

03- ENGINEERING & PROJECT MANAGEMENT DIVISION

OVERVIEW

The Engineering and Project Management Division ensures the successful completion of capital improvement projects through professional planning, design, right-of-way, and construction services. The division is responsible for RTA's planning, real estate, and capital project design and construction management activities. The Division plays a key role in obtaining competitive grants to bring in additional grant funding to achieve a State of Good Repair (SOGR).

CONNECTION TO STRATEGIC PLAN

Success Outcomes: **Customer Experience** **Community Impact** **Employee Investment** **Financial Health**

The Engineering and Project Management Division is committed to ensuring positive customer experience with RTA's capital projects from design to construction. Community value is seen through actual and perceived economic impact of capital projects, emission reduction, and services provided that support quality of life and social needs. Financial sustainability through reducing major project change orders and securing competitive grants towards prioritized capital projects. Employee perception of opportunity for growth and success, understanding the Authority's vision and direction, clarity in connection between personal performance and organization success, and understanding of benefits of capital program.

2023 ACCOMPLISHMENTS

- Obtained over \$162 million of competitive grants from FTA, ODOT, Ohio Environmental Protection Agency (OEPA) and Northeast Ohio Areawide Coordinating Agency (NOACA).
- Increased the funding for the Railcar Replacement Program by \$142.4 million.
- Completed construction of the Waterfront Line Bridge Rehabilitation.
- Completed construction of the Waterfront Line track and Platform Rehabilitations.
- Completed construction of the Red Line Fiber Optic Line Replacement.
- Completed construction of the East 75th Light Rail Interlocking.
- Completed construction of the Cuyahoga Viaduct Bulkhead Repair.
- Completed design of the Warrensville/Van Aken Station Improvements and Comfort Station.
- Completed design of the East 120th Street Substation Replacement.
- Continued construction of the Warrensville/Van Aken Substation.
- Continued contract for the new CTDS system.
- Conducted the Onboard Origin & Destination Surveys.
- Began construction of the Trunk Line Signal System.
- Began construction of the Overhead Catenary System Structural Rehabilitation – Phase 2.
- Began construction of the Red Line Bridge over West 117th Street.
- Began installation of the 515 Switch and Track.
- Began design of the East 79th Street Light Rail Station ADA Reconstruction.
- Received bids for the Tower City East Portal Rehabilitation.
- Provided FFY2023 Cleveland Urbanized Area (CUZA) funding allocations for formula funds.

- Promoted transit elements in various Transportation for Livable Communities Initiative (TLCI) studies throughout Cuyahoga County.
- Continued supporting Asset Management and State of Good Repair (SOGR) initiatives.
- Facilitated construction coordination with various ODOT and City of Cleveland projects.
- Supported the activities of the Cuyahoga County Trails Leadership Network.

2024 PRIORITIES

Customer Experience

- Complete the Final Report for the Onboard Origin & Destination Surveys.
- Complete construction of the Overhead Catenary System Structural Rehabilitation – Phase 2.
- Complete installation of the 515 Switch and Track.
- Continue construction of the Red Line Bridge over West 117th Street.
- Continue installation of the Trunk Line Signal System.
- Begin construction of the Tower City East Portal Rehabilitation.
- Begin construction of the Warrensville/Van Aken Station Improvements and Comfort Station.
- Begin construction of the tracks at the Warrensville/Van Aken Station.
- Begin construction of the East 120th Street Substation Replacement.
- Begin construction of the Brookpark Shop Relocation Modifications.
- Begin installation of the new Consolidated Train Dispatch System (CTDS) system.
- Begin design of the Light Rail Retaining Wall Rehabilitation - Phase 3.
- Complete installation of the Shaker Light Rail Shelter Improvements.

