2018 - 2022 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 2018–2022 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 2018-22 CIP presented here includes the first five programmed years of the Authority's Capital Program, with-out year projects, covering 2023–2025, under preliminary development.

ORGANIZATION OF THE CAPITAL IMPROVEMENT PLAN

This chapter contains the 2018-2022 Capital Improvement Plan of the Authority. The first year reflects the Board approved RTA Capital and RTA Development Fund budget appropriations for the FY 2018 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 2018 Capital Improvement Budget and the four out-years of the overall 2018-2022 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 73. These facilities and others are briefly discussed on the following pages.

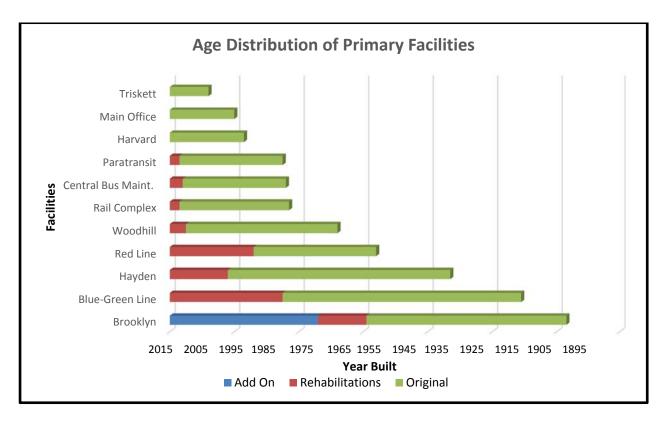


Figure 73: Age Distribution of GCRTA Primary Facilities

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. The Authority has negotiated to sale this facility to a third party 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 2018. 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 2018.

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. The Authority has negotiated to sale the Harvard facility in FY 2018.

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 8,000 parking spaces at 21 of its rapid stations and operates seven bus Park-N-Ride lots in Berea, Brecksville, Bay Village, Strongsville, North Olmsted, Euclid and Westlake with more than 2,348 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. During FY 2018 the Authority has programmed to rehab CRMF Track 3.

TRANSIT CENTERS

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

WOODHILL GARAGE FACILITY

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

RAIL SYSTEM

RIGHT-OF-WAY

RTA owns 65 miles of rail lines (32.5 miles of joint rail) used for the operation of its rapid transit system including twenty-seven miles 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 2016-2018, nine Light Rail Crossings were rehabbed and completed in 3 phases on the Green Line, and included reconstruction of two Green Line Stations at Warrensville/Shaker Blvd. and Lee Road/Shaker Blvd. and the reconstruction of East 116th St. Light Rail Trunk Line Station.

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 2018-22 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. In FY2017, \$9.1 million was programmed for track rehabilitation of Redline $W.30^{th} - W.98^{th}$.

REVENUE VEHICLE FLEETS

CONVENTIONAL BUSES

There were 462 vehicles in the GCRTA bus fleet at the end of 2017. Compared to the prior year, 34 vehicles have been retired or are in the process of being replaced under the bus improvement program. During FY 2017, 45 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 90 40-Ft CNG vehicles and 20 MV1s in late FY 2015. The Authority's other fleet mix includes 295 fleets, of which 176 40-foot diesel transit buses; 40 60-foot articulated diesel buses; 21 60-foot articulated hybrid bus rapid transit (BRT) vehicles; 21 commuter buses; 3 60-foot articulated BRT buses; 11 29-foot trolley buses; 20 Propane vehicles and 3 Dodge Caravans 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 2017. The age distribution of the Authority's large bus fleet is shown in Figure 74 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 2018–22 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.

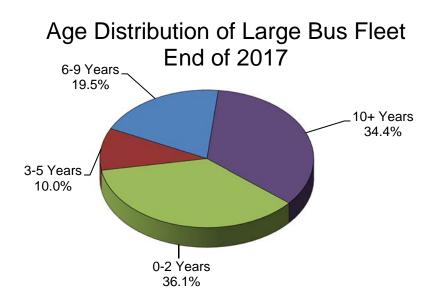


Figure 74: Age Distribution of Bus Fleet



Programmed orders in future years of this CIP depends upon the availability of non-formula funding and competitive grants, but they are expected to further lower the average age of the Authority's big bus fleet to approximately 6.4 years at the end of 2023. 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 5.6 years at the end of FY 2017. In mid FY 2016, 20 MV-1 vehicles were 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 2.9 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 75 on the next page, depicts the revised Capital Improvement and TIP planning cycles for the 2018-22 Capital Improvement Plan (CIP). The process began in March, 2017 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 2018-22 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 2018-22 CIP were finalized.

BUDGET DEVELOPMENT SCHEDULE - 2017/2018

MARCH 2017

DATES	SCHEDULE
March 31	Operating: 2017 Quarter 1 Ends

APRIL 2017

DATES	SCHEDULE
April 13	2018 – 2022 CIP: Directors' meeting to review CIP process
April 17	2018 – 2022 CIP: Due date for Project Submissions
April 25	Operating/CIP: Q1 QMR completed
April 30	Operating/CIP: NTD 1st Submission Due

MAY 2017

DATES	SCHEDULE
May 5	Operating/CIP: ODOT Black Cat submission due
May 17	2018 - 2022 CIP: First Capital Program Working Group (CPWG) Meeting
May 15	Operating: Begin Revenue research for 2018 Tax Budget
May 15	Operating: Submit Scope, Introduction, Justification, and list of Panel Members to Procurement
May 31	Operating/CIP: Review NTD Validation Issues and submit updates and responses

JUNE 2017

DATES	SCHEDULE
June 1	2018 - 2022 CIP: Second CPWG Meeting
June 23	2018 - 2022 CIP: First Capital Program Oversight Committee (CPOC) Meeting
June 27	Operating/CIP: Final completion of 2018 Tax Budget Transmittal Letter and Fund Statements: Legal Notice: Tax Budget & Public Hearing
June 30	Operating/CIP: Review NTD Validation Issues and submit final updates and responses
June 30	Operating/CIP: 2017 Quarter 2 Ends

JULY 2017

DATES	SCHEDULE
July 10	2018 - 2022 CIP: Second CPOC Meeting
July 11	Operating: Presentation of 2018 Tax Budget to Finance Committee; & Public Hearing; <u>Legal</u> <u>Notice: CIP & Public Hearing</u>
July 18	Operating: Board Approval of 2018 Tax Budget; Send Tax Budget to County
July 25	Operating/CIP: Q2 QMR Completed

AUGUST 2017

DATES	SCHEDULE
August 1	2018 - 2022 CIP: Presentation to the Finance Committee; Public Hearing for CIP
August 9	2018 - 2022 CIP : Reso review & signing
August 15	2018 - 2022 CIP: Board Meeting: Approval of CIP
August 31	Operating: New contract year for CMSD Student Tickets; Receive Revenue for new



SEPTEMBER 2017

DATES	SCHEDULE
September 15	Operating: Draft of 2017-2018 Service Plan due; GL Closed – allocate Fringes
September 18- 20	Operating: 1st Meeting with CEO on 2018 Budget; Begin 2018 Cost Allocation Plan process
September 22	Operating: Finalize Base Budget
September 25	Operating: Present Base Budget to EMT; Division Review and appeal schedule
September 30	Operating / CIP: 2017 Q3 Ends

