continuation of prior year grant funded information technology projects including Data Center, Intranet Development and Network improvements.

FACILITIES IMPROVEMENTS - \$3.76 MILLION

The combined Facilities Improvements budget appropriation of \$3.76 million in 2017 concentrates on rehabilitation projects of track bridges throughout the Authority's Rail System. Including \$2.09 million for the initial phase of reconstructing Viaduct Bridge Drainage & Concrete repair project, \$460,000 for Bridge Inspection Program and evaluation of the track bridge at Lorain Avenue.

OTHER PROJECTS - \$2.09 MILLION

The 2017 budget for this project category includes two unfunded projects – a \$2.0 million budget contingency project and a \$93,750 for various transportation studies depending upon the availability of grant funds.

PREVENTIVE MAINTENANCE / OPERATING BUDGET REIMBURSEMENTS - \$20.0 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 2017 budget appropriation for \$20.0 million.

RAIL PROJECTS- \$20.49 MILLION

In FY 2017, the Rail Projects category includes a wide diversity of capital projects and, as in most prior CIP's, is one of the largest of the CIP. Major programmed areas within this category include \$9.17 million for various track rehabilitation projects, a combined \$7.92 million for rail train controls, electrical and signal improvements systems throughout the Authority, and \$3.4 million for various station rehabilitation projects.

Major station projects in FY 2017 include \$3.40 million for the first of two years of funding to reconstruct the Heavy & Light Rail at East 34th Street Station. The \$9.17 million for track rehabilitation and reconstruction projects includes \$3.84 million for Red Line Track West reconstruction at West 75th –W. 98th, \$1.19 million for Tower City Track 10 & 13, \$2.05 million reconstruction of track at Buckeye/Woodhill Station, and \$2.09 million for various rail engineering and infrastructure improvements.

TRANSIT CENTERS / BUS LOOPS – \$320,000

The 2017 capital budget includes \$320,000 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 original plan was drafted in 1998 and updated in 2004 to reflect the existing system's state of repair; the future plans of key stakeholders, and the economic conditions of the region. In 2008, RTA initiated an update of the Long Range Plan, titled the "GCRTA Strategic Plan" that was completed in 2012. The goals of the Plan are to help determine the course of projects and services within GCRTA that can result in the increase of ridership, increase in revenues, and bring the system into a state of good repair while being grounded in the economic and the financial reality of public transportation funding in Northeast Ohio.

The existing Key Transit 2025 project elements include the following:

- Exploring the feasibility of additional Bus Rapid Transit projects in other major travel corridors;
- Completing the Transit Center Network; Initiating Transit-Oriented Development Projects;
- Continuing to implement the Transit Waiting Environment (TWE) Program;
- Reconstructing various Rapid Transit Stations as part of the FTA ADA Key Station requirement agreement.

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
BUS GARAGES							
BUS GARAGES							
CBM - Install 3 Post Vehicle Lift & Fall Protection FFY 2017 Federal Formula Grant	P16390180	0	450,000	0	0	0	450,000
Triskett CNG Building Compliance FY 2018 100% Local Funds FY 2019 100% Local Funds	P22800160	0	1,950,000	1,950,000	0	0	3,900,000
Triskett CNG Loading Station FY 2019 100% Local Funds	P22800190	0	0	3,500,000	0	0	3,500,000
TOTAL - BUS GARAGES		0	2,400,000	5,450,000	0	0	7,850,000
BUS REPLACEMENTS							
BUS IMPROVEMENT PROGRAM							
2015-2017 Bus Improvement Program	P11390170	10,044,945	0	0	0	0	10,044,945
FFY 2016 Federal Formula Grant		9,894,945					
FY 2017 Local Funds		150,000					
2018-2020 Bus Improvement Program	P11390180	0	20,000,000	20,000,000	20,000,000	0	60,000,000
SFY 2017 ODOT CMAQ Grant		4,328,125					
SFY 2017 ODOT UTP Award		1,730,822					
FFY 2017 Federal Formula Grants		4,321,961					
FY 2018 Local Funds		125,000					
FY 2018 (TBD)		9,494,092					
SFY 2018 ODOT CMAQ Grant		2,125,000					
SFY 2018 ODOT UTP Award		1,730,822					
FFY 2018 Federal Formula Grants		4,371,961					
FY 2019 Local Funds		125,000					
FY 2019 (TBD)		11,647,217					

