

# ENGINEERING & PROJECT MANAGEMENT DIVISION

## MISSION STATEMENT

The mission of the Engineering and Project Management Division is to ensure the successful completion of capital improvement projects through professional planning, design, right-of-way, and construction services.

## DIVISION STRATEGIC PLAN CHANGE INITIATIVES & SCORECARD MEASURES

The Engineering and Project Management Division is responsible for RTA's planning, real estate, and capital project design and construction management activities. The Engineering Division plays a key role in obtaining competitive grants to bring in additional grant funding to achieve a State of Good Repair (SOGR). Progress and impact are measured by completion of SOGR priorities, and the improvement in the Asset Management Rating of assets.

2021 is a year in transition. As the Authority completes its Strategic Plan update, divisions and departments will move from connection with the previous plan's Mission, Vision, Values, Vital few objectives, and scorecard measurements (as outlined in following pages) to new priorities beginning with the RTA Targets (Division level metrics to address RTA identified outcome areas) that are presented for the first time after Division priorities.

## 2020 ACCOMPLISHMENTS

- Completed the design and construction of the Light Rail Track Rehabilitation – Phase 1.
- Completed construction of the replacement of the Puritas Substation.
- Completed installation of the new SCADA system.
- Completed construction of the Shaker Square Station ADA ramps.
- Completed the ten year Strategic Plan Update to incorporate Pillar Study results.
- Completed construction of the Triskett Garage CNG Fueling and Storage Facility.
- Continued construction of Tower City Track 10/Track 13 Rehabilitation with platform, catenary and signal work.
- Completed the installation of Stations and Kiosks along Opportunity Corridor Phase 1.
- Completed the adoption of the SFY 2021-2024 Transportation Improvement Plan (TIP).
- Completed design of the Triskett Garage CNG Facility Upgrades.
- Completed design of the Light Rail Track Rehabilitation – Phase 2.
- Completed design for Cuyahoga Viaduct Rehabilitation Phase 1.
- Began construction of the Warrensville/Van Aken Substation.
- Began construction of the East 79<sup>th</sup> Street Red Line Station ADA Rehabilitation.
- Began construction of the Red Line Fiber Optic Line Replacement.
- Began construction of the West 30<sup>th</sup> Substation Transformer/Rectifier Replacements.
- Began construction of the Light Rail Retaining Wall Rehabilitation - Phase 2.
- Continued design of the Overhead Catenary System Structural Rehabilitation.
- Completed study and began design of the Warrensville/Van Aken Station Improvements and Comfort Station.
- Began design of the Tower City East Portal Rehabilitation.
- Began design of the East 120<sup>th</sup> Street Substation Replacement.
- Began design of the Trunk Line Signal System.
- Began the due diligence phase for the Columbus Road Transit Oriented Development.
- Began the Transit Oriented Development Planning along the West 25<sup>th</sup> Street Corridor.
- Supported the activities of the Cuyahoga County Trails Leadership Network.

- Provided leadership for the Performance Management initiatives of TPE, ISO 14001 and Sustainability programs.
- Provided FFY2021 CUZA funding allocations for the Region for formula and CARES act grants.
- Promoted transit elements in various TLCI studies throughout Cuyahoga County.
- Continued supporting Asset Management and SOGR initiatives throughout GCRTA.
- Facilitated construction coordination with various ODOT and City of Cleveland projects.
- Obtained over \$30 million of competitive grants from FTA, ODOT, OEPA, NOACA and USDOT BUILD.