Community Impact

- Complete design of the East 79th Street Light Rail Station ADA Reconstruction.
- Complete the due diligence phase for the Columbus Road Transit Oriented Development.
- Continue supporting the Rail Car Replacement Program.
- Begin design of the West 25th Street/MetroHealth Line BRT Corridor.
- Begin Transit Access Barriers Study.
- Begin Broadway Corridor TOD Study.
- Evaluate the MicroTransit Pilot Program.
- Evaluate the Baby on Board and Paradox Prize Pilot Programs.
- Provide FFY2024 CUZA funding allocations for the Region.
- Promote transit elements in various TLCI studies throughout Cuyahoga County.
- Facilitate construction coordination with various ODOT and City of Cleveland projects.
- Support the activities of the Cuyahoga County Trails Leadership Network.

Employee Investment

- Begin construction of the Main Office Building HVAC and Roof Replacement.

Financial Health

- Complete the construction of the Hayden Garage Roof Replacement.

- Obtain \$35 million of competitive grants from FTA, ODOT, OEPA and NOACA.
- Continue supporting Asset Management and SOGR initiatives throughout GCRTA.

LIST OF DEPARTMENTS

Department Number	Department Name
55	Project Support
57	Programming & Planning
80	Engineering & Project Development

The 2024 Organizational Scorecard is shown in the Budget Management section of the Budget Guide. The results of the 2023 Engineering & Project Management Division scorecard are shown below, and the divisions were still developing their 2024 strategic scorecards to support GCRTA's Strategic Plan as of the writing of this report.



Engineering & Project Mgmt. 2023

Success Outcomes	Metric	Definition	FY2023 Performance Goals	Objective	Annual 2023
					Actual Results
Customer Experience	Annual Goal for Rail Car Replacement Fund	Appropriated or obligated funding for rail car replacement fund secured in the program year	\$25,000,000	—	\$104,954,000
	Completion of Annual Work Program	Total value of the design and construction contracts approved by the Board of Trustees.	\$40,000,000	—	\$27,039,570
	Benefit and Value of Capital Program Investments - Impression	% of customers who have a positive impression of capital program investments (recently completed projects)	84%	↑	60%
	Capital Program Project Schedule Adherence	% of capital projects (budget ≥ \$1M) that reach substantial completion milestone in 2023 within 60 calendar days of schedule	40%	—	57%
Community Value	Economic Impact of Capital Program - Impression	% of community that has a positive perception of the economic impact of the capital program	49%	↑	47%
	Economic Impact of Capital Program - Actual	The construction value ratio of development within 1/4 mile of active and recently completed (3yr completion) major capital projects (budget ≥ \$1M) (3 to 1)	7	↑	9.43
	Sustainability - Emissions Reduction - Actual	% Reduction of Type I and II emissions per passenger-mile traveled on RTA	-8%	↑	-11%
	Capital Investment in Environmental Justice comm	% of capital projects (budget ≥ \$1M) that are located in EJ communities	79%	↑	81%
Financial Sustainability	Competitive Grants Awarded Towards Annual Goal for Prioritized Capital Projects	Annual goal for competitive grants awarded for prioritized capital projects in the program year	\$35,000,000	—	\$119,356,682
	Change Orders on Major Projects	Achievement of under 5% change orders for major capital projects (budget ≥ \$1M) substantially completed in 2023.	5%	—	4%
Employee Engagement	Division Employees Agree - Supervisor Invested in Growth and Success	% of Division employees that agree (or strongly agree) that their Supervisor is invested in their growth and success	51%	↑	43%
	Division Employees Agree - Understand Vision and Direction	% of Division employees that agree (or strongly agree) that they understand the vision and direction of GCRTA and the Engineering & Project Management Division	69%	↑	62%
	Division Employees Agree - Understand How Performance Linked to Organization Success	% of Division employees that agree (or strongly agree) that they understand how their performance contributes to organizational success	75%	↑	76%
	Division Employees Understand Benefits of Capital Program	% of Division employees that answer "yes" that they understand the benefits of the capital program	79%	↑	76%

55- PROJECT SUPPORT DEPARTMENT

OVERVIEW

The mission of the Project Support Department is to provide quality assurance oversight and program review services in support of the Greater Cleveland Regional Transit Authority's capital and development activities and foster the Authority's sustainability practices creating a healthier and livable environment for our customers and the community we serve.

