
ENGINEERING SERVICES

Engineering Services group provides innovative, high-quality, and cost-effective solutions to meet our customers' needs and ensure the long-term reliability and successful operation of Metropolitan's infrastructure.

PROGRAMS

Engineering Services performs project management, design, construction management, environmental planning, infrastructure protection monitoring, water-related facility planning, and manages Metropolitan's Capital Investment Plan (CIP).

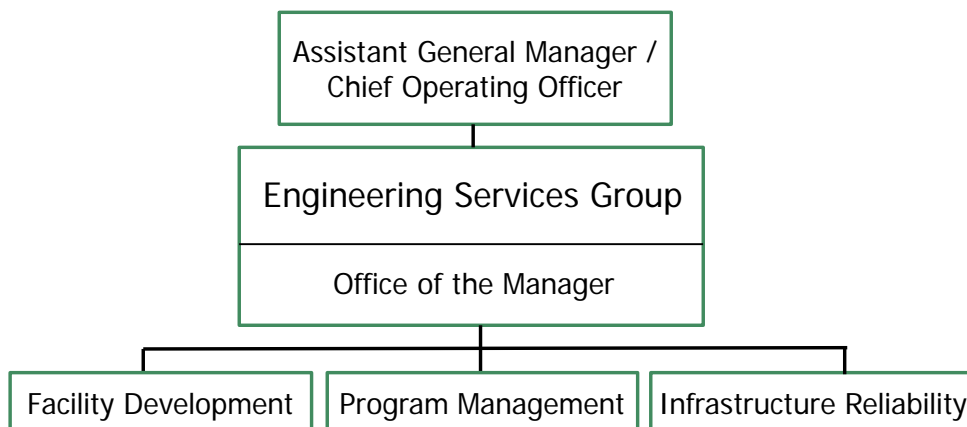
Engineering Services accomplishes its mission through the following programs or services:

Office of the Group Manager oversees the management of the Engineering Services group by providing strategic leadership on engineering initiatives and core business efforts, to ensure the continued reliability and quality of water deliveries.

Facility Development is responsible for providing design, environmental planning, and local and regional water-related facility planning services.

Program Management is responsible for overall project delivery of capital and O&M projects, and serves as Metropolitan's "Owner's Engineer."

Infrastructure Reliability is responsible for construction management and for the monitoring and protection of Metropolitan's infrastructure.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, Engineering Services will focus on the following key issues:

California Water Fix and California Eco Restore

Provide engineering and program management leadership in support of the California Water Fix and California Eco Restore initiatives.

Drought Management

Develop and execute projects to optimize water system operations and expand the delivery of Colorado River water to areas of the distribution system that are normally supplied by the State Water Project.

Expedite development of a Regional Recycled Water Supply Program including the design and construction of a demonstration-scale recycled water treatment plant, and preparation of a comprehensive feasibility study of a full-scale recycled water system.

Continue to support opportunities to collaborate with other agencies to enhance local water supplies.

Infrastructure Reliability

Manage and complete Board-authorized projects within the CIP to ensure the reliable delivery of water to Metropolitan's member agencies.

Provide engineering and technical services to support the operation and maintenance of Metropolitan's water conveyance, delivery, and treatment facilities.

Protect public safety, minimize future costs of infrastructure maintenance and repairs, avoid unplanned outages by monitoring Metropolitan's facilities and right-of-way, and performing essential technical assessments.

CIP Management

Execute and prioritize capital projects to address Metropolitan's short-term needs and long-term objectives, and optimize utilization of internal and external resources.

Evaluate project performance to identify and implement improvements in project delivery.

Employee Development

Lead workforce development and succession planning activities to optimally maintain technical expertise and skills needed in the future.

