

CITY ENGINEERING

Mission Statement

To provide quality engineering and project management services to ensure properly planned, designed, and constructed public projects are delivered to the citizens of Memphis in a timely and cost-efficient manner.

Services

The Division of Engineering provides planning, design and construction administration to constantly improve and expand the City's infrastructure. The Division designs and manages the construction of all the City's capital projects. Engineering staff reviews all private development proposals to ensure the required public improvements are included.

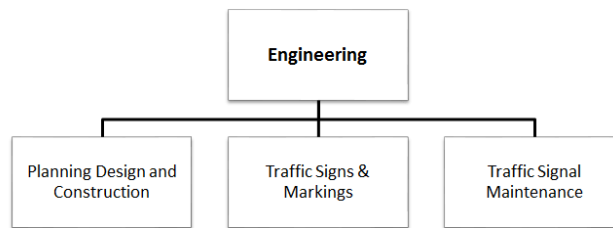
Operating Budget

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
Personnel Services	7,090,347	7,404,392	7,515,004	7,611,267
Materials and Supplies	3,300,343	3,644,334	3,416,367	3,908,413
Capital Outlay	12,410	69,000	32,000	85,000
Grants and Subsidies	0	0	5,000	0
Expense Recovery	(3,792,305)	0	(3,800,000)	(3,800,000)
Service Charges	70,400	36,000	36,000	41,000
Total Expenditures	\$ 6,681,195	\$ 11,153,725	\$ 7,204,371	\$ 7,845,680
Program Revenues	\$ (988,392)	\$ (1,108,763)	\$ (1,142,006)	\$ (1,120,763)
Net Expenditures	\$ 5,692,803	\$ 10,044,962	\$ 6,062,365	\$ 6,724,917

Authorized Complement

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Organization Structure



Performance Highlights

- Increased percentage of plan reviews completed in 10 working days from 75%(FY16) to 90%(FY17)
- 13,864 Signs Replaced/Maintained
- 1177 Miles of roadway striped
- 62 miles of new bike lanes, cycle tracks, trails, and bike routes in FY17.
- Processed 474 Speed Hump Requests, and installed 60 speed humps
- Approximately 250 Traffic Studies Completed
- 6,559 Traffic Signal Maintenance Tickets Addressed

Issues & Trends

The Division of Engineering's current Traffic Signal and Signs and Markings funding and staffing are not adequate to address deferred maintenance. Also, several positions in Civil Design, Sewer, and Drainage need to be filled to undertake current and increasing workloads. The division is anticipating a substantial increase in construction activities related to bridge projects which require CEI services (construction inspection) and surveying work to be performed during and/or after construction. Solving Drainage issues still remain a priority. Drainage Masterplans reports are being finalized with design projects and construction activities to follow.

Key Performance Indicators

ADMINISTRATION	FY16 ACTUAL	FY17 GOAL	FY17 ACTUAL*	FY18 GOAL	CATEGORY
Review and return land development plan submittals to developers within 10 working days of submission	75%	100%	90%	95%	Government
Number of plan reviews performed monthly	37	Tracking	49.6	Tracking	Government
Cumulative average time to execute all construction contracts after the bid opening	109	120	105	105	Government
Review private development sewer drawings within 7 calendar days	62%	100%	75%	88%	Government
Cumulative number of drainage design projects initiated annually	6	12	10	12	Government
Cumulative number of drainage design projects completed annually	5	7	3	7	Government
Cumulative number of months until a decision is reached (approval/rejection) on speed hump requests	20	7	26	7	Government
Cumulative number of months between approval of a speed hump request and installation	4.4	8	5	8	Government

SIGNS AND MARKINGS	FY16 ACTUAL	FY17 GOAL	FY17 ACTUAL*	FY18 GOAL	CATEGORY
% of curb ramps in the city that are ADA compliant	60%	63%	63%	66%	Public Safety
Number of traffic signs repaired/installed annually	13500	Tracking	12490	Tracking	Public Safety
% of city streets re-striped annually	56%	50%	42%	50%	Public Safety

SIGNAL MAINTENANCE	FY16 ACTUAL	FY17 GOAL	FY17 ACTUAL*	FY18 GOAL	CATEGORY
Complete preventative maintenance on 100% of traffic signals (998) annually	70%	100%	55%	100%	Public Safety
% of down/malfunctioning traffic signals responded to within 24 hours	100%	100%	100%	100%	Public Safety
% of signal systems installed/modified within 2 months of assignment	63%	100%	81%	85%	Public Safety
% of intersections with pedestrian countdown signals	10%	21%	12%	14%	Public Safety

* Some figures are approximate. In these cases, the reporting for FY17 was not complete before production of the budget book.