2023 ACCOMPLISHMENTS

- Completed 40 Quality Assurance Audits.
- Completed 35 Quality Control Plan, Request for Proposal, and Issue for Bid Package Reviews.
- Completed 24 Third-Party plan reviews.
- Provided engineering design and construction assistance on Engineering and Project Development projects.
- Provided document control support on Engineering and Project Development projects.
- Developed the Request for Proposals for the Architectural/ Engineering Services for the E. 79th Street Light Rail Station and the creation of the conceptual design.
- Tracked agency wide emissions for sustainability program and TRACTION.
- Assisted in the development of TransDash.
- Participated in NOACA's Regional Climate Action Plan, Inventory Working Group.
- Served on the City of Cleveland's Transportation Infrastructure Advisory Committee.
- Assisted in the refinement of the GCRTA Project Management Development Training and participated in the training session.

2024 PRIORITIES

Success Outcomes: **Customer Experience (CE)** **Community Impact (CI)** **Employee Investment (EI)** **Financial Health (FH)**

- Conduct quality assurance audits (CE, CI).
- Review GCRTA plans and specifications for construction projects (FH).
- Review third party plans and specifications for construction crossing or adjoining GCRTA facilities (CE).
- Participate in the City of Cleveland's Transportation Infrastructure Advisory Committee (CI).
- Provide engineering assistance as needed in Design and Construction (EI).
- Track agency wide emissions for sustainability program and TRACTION (CI).
- Lead the development of strategy for the TRACTION Community Impact success outcome (CI).
- Participate in the Development of NOACA's Regional Climate Action Plan (CI).
- Serve on the City of Cleveland's Transportation Infrastructure Advisory Committee (CI).
- Manage the design of the E. 79th Light Rail Station and the creation of the construction bid documents (CE, CI).
- Coordinate work of support staff (EI).

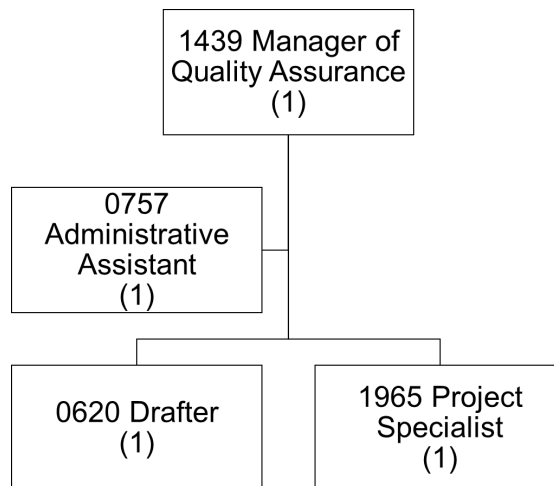
PROJECT SUPPORT DEPARTMENT BUDGET

Object Class	Description	2022 Actual	2023 Actual	2024
501300	Salaried Employees Labor	\$202,648	\$166,606	\$195,085
501310	Salaried Employees Overtime	0	0	10,000
502000	Fringe Benefits	90,558	59,396	82,341
503000	Services	6,313	7,657	66,500
504000	Materials & Supplies	0	464	5,300
509000	Miscellaneous Expense	71,693	529	29,000
509022	Meals/Food/Per Diem	0	0	250
Total		\$371,213	\$234,654	\$388,476

PROJECT SUPPORT DEPARTMENT STAFFING

Grade	Job Name	2022	2023	2024
06	0620 Drafter	1	-	1
24	1965 Project Specialist	1	-	1
104	0757 Administrative Assistant I	1	1	1
113	1439 Mgr. – Quality Assurance	1	1	1
Total		4	2	4