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
SFY 2019 ODOT CMAQ Grant		10,887,500					
SFY 2019 ODOT UTP Award		1,730,822					
FFY 2019 Federal Formula Grants		4,500,000					
FY 2020 Local Funds		150,000					
FY 2020 (TBD)		2,731,678					
2021-2023 Bus Improvement Program	P11390110	0	0	0	0	24,000,000	24,000,000
SFY 2020 ODOT CMAQ Grant		5,578,125					
SFY 2020 ODOT UTP Award		1,730,822					
FFY 2020 Federal Formula Grants		4,500,000					
FY 2021 Local Funds		150,000					
FY 2021 (TBD)		12,041,053					
Sub-Total: Bus Improvement Program		10,046,962	20,000,000	20,000,000	20,000,000	24,000,000	94,046,962
PARATRANSIT IMPROVEMENT PROGRAM							
Paratransit Buses	P12390170	2,247,650	1,958,227	0	0	0	4,205,877
FFY 2014 Grant Revision		2,247,650					
FFY 2017 Federal Formula Grant		1,958,227					
Sub-Total: Paratransit Improvement Program		2,247,650	1,958,227	0	0	0	4,205,877
BUS SPARE PARTS PROGRAM							
Bus Capital Spare Parts Program	P16390140	132,000	0	0	0	0	132,000
FFY 2016 Federal Formula Grant		132,000					
BRT Bus Capital Spare Parts Program	P16390150	420,000	0	0	0	0	420,000
FFY 2016 Federal Formula Grant		420,000					
Sub-Total: Bus Spare Parts Program		552,000	0	0	0	0	552,000
TOTAL - BUSES		12,846,612	21,958,227	20,000,000	20,000,000	24,000,000	98,804,839

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
<u>EQUIPMENT & VEHICLES</u>							
<u>MANAGEMENT INFORMATION SYSTEM</u>							
Ultramain Version 9 Upgrade FFY 2017 Federal Formula Grant	P42350180 1,165,951	0	1,165,951	0	0	0	1,165,951
Network Infrastructure - Networks FFY 2016 Federal Formula Grant FFY 2017 Federal Formula Grant	P42610120 166,600 166,600	166,600	166,600	0	0	0	333,200
Network Infrastructure - Data Center FFY 2016 Federal Formula Grant FFY 2017 Federal Formula Grant	P42610220 235,000 130,000	235,000	130,000	0	0	0	365,000
Network Infrastructure - Phone System FFY 2016 Federal Formula Grant	P42610320 189,000	189,000	0	0	0	0	189,000
Internet - Intranet Development FFY 2016 Federal Formula Grant FFY 2017 Federal Formula Grant	P42610520 80,000 80,000	80,000	80,000	0	0	0	160,000
Radio/CAD/AVL System Replacement FY 2018 Competitive Grant (Pending) FY 2019 Competitive Grant (Pending) FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant	P44350190 5,172,625 5,650,825 3,500,000 3,000,000	0	5,172,625	5,650,825	3,500,000	3,000,000	17,323,450
Sub-Total: Management Information System		670,600	6,715,176	5,650,825	3,500,000	3,000,000	19,536,601
TOTAL - EQUIPMENT & VEHICLES		670,600	6,715,176	5,650,825	3,500,000	3,000,000	19,536,601