OCTOBER 2017

DATES	SCHEDULE
October 2-6	Operating: Division / Department Appeals on 2018 Operating Budget;
October 13	Operating: 2018 Service Plan Due
October 18-20	Operating: 2 nd Meeting with CEO on 2018 Budget
October 23	Operating: Legal Notice: Operating Budget & Public Hearings; 2017 Q3 Completed
October 27	Operating / CIP: Q3 QMR Completed
October 31	Operating: Finalize revisions to 2018 Operating Budget and Presentation

NOVEMBER 2017

DATES	SCHEDULE
November 14	Operating: Presentation of Operating Budget to Finance Committee;
November 21	Operating: Service Management presentation of 2018 Service Plan; TBD - Public Hearing on 2018 Operating Budget

DECEMBER 2017

DATES	SCHEDULE
December 5	Operating: Presentation – final update to Finance Committee on 2018 Operating Budget and 2018 – 2022 CIP; Public Hearing after
December 19	Operating: Board Meeting – Adoption of 2018 Operating Budget 2018 – 2022 CIP: Board Meeting: Adoption of 2018 Amended Capital Improvement Budget
December 29 - 31	Operating; Inventory Roll; 2017 Q4 Ends; Send memo about 2 Fiscal Years Open; Deliver 2018 Cost Allocation Plan to designated employees

JANUARY 2018

DATES	SCHEDULE
January 15-19	2017 Operating Budget Encumbrance Roll; Complete 2017 4Q QMR; Oracle re-opened

FEBRUARY 2018

DATES	SCHEDULE	
February 12	Operating / CIP: NTD Kick-off meeting	

Figure 75: Budget Development Schedule

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 2018-22 was finalized and presented to the Board of Trustees' Finance Committee in August for discussion and review at which time approval was given.

TRANSPORTATION IMPROVEMENT PROGRAM

The planning cycle for grant-funded projects begins with the development of the Authority's CIP for incorporation into the Transportation Improvement Program (TIP). The TIP documents transportation related capital projects within the region for which Federal funding will be requested. Projects must appear in the TIP to receive funding consideration. The Northeast Ohio Area-wide Coordinating Agency (NOACA) is responsible for bi-annually preparing the four-year plan for this area with 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 2018–22 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.

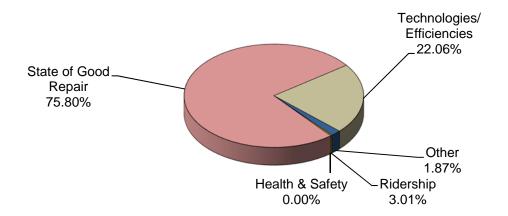
During this planning cycle, priority areas of the Authority were defined as:

- **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 76 reflects the distribution of approved 2018 Capital Improvement projects by capital priority area. The largest portion of the 2018 Capital Budget appropriations, \$85.04 million or 75.8 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 \$24.8 million, or 22.06 percent, with the remaining categories making up the balance of the budgeted capital projects.

2018 Capital Projects by Priority Area (Millions)



Priority Area	2018 Budget	2019 Plan	2020 Plan	2021 Plan	2022 Plan	2018-22
Ridership	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$1.50
Health & Safety	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
State of Good Repair	\$85.04	\$51.72	\$76.78	\$80.84	\$55.55	\$349.93
Technologies/Efficiencies	\$24.75	\$10.59	\$4.47	\$3.50	\$4.50	\$47.81
Other	\$2.10	\$2.10	\$2.09	\$2.09	\$2.09	\$10.47
Total	\$112.19	\$64.71	\$83.64	\$86.73	\$62.44	\$409.71

Figure 76: 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 2018 for existing debt service.

At the end of FY 2017, the Authority will have a combined \$108.4 million of outstanding debt among six 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 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 77, Federal grants provide an estimated \$48.7 million, or nearly 52.8 percent of the Authority's capital improvement revenue stream during FY 2018. 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 a an unfavorable impact upon financial resources for the Authority's capital improvement program.

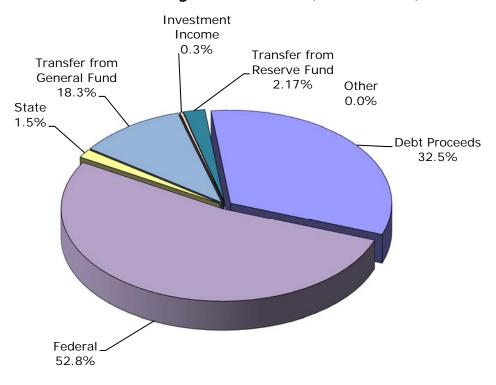
The changes brought on by MAP-21 legislation impacted the Authority's Rail Systems capital programming. Prior to MAP-21 the Rail Modernization grant was allocated through a formula favorable to the Authority and other "older" rail systems in America. Rail formula funds are currently allocated through a STATE OF GOOD REPAIR (SOGR) program, which incorporates both population and operating statistics into the formula allocations resulting in a reduction of formula funds for the rail system. While the MAP-21 legislation clarified available financial resources in the short-term, the long-term Federal funding commitment to public transportation remains uncertain.

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

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



FY 2018 Capital Improvement Revenue By Source (Millions)



	2015 2016 Actual Actual		2017 Actual	2018 Budget	2019 Plan	2020 Plan
Transfer from General Fund	\$15.51	\$9.47	\$10.27	\$9.93	\$12.08	\$10.81
Transfer from Reserve Fund	\$0.00	\$0.00	\$0.00	\$2.00	\$0.00	\$0.00
Investment Income	\$0.21	\$0.29	\$0.33	\$0.27	\$0.26	\$0.26
Federal	\$75.82	\$47.73	\$48.45	\$48.77	\$63.76	\$66.14
State	\$0.53	\$0.11	\$0.00	\$1.38	\$1.38	\$1.38
Debt Proceeds	\$30.00	\$0.00	\$0.00	\$30.00	\$0.00	\$25.00
Other	\$0.01	\$0.00	\$0.33	\$0.00	\$0.00	\$0.00
Total	\$122.08	\$57.60	\$59.38	\$92.35	\$77.48	\$103.59

Figure 77: 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 2016, with the local match included, the Authority received \$29.62 million and \$29.92 in FY 2017 from its Section 5307 award, a slight increase from the prior FY 2015 amount of \$29.08 million. Future allocations under the upcoming FAST 21 legislation are estimated at \$29.962 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 and \$18.92 in FY2017, 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 \$2.43 million received in FFY 2014 and FFY 2015, a slight decrease to \$2.31 million in FFY 2016, and \$2.39 in FFY 2017. 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 was recently awarded non-traditional funding for several projects under the proposed 2018-2022 Capital Improvement Plan (CIP), projects identified are for track rehabilitation of Red Line Track West (W.117-West Park) \$6.6 million, for Radio CAD/AVL System Replacement \$11.6 million and Triskett Building Compliance Facility upgrades for \$3.3 million. In FY 2017 the authority received competitive funds totaling \$4.0 million for continuous improvement of Red Line West at W.75th – W.98th, received non-traditional funding for the Career Pathways Development award of \$985,754 received



in FY 2015 to be used by the Authority for a work force development program. In FY 2013 a TIGER III grant award for \$15.63 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. The capital funding from non-traditional Federal source grants are used to support years' worth of unfunded programmed capital projects identified in the CIP.