PROJECT SUPPORT DEPARTMENT ORGANIZATION CHART



Total Positions = 4

57- PROGRAMMING & PLANNING DEPARTMENT

OVERVIEW

The Department of Programming and Planning is responsible for initiating studies and long-term projects designed to maintain and improve transit ridership through project viability studies, joint venture identification, station area, and land use planning. The Department is also responsible for the oversight of the Authority's real estate property holdings, transit waiting environment, and arts-in-transit programs. The department also leads GCRTA's efforts in Micro-mobility as part of an inter-agency task force.

2023 ACCOMPLISHMENTS

- Represented GCRTA interests in City of Cleveland, NOACA, and other agency Planning projects.
- Obtained approval on revised Development and Use Agreement on the Columbus Road Transit Oriented Development (TOD) project.
- Completed field work for RTA On-Board Origin-Destination Survey.
- Completed RFP for FTA TOD Planning Grant for Broadway Avenue Corridor.
- Participated in the development of RTA's and NOACA's Climate Action Sustainability Plan.
- Obtained 2 Environmental Clearances.
- Completed UZA allocations for 5307, 5339 through NOACA and Transit Council.
- Monitored Implementation of Framework for the Future short-term objectives.
- Continued to represent GCRTA on NOACA committees, sub-committees, and TLCI projects.
- Awarded second Micro Mobility Pilot Demonstration project contract.
- Completed nine Community Investment Improvement Projects with sixteen more pending.
- Obtained permits for eleven new shelters.
- Managed the NOACA sponsored EV charger installation projects.
- Apply for Planning grants from NOACA, FTA, ODOT and other sources for planning related activities.
- Completed RFP/IFP documents to Shaker Shelter Improvement Project.
- Completed 50% of NOACA's the "Reimagining Euclid" RFP process for East Cleveland.
- Continued to provide technical assistance required for the E. 105/E. 93rd Street BRT Project sponsored by the City of Cleveland.
- Completed two Diversity and Inclusion artistic messaging projects.
- Represented RTA on Cuyahoga County Greenway Partners and other related trail and bike projects.
- Collaborated on Phase II of a multi-phased TOD Planning & Zoning Project sponsored by the Cuyahoga County Planning Commission.
- Supported the City of Cleveland's adoption of its Transportation Demand Management (TDM) Planning and Zoning Ordinance.
- Completed the RFP for Micro Transit for Baby on Board Clients.
- Completed RFP for Transit Access Barrier Study (FTA Persistent Poverty Grant).
- Completed and received Board Approval of the 2024 Shaker Heights Maintenance Agreement.

2024 PRIORITIES

Success Outcomes: **Customer Experience (CE)** **Community Impact (CI)** **Employee Investment (EI)** **Financial Health (FH)**