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
<u>FACILITIES IMPROVEMENTS</u>							
<u>BRIDGE REHABILITATION</u>							
Track Bridge Rehab. - Viaduct Drainage & Concrete Repairs FFY 2016 Federal Formula Grant	P20800360 2,085,600	2,085,600	0	0	0	0	2,085,600
Track Bridge Rehab. - Viaduct Bridge Rehab: Phase 1 FY 2018 (TBD)	P20800460 6,210,000	0	6,210,000	0	0	0	6,210,000
Track Bridge Inspection Program FY 2017 Local Funds FY 2019 Local Funds FY 2021 Local Funds	P20800270 460,000 475,000 475,000	460,000	0	475,000	0	475,000	1,410,000
Track Bridge Rehab. - West 117th Street FY 2019 Local Funds FFY 2020 Federal Formula Grant	P20800390 450,000 4,580,000	0	0	450,000	0	4,580,000	5,030,000
Track Bridge Rehab - Ambler Avenue FY 2018 Local Funds FY 2019 (TBD)	P20800180 30,000 250,000	0	30,000	250,000	0	0	280,000
Track Bridge Rehabilitation - Canal Road FY 2018 Local Funds FFY 2019 Federal Formula Grant	P20800280 215,000 2,750,000	0	215,000	0	2,750,000	0	2,965,000
Track Bridge Rehabilitation - Lorain Avenue FY 2017 Local Funds FFY 2018 Federal Formula Grant	P20800270 260,000 3,170,000	260,000	0	3,170,000	0	0	3,430,000
Sub-Total: Bridge Rehabilitation		2,805,600	6,455,000	4,345,000	2,750,000	5,055,000	21,410,600
<u>SYSTEM-WIDE FACILITIES</u>							
Tower City - East Portal Concrete Repairs FY 2017 Local Funds FY 2019 (TBD)	P26800170 501,400 6,230,000	501,400	0	6,230,000	0	0	6,731,400
State of Good Repair Projects FFY 2016 Federal Formula Grant FFY 2017 Federal Formula Grant FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant	P32800250 450,000 481,724 477,061 2,721,890 1,162,890	450,000	481,724	477,061	2,721,890	1,162,890	5,293,565
Sub-Total: System-Wide Facilities		951,400	481,724	6,707,061	2,721,890	1,162,890	12,024,965
TOTAL - FACILITIES IMPROVEMENTS		3,757,000	6,936,724	11,052,061	5,471,890	6,217,890	33,435,565

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
<u>OTHER PROJECTS</u>							
<u>OTHER</u>							
Planning Studies (Transportation for Livable Communities)	P49570120	93,750	93,750	93,750	93,750	93,750	468,750
SFY 2016 NOACA STP Grant	93,750						
SFY 2017 NOACA STP Grant	93,750						
SFY 2018 NOACA STP Grant	93,750						
SFY 2019 NOACA STP Grant	93,750						
SFY 2020 NOACA STP Grant	93,750						
RTA Development Fund Contingency 2017 - 21 (TBD)	TBD	P49990150	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
TOTAL - OTHER PROJECTS			2,093,750	2,093,750	2,093,750	2,093,750	10,468,750
<u>PREVENTIVE MAINTENANCE/OPERATING REIMBURSEMENTS</u>							
<u>PREVENTIVE MAINTENANCE/OPERATING REIMBURSEMENTS</u>							
Preventive Maintenance Expenses	P516701X0	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,000
FFY 2015 Federal Formula Grant	320,796						
FFY 2016 Federal Formula Grant	19,679,204						
FFY 2017 Federal Formula Grant	19,550,000						
FFY 201X Federal Formula Grant (TBD)	450,000						
FFY 2018 Federal Formula Grant	20,000,000						
FFY 2019 Federal Formula Grant	20,000,000						
FFY 2020 Federal Formula Grant	20,000,000						
TOTAL - PREVENTIVE MAINT./OPERATING REIMB.			20,000,000	20,000,000	20,000,000	20,000,000	100,000,000