City Engineering Division Detail

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
PERSONNEL SERVICES				
Full-Time Salaries	4,690,124	6,234,352	5,462,882	6,337,259
Holiday Salary Full Time	274,836	0	130,711	0
Vacation Leave	378,066	0	215,574	0
Bonus Leave	48,760	0	23,086	0
Sick Leave	238,653	0	122,658	0
Overtime	309,909	241,200	241,390	141,200
Out of Rank Pay	16,799	35,757	36,042	35,757
Longevity Pay	6,605	0	6,483	0
Shift Differential	10,574	12,360	12,360	12,360
Retirement Benefits	84,973	91,000	92,592	91,000
Required Special License Pay	208	0	64	0
Pension	322,857	325,802	325,801	347,369
Social Security	3,803	0	2,351	0
Pension ARC Funding	547,758	633,761	633,761	631,593
Group Life Insurance	14,789	16,726	16,724	17,525
Unemployment	11,770	8,640	8,640	8,560
Medicare	82,139	92,410	92,410	86,223
Long Term Disability	15,496	16,968	16,968	17,221
Health Insurance - Basic	32,113	30,747	37,026	0
Health Insurance - Value PPO	0	0	1,289	15,467
Health Insurance - Premier	759,218	756,702	756,703	541,894
Other Post Employment Benefits	0	30,392	0	0
Benefits Adjustments	0	(30,392)	0	66,579
Health Insurance-Local Plus Plan	0	0	55,958	332,911
Salaries - Part Time/Temporary	61,339	132,416	127,416	152,800
On the Job Injury	139,217	25,000	63,186	25,000
Payroll Reserve	43,331	0	0	0
Attrition	0	(249,449)	0	(249,449)
Bonus Pay	0	0	42,486	0
Expense Recovery - Personnel	(1,002,990)	(1,000,000)	(1,009,557)	(1,000,000)
Total Personnel Services	\$ 7,090,347	\$ 7,404,392	\$ 7,515,004	\$ 7,611,267
MATERIALS AND SUPPLIES				
City Storeroom Supplies	950	4,640	2,300	4,640
City Shop Charges	215,323	190,469	190,469	128,343
City Shop Fuel	79,061	111,626	111,626	102,178
City Computer Svc Equipment	106	7,675	4,000	11,513
Data/Word Process Software	22,441	0	0	0

City Engineering Division Detail *(continued)*

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
City Telephone/Communications	27,836	18,862	26,298	27,810
Printing - Outside	0	820	410	820
Supplies - Outside	24,047	41,458	30,001	37,858
Hand Tools	9,894	9,504	6,000	10,504
Clothing	24,696	30,533	30,533	30,533
Safety Equipment	13,844	11,365	11,365	11,365
Drafting/Photo Supplies	5,593	2,500	1,250	1,000
Outside Postage	2,810	1,575	700	1,575
Paints Oils & Glass	279,626	300,000	300,000	400,000
Steel & Iron Products	130,954	90,000	90,000	90,000
Pipe Fittings & Castings	5,505	3,000	3,000	3,000
Lime Cement & Gravel	595	1,000	500	1,000
Chemicals	100	0	0	0
Materials and Supplies	280,150	255,233	256,262	255,233
Maintenance Traffic Signal System	1,002	4,000	2,000	4,000
Outside Vehicle Repair	17,459	4,840	2,400	4,840
Outside Equipment Repair/Maintenance	56,624	59,029	30,001	57,029
Internal Repairs and Maintenance	187,318	228,694	224,425	228,694
Legal Services/Court Cost	0	0	135	0
Advertising/Publication	762	0	0	0
Janitorial Services	7,920	8,000	8,000	8,000
Seminars/Training/Education	5,811	37,711	5,000	41,711
Misc Professional Services	644,564	780,500	925,328	980,500
Travel Expense	5,774	3,750	5,169	3,750
Unreported Travel	(333)	400	1,100	400
Mileage	152,899	188,351	188,351	188,351
Utilities	184,739	180,608	180,613	180,608
Insurance	39,307	38,913	38,913	63,780
Claims	(185,485)	300,000	50,000	300,000
Lawsuits	319,156	23,630	10,000	23,630
Dues/Memberships/Periodicals	10,832	13,548	8,000	13,648
Radio Trunking Lease	0	2,000	2,000	2,000
Misc Services and Charges	435,750	385,000	385,000	385,000
Urban Art Maintenance	9,995	10,000	10,000	10,000
Equipment Rental	326,018	326,100	326,100	326,100
Expense Recovery - M & S	(43,303)	(31,000)	(50,882)	(31,000)
Total Materials and Supplies	\$ 3,300,343	\$ 3,644,334	\$ 3,416,367	\$ 3,908,413
CAPITAL OUTLAY				
Prod/Constr/Maint Equipment	11,198	44,000	7,000	44,000