## 2021 PRIORITIES

- Complete construction of Tower City Track 10/Track 13 Rehabilitation with platform, catenary and signal work.
- Complete the construction of the Light Rail Track Rehabilitation – Phase 2.
- Complete construction of the Triskett Garage CNG Facility Upgrades.
- Complete construction of the Warrensville/Van Aken Substation.
- Complete construction of the East 79<sup>th</sup> Street Red Line Station ADA Rehabilitation.
- Complete construction of the Red Line Fiber Optic Line Replacement.
- Complete construction of the West 30<sup>th</sup> Substation Transformer/Rectifier Replacements.
- Complete construction of the Light Rail Retaining Wall Rehabilitation - Phase 2.
- Begin construction of the Cuyahoga Viaduct Rehabilitation Phase 1.
- Begin construction of the West 117<sup>th</sup> Street Substation.
- Complete the due diligence phase for the Columbus Road Transit Oriented Development.
- Complete the Transit Oriented Development Planning along the West 25<sup>th</sup> Street Corridor.
- Complete design and begin construction of the Tower City East Portal Rehabilitation.
- Complete design and begin installation of the Trunk Line Signal System.
- Complete design and begin installation of the 515 Switch and Track.
- Complete design and begin construction of the Overhead Catenary System Structural Rehabilitation.
- Complete design & begin construction of the Warrensville/Van Aken Station Improvements and Comfort Station.
- Complete design of the East 120<sup>th</sup> Street Substation Replacement.
- Complete the structural evaluation of the Waterfront Line Bridge.
- Begin design of the Red Line Bridge over West 117<sup>th</sup> Street.
- Begin design of the Track Bridge over Conrail.
- Begin implementation of the ten year Strategic Plan Update.
- Support the Rail Car Replacement Program.
- Support the Baby on Board and Paradox Price Pilot Programs.
- Support the activities of the Cuyahoga County Trails Leadership Network.
- Obtain ISO 14001 Certification and lead the Sustainability programs.
- Provide FFY2022 CUZA funding allocations for the Region.
- Promote transit elements in various TLCI studies throughout Cuyahoga County.
- Continue supporting Asset Management and SOGR initiatives throughout GCRTA.
- Facilitate construction coordination with various ODOT and City of Cleveland projects.
- Obtain competitive grants from FTA, ODOT, OEPA and NOACA.

## LIST OF DEPARTMENTS

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

# ENGINEERING & PROJECT MANAGEMENT

Success Outcomes	Metric	FY2020 Performance Goals	Objective	Goal Points	Definition	Information System	Owner
Customer Experience	Annual Goal for Rail Car Replacement Fund	\$20M	–	10	Appropriated or obligated funding for rail car replacement fund secured in the program year	Performance Data	Michael Schipper
	Completion of Annual Work Program	\$25M	–	15	Total value of the design and construction contracts approved by the Board of Trustees.	Performance Data	Joseph Shaffer
	Benefit and Value of Capital Program Investments - Impression	20%	↑	5	% of customers who have a positive impression of capital program investments (recently completed projects)	Customer Survey	Maribeth Feke
	Capital Program Project Schedule Adherence	80%	–	5	% of capital projects (budget ≥ \$1M) that are on schedule	Performance Data	Joseph Shaffer
	<b>TOTAL POINTS</b>			<b>35</b>			
Community Value	Economic Impact of Capital Program - Impression	20%	↑	10	% of community that has a positive perception of the economic impact of the capital program	Customer Survey	Maribeth Feke
	Economic Impact of Capital Program - Actual	3 to 1	↑	10	The actual economic impact of major capital projects (budget ≥ \$1M)	Economic Impact Study	Maribeth Feke
	Sustainability - Emissions Reduction - Actual	>5%	↓	10	% Reduction of Type I and II emissions per passenger-mile traveled on RTA	Performance Data	Heather Valentino
	Social Mobility Initiative - Impression	20%	↑	10	% of community that agrees or strongly agrees that GCRTA provides service that supports quality of life and social needs	Customer Survey	Joseph Shaffer
	<b>TOTAL POINTS</b>			<b>30</b>			
Financial Sustainability	Competitive Grants Awarded Towards Annual Goal for Prioritized Capital Projects	\$25M	–	15	Annual goal for competitive grants awarded for prioritized capital projects in the program year	Financial Data	Michael Schipper
	Change Orders on Major Projects	<5%	–	10	Achievement of under 5% change orders for major capital projects	Performance Data	Joseph Shaffer
	<b>TOTAL POINTS</b>			<b>25</b>			