- Represent RTA interests in City of Cleveland, NOACA, and other agency Planning projects as required (CI).
- Manage real estate interests of RTA as required (CI).
- Continue working with Cuyahoga County Planning Commission on next phase of TOD Land Use and Planning Project (CI).
- Work with the City of Cleveland to implement its TDM Zoning (CI).
- Initiate a comprehensive mobility program that includes TOD, Finance and Marketing (CE, CI).
- Continue to evaluate and dispose of excess real estate assets no longer required for RTA operations (CI).
- Continue Columbus Road TOD Development process towards City of Cleveland approval (CE, CI).
- Award contract on the Transit Access Barrier Study, FTA's Persistent Poverty Grant (FH).
- Award contract for Broadway TOD Pilot Planning Grant (FH).
- Complete the GCRTA On-Board Origin-Destination Survey Project (CE, CI).
- Continue to assist on the Climate Action Sustainability Plan (CE, CI).
- Obtain Environmental Clearances as needed (CI).
- Monitor Implementation of Framework for the Future long-term objectives (FH).
- Continue to represent GCRTA on NOACA committees, Sub-committees, Task Forces, and TLCI projects (CI).
- Manage the Micro Transit project evaluation process (CI, FH).
- Complete five Community Investment Improvement Projects (CI).
- Assist in implementing the Adopt A Shelter program (CE, CI).
- Manage the completion of the installation of the NOACA sponsored EV chargers at RTA facilities(CE, CI, FH).
- Apply for Planning grants from NOACA, FTA, ODOT and other sources for planning related activities (FH).
- Manage the implementation/usage of the Baby on Board program (CE, CI).
- Award contract for Shaker Shelter Improvement Project (CI).
- Complete NOACA's "Reimagining Euclid TLCI Planning Project" (CE, CI).
- Complete technical assistance for the E. 105/E. 93rd Street BRT Project for the City of Cleveland (CI).
- Continue to develop Diversity Inclusion artistic messaging and murals on RTA Assets (CE, CI).
- Progress on the 25Connects/W.25th MetroHealth Line BRT NEPA/Section 106 process clearances (CE,CI).
- Continue to Represent RTA on Cuyahoga County Greenway Partners and related trail and bike projects (CI).
- Complete UZA allocations required for 5307, 5339 and any other Federal Funding required to be distributed through NOACA Transit Council (FH).
- Assist with permitting of 15 new bus shelters throughout the GCRTA network (CE, CI).
- Transfer land to the Developer for the Depot on Detroit TOD project (CI, FH).
- Complete option agreements for additional TOD projects (CI, FH).

- Complete acquisition of land required for E. 120th Station (CE, CI).
- Complete land transactions with the Port of Cleveland required for the delivery of the new rail vehicles (CE, CI).
- Coordinate the curation of the Woodhill Wall with Elevate the East Art’s Committee (CI).
- Coordinate the potential for Joint Development with the planning of E. 79th street Light Rail Station (CI).
- Initiate procurement of Consultant Services for Energy Consultant for Electrification Study Grant received from ODOT (FH).

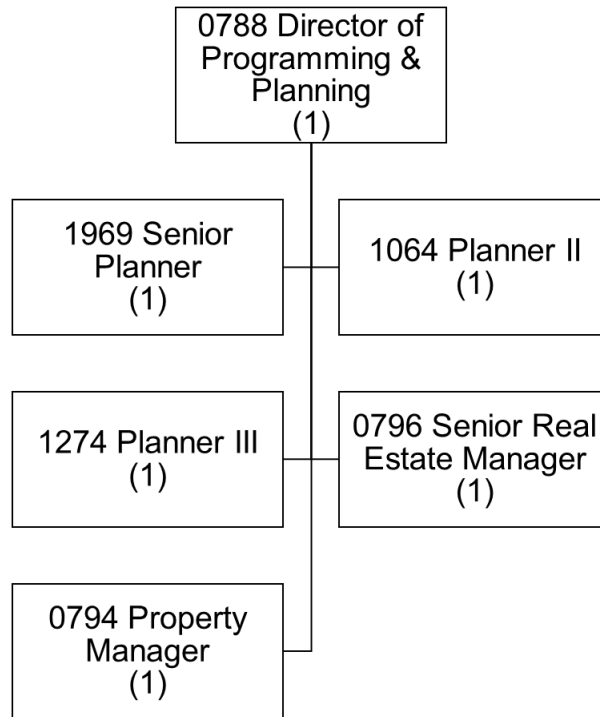
PROGRAMMING AND PLANNING DEPARTMENT BUDGET

Object Class	Description	2022 Actual	2023 Actual	2024 Budget
501300	Salaried Employees Labor	\$384,491	\$507,821	\$550,580
502000	Fringe Benefits	156,830	182,582	164,574
503000	Services	12,361	25,161	2,015,895
504000	Materials & Supplies	16	0	600
505019	Water	89,925	96,603	0
505020	Sewer	0	0	110,000
507030	Property Tax	26,024	58,781	174,833
509000	Miscellaneous Expense	7,963	39,386	21,026
509022	Meals/Food/Per Diem	0	42	100
512000	Leases & Rentals	90,874	9,282	69,100
Total		\$768,484	\$919,658	\$3,106,708