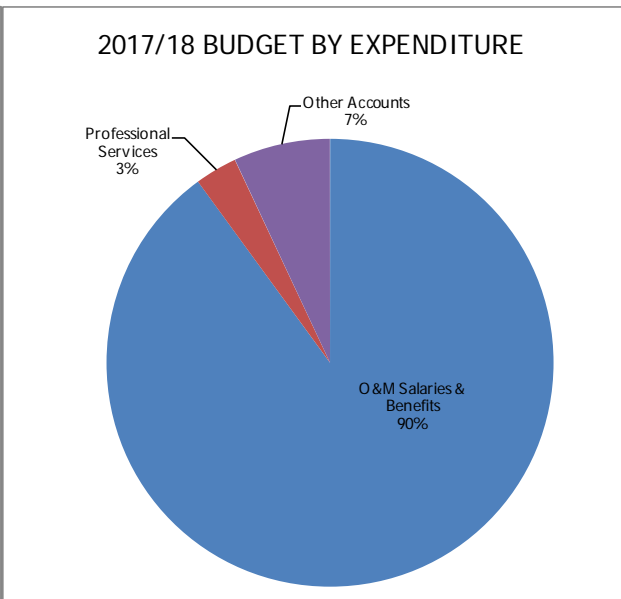
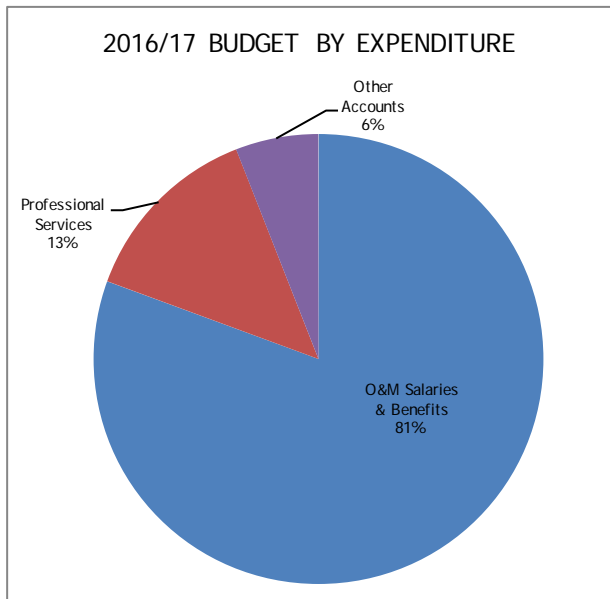
Customer Service

Provide technical leadership and services to meet Metropolitan's business needs.

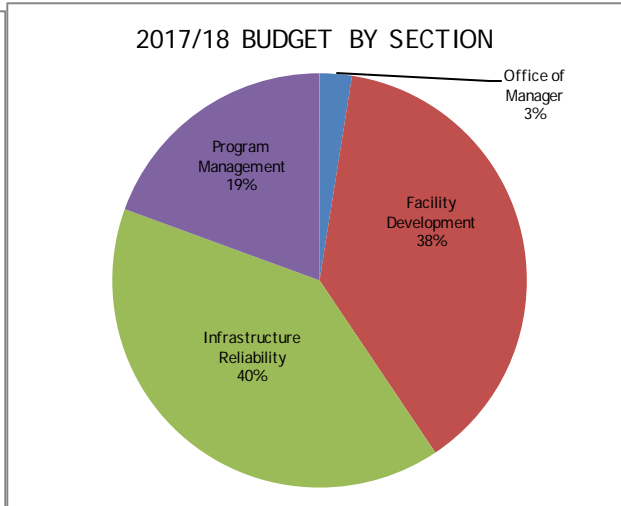
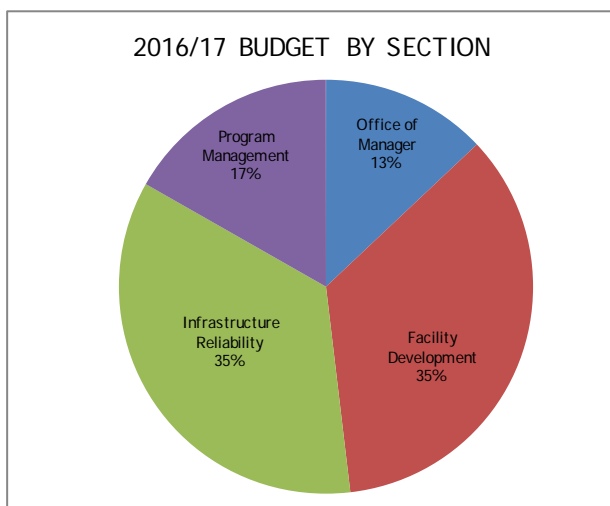
O&M Financial Summary