Success Outcomes	Metric	FY2020 Performance Goals	Objective	Goal Points	Definition	Information System	Owner
Employee Engagement	Division Employees Agree - Supervisor Invested in Growth and Success	5%	↑	2	% of Division employees that agree or strongly agree that their Supervisor is invested in their growth and success	Employee Survey	Michael Schipper
	Division Employees Agree - Understand Vision and Direction	10%	↑	2	% of Division employees that agree or strongly agree that they understand the vision and direction of GCRTA and the Engineering & Project Management Division	Employee Survey	Brian Temming
	Division Employees Agree - Understand How Performance Linked to Organization Success	20%	↑	2	% of Division employees that agree or strongly agree that they understand how their performance contributes to organizational success	Employee Survey	Joseph Shaffer
	Workforce Net Promoter Score	5	↑	2	% Promoters minus % Detractors that recommend Division as a place to work	Employee Survey	Maribeth Feke
	Agency Employees Understand Benefits of Capital Program	20%	↑	2	% of Agency employees that agree or strongly agree that they understand the benefits of the capital program	Employee Survey	Michael Schipper
	<b>TOTAL POINTS</b>				<b>10</b>		
<b>OVERALL PERFORMANCE SCORE</b>					<b>100</b>		

# PROJECT SUPPORT DEPARTMENT

## MISSION STATEMENT

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 to create a healthier and livable environment for our customers and the community we serve.

## STRATEGIC PLAN CHANGE INITIATIVES & SCORECARD MEASURES

Supporting the Vital Few Objectives (VFOs) for Continual Process Improvement, Fiscal Responsibility and Innovation & Learning. The Project Support Department impacts GCRTA's ability to achieve a State of Good Repair and Advance and Improve Technology, as well as Enhancing Fiscal Responsibility by providing quality and safety oversight and program reviews of projects. The Project Support Department also works to Improve Sustainability throughout the Authority by advancing the use of environmental best practices and documenting, implementing, and maintains the Authority's Environmental Sustainability Management System (ESMS).

## 2020 ACCOMPLISHMENTS

- Completed 105 Quality Assurance Audits
- Completed 30 Quality Control Plan, Request for Proposal and Issue for Bid Package Reviews
- Completed 24 Third-Party plan reviews
- Updated and reissued the Engineering and Project Management Project Execution Manual
- Updated and reissued the Engineering and Project Management Quality Program Plan
- Provided engineering design and construction assistance on Engineering and Project Development projects
- Provided document control support on Engineering and Project Development projects
- Progressed the Construction of the E. 79<sup>th</sup> Street Red Line Station to 90% Completion
- Installed water bottle filling station in the Main Office Building
- Monthly Energy Dashboard
- Execution of Healthline LED Retrofit project
- Execution of Strongsville & Southgate LED Retrofit Project

## 2021 PRIORITIES

- Conduct quality assurance audits.
- Review GCRTA plans and specifications for construction projects.
- Review third party plans and specifications for construction crossing or adjoining GCRTA facilities.
- Provide engineering assistance as needed in Design and Construction.
- Conduct Field and Manufacturing site visits.
- Coordinate work of support staff.
- Execution of Paratransit LED retrofit project
- Execution of modifications of Paint & Primer storage room to reduce Central Bus Maintenance Facility Significant Aspect risk