PROGRAMMING AND PLANNING DEPARTMENT STAFFING

Grade	Job Name	2022	2023	2024
27	0838.Planning Team Leader	1	-	-
107	1064.Planner II	1	1	1
109	1274.Planner III	-	1	1
110	1969.Senior Planner	1	1	1
111	0794.Property Manager	2	1	1
112	0796.Senior Real Estate Manager	-	1	1
114	0788.Director - Programming and Planning	1	1	1
Total		6	6	6

PROGRAMMING AND PLANNING DEPARTMENT ORGANIZATION CHART



Total Positions = 6

80- Engineering & Project Development Department

OVERVIEW

The Engineering & Project Development Department supports the Authority through the execution and management of the Authority's capital improvement and rehabilitation programs. Attention includes focus on safety, completion to budget and schedule, as well as involvement in quality control and quality assurance on infrastructure projects. Engineering works to ensure that capital projects allow GCRTA bus, rail, and paratransit service to meet the expectations of the community as a whole, as well as internal and external customers and stakeholders. Special projects include Rail Car Replacement Program supported by projects such as station platform modifications for the new fleet.

2023 ACCOMPLISHMENTS

- Completed construction of the Cuyahoga Viaduct River Bulkhead Rehabilitation.
- Issued NTP for implementation of the Light Rail Trunk Line Signal System Replacement.
- Completed construction of Waterfront Line Bridge Rehabilitation and restored service in time for Brown's first 2023 home game.
- Removed emergency shoring towers that supported Waterfront Line Bridge.
- Began construction of the Hayden Garage Roof Replacement.
- Began construction of the W. 117th Red Line Bridge/Station Platform Rehabilitation.
- Received approval for new modular E.120th Substation and worked to acquire necessary property.
- Began construction of Red Line East Overhead Catenary Structural Rehabilitation Phase 2.
- Issued NTP for Red Line Switch 515 (Brookpark Yard) return to service.
- Completed Red Line Rail Grinding Program.
- Completed reroofing of service building at Shaker Square during summer rail shutdown.
- Completed construction of Red Line Fiber Optic System Replacement.
- Commenced design of Brookpark Shop and Yard Improvements for Railcar Replacement Project.
- Continued design of the Windermere Substation Rehabilitation.
- Completed design of Warrensville - Van Aken Comfort Station and Rail Station Improvements, continued design of track, power, communication, and signal components.
- Continued reconstruction of Warrensville – Van Aken Substation. Modular substation in place.
- Continued Safety Certification process for Railcar Replacement Project.
- Completed sectionalization cable installation in preparation for Tower City East Portal Reconstruction. Issued IFB for East Portal Reconstruction
- Issued NTP and achieved 30% design for Consolidated Train Dispatch System (CTDS) Replacement.
- Continued construction of E. 75th (Trunk Line) Interlocking Rehabilitation.
- Continued construction of W. 117th Substation Rehabilitation.
- Continued construction Hayden HVAC unit replacement.
- Completed RFP for design consultant of Light Rail Trunk Line Retaining Wall Rehab. – Phase 3 Blue Line.
- Completed construction of Shaker Junction Protran Train Occupancy Communication System.
- Continued to support Asset Management and State of Good Repair projects throughout GCRTA.
- Installed trip-stop at Shaker Junction.
- Completed ADA-improvements at Shaker Square Station.
- Completed survey in support of Central Rail Roadway and Parking Lot Repaving.
- Began design for "155" Brookpark FM building rehabilitation.