City Engineering Division Detail *(continued)*

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
Equipment	0	25,000	25,000	41,000
Security Equipment	1,212	0	0	0
Total Capital Outlay	\$ 12,410	\$ 69,000	\$ 32,000	\$ 85,000
GRANTS AND SUBSIDIES				
Death Benefits	0	0	5,000	0
Total Grants and Subsidies	\$ 0	\$ 0	\$ 5,000	\$ 0
EXPENSE RECOVERY				
Expense Recovery - State Street Aid	(3,792,305)	0	(3,800,000)	(3,800,000)
Total Expense Recovery	\$ (3,792,305)	\$ 0	\$ (3,800,000)	\$ (3,800,000)
SERVICE CHARGES				
Credit Card Fees - Expense	70,400	36,000	36,000	41,000
Total Service Charges	\$ 70,400	\$ 36,000	\$ 36,000	\$ 41,000
TOTAL PROGRAM EXPENDITURES	\$ 6,681,195	\$ 11,153,725	\$ 7,204,371	\$ 7,845,680
LOCAL TAXES				
Fiber Optic Franchise Fees	85,933	350,000	350,000	350,000
Total Local Taxes	\$ 85,933	\$ 350,000	\$ 350,000	\$ 350,000
LICENSES AND PERMITS				
Sidewalk Permit Fees	19,294	88,000	88,000	88,000
Total Licenses and Permits	\$ 19,294	\$ 88,000	\$ 88,000	\$ 88,000
CHARGES FOR SERVICES				
Subdivision Plan Inspection Fee	171,300	90,000	90,000	90,000
Street Cut Inspection Fee	267,088	250,000	250,000	250,000
Traffic Signals	306,733	200,000	200,000	200,000
Signs-Loading Zones	31,538	15,000	15,000	15,000
Arc Lights	3,809	4,000	4,000	4,000
MLG&W Rent	2,400	2,400	2,400	2,400
Subdivision Development Fees	10,550	0	47	0
Total Charges for Services	\$ 793,418	\$ 561,400	\$ 561,447	\$ 561,400
STATE GRANTS				
St TN Highway Maint Grant	80,080	95,000	128,196	95,000
Total State Grants	\$ 80,080	\$ 95,000	\$ 128,196	\$ 95,000

City Engineering Division Detail *(continued)*

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
OTHER REVENUES				
Sale Of Reports	8,998	14,363	14,363	26,363
Miscellaneous Income	668	0	0	0
Total Other Revenues	\$ 9,666	\$ 14,363	\$ 14,363	\$ 26,363
TOTAL PROGRAM REVENUES	\$ (988,392)	\$ (1,108,763)	\$ (1,142,006)	\$ (1,120,763)
NET EXPENDITURES	\$ 5,692,803	\$ 10,044,962	\$ 6,062,365	\$ 6,724,917

Administration

To provide timely and quality engineering services in the design of civil works projects and the review of private developments to protect the safety of the public.

Operating Budget

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
Personnel Services	2,940,820	3,151,510	3,250,627	3,345,293
Materials and Supplies	1,794,476	2,043,976	1,890,430	2,268,336
Capital Outlay	0	25,000	25,000	41,000
Expense Recovery	(948,888)	0	(3,800,000)	(3,800,000)
Service Charges	70,400	36,000	36,000	41,000
Total Expenditures	\$ 3,856,808	\$ 5,256,486	\$ 1,402,056	\$ 1,895,629
Program Revenues	\$ (908,312)	\$ (1,013,763)	\$ (1,013,810)	\$ (1,025,763)
Net Expenditures	\$ 2,948,496	\$ 4,242,723	\$ 388,246	\$ 869,866

Authorized Complement	60
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Signs & Markings

To improve safety and quality of life within the city of Memphis by installing and maintaining proper signage and pavement markings for both pedestrian and vehicular traffic.