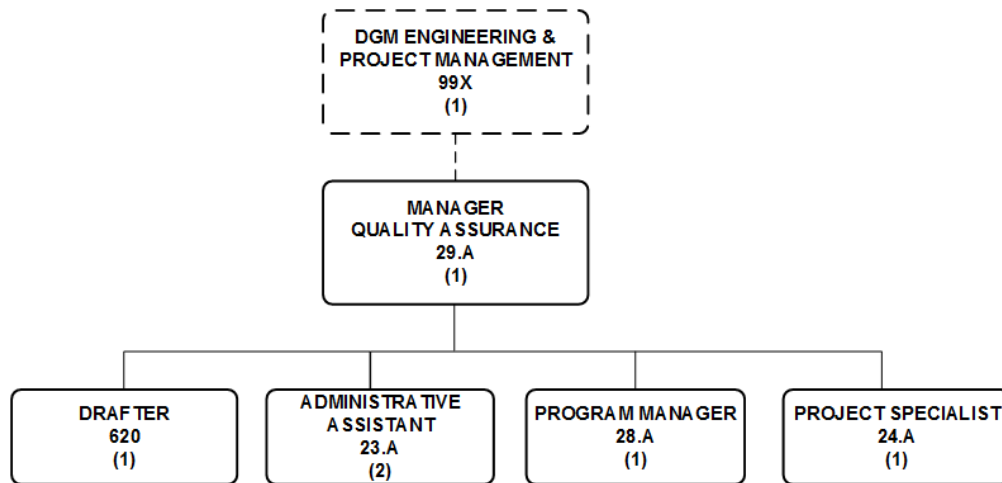
**PROJECT SUPPORT DEPARTMENT BUDGET**

Object Class	Description	2019 Actual	2020 Projected Actual (Q3)	2021 Budget
501300	Labor – Salaried Employees	\$395,062	\$570,263	\$422,016
501310	Overtime – Salaried Employees	652	0	10,000
502000	Fringe Benefits	152,094	178,415	152,067
503000	Services	0	12,813	61,500
504000	Materials & Supplies	207	895	8,300
509000	Miscellaneous Expenses	175	22,579	38,000
509022	Meals & Concessions	0	0	250
	<b>Total</b>	<b>\$548,190</b>	<b>\$784,964</b>	<b>\$692,133</b>

**PROJECT SUPPORT DEPARTMENT STAFFING**

Grade	Job Name	2019	2020	2021
06	0620 Drafter	1.0	1.0	1.0
23	0757 Administrative Assistant	1.0	2.0	2.0
24	0860 Project Assistant	1.0	-	-
24	1965 Project Specialist	1.0	1.0	1.0
28	0888 Program Manager	1.0	1.0	1.0
29	1439 Mgr. – Quality Assurance	1.0	1.0	1.0
	<b>Total</b>	<b>6.0</b>	<b>6.0</b>	<b>6.0</b>

**PROJECT SUPPORT DEPARTMENT ORGANIZATION CHART**



# PROGRAMMING & PLANNING DEPARTMENT

## MISSION STATEMENT

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, arts-in-transit programs. The department also leads GCRTA's efforts in Micro-mobility as part of an inter-agency task force.

## STRATEGIC PLAN CHANGE INITIATIVES & SCORECARD MEASURES

Supporting the Vital Few Objectives (VFOs) for Voice of Customer (Expanding Advocacy and Enhancing Customer Experience) and Continual Process Improvement (Achieving State of Good Repair and Advance & Improve Technology). The Programming and Planning Department impacts GCRTA's ability to meet goals for advocacy, public art, transportation studies, and receiving competitive grants for the capital improvement program.

## 2020 ACCOMPLISHMENTS

- Completed Framework for the Future, GCRTA's strategic Plan
- Initiated 25connects, the W. 25<sup>th</sup> TOD Planning project funded by FTA
- Completed land acquisitions for parcels required for E. 34<sup>th</sup> Street Station Reconstruction Project
- Completed sale of Excess property at 5508 Euclid Avenue
- Modified leasehold clauses in response to COVID
- Completed Title VI Analysis
- Completed CUZA allocation
- Completed CARES Act funding allocation expeditiously
- Served on NOACA Air Quality, Transit Council, and Transportation Committees.
- Participation on NOACA's Transit Needs Assessment, Downtown Mobility Plan, and Long Range Plan
- Completed 4 Transit Waiting Environment Projects
- Processed and obtained Environmental Clearances on 3 projects.
- Participated in Vision for the Valley and Metroparks "Cheers" Project
- Awarded and Executed contract with 2 artists for E. 79<sup>th</sup> Street Rail Project
- Worked with the City of Cleveland's Vision Zero Task Force.
- Participated on Downtown Cleveland Alliance's Downtown Mobility Taskforce and Ontario Street Planning
- Collaborated and assisted with successful Paradox Grant application
- Completed shelter pad construction for E. 105/Opportunity Corridor Project.
- Completed 5 Community Investment Improvement Projects.
- Assisted in successful applications to ODOT for "Baby on Board" Project and to DOT for Build grant
- Applied for 2 competitive planning grants
- Worked with task force in Shaker Heights on Van Aken District
- Represented RTA on Solon Mobility Task Force
- Acted as Project Manager for construction of the Red Line Greenway
- Participated in the NOACA "Walkability Virtual Academy" Northeast Ohio Team