	2014/15 Actual	2015/16 Budget	2016/17 Proposed	Change from 2015/16	2017/18 Proposed	Change from 2016/17
Total Salaries and Benefits	68,237,600	68,811,500	70,196,000	1,384,500	71,410,800	1,214,800
Direct Charges to Capital	(41,307,600)	(41,895,500)	(43,990,800)	(2,095,300)	(46,375,100)	(2,384,300)
Total Salaries and Benefits	26,930,000	26,916,000	26,205,200	(710,800)	25,035,700	(1,169,500)
% Change		(0.1%)		(2.6%)		(4.5%)
Professional Services	1,161,600	1,445,300	4,371,000	2,925,700	851,000	(3,520,000)
Communication Expenses	95,200	130,000	100,000	(30,000)	100,000	—
Materials & Supplies	578,400	448,800	580,200	131,400	602,200	22,000
Memberships & Subscriptions	89,400	146,700	181,300	34,600	188,900	7,600
Taxes & Permits	371,500	302,000	320,000	18,000	330,000	10,000
Travel Expenses	167,600	261,900	140,400	(121,500)	130,000	(10,400)
Utilities Charges	166,800	240,000	180,000	(60,000)	180,000	—
Other Accounts	558,900	380,200	433,600	53,400	414,800	(18,800)
Total O&M	30,119,400	30,270,900	32,511,700	2,240,800	27,832,600	(4,679,100)
% Change		0.5%		7.4%		(14.4%)
Operating Equipment	—	406,300	435,400	29,100	258,800	(176,600)
Total O&M and Operating Equipment	30,119,400	30,677,200	32,947,100	2,269,900	28,091,400	(4,855,700)
% Change		1.9%		7.4%		(14.7%)

Note – Totals may not foot due to rounding.



O&M BUDGET BY SECTION



	2015/16 Budget	2016/17 Proposed	Change from 2015/16	2017/18 Proposed	Change from 2016/17	Pers. 15/16	Pers. 16/17	Pers. 17/18
Facility Development Section	12,010,151	11,429,533	(580,618)	10,599,684	(829,849)	55	50	45
Infrastructure Reliability Section	11,404,324	11,421,675	17,351	11,133,938	(287,736)	60	58	56
Office of the Grp Mgr -	1,117,679	4,214,834	3,097,155	696,824	(3,518,010)	8	1	1

Engineering Services								
Program Management Section	5,738,743	5,445,638	(293,105)	5,402,154	(43,484)	23	30	29
Total O&M	30,270,897	32,511,680	2,240,783	27,832,601	(4,679,079)	146	139	131

Note - Totals may not foot due to rounding.

Personnel Summary

		2014/15 Actual	2015/16 Budget	2016/17 Proposed	Change from 2015/16	2017/18 Proposed	Change from 2016/17
Regular	Total	345	371	371	—	371	—
	O&M	134	146	139.39	-6.61	131.39	-8
	Capital	211.2	225	231.61	6.61	239.61	8
Temporary	Total	2	—	—	—	—	—
	O&M	0.19	0	0	0	0	0
	Capital	1.42	0	0	0	0	0
Total Personnel	Total	347	371	371	—	371	—
	O&M	134.19	146	139.39	-6.61	131.39	-8
	Capital	212.62	225	231.61	6.61	239.61	8

Note - Totals may not foot due to rounding.

SIGNIFICANT BUDGET ISSUES

Engineering Services O&M budget is \$32.5 million in FY 2016/17 and \$27.8 million in FY 2017/18. As detailed below, Engineering Services' budget is influenced significantly by a new initiative, Metropolitan's Regional Recycled Water Supply Program. During FY 2016/17, a conceptual feasibility study for this program will be conducted that is categorized as a Major O&M project. This effort is planned to be completed within that fiscal year.