Operating Budget

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
Personnel Services	1,864,084	1,985,043	1,970,603	2,063,567
Materials and Supplies	787,426	808,142	801,921	883,020
Capital Outlay	11,988	22,000	3,500	22,000
Grants and Subsidies	0	0	5,000	0
Expense Recovery	(1,335,715)	0	0	0
Total Expenditures	\$ 1,327,784	\$ 2,815,185	\$ 2,781,025	\$ 2,968,588
Program Revenues	\$ (80,080)	\$ (95,000)	\$ (128,196)	\$ (95,000)
Net Expenditures	\$ 1,247,703	\$ 2,720,185	\$ 2,652,828	\$ 2,873,588

Authorized Complement	28
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Signal Maintenance

Traffic Signal Maintenance works to increase the safety of pedestrians, motorists and goods movement by maintaining existing traffic signals and installation of new signals at intersections throughout the City of Memphis.

Operating Budget

Category	FY 2016 Actual	FY 2017 Adopted	FY 2017 Forecast	FY 2018 Adopted
Personnel Services	2,285,443	2,267,839	2,293,774	2,202,407
Materials and Supplies	718,441	792,216	724,017	757,057
Capital Outlay	422	22,000	3,500	22,000
Expense Recovery	(1,507,702)	0	0	0
Total Expenditures	\$ 1,496,604	\$ 3,082,055	\$ 3,021,291	\$ 2,981,464
Net Expenditures	\$ 1,496,604	\$ 3,082,055	\$ 3,021,291	\$ 2,981,464

Authorized Complement	28
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City Engineering • Authorized Complement

Position Title	Authorized Positions	Position Title	Authorized Positions
ADMINISTRATION		Painter App	1
ADMR LAND DEVELOP BUDGET	1	SPEC FLAGMAN OFFICER	5
ADMR TRAFFIC ENGINEERING	1	Total Signs & Markings	<u>28</u>
ANALYST GIS TECHNICAL	2	SIGNAL MAINTENANCE	
ASST EXECUTIVE	1	AIDE TRAFFIC SIGNAL	9
ASST OFFICE	2	CLERK OFFICE SUPPORT A	1
CLERK ACCOUNTING A	1	MGR SIGNAL MNT CONST	1
CLERK OFFICE SUPPORT A	3	SPEC PROCUREMENT	1
COLLECTOR METER	1	TECH TRAFFIC SIGNAL	16
COORD ADA RAMP PROGRAM	1	Total Signal Maintenance	<u>28</u>
COORD ADMIN SUPPORT	1		
COORD LAND DEV	1		
COORD PLANS REVIEW PROJECT	1	<u>TOTAL City Engineering</u>	<u>116</u>
COORD RAILROAD/COMPLIANCE	1		
DIRECTOR ENGINEERING DEPUTY	1		
ENG DESIGNER	3		
ENGINEER CITY	1		
ENGINEER CITY CIVIL DESIGN	1		
ENGINEER DESIGN	1		
ENGINEER DESIGN SENIOR	4		
INSP ZONE CONSTRUCTION	11		
MGR BIKEWAY PEDESTRIAN PROG	1		
MGR CONSTRUCTION INSP	1		
MGR ENG PROJECT	4		
MGR GIS MAPPING	1		
MGR SURVEYOR	1		
REPAIRER PARKING METER	1		
SPEC DOCUMENT	1		
SPEC ITS MONITORING	1		
SUPER CONSTRUCTION INSP	4		
SUPER OFFICE ENG	1		
SUPER PARKING OPER	1		
TECH PARKING ENFORCEMENT	4		
Total Administration	<u>60</u>		
SIGNS & MARKINGS			
COUNTER TRAFFIC	3		
MGR STREET SIGNS MARK	1		
PAINTER	4		
PAINTER SIGNS AND MARKING	12		
PAINTER SIGNS AND MARKING LO	2		