- Created Legislature Update for capital expenditures

## 2021 PRIORITIES

- Represent RTA interests in City of Cleveland, NOACA, and other agency Planning projects as required
- Manage real estate interests of RTA as required
- Continue to evaluate and dispose of excess real estate assets no longer required for RTA operations
- Complete 25connects TOD Planning project on W. 25<sup>th</sup> Street
- Manage Completion of Red Line Greenway project
- Obtain Environmental Clearances as needed.
- Monitor Implementation of Framework for the Future short term objectives
- Execute a Letter of Intent for the W. 25<sup>th</sup> Street/Columbus Road TOD Project
- Complete land acquisitions required for Viaduct Repair, W. 117<sup>th</sup> Bridge and West Side Red Line projects.
- Complete 4 TWE projects.
- Continue to represent GCRTA on NOACA committees, Sub-committees, Task Forces, and TLCI projects
- Establish Micro Mobility Pilot Demonstration project.
- Complete 4 Community Investment Improvement Projects.
- Apply for Planning grants from NOACA, FTA, ODOT and other sources for planning related activities
- Complete downtown transit signage project in collaboration with Laketran, Neoride and other transit agencies

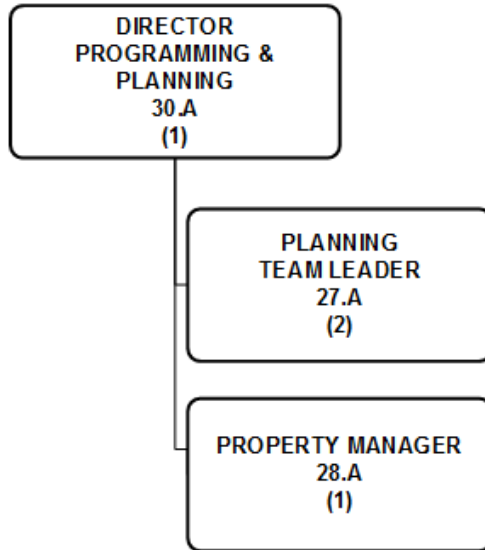
## PROGRAMMING AND PLANNING DEPARTMENT BUDGET

Object Class	Description	2019 Actual	2020 Estimate	2021 Budget
501300	Labor Salaried Employees	\$332,556	\$360,331	\$362,441
502000	Fringe Benefits	129,231	129,277	113,622
503000	Services	165,804	148,622	152,300
504000	Materials & Supplies	33	20	600
507030	Property Taxes	80,585	5,504	129,833
509000	Miscellaneous Expenses	15,915	8,844	21,626
509022	Meals & Concessions	0	0	100
512000	Leases & Rentals	118,986	109,801	120,534
<b>Total</b>		<b>\$843,110</b>	<b>\$762,399</b>	<b>\$901,055</b>

## PROGRAMMING AND PLANNING DEPARTMENT STAFFING

Grade	Job Name	2019	2020	2021
27	0838 Planning Team Leader	2.0	2.0	2.0
28	0794 Property Manager	1.0	1.0	1.0
30	0788 Director	1.0	1.0	1.0
<b>Total</b>		<b>4.0</b>	<b>4.0</b>	<b>4.0</b>

**PROGRAMMING AND PLANNING DEPARTMENT ORGANIZATION CHART**



# ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT

## MISSION STATEMENT

The Engineering & Project Development Department supports Bus, Rail and Paratransit delivery of customer service by 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 services. Engineering works to assure that capital projects meet the expectations of internal and external customers and stakeholders.