STATE SOURCES

Administered through the Ohio Department of Transportation (ODOT), the State contributes up to one-half of the local match portion of Federal grant programs. In the current years the authority have been awarded various competitive grants under the Ohio Transit Preservation Partnership (OTTP), Urban Transit Program (UTP) and Diesel Emission Reduction Grant (DERG) grant awards. Recently it has focused on contributions that are project-specific rather than for local match contributions, and it utilizes available Federal rather than State awards. In FY 2016, the OTTP awarded \$4.0 million for rehabilitation of Red Line West 75th – W.98th, \$2.6 million was awarded under UTP and DERG grants for 40ft CNG buses. In FY 2017, OTTP awarded \$5.2 million for continuous improvement of the Red Line West 117th –West Park, \$1.6 million was awarded under UTP for MCI diesel buses, and \$2.8 million awarded under DERG for 40ft CNG buses. In FY 2014-2015 executed a combined \$4.58 million OTTP award for four replacement trolley buses and 40-Ft buses. In FY 2013, \$1.96 million OTTP award for replacement trolley buses and in FY 2012, \$2.6 million to reconstruct the Red Line Airport Tunnel. 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 \$28.79 million are sourced from two transfers included within the General Fund. The first is a \$9.93 million transfer to the RTA Capital Fund to cover locally funded capital expenditures within the Capital Funds. The second, \$18.86 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 \$38.13 million in FY 2015, decreasing to \$31.35 million in FY 2016, decreasing again to \$27.31 in FY 2017, and expected to increase slightly and remain steady into future budget years.

DEBT MANAGEMENT

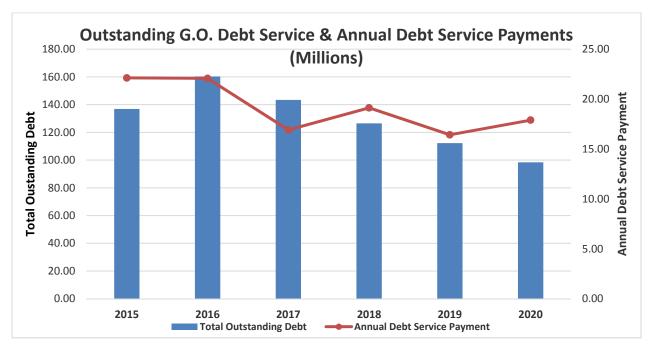
Although major capital improvements are mostly funded by Federal and State capital grants, the Authority is required to pay a percentage of most grant-funded projects from its own local sources. Debt sales are used for this purpose as well as to pay for major 100 percent locally funded projects. In FY 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 2017 will mature by December 2034. The \$143.41 million balance of outstanding debt at the end of 2017 will require principal and interest payments of \$16.91 million in 2018.

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	2015 Actual	2016 Actual	2017 Estimate	2018 Budget	2019 Plan	2020 Plan
Annual Debt Service Payment	22.12	22.07	16.91	19.12	16.42	17.89
Total Outstanding Debt	136.88	160.33	143.41	126.48	112.26	98.40

Figure 78: 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 2017 of \$27.87 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 \$27.87 billion, annual debt servicing capacity would be close to \$27.87 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 10.38 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 [KS1] 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 2018 Operating Budget in a number of ways such as the following:

- The Trustees' commitment to balancing sales & use tax revenues between the Capital Improvement Fund and supporting operation needs. The estimated transfers to the Capital Fund during FY 2018 is \$9.93 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 \$16.91 million will require a General Fund transfer to the Bond Retirement Fund to offset the debt in FY 2018, 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 2018, 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 ended the year at \$21.20 million. In FY 2017, PM activities decreased 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 2018 General Fund or Operating Budget are supported by \$3.74 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.

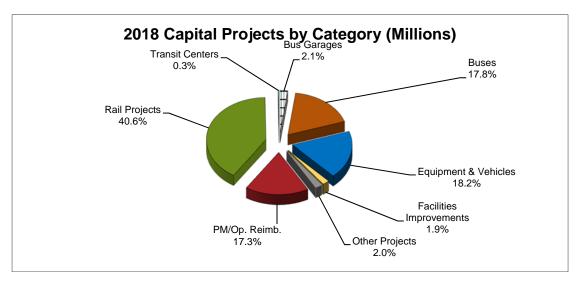
CAPITAL PROJECT CATEGORIES

The combined 2018–2022 Capital Improvement Plan (CIP) totals \$427.15 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 2018 CIP, four categories comprise \$108.8 million, or 93.84 percent, of the combined \$115.94 million capital budget appropriations. The largest with \$47.07 million is the Rail Project category, second largest with \$21.10 under Equipment & Vehicles, followed by Bus project category with \$20.63, and the final project category in Preventive



Maintenance/Operating Expense \$20.0 million. The four remaining categories totaling \$7.14 million within the approved capital budget as shown in Figure 79.

Reflecting the challenging financial picture the Authority faces, the largest budgeted category over the five-year CIP is the grant funded Bus Improvement Programs with \$116.00 million, or 26.84 percent of the CIP budget over the five years. This is followed by Rail Projects with \$106.24 million, 24.56 percent, and the Preventive Maintenance Reimbursement to Operating with \$100.0 million, or 23.12 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	2018 Budget	2019 2020 Plan Plan		2021 Plan	2022 Plan	2018 - 22
Bus Garages	\$2.40	\$5.45	\$0.00	\$0.00	\$0.00	\$7.85
Buses	\$20.63	\$14.73	\$30.44	\$37.92	\$12.36	\$116.08
Equipment & Vehicles	\$21.10	\$8.90	\$6.01	\$4.89	\$5.77	\$46.67
Facilities Improvements	\$2.17	\$14.45	\$9.80	\$6.93	\$9.34	\$42.69
Other Projects	\$2.27	\$2.28	\$2.28	\$2.28	\$2.28	\$11.39
PM/Oper. Reimb.	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$100.00
Rail Projects	\$47.07	\$7.41	\$18.40	\$17.70	\$15.65	\$106.24
Transit Centers	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$1.50
Total	\$115.94	\$73.52	\$87.23	\$90.02	\$65.70	\$432.42

Figure 79: 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 81 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 2018 will include \$9.93 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 \$18.86 million to the Bond Retirement Fund, brings the total commitment to Capital to \$28.79 million, or 14.55 percent of the projected 2018 sales & use tax revenue.