2024 PRIORITIES

Success Outcomes: **Customer Experience (CE)** **Community Impact (CI)** **Employee Investment (EI)** **Financial Health (FH)**

- Complete construction of Hayden Garage Roof Replacement (CE).
- Complete design of Trunk Line Fiber Optic System to support new rail signal system project (CE).
- Complete design and begin construction of Central Rail Roadway and Parking Lot Repaving (CE, EI).
- Complete design and begin rehabilitation of "155" Brookpark FM building (CE).
- Complete construction of new west side salt dome at Brookpark Shop (CE, CI).
- Complete design and begin construction of Brookpark Shop and Yard Improvements to support Railcar Replacement Project (CE).
- Begin design of Blue Line Track Rehabilitation (CE).
- Complete design of Light Rail Trunk Line Retaining Wall Rehabilitation – Phase 3 – Blue Line (CE).
- Complete Hayden HVAC unit replacement (CE, EI).
- Begin Main Office HVAC unit replacement (CE, EI).
- Complete connection design and issue IFB for Port Connector track to GCRTA Waterfront line in support of Railcar Replacement Project (CE).
- Complete reconstruction of the E. 75th Trunk Line Interlocking (CE).
- Begin design for Tower City GL-1 replacement in coordination with CTDS replacement design (CE).
- Complete replacement of the Warrensville - Van Aken Substation (CE).
- Complete RFP for Flyover Bridge near Stokes Reconstruction (CE).
- Continue Safety Certification for W. 117th Bridge/Station, Warrensville Station and other projects (CE).
- Continue Safety Certification process for Rail Car Replacement Project (CE).
- Award and begin Tower City East Portal Reconstruction (CE).
- Issue IFB and begin the E. 120th Red Line Substation Replacement (CE).
- Issue IFB and award the E.55th Substation Transformer/Rectifier Replacement (CE).
- Continue Light Rail Trunk Line Signal System Replacement (CE).
- Continue W. 117th Red Line Bridge/Station Platform Rehabilitation (CE, CI).
- Award Shaker Boulevard Crossings Replacement for 2025 construction (CE).
- Began construction of Red Line Switch 515 (Brookpark Yard) return to service (CE).
- Complete construction of Overhead Catenary Structural Rehabilitation Phase 2 (CE).
- Issue IFB, award and begin construction of Warrensville - Van Aken Comfort Station and Rail Station including track, power, communications, and signal (CE, CI, EI).
- Begin design for Central Rail Improvements to support Railcar Replacement Project (CE).
- Begin design for Station Platform improvements to support Railcar Replacement Project (CE, CI).
- Begin design of Overhead Catenary Structural Rehabilitation Phase 3 – Light Rail (CE).
- Begin design of W.25th MetroHealth Bus Rapid Transit System (CE, CI).
- Continued to support Asset Management and State of Good Repair projects throughout GCRTA (CE, CI, EI).