Total planned expenditures for FY 2016/17 are approximately \$2.2 million or 7.4% more than in FY 2015/16, with the addition of Major O&M support required for Metropolitan's Regional Recycled Water Supply Program. All support to the California Water Fix initiative is planned to be funded under a reimbursable agreement.

For FY 2017/18, planned expenditures are approximately \$4.7 million or 14.4% less than in FY 2016/17, due to completion of Major O&M work in support of the Regional Recycled Water Supply Program.

O&M	FY 2015/16	FY 2016/17	FY 2017/18
Labor	\$26,915,999	\$24,649,180	\$25,035,701
Non-labor	\$3,354,900	\$2,786,500	\$2,796,900
Total O&M	\$30,270,899	\$27,435,680	\$27,832,601
Recycled Water (labor & non-labor)	\$0	\$5,076,000	\$0
Total O&M & Special Initiative	\$30,270,899	\$32,511,680	\$27,832,601
% Change		7.4%	(14.4%)

Note: Excludes Operating Equipment

The following are the significant changes by budget year.

FY 2016/17

Personnel-Related Issues

Total personnel levels remain consistent with the previous fiscal year. However, the O&M and capital complement is different from the FY 2015/16 budget. This is primarily due to the shift in Major O&M work with the California Water Fix initiative no longer being funded under Major O&M as it is planned to be funded under a reimbursable agreement, and Major O&M support required for Metropolitan's Regional Recycled Water Supply Program.

Planned capital expenditures for FY 2016/17 are approximately \$56 million less than in FY 2015/16, with a total capital budget of \$180 million. This decrease in planned expenditures reflects a readjustment of project budgets and schedules to meet Metropolitan's overall biennial budgetary goals. Actual capital expenditures during the FY 2015/16 are also projected to be about \$33 million less than budgeted.

Professional Services

The budget primarily reflects increases to support Metropolitan's Regional Recycled Water Supply Program.

Materials & Supplies

The budget reflects an increase in design-related software maintenance costs.

Travel Expenses

The budget reflects decreases of travel-related expenses for the California Water Fix initiative, which is planned to be funded under a reimbursable agreement.

Utility Charges

The budget reflects an overall decrease in Engineering Services' utility costs at the La Verne facility based on current expenditure trends.

Other

Other nonlabor budget includes planned expenditures to support Metropolitan's Regional Recycled Water Supply Program and Engineering's workforce development programs (e.g., Career Launch, Mentoring Program, etc.).

FY 2017/18

Personnel-related issues

Total personnel levels remain consistent with the previous fiscal year. However, the O&M and capital complement is different from the FY 2016/17 budget. This is primarily due to the planned completion of Major O&M work in FY 2016/17 for Metropolitan's Regional Recycled Water Supply Program, resulting in a shift of O&M staffing to CIP in FY 2017/18.

Planned capital expenditures for FY 2017/18 will remain steady, with a total capital budget of \$180 million. High priority projects that will continue during the fiscal year include the Weymouth Oxidation Retrofit Program, which will be completed; the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program; the Colorado River Aqueduct (CRA) Reliability Programs; and the Right of Way and Infrastructure Protection Program.

Professional Services

The budget primarily reflects a decrease due to completion of support to Metropolitan's Regional Recycled Water Supply Program.

Materials & Supplies

The budget reflects anticipated increases in design-related software maintenance costs.

Other

The Conference and Meetings budget reflects decreases due to completion of support to Metropolitan's Regional Recycled Water Supply Program.

Operating Equipment – FY 2016/17 and FY 2017/18

The operating equipment budget reflects a slight increase from FY 2015/16 to FY 2016/17, and then a decrease in FY 2017/18 primarily due to the deferral of vehicle replacements. Other equipment identified to

be replaced includes robotic total stations (field survey equipment) which have already exceeded their expected service life.