Budgeted FY 2018 expenditures within the RTA Capital Fund of \$10.15 million include \$1.60 million for Asset Maintenance or facilities projects, \$1.60 million for Routine Capital or equipment purchases, and a \$6.93 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 2018 ending balance of \$1.09 million is a decrease from prior years due to a decrease in transfers from General Fund to maintain a sustainable Operating Budget

RTA Capital Fund Balance Analysis

	2015	2016	2017	2018	2019	2020	2021	2022
	Actual	Actual	Actual	Amended Budget	Plan	Plan	Plan	Plan
Beginning Balance	1,522,919	2,114,010	3,074,133	1,299,482	1,098,570	1,081,191	1,066,791	1,064,257
Revenue								
Transfer from General Fund	15,509,273	9,472,060	10,271,331	9,933,343	12,086,877	10,809,855	13,598,221	14,426,089
Investment Income	21,847	25,784	41,632	20,000	20,000	20,000	20,000	20,000
Other Revenue	0	0	0	0	0	0	0	0
Total Revenue	15,531,120	9,497,844	10,312,963	9,953,343	12,106,877	10,829,855	13,618,221	14,446,089
Total Resources	17,054,039	11,611,854	13,387,096	11,252,825	13,205,446	11,911,046	14,685,012	15,510,347
Expenditures								
Asset Maintenance	1,415,840	1,020,521	2,322,492	1,600,000	1,510,000	1,550,000	1,471,500	1,900,000
Routine Capital	1,874,934	2,182,945	2,920,867	1,620,000	1,630,000	1,610,000	1,715,000	1,800,000
Other Expenditures	0	0	0	0	0	0	0	0
Transfer to RTA Development Fund	11,649,255	5,334,255	6,844,255	6,934,255	8,984,255	7,684,255	10,434,255	10,684,255
Total Expenditures	14,940,029	8,537,721	12,087,614	10,154,255	12,124,255	10,844,255	13,620,755	14,384,255
Ending Balance	2,114,010	3,074,133	1,299,482	1,098,570	1,081,191	1,066,791	1,064,257	1,126,092

. Figure 8o: RTA Capital Fund Balance

RTA Capital Fund Balance Analysis (Millions)

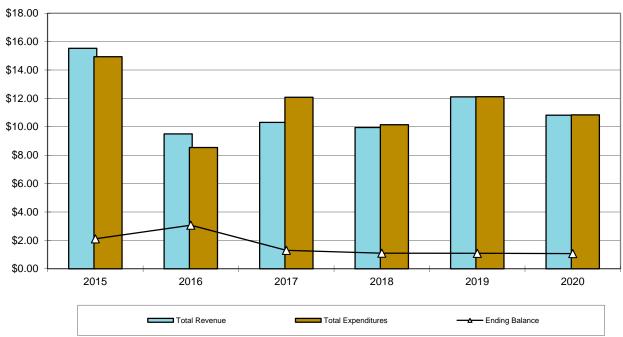


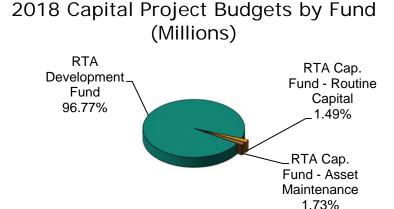
Figure 81: RTA Capital Fund Balance Trends



ASSET MAINTENANCE PROJECTS

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

The FY 2018 budget appropriation for Asset Maintenance projects is \$2.01 million, representing 1.7 percent of the overall FY 2018 Capital Improvement Budget as represented in Figure 82. 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 \$950,000 or 47.21 percent. Asset and Configuration Management manages \$590,000, or 29.32 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.



	2018 Budget	2019 Plan	2020 Plan	2021 Plan	2022 Plan	2018-22
RTA Cap. Fund - Routine Capital	\$1.73	\$1.79	\$1.72	\$1.57	\$1.45	\$8.26
RTA Cap. Fund - Asset Maintenance	\$2.01	\$1.76	\$1.86	\$1.72	\$1.82	\$9.17
RTA Development Fund	\$112.19	\$64.70	\$83.64	\$86.73	\$62.44	\$409.70
Total	\$115.93	\$68.25	\$87.22	\$90.02	\$65.71	\$427.13

Figure 82: 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 82, the budget appropriation for Routine Capital projects accounts for \$1.7 million, or 1.5 percent, of the 2018 CIP Budget. Reflecting the support of daily operations, the greatest portion of the budget appropriation for Routine Capital projects in the 2018 CIP is within the Operations Division, which has \$639,171 programmed for the non-revenue vehicle lease or replacement program followed by \$158,497 for equipment pool projects throughout various Operating Division Departments, Information Technology \$305,000, and a budgeted Transit Police Department security pool program of \$225,000. The remaining \$411,000 budgeted throughout the Authority for Administration, and contingencies.



GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY 2018 - 2022 CAPITAL IMPROVEMENT PLAN RTA CAPITAL FUND

ASSET MAINTENANCE (FACILIT	IES) PROJECTS
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		Project	2018	2019	2020	2021	2022	2018-22
	Department / Project Name	Number	Budget	Plan	Plan	Plan	Plan	Total
31	Paratransit District							
	Interior Garage Cleaning/Painting	P32315079	\$0	\$0	\$0			\$0
			\$0	\$0	\$0	\$0	\$0	\$0
32	Rail District							
	WFL Booth Replacements (5)	P32325079	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0	\$0	\$0
33	Asset & Configuration Mgt.							
	Administration Facilities Maint. Pool	P32335159	\$60,000	\$70,000	\$70,000	\$70,000	\$70,000	\$340,000
	Elevator/Escalator Maintenance Pool	P32335259	\$180,000	\$100,000	\$100,000	\$100,000	\$100,000	\$580,000
	Operating Facilities Maintenance Pool	P32335359	\$175,000	\$135,000	\$185,000	\$160,000	\$210,000	\$865,000
	Passenger Facilities Maintenance Pool	P32335459	\$175,000	\$135,000	\$185,000	\$160,000	\$210,000	\$865,000
			\$590,000	\$440,000	\$540,000	\$490,000	\$590,000	\$2,650,000
39	Fleet Management							
	Install High Speed Doors (#15 & #19)	P32395079	\$0	\$0	\$0	\$0	\$0	\$0
	Replace Skylights & Smoke Hatches	P32395089	\$172,000	\$0	\$0	\$0	\$0	\$172,000
	Bus Districts Lift Rebuilds/Rehab's	P47395059	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
			\$222,000	\$50,000	\$50,000	\$50,000	\$50,000	\$422,000
<u>57</u>	Programming & Planning							
	Transit Waiting Environment	P28575059	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
			\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
80	Engineering & Project Dev.							
	Facilities - ADA Projects	P32805049	\$125,000	\$125,000	\$150,000	\$150,000	\$150,000	\$700,000
	Passenger Facilities Maint. Pool	P32805149	\$300,000	\$300,000	\$325,000	\$325,000	\$325,000	\$1,575,000
	Operating Facilities Maint. Pool	P32805249	\$525,000	\$525,000	\$550,000	\$550,000	\$450,000	\$2,600,000
	Paratransit Parking Lot Expansion	P32805189	\$0	\$170,000	\$0	\$0	\$0	\$170,000
			\$950,000	\$1,120,000	\$1,025,000	\$1,025,000	\$925,000	\$5,045,000
<u>67</u>	OFFICE OF MGT. & BUDGET							
	Energy Retrofits	P32675339	\$100,000	\$0	\$100,000	\$0	\$100,000	\$300,000
	Asset Maintenance Contingency	P49995059	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
			\$200,000	\$100,000	\$200,000	\$100,000	\$200,000	\$800,000
	<u> </u>							
1	TOTAL ASSET MAINTEN	IANCE	\$2,012,000	\$1,760,000	\$1.865.000	\$1,715,000	\$1,815,000	\$9.167.000



GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY 2018 - 2022 CAPITAL IMPROVEMENT PLAN RTA CAPITAL FUND

ROUTINE CAPITAL (EQUI	PMENT) PRO JECTS

		ROUTINE CA						
		Project	2018	2019	2020	2021	2022	2018-22
	Department / Project Name	Number	Budget	Plan	Plan	Plan	Plan	Total
<u>12</u>	Executive							
	NOACA Dues	P49120149	58,500	58,500	58,500	59,000	59,000	293,500
	CLE Works Dues	P49120249	30,000	30,000	30,000	30,000	30,000	150,000
	Outside Legal Services - Leg. Review	P49120349	90,000	91,500	91,500	92,500	92,500	458,000
			178,500	180,000	180,000	181,500	181,500	901,500
<u>31</u>	<u>Paratransit</u>							
	Paratransit District Equipment Pool	P47310179	68,497	0	0	0	0	68,497
			68,497	0 "	0 "	0 *	0	68,497
32	Rail District							
	Rail District Equipment Pool	P47320149	90,000	90,000	126,800	20,000	20,000	346,800
			90,000	90,000	126,800	20,000	20,000	346,800
34	Transit Police							
<u> </u>	Security Improvements Pool	P44340249	225,000	225,000	225,000	225,000	225,000	1,125,000
	and the second s		225,000	225,000	225,000	225,000	225,000	1,125,000
39	Fleet Management						,	1,1=0,000
<u> 33</u>	Non-Revenue Vehicle Imp. Program	P46390159	125,000	150,000	150,000	150,000	150,000	725,000
	NRVIP - Lease Payments	P46390169	400,000	400,000	400,000	400,000	400,000	2,000,000
	Overhead Catenary Repair Vehicle	P46390279	400,000	0	0	400,000	400,000	2,000,000
	Fleet Management Equipment Pool	P47390349	114,171	107,000	80,000	142,000	40,000	483,171
	Pieet Management Equipment Fooi	F 47 390349	639,171	657,000	630,000	692,000	590,000	3,208,171
46	Hayden District		033,171	037,000	030,000	032,000	330,000	3,200,171
40	Hayden District Equipment Pool	P47460169	0	50,000	40,000	50,000	50,000	190,000
	Playden District Equipment 1 001	1 47400103	0	50,000	40,000	50,000	50,000	190,000
49	Triskett District			30,000	40,000	00,000	00,000	100,000
49		D47400450		00.000	00.000	00.000		400,000
	Triskett District Equipment Pool	P47490159	0	20,000	86,000	20,000	0	126,000
			0 '	20,000	86,000	20,000	0	126,000
<u>61</u>	Information Technology	P32805189						
	IT Systems Development Pool	P42610149	130,000	130,000	130,000	130,000	130,000	650,000
	PC Replacement Program	P42610169	50,000	50,000	50,000	50,000	50,000	250,000
	Thin Client Replacement Program	P42610179	0	0	0	0	0	0
	Kiosk Replacement Program	P42610189	125,000	125,000	75,000	25,000	25,000	375,000
	Laser Printer Replacement Program	P42610299	0	35,000	35,000	35,000	35,000	140,000
			305,000	340,000	290,000	240,000	240,000	1,415,000
<u>62</u>	SUPPORT SERVICES	D 400004 40	40.000	40.000	45.000	45.000	45.000	045.000
	Office Equipment/Furniture Pool Two Color Press Machines	P43620149 P43620189 (New)	40,000 92,500	40,000 92,500	45,000	45,000	45,000	215,000 185,000
	TWO COIOI FTESS WACTIMES	F 43020109 (New)	132,500	132,500	45,000	45,000	45,000	400,000
	OFFICE OF MOT A DUDGET	+	132,300	132,300	45,000	45,000	45,000	400,000
<u>67</u>	OFFICE OF MGT. & BUDGET	D40000450	400.000	400.000	400.000	400 000	400.000	F00 000
	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 CA	PITAL	1,738,668	1,794,500	1,722,800	1,573,500	1,451,500	8,280,968
	DTA CADITAL FUND	TOTAL	0.000	0.55: 500	0.505.000	0.000	0.000	4-4
	RTA CAPITAL FUND	IUIAL	3,750,668	3,554,500	3,587,800	3,288,500	3,266,500	17,447,968



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 2015, \$11.65 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 to \$5.33 million in FY 2016, and in FY 2017 to \$6.84 million. The amount remained relatively stable in FY 2018 at \$6.93 million, and increase slightly to \$8.98 million in FY 2019 due to the financial demands of the Authority's operating budget.

RTA Development Fund Balance Analysis

	2015	2016	2017	2018	2019	2020	2021	2022
	Actual	Actual	Actual	Amended Budget	Plan	Plan	Plan	Plan
Beginning Balance	23,911,529	42,499,967	30,037,486	20,136,261	34,446,074	10,724,006	18,670,419	5,155,871
Revenue								
Debt Service Proceeds	30,000,000	0	0	30,000,000	0	25,000,000	0	25,000,000
Transfer from RTA Capital Fund	11,649,255	5,334,255	6,844,255	6,934,255	8,984,255	7,684,255	10,434,255	10,684,255
Transfer from the Reserve Fund	0	0	0	2,000,000	0	0	0	0
Investment Income	185,574	260,886	284,557	250,000	240,000	240,000	240,000	240,000
Federal Capital Grants	75,819,587	47,732,909	48,455,538	48,766,900	63,757,536	66,137,500	64,157,980	45,360,163
State Capital Grants	534,487	110,699	0	1,384,658	1,384,658	1,384,658	1,384,658	1,384,658
Other Revenue	9,000	0	329,920	0	0	0	0	0
Total Revenue	118,197,903	53,438,749	55,914,270	89,335,813	74,366,449	100,446,413	76,216,893	82,669,076
Total Resources	142,109,432	95,938,716	85,951,756	109,472,074	108,812,523	111,170,419	94,887,312	87,824,947
Expenditures								
Capital Outlay	99,609,466	65,901,230	65,815,495	75,026,000	98,088,517	92,500,000	89,731,441	63,440,787
Other Expenditures	0	0	0	0	0	0	0	0
Total Expenditures	99,609,466	65,901,230	65,815,495	75,026,000	98,088,517	92,500,000	89,731,441	63,440,787
Ending Balance	42,499,967	30,037,486	20,136,261	34,446,074	10,724,006	18,670,419	5,155,871	24,384,160

Figure 83: RTA Development Fund Balance Analysis

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 2015 to support capital project activities and an additional debt service of approximately \$30.00 million is expected in late FY 2018. Interest income has varied over the years from a high of \$260,886 in FY 2016 to an estimated \$250,000 in FY 2018 due to fluctuations in the interest rates and fund balance over the years

Figure 84, 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 2015, the fund balance was \$42.49 million. Capital construction activities over the following years drew the fund balance down as it declined to \$30.03 million at the end of FY 2016 due to the issuance of Revenue bonds. Fund balance decrease again to \$20.13 million at the end of FY 2017. It is expected to again increase to \$34.44 million in FY 2018 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 83, 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 \$75.03 million in 2018. 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 2018-22 CIP, which are based upon the establishment of the necessary budget appropriation for the capital projects.