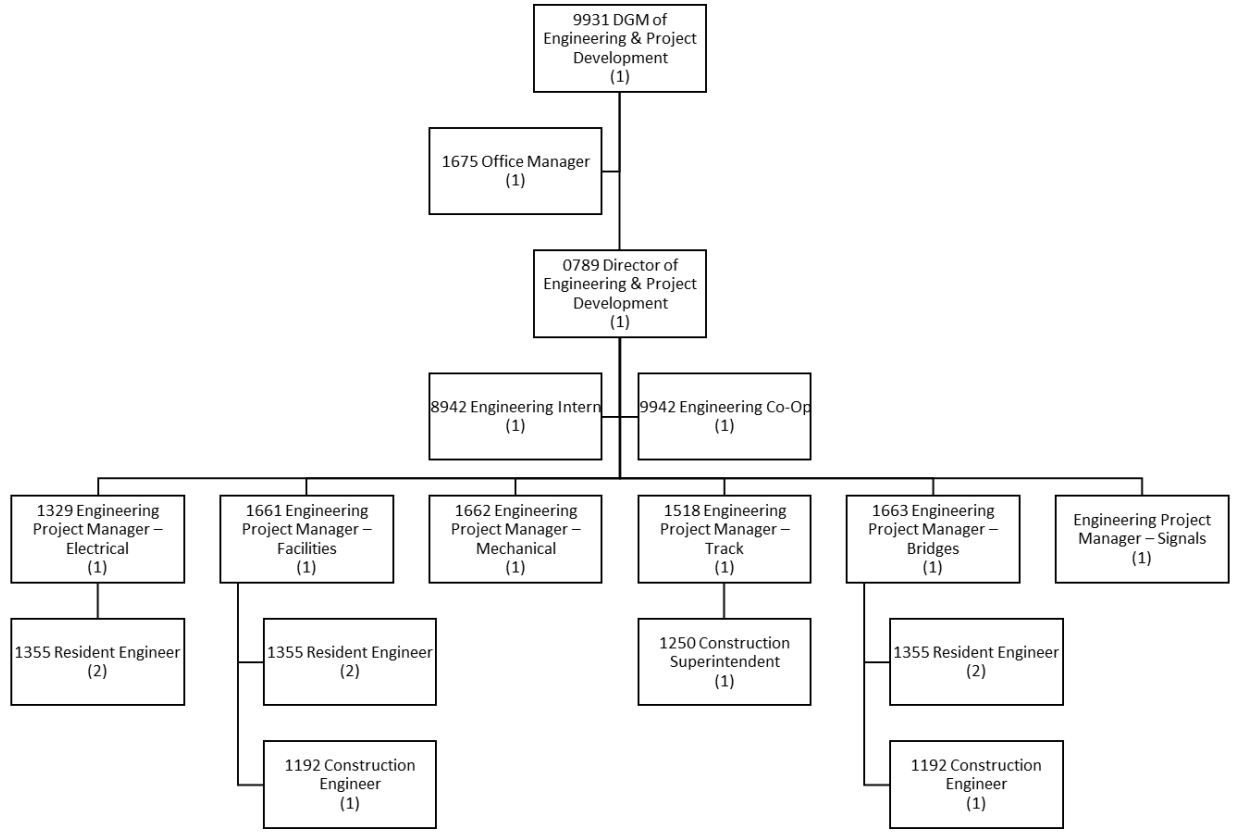
ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT BUDGET

Object Class	Description	2022 Actual	2023 Actual	2024 Budget
501300	Salaried Employees Labor	\$1,556,899	\$1,596,934	\$1,799,401
502000	Fringe Benefits	612,889	570,361	504,483
503000	Services	43,496	72,648	35,000
503052	Other Maintenance Contract	0	0	0
504000	Materials & Supplies	7,200	1,603	2,900
509000	Miscellaneous Expense	19,275	36,924	38,540
509022	Meals/Food/Per Diem	559	594	800
Total		\$2,240,318	\$2,279,064	\$2,381,124

ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT STAFFING

Grade	Job Name	2022	2023	2024
01	8942.Department Intern	1	2	2
01	9942.Engineering Co-Op	1	1	1
25	1675.Office Manager	1	-	-
107	0725.Executive Assistant	-	1	1
108	1192.Construction Engineer	2	2	2
110	1250.Superintendent - Construction	1	1	1
111	1355.Resident Engineer/Architect	6	5	5
113	1328.Engineering Project Manager-Track	1	1	1
113	1329.Engineering Project Manager - Electrical	1	1	1
113	1661.Engineering Project Manager - Facilities	1	1	1
113	1663.Engineering Project Manager - Bridges	1	1	1
113	1664 Engineering Project Manager - Signals	1	1	1
113	1662 Engineering Project Manager - Mechanical	1	1	1
114	0789.Director - Engineering & Project Development	1	1	1
116	9931.DGM - Engineering & Project Management	1	1	1
Total		20	20	20

ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT ORGANIZATION CHART



Total Positions = 20