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
<u>RAIL PROJECTS</u>							
<u>ELECTRICAL SYSTEM</u>							
OCS Replacement and Upgrade Plan	P21320150	100,000	153,409	0	0	0	253,409
FFY 2016 Federal Formula Grant	100,000						
FFY 2017 Federal Formula Grant	153,409						
Substation Replacement - Puritas Avenue	P21800490	697,790	0	0	0	0	697,790
FFY 2016 Federal Formula Grant	697,790						
Substation Replacement - Van Aken/Warrensville	P21800160	2,060,400	0	0	0	0	2,060,400
FFY 2016 Federal Formula Grant	2,060,400						
Substation Replacement - East 120th Street	P21800240	165,400	3,700,000	0	0	0	3,865,400
FFY 2016 Federal Formula Grant	165,400						
FFY 2017 Federal Formula Grant	3,700,000						
Substation Replacement - W. 117th Street	P21800390	0	151,000	3,900,000	0	0	4,051,000
FY 2018 Local Funds	151,000						
FFY 2018 Federal Formula Grant	3,900,000						
Replace W. 25th / Ohio City Transformer / Rectifier	P21800180	0	526,191	0	0	0	526,191
FFY 2017 Federal Formula Grant	526,191						
Substation Improvement Program	P21800200	0	0	0	3,850,000	3,850,000	7,700,000
FFY 2019 Federal Formula Grant	3,850,000						
FFY 2020 Federal Formula Grant	3,850,000						
SCADA System Upgrade	P42800170	24,000	1,332,600	0	0	0	1,356,600
FY 2017 Local Funds	24,000						
FFY 2017 Federal Formula Grant	701,724						
FY 2018 Local Funds	630,876						
Sub-Total: Electrical System			3,047,590	5,863,200	3,900,000	3,850,000	3,850,000
Sub-Total: Electrical System			3,047,590	5,863,200	3,900,000	3,850,000	20,510,790
<u>TRAIN CONTROL / SIGNALS</u>							
CAB Signal System Replacement (Railcars)	P26800170	0	985,750	0	0	0	985,750
FFY 2017 Federal Formula Grant	985,750						
Cab Signaling - East 79th to Shaker Square	P26800240	0	3,804,514	0	0	0	3,804,514
FFY 2017 Federal Formula Grant	3,804,514						
Red Line Signal System Replacement (Design)	P26800280	0	1,000,000	0	0	0	1,000,000
FFY 2017 Federal Formula Grant	1,000,000						
Fiber Optic System Software/Hardware Upgrades	P26800640	4,875,450	2,810,600	0	0	0	7,686,050
FFY 2016 Federal Formula Grant	4,875,450						
FFY 2017 Federal Formula Grant	2,810,600						
Sub-Total: Train Control / Signals			4,875,450	8,600,864	0	0	0
Sub-Total: Train Control / Signals			4,875,450	8,600,864	0	0	13,476,314

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
<u>RAIL PROJECTS - Continued</u>							
<u>TRACK REHABILITATION</u>							
Track Reconstruction - Buckeye/Woodhill Station	P23800570	2,046,014	0	0	0	0	2,046,014
SFY 2016 ODOT Grant	153,274						
SFY 2017 ODOT Grant	1,892,740						
Rail Profile Grinding Program	P23320170	488,029	1,488,534	1,779,719	0	0	3,756,282
FFY 2016 Federal Formula Grant	488,029						
FFY 2017 Federal Formula Grant	1,488,534						
FFY 2018 Federal Formula Grant	1,779,719						
Rail Infrastructure Program	P23320150	944,420	686,458	1,000,000	1,000,000	1,000,000	4,630,878
FFY 2016 Federal Formula Grant	944,420						
FFY 2017 Federal Formula Grant	686,458						
FFY 2018 Federal Formula Grant	1,000,000						
FFY 2019 Federal Formula Grant	1,000,000						
FFY 2020 Federal Formula Grant	1,000,000						
Westpark Diamond Crossover Rebuild	P23800160	459,270	0	0	0	0	459,270
FFY 2016 Federal Formula Grant	459,270						
On-Call Rail Engineering Services	P23800240	200,000	200,000	200,000	200,000	200,000	1,000,000
FFY 2016 Federal Formula Grant	200,000						
FFY 2017 Federal Formula Grant	200,000						
FFY 2018 Federal Formula Grant	200,000						
FFY 2019 Federal Formula Grant	200,000						
FFY 2020 Federal Formula Grant	200,000						
On-Call Rail Maintenance Services	P23800340	0	500,000	0	500,000	0	1,000,000
FFY 2017 Federal Formula Grant	500,000						
FFY 2019 Federal Formula Grant	500,000						