\$140.00 \$100.00 \$80.00 \$60.00 \$20.00

2017

RTA Development Fund Balance Analysis (Millions)

	2015 Actual	2016 Actual	2017 Actual	2018 Budget	2019 Plan	2020 Plan
Beginning Balance	\$23.91	\$42.49	\$30.03	\$20.13	\$34.44	\$10.72
Total Revenue	\$118.19	\$53.44	\$55.91	\$89.34	\$74.36	\$100.44
Total Resources	\$142.10	\$95.93	\$85.94	\$109.47	\$108.80	\$111.16
Total Expenditure	\$99.61	\$65.90	\$65.81	\$75.03	\$98.08	\$92.50
Ending Balance	\$42.49	\$30.03	\$20.13	\$34.44	\$10.72	\$18.66

■ Total Expenditures

2018

2019

—▲ Ending Balance

2020

Figure 84: RTA Development Fund Analysis Trend

2016

Total Revenue

2015



RTA DEVELOPMENT FUND PROJECTS

The total budget appropriation of \$112.19 million for RTA Development Fund projects accounts for most of the Authority's Capital Improvement Budget as allocated for 2018, as seen in Figure 82. 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 grantfunding, 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 2018. 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 - \$2.4 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. New projects programmed in the 2018 CIP includes the facility upgrades at Triskett Garage to prepare for GNG loading station and building compliance.

BUS/PARATRANSIT IMPROVEMENT PROGRAMS - \$20.62 MILLION

The 2018 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 funds to purchase twenty nine (27) 40-Ft CNG buses, and Bus spare parts.

EQUIPMENT & VEHICLES - \$19.5 MILLION

All budget appropriation within this category of the RTA Development Fund in FY 2018 are for grant funded information technology projects including Data Center, Intranet Development and Network improvements totaling \$376,600, an additional \$18.0 million programmed budget for upgrades to the Radio CAD/AVL communication system, and \$1.16 million version 9 Ultramain system upgrades.

FACILITIES IMPROVEMENTS - \$160,000

The Facilities Improvements budget appropriation of \$160,000 in 2018 concentrates on rehabilitation of Track Bridge at Ambler Avenue, with ongoing bridge inspection and assessments throughout the year to address critical needs.

OTHER PROJECTS - \$2.09 MILLION

The 2018 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 2018 budget appropriation for \$20.0 million.



RAIL PROJECTS- \$47.07 MILLION

In FY 2018, the Rail Projects category includes a wide diversity of capital projects and, is one of the largest of the CIP. Major programmed areas within this category include a combined \$14.59 million for rail train controls, electrical and signal improvements systems throughout the Authority, \$23.81 million for track rehabilitation, \$5.03 rail vehicle fleet, and \$3.83 million for various station rehabilitation projects.

Major station projects in FY 2018 include \$1.67 million for ADA Key station at Farnsleigh Station, \$1.28 million for CRMF Track 3 rehabilitation, and \$873,000 to upgrade the end of track at Warrensville-Van Aken. The combined \$38.4 million for track rehabilitation and train control reconstruction projects includes \$15.2 million for track rehabilitation of Tower City Track 10 & 13, and \$6.8 million for Red Line Track West reconstruction at West 117th –West Park, \$3.7 million for substation replacement at E. 120th Street, \$3.65 million for Signal system upgrades at E. 79th to Shaker, \$2.8 million for the Fiber Optic System Upgrades, with other budgeted amount allocated throughout for various rail engineering and infrastructure improvements.

TRANSIT CENTERS / BUS LOOPS - \$300,000

The 2018 capital budget includes \$300,000 for various grant funded passenger enhancements throughout the Authority. Many of the enhancement funds are allocated for Bus Shelter, Landscaping, and ADA Access.

TRANSIT 2025 LONG RANGE PLAN

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

The 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.



ANTICIPATED FUNDING SOL	IRCE							
ANTION ATED TONDING GOV	JILOL	PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
BUS GARAGES								
BUS GARAGES								
CBM - Install 3 Post Vehicle Lift & Fall Protection FFY 2017 Federal Formula Grant	1 450,000	P16390180	450,000	0	0	0	0	450,000
Triskett CNG Building Compliance FY 2018 100% Local Funds FY 2019 100% Local Funds	1,950,000 1,950,000	P22800160	1,950,000	1,950,000	0	0	0	3,900,000
Triskett CNG Loading Station FY 2019 100% Local Funds	3,500,000	P22800190	0 "	3,500,000	0	0	0	3,500,000
T	OTAL - BU	S GARAGES	2,400,000	5,450,000	0	0	0	7,850,000
BUS REPLACEMENTS								
BUS IMPROVEMENT PROGRAM								
2018-2020 Bus Improvement Program	63,123,070	P11390180	20,127,160	14,642,775	28,353,135	0	0	63,123,070
SFY 2017 ODOT CMAQ Grant SFY 2017 ODOT UTP Award FFY 2017 Federal Formula Grants FY 2018 Local Funds FY 2019 (TBD)	7,071,982 6,080,822 4,369,696 429,660 2,175,000							
SFY 2018 ODOT CMAQ Grant SFY 2018 ODOT UTP Award FFY 2018 Federal Formula Grants FY 2019 Local Funds FY 2019 (TBD)	2,125,000 1,730,822 4,371,961 125,000 6,289,992							
SFY 2019 ODOT CMAQ Grant SFY 2019 ODOT UTP Award FFY 2019 Federal Formula Grants FY 2020 Local Funds FY 2020 (TBD)	10,887,500 1,730,822 4,831,250 150,000 10,753,563							

		-						
ANTICIPATED FUNDING	SOURCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
BUS REPLACEMENTS -Cor	ntinued							
BUS IMPROVEMENT PROGRAM								
2021-2023 Bus Improvement Program	77,014,154	P11390110	0	0	0	36,014,154	0	36,014,154
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)	24,055,207							
SFY 2021 ODOT CMAQ Grant		P11390120					11,865,750	
SFY 2021 ODOT UTP Award	1,730,822						,,	
FFY 2021 Federal Formula Grants	4,500,000							
FY 2022 Local Funds	150,000							
FY 2022 (TBD)	5,484,928							
	Sub-Total: Bus Impre	ovement Program	20,127,160	14,642,775	28,353,135	36,014,154	11,865,750	111,002,974
PARATRANSIT IMPROVEMENT PROGRA	<u>M</u>							
Paratransit Buses		P12390170	0	93,500	1,585,000	1,406,000	0	3,084,500
FY 2019 (TBD)	93,500							
FY 2020 (TBD)	1,585,000							
FY 2021 (TBD)	1,406,000							
Sub-To	otal: Paratransit Impr	ovement Program	0	93,500	1,585,000	1,406,000	0	3,084,500
BUS SPARE PARTS PROGRAM								
Bus Capital Spare Parts Program		P16390140	500,000	0	500,000	500,000	500,000	2,000,000
FFY 2013 Federal Formula Grant	170,167							
FFY 2014 Federal Formula Grant	118,885							
FFY 2015 Federal Formula Grant	210,948							
FFY 2019 Federal Formula Grant	500,000							
FFY 2020 Federal Formula Grant	500,000							
FFY 2021 Federal Formula Grant	500,000							
	Sub-Total: Bus Spa	are Parts Program	500,000	0	500,000	500,000	500,000	2,000,000
	TOT	AL - BUSES	20,627,160	14,736,275	30,438,135	37,920,154	12,365,750	116,087,474