## 2020 ACCOMPLISHMENTS

- Completed reconstruction of Tower City Track 10 East, 10 West and new crossover at west end.
- Completed reconstruction of Light Rail Track (Trunk Line Phase 1) from E. 79<sup>th</sup> to Buckeye/Woodhill.
- Completed reconstruction of W. 65<sup>th</sup> Red Line Substation.
- Completed reconstruction of the modular Puritas Red Line Substation.
- Completed installation of the new Supervisory Control and Data Acquisition (SCADA) system.
- Began construction of Red Line Fiber Optic System Replacement.
- Completed construction of the Shaker Square Station ADA Ramps.
- Completed reroofing of Shaker Square and W. 30<sup>th</sup> Substations
- Completed construction of the Triskett Garage CNG Fueling Facility.
- Completed design for the Triskett CNG Facility Upgrades and advertised for construction.
- Continued construction of the Warrensville/Van Aken Substation.
- Began construction of the new E. 79<sup>th</sup> Red Line Station.
- Continued design of the E. 120<sup>th</sup> Red Line Substation Replacement.
- Completed design and began construction of the W. 30<sup>th</sup> Red Line Substation Rehabilitation.
- Completed design of the Light Rail Trunk Line Signal System Replacement.
- Began construction of the Light Rail Trunk Line Retaining Wall Rehabilitation – Phase 2.
- Commenced Tower City East Portal Reconstruction design.
- Completed design of the Cuyahoga Viaduct Rehabilitation – Phase 1.
- Completed design of Light Rail Track Rehabilitation Trunk Line Phase 2, Buckeye/Woodhill to Shaker Square.
- Completed design of Red Line E. 55<sup>th</sup> – E. 79<sup>th</sup> Rail Replacement.
- Began Safety Certification process for Rail Car Replacement Program.
- Began design for Brookpark Shop and Yard Improvements to support Rail Car Replacement Program.
- Awarded design RFP for W. 117<sup>th</sup> Red Line Bridge/Station Platform Rehabilitation.
- Awarded design RFP for Waterfront Line Bridge Rehabilitation.
- Completed design of Overhead Catenary Structural Rehabilitation Phase 1.
- Began design of Warrensville Van Aken Comfort Station and Rail Station Improvements.
- Continued to support Asset Management and State of Good Repair projects throughout GCRTA.

## 2021 PRIORITIES

- Complete reconstruction of Tower City Track 13 and updates to GL-1 processor.
- Complete reconstruction of Light Rail Track (Trunk Line Phase 2) from Buckeye/Woodhill to Shaker Square.
- Complete construction of the Fiber Optic System Replacement.
- Complete construction of the Triskett CNG Garage Infrastructure Upgrades.
- Complete construction of the Warrensville/Van Aken Substation.
- Complete construction of the new E. 79<sup>th</sup> Red Line Station.

- Complete design and advertise E. 120<sup>th</sup> Red Line Substation Replacement.
- Award and begin construction of W. 30<sup>th</sup> Red Line Substation Rehabilitation.
- Award and begin Light Rail Trunk Line Signal System Replacement.
- Complete construction of Light Rail Trunk Line Retaining Wall Rehabilitation – Phase 2
- Complete design of and award Tower City East Portal Reconstruction.
- Award and begin construction of Cuyahoga Viaduct Rehabilitation - Phase 1
- Complete design of Light Rail Track Rehabilitation Green Line Phase 1, Moreland Pocket to Eaton
- Award and complete construction of Red Line E. 55<sup>th</sup> to E. 79<sup>th</sup> Rail Replacement.
- Continue Safety Certification process for Rail Car Replacement Program.
- Complete design for Brookpark Shop and Yard Improvements to support Rail Car Replacement Program.
- Begin design for Station Platform improvements to support Rail Car Replacement Program.
- Commence design for W. 117<sup>th</sup> Red Line Bridge/Station Platform Rehabilitation.
- Complete Design and advertise for Waterfront Line Bridge Rehabilitation.
- Begin Overhead Catenary Structural Rehabilitation Phase 1.
- Complete design of Warrensville Van Aken Comfort Station and Rail Station Improvements.
- Continued to support Asset Management and State of Good Repair projects throughout GCRTA.