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE							
CATEGORY / PROJECT NAME	PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
		2017	2018	2019	2020	2021	
<u>RAIL PROJECTS - Continued</u>							
<u>TRACK REHABILITATION</u>							
Tower City Tracks 10 & 13 Reconstruction	P23800470	1,189,000	0	13,794,000	200,000	0	15,183,000
FY 2017 Local Funds	841,712						
FFY 2017 Federal Formula Grant	347,288						
FFY 2018 Federal Formula Grant	12,952,896						
FY 2019 Local Funds	841,104						
FY 2020 (TBD)	200,000						
LR Retaining Wall - Buckeye/Woodhill - Shaker Sq.: Ph. 2	P23800590	0	0	1,410,000	1,441,000	0	2,851,000
FFY 2018 Federal Formula Grant	1,410,000						
FFY 2019 Federal Formula Grant	1,441,000						
Red Line Track West Reconstruction (W. 75th - W. 98th)	P23800380	3,842,869	0	0	0	0	3,842,869
FFY 2017 Competitive Grant (Pending)	3,842,869						
Red Line Track West Reconstruction (Viaduct - W. 30th)	P23800X90	0	0	3,125,000	0	0	3,125,000
SFY 2018 OTPPP	3,125,000						
Red Line Track W. Reconst. (W. Bound W. 117th - Triskett)	P23800X00	0	0	0	1,600,000	0	1,600,000
SFY 2019 OTPPP	1,600,000						
Track Reconstruction Program	P23800X80	0	3,125,000	0	4,525,000	6,125,000	13,775,000
SFY 2017 OTPPP	3,125,000						
FFY 2019 Federal Formula Grant	3,000,000						
SFY 2019 OTPPP	1,525,000						
FFY 2020 Federal Formula Grant	3,000,000						
SFY 2020 OTPPP	3,125,000						
Sub-Total: Track Rehabilitation		9,169,602	5,999,992	21,308,719	9,466,000	7,325,000	53,269,313
<u>RAIL STATION REHABILITATION</u>							
Farnsleigh Station Reconstruction	P24800360	0	1,671,929	0	0	0	1,671,929
FFY 2017 Federal Formula Grant	1,671,929						
East 34th Station Reconstruction	P24800540	3,400,000	0	0	0	0	3,400,000
FFY 2016 Federal Formula Grant	3,400,000						
Sub-Total: Rail Station Rehabilitation		3,400,000	1,671,929	0	0	0	5,071,929

**GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
2017 - 2021 CAPITAL IMPROVEMENT PLAN
RTA DEVELOPMENT FUND**

ANTICIPATED FUNDING SOURCE		PROJECT NUMBER	CALENDAR YEAR					TOTALS 2017-2021
CATEGORY / PROJECT NAME			2017	2018	2019	2020	2021	
<u>RAIL PROJECTS - Continued</u>								
<u>RAIL VEHICLE FLEET</u>								
Replacement Choppers - Breda Cars	2,832,500	P16320180	0	2,832,500	0	0	0	2,832,500
Sub-Total: Rail Vehicle Fleet			0	2,832,500	0	0	0	2,832,500
TOTAL - RAIL PROJECTS			20,492,642	24,968,485	25,208,719	13,316,000	11,175,000	95,160,846
<u>TRANSIT CENTERS</u>								
Enhanced ADA Access (Enhancement Item)		P30800240	320,000	300,000	300,000	300,000	300,000	1,520,000
FFY 2016 Federal Formula Grant	320,000							
FFY 2017 Federal Formula Grant	300,000							
FFY 2018 Federal Formula Grant	300,000							
FFY 2019 Federal Formula Grant	300,000							
FFY 2020 Federal Formula Grant	300,000							
TOTAL - TRANSIT CENTERS			320,000	300,000	300,000	300,000	300,000	1,520,000
TOTAL RTA DEVELOPMENT FUND			60,180,604	85,372,362	89,755,355	64,681,640	66,786,640	366,776,601
TOTAL RTA CAPITAL FUND			3,916,700	3,355,500	3,390,000	3,295,000	3,186,500	17,143,700
TOTAL CAPITAL IMPROVEMENT PLAN			64,097,304	88,727,862	93,145,355	67,976,640	69,973,140	383,920,301

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