ANTIQUEATED ELINIBING O	OLIDOE	1						
ANTICIPATED FUNDING S	OURCE							
		PROJECT					L	TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
EQUIPMENT & VEHICLES								
MANAGEMENT INFORMATION SYSTEM								
Ultramain Version 9 Upgrade		P42350180	1.165.951	0	0	0	0	1,165,95
FFY 2017 Federal Formula Grant	1,165,951	1 12000100	1,100,001	· ·	ŭ	ŭ	ŭ	1,100,00
Network Infrastructure - Networks		P42610120	400,000	0	0	0	0	400.000
FFY 2017 Federal Formula Grant	166.600	P42610120	166,600	U	0	U	0	166,600
	100,000							
Network Infrastructure - Data Center FFY 2017 Federal Formula Grant	400,000	P42610220	130,000	0	0	0	0	130,000
FFY 2017 Federal Formula Grant	130,000							
Internet - Intranet Development		P42610520	80,000	0	0	0	0	80,000
FFY 2017 Federal Formula Grant	80,000							
Enterprise Content Management		New	0	1,635,507	0	0	0	1,635,507
FY 2019 TBD	1,635,507							
Radio/CAD/AVL System Replacement		P44350190	18,000,000	5,650,825	4,472,419	3,500,000	4,500,000	36,123,244
FY 2018 (TBD)	18.000.000	1 44330130	10,000,000	3,030,023	7,772,713	3,300,000	4,300,000	30,123,24
FFY 2018 Federal Formula Grant	3,500,000							
FY 2019 (TBD)	0							
FFY 2019 Federal Formula Grant	4,472,419							
FFY 2020 Federal Formula Grant	3,500,000							
FFY 2021 Federal Formula Grant	4,500,000							
Sub-Tota	I: Management Inf	formation System	19,542,551	7,286,332	4,472,419	3,500,000	4,500,000	39,301,302
TOTAL - E	QUIPMENT 8	& VEHICLES	19,542,551	7,286,332	4,472,419	3,500,000	4,500,000	39,301,30

		1					
ANTICIPATED FUNDING SOURCE							
	PROJECT						TOTALS
CATEGORY/PROJECT NAME	NUMBER	2018	2019	2020	2021	2022	2018-2022
FACILITIES IMPROVEMENTS							
BRIDGE REHABILITATION							
Track Bridge Rehab Viaduct Bridge Rehab: Phase 1	P20800460	0	3,105,000	3,105,000	0	0	6,210,000
FY 2019 (TBD) 3,105,0 FY 2020 (TBD) 3,105,0							
Track Bridge Inspection Program	P20800270	0	475.000	0	475.000	0	950.000
FY 2019 Local Funds 475.0		0	475,000	U	475,000	U	950,000
FY 2021 Local Funds 475,0	00						
Track Bridge Rehab West 117th Street	P20800390	0	450,000	4,581,000	0	0	5,031,000
FFY 2018 Federal Formula Grant 450,0							
FFY 2019 Federal Formula Grant 3,981,0 FY2020 Local Funds 600,0							
						_	
Track Bridge Rehab - Ambler Avenue FY 2018 Local Funds 160.0	P20800180	160,000	90,000	0	0	0	250,000
FY 2019 (TBD) 90,0							
Track Bridge Rehabilitation - Canal Road	P20800280	0	0	0	215,000	2,750,000	2,965,000
FFY 2020 Federal Formula Grant 215,0					.,	,,	,,
FFY 2021 Federal Formula Grant 2,750,0	00						
Road Bridge Rehab - E. 116th Street	P20800740		1.404.800	0	0	0	1,404,800
FFY 2018 Federal Formula Grant 660,0			, - ,				, . ,
FY 2019 ODOT Municipal Bridge 744,8	00						
Track Bridge Rehabilitation - Lorain Avenue	P20800270	0	0	250,000	3,170,000	0	3,420,000
FFY 2020Federal Formula Grant 3,170,0 FY 2020 Local Funds 250,0							
FT 2020 LOCAL FUTUS 250,0	,,,						
Track Bridge Rehabilitation - Access Rd. Bridge at CRMF	P20800X10	0	0	0	0	4,580,000	4,580,000
FFY 2021 Federal Formula Grant 4,580,0	00						
		<u> </u>					
Sub-Total:	Bridge Rehabilitation	160,000	5,524,800	7,936,000	3,860,000	7,330,000	24,810,800



ANTICIPATED FUNDING S	OURCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
FACILITIES IMPROVEMENTS	- Continued							
SYSTEM-WIDE FACILITIES								
Tower City - East Portal Concrete Repairs FY 2019 (TBD)	6,230,000	P26800170	0	6,230,000	0	0	0	6,230,000
State of Good Repair Projects FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant FFY 2021 Federal Formula Grant	937,061 0 1,350,456 201,287	P32800250	0	937,061	0	1,350,456	201,287	2,488,804
	Sub-Total: Syster	m-Wide Facilities	0	7,167,061	0	1,350,456	201,287	8,718,804
TOTAL - FACI	TOTAL - FACILITIES IMPROVEMENTS				7,936,000	5,210,456	7,531,287	33,529,604