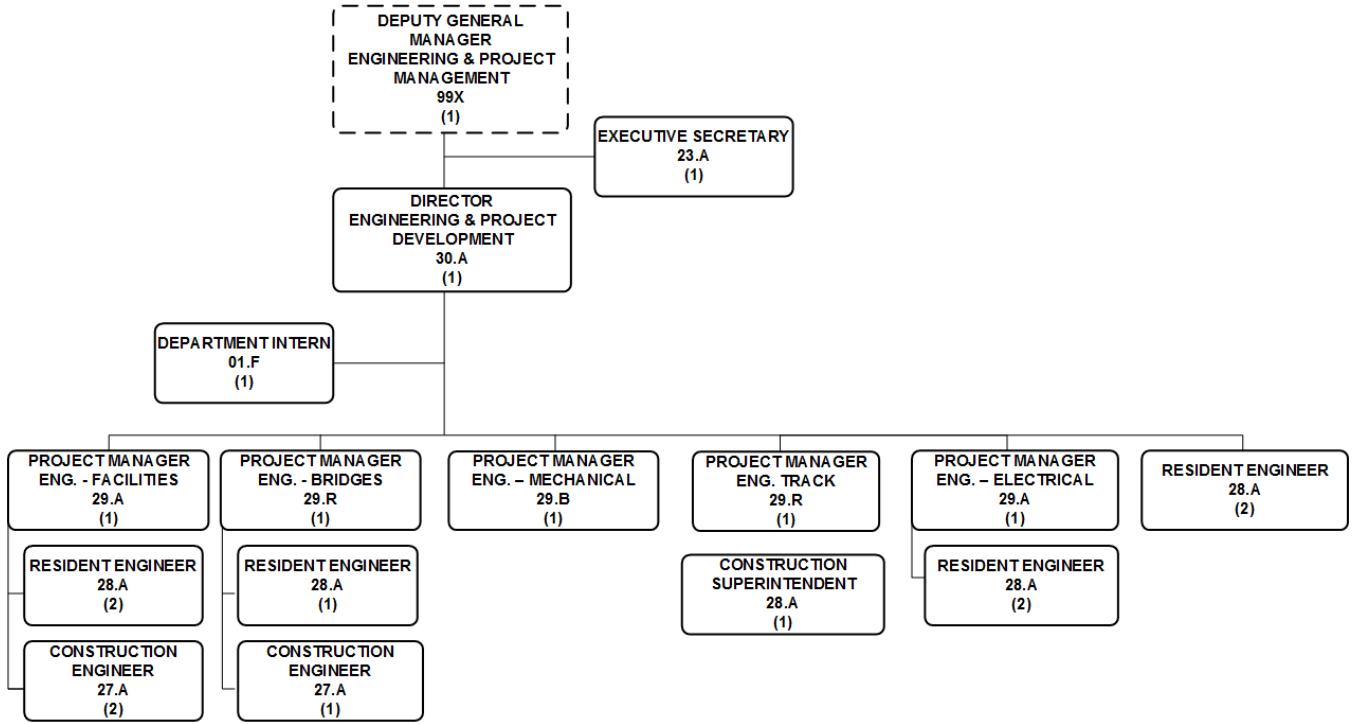
#### ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT BUDGET

Object Class	Description	2019 Actual	2020 Estimate	2021 Budget
501300	Labor Salaried Employees	\$1,314,979	\$1,367,078	\$1,488,677
502000	Fringe Benefits	471,603	472,563	519,887
503000	Services	15,758	36,150	35,000
504000	Materials & Supplies	15,593	16,485	2,900
509000	Miscellaneous Expenses	50,339	15,873	38,540
509022	Meals & Concessions	4,635	365	800
<b>Total</b>		<b>\$1,872,907</b>	<b>\$1,908,515</b>	<b>\$2,085,804</b>

#### ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT STAFFING

Grade	Job Name	2019	2020	2021
01	8942 Engineering Intern	1.0	1.0	1.0
23	0725 Executive Secretary	1.0	1.0	1.0
27	1192 Construction Engineer	3.0	3.0	3.0
28	1250 Supt Construction	1.0	1.0	1.0
	1355 Resident Engineer	7.0	7.0	6.0
29	1329 Project Manager – Electrical	1.0	1.0	1.0
	1518 Project Manager – Track	1.0	1.0	1.0
	1661 Project Manager – Facilities	1.0	1.0	1.0
	1662 Project Manager – Mechanical	1.0	1.0	1.0
	1663 Project Manager – Bridges	1.0	1.0	1.0
30	0789 Director – Engineering & Project Dev	1.0	1.0	1.0
99	9931 DGM Eng. & Project Mgmt.	1.0	1.0	1.0
<b>Total</b>		<b>20.0</b>	<b>20.0</b>	<b>19.0</b>

**ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT ORGANIZATION CHART**



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