ANTICIPATED FUNDING SOUR	RCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
OTHER PROJECTS								
OTHER Planning Studies (Transportation for Livable Co FY 2017 (TBD) FY 2018 (TBD) FY 2019 (TBD) FY 2020 (TBD) FY 2021 (TBD)	93,750 93,750 93,750 93,750 93,750 93,750	P49570120	93,750	93,750	93,750	93,750	93,750	468,750
` '	93,730 IBD	P49990150	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000
TOTAL	- OTHER	PROJECTS	2,093,750	2,093,750	2,093,750	2,093,750	2,093,750	10,468,750
PREVENTIVE MAINTENANCE/OPI	ERATING	REIMBURSE	MENTS					
PREVENTIVE MAINTENANCE/OPERATING REIMBI								
Preventive Maintenance Expenses FFY 2017 Federal Formula Grant FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant FFY 2021 Federal Formula Grant	20,000,000 20,000,000 20,000,000 20,000,00	P516701X0	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,000
TOTAL - PREVENTIVE MAINT.	/OPERA	TING REIMB.	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	100,000,000
RAIL PROJECTS								
ELECTRICAL SYSTEM OCS Replacement and Upgrade Plan FFY 2017 Federal Formula Grant FFY 2020 Federal Formula Grant	153,400 2,000,000	P21320150	153,400	0	0	2,000,000	0	2,153,400
Substation Replacement - East 120th Street FFY 2017 Federal Formula Grant	3,700,000	P21800240	3,700,000	0	0	0	0	3,700,000
Warrensville Substation Feeder System FY 2018 (TBD)	1,831,050	P21800540	1,831,050	0	0	0	0	1,831,050
Substation Replacement - W. 117th St. FY 2019 Local Funds FFY 2019 Federal Formula Grant FY 2020 Local Funds	151,000 3,850,000 50,000	P21800390	0	151,000	3,900,000	0	0	4,051,000
Replace W. 25th / Ohio City Transformer / Rectifier FFY 2017 Federal Formula Grant	526,200	P21800180	526,200	0	0	0	0	526,200
Substation Improvement Program FFY 2020 Federal Formula Grant	3,850,000	P21800200	0	0	0	3,850,000	3,850,000	7,700,000
FFY 2021 Federal Formula Grant	3,850,000						3,850,000	



ANTICIPATED FUNDING SOU	RCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
RAIL PROJECTS - Continued								
TRAIN CONTROL / SIGNALS								
CAB Signal System Replacement (Railcars) FFY 2017 Federal Formula Grant	985,750	P26800170	985,750	0	0	0	0	985,75
Wayside Signaling - East 79th to Shaker Square FFY 2017 Federal Formula Grant	3,654,514	P26800240	3,654,514	0	0	0	0	3,654,51
Red Line Signal System Replacement (Design) FFY 2017 Federal Formula Grant	930,000	P26800280	930,000	0	0	0	0	930,00
Fiber Optic System Software/Hardware Upgrades FFY 2017 Federal Formula Grant	2,810,600	P26800640	2,810,600	0	0	0	0	2,810,60
Sı	ıb-Total: Trair	n Control / Signals	8,380,864	0	0	0	0	8,380,86
TRACK REHABILITATION			· · · · · · · · · · · · · · · · · · ·					· · · · · ·
Rail Profile Grinding Program FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant	1,779,719 1,489,000	P23320170	0	1,779,719	1,489,000	0	0	3,268,71
Rail Infrastructure Program FFY 2017 Federal Formula Grant FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant FFY 2021 Federal Formula Grant	786,400 750,000 1,000,000 1,000,000 1,000,000	P23320150	786,400	750,000	1,000,000	1,000,000	1,000,000	4,536,40
On-Call Rail Engineering Services FFY 2017 Federal Formula Grant FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant FFY 2021 Federal Formula Grant	200,000 200,000 200,000 200,000 200,000	P23800240	200,000	200,000	200,000	200,000	200,000	1,000,00
On-Call Track Maintenance Services FFY 2017 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2021 Federal Formula Grant	600,000 500,000 500,000	P23800340	600,000	0	500,000	0	500,000	1,600,00
Tower City Tracks 10 & 13 Reconstruction FFY 2017 Federal Formula Grant FFY 2018 Federal Formula Grant FY 2019 Local Funds	1,407,288 12,952,896 841,104	P23800490	15,201,288	0	0	0	0	15,201,28

ANTICIPATED FUNDING S	OURCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
RAIL PROJECTS - Continued								
TRACK REHABILITATION								
LR Retaining Wall - Buckeye/Woodhill - Shake FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant	er Sq.: Ph. 2 1,410,000 1,441,000	P23800590	0	1,410,000	1,441,000	0	0	2,851,000
Red Line Track West Reconstruction (West 1' SFY 2018 OTPPP	17th - West Park) 6,823,000	P23800X90	6,823,000	3,125,000	0	0	0	9,948,00
Red Line Track W. Reconst. (W. Bound W. 11 FFY 2019 Federal Formula Grant	17th - Triskett) 1,600,000	P23800X00	0	0	1,600,000	0	0	1,600,000
Track Reconstruction Program FFY 2019 Federal Formula Grant SFY 2019 OTPPP FFY 2020 Federal Formula Grant SFY 2020 OTPPP FFY 2021 Federal Formula Grant SFY 2021 OTPPP	4,397,868 3,125,000 6,782,081 3,125,000 6,225,000 3,125,000	P23800X80	0	0	7,522,868	9,907,081	9,350,000	26,779,949
	Sub-Total: Tra	ck Rehabilitation	23,610,688	7,264,719	13,752,868	11,107,081	11,050,000	66,785,356



ANTICIPATED FUNDING	SOURCE							
		PROJECT						TOTALS
CATEGORY/PROJECT NAME		NUMBER	2018	2019	2020	2021	2022	2018-2022
RAIL PROJECTS - Continued	d							
RAIL STATION REHABILITATION								
Famsleigh Station Reconstruction FFY 2017 Federal Formula Grant	1,671,925	P24800360	1,671,925	0	0	0	0	1,671,925
CRMF Track 3 FFY 2017 Federal Formula Grant	1,288,500	New	1,288,500	0	0	0	0	1,288,500
Warrensville Van Aken End of Track Upgrad FFY 2015 Federal Formula Grant	des 873,000	New	873,000	0	0	0	0	873,000
	Sub-Total: Rail Stat	ion Rehabilitation	3,833,425	0 '	0	0 '	0	3,833,425
RAIL VEHICLE FLEET								
Replacement Choppers - Breda Cars FFY 2017 Federal Formula Grant	3,032,500	P16320180	3,032,500	0	0	0	0	3,032,500
Rail Capital Spare Parts Program FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant FFY 2021 Federal Formula Grant	750,000 750,000 750,000	P16390X00	0	0	750,000	750,000	750,000	2,250,000
Rail Car Study FY 2019 Local Funds	2,000,000		2,000,000					
	Sub-Total:	Rail Vehicle Fleet	5,032,500	0	750,000	750,000	750,000	7,282,500
	TOTAL - RAIL	PROJECTS	47,068,127	7,415,719	18,402,868	17,707,081	15,650,000	106,243,795
TRANSIT CENTERS								
Enhanced ADA Access (Enhancement Item OR FOR SIGNAGE AFTER FY 2018 FFY 2017 Federal Formula Grant FFY 2018 Federal Formula Grant FFY 2019 Federal Formula Grant FFY 2020 Federal Formula Grant FFY 2021 Federal Formula Grant	300,000 300,000 300,000 300,000 300,000	P30800240	300,000	300,000	300,000	300,000	300,000	1,500,000
ТО	TAL - TRANS	T CENTERS	300,000	300,000	300,000	300,000	300,000	1,200,000
TOTAL R	TA DEVELOP	MENT FUND	112,191,588	69,973,937	83,643,172	86,731,441	62,440,787	414,980,925
T	OTAL RTA CA	PITAL FUND	3,750,668	3,554,500	3,587,800	3,288,500	3,266,500	17,447,968
TOTAL CAPIT	TAL IMPROVE	MENT PLAN	115,942,256	73,528,437	87,230,972	90,019,941	65,707,287	432,428,893



