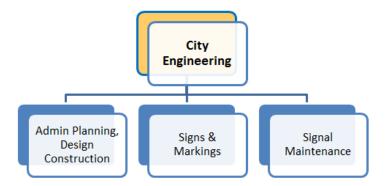
CITY ENGINEERING

Mission Statement

Improving the quality of life and safety for Memphis citizens by providing exceptional engineering services through civil design, land development, and traffic operations.

Organization Structure



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.

CITY ENGINEERING • DIVISION SUMMARY

Operating Budget

Category	FY 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
EXPENDITURES				
Personnel Services	\$ 7,498,635	\$ 7,611,268	\$ 7,668,776	\$ 8,056,959
Materials and Supplies	3,915,489	3,908,413	4,647,767	4,086,197
Capital Outlay	14,169	85,000	87,746	85,000
Grants and Subsidies	5,000	0	0	0
Expense Recovery	(3,720,498)	(3,800,000)	(3,800,000)	(4,185,300)
Service Charges	67,654	41,000	41,000	41,000
Total Expenditures	\$ 7,780,449	\$ 7,845,680	\$ 8,645,288	\$ 8,083,856
Total Revenues	\$ (1,241,415)	\$ (1,120,763)	\$ (1,121,290)	\$ (1,120,763)
NET EXPENDITURES	\$ 6,539,034	\$ 6,724,917	\$ 7,523,998	\$ 6,963,093

Authorized Complement

115

City Engineering • Charges for Services Summary

Account	FY 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
Arc Lights	\$ 3,981	\$ 4,000	\$ 4,000	\$ 4,000
Fiber Optic Franchise Fees	0	350,000	350,000	350,000
MLG&W Rent	2,600	2,400	2,400	2,400
Recovery Of Prior Year Expense	0	0	514	0
Sale Of Reports	12,868	26,363	26,363	26,363
Sidewalk Permit Fees	28,407	88,000	88,000	88,000
Signs-Loading Zones	31,874	15,000	15,000	15,000
St TN Highway Maint Grant	297,421	95,000	95,000	95,000
Street Cut Inspection Fee	438,747	250,000	250,000	250,000
Subdivision Development Fees	47	0	13	0
Subdivision Plan Inspection Fee	139,342	90,000	90,000	90,000
Traffic Signals	286,128	200,000	200,000	200,000
Total Charges for Services	\$ 1,241,415	\$ 1,120,763	\$ 1,121,290	\$ 1,120,763

Performance Highlights

The City Engineering Division is a key aspect of improving the quality of life for all citizens of Memphis. Engineering is responsible for ensuring that projects are properly planned, designed, and constructed for Memphians in a timely cost-efficient manner. The division has a variety of departments that work to improve and expand the City's infrastructure, manage the design and construction of the City's capital projects, and review private development proposals; all to ensure the required standards, codes, and safety procedures are being followed for public safety.

This year Engineering has continued its service to Memphis through public outreach initiatives which concentrate on the youth, public safety, good government, jobs and neighborhoods.

Traffic Engineering

Traffic Engineering is a key element in the safety and quality of life within the Memphis city limits. The department designs, operates, and provides maintenance supervision services for all permanent and temporary traffic control devices within the public rights-of-way. This year Traffic Engineering continued its service by completing the following:

- Completed the installation of 26 High Definition CCTV Cameras for the enhancement of the City's Intelligent Transportation System (ITS).
- Completed the installation of Warning Flashers on Quince near Crestwood to improve advance warning for motorists approaching the roadway curvature.
- Completed the installation of Stop Sign Flashers at the intersection of Beale at Fourth
- Completed Temporary Signal Modifications at the intersection of N. Parkway at Cleveland to accommodate the Crosstown Development
- Completed the STP Northwest, Coordinated Signal System Project; interconnecting Traffic Signals along North Parkway, Sam Cooper, and Jackson Ave.
- Completed the installation of an enhanced Pedestrian Crossing including Rapid Flashing Beacons at the intersection of Macon and Vaughn near Gaisman Park.
- Completed Traffic Signal Improvements at the intersection of Poplar and East Parkway.
- Secured Federal Funding for the Design/Evaluation of a potential roundabout at the intersection of W. Georgia and Riverside. This award also includes construction funding.
- Coordinated with TDOT to complete Traffic Signal Improvements at the intersection of S. Perkins at Old Lamar/Hungerford.
- Coordinated with TDOT to complete Traffic Signal Improvements at the intersection of S. Parkway at Cummings
- Completed Traffic Signal Improvements at the intersection of Summer at Tillman
- Completed Traffic Signal Improvements at the intersection of Poplar at Lafayette

Bike-Ped Highlights:

- Launched a Pedestrian Advocacy Council and Bicycle Advocacy Council to foster better communication and collaboration between the City and citizens/advocates.
- Successfully applied for and received The Big Jump, a three-year grant from PeopleForBikes to support capacity building and advocacy for better bicycling facilities. Nearly 100 cities applied; Memphis was one of ten cities selected.
- Launched the Big Jump Teen Ambassador Program in South Memphis in collaboration with The Works, CDC and Revolutions Bicycle CoOp.

- Implementation of the Great Streets Pilot Project, a complete streets retrofit of a downtown corridor funded almost entirely through private sponsorships.
- Received \$1.2 million in Federal transportation grants to fund pedestrian safety and street improvement projects around the city.
- Submitted 7 applications for Federal transportation funding toward pedestrian safety projects (award decision to be announced in January 2018).
- Collaborated with the Medical District Collaborative to implement major street improvements along Manassas Street through the Medical District, improvements which will enhance the safety of users along the street as well as the general aesthetics.
- Facilitated a public outreach process for STP 5 & 6 Re-Surfacing Groups that captured input from nearly 2,000 individuals.
- Approximately 20 centerline miles of new on-street bicycle facilities added to the City's network.
- Continued coordination with Explore Bike Share (i.e. station siting) to launch bike share in Memphis in spring 2018.
- Installed the City's first permanent on-street bicycle counter on Florida Street to better enable datadriven decisions.

Signs and Markings

The Signs and Markings department installs and maintains proper signage and pavement markings for both vehicular traffic and pedestrians. They aide in providing safety measures and requirements that are necessary for Memphians to operate safely within city limits. This year the department completed the following:

- Thermoplastic Pre-melter and Applicator Machines has taken 3 years to procure this equipment to improve pedestrian safety and visibility.
- AutoZone Banners promoting commerce and tourism
- Georgia/Tate/McKinley project Roundabout traffic circle for traffic calming and neighborhood safety
- Peabody Place Planter Project raises pedestrian awareness and safety
- Bike Lanes bicycle safety
- Honorary Signs to honor notable Memphians and their community achievements/contributions
- MEMFIX Project
- Honorary Signs
- Graffiti Removal

Traffic Signal Maintenance

Traffic Signal Maintenance is responsible for Maintaining the following which makes up the City of Memphis Traffic Signal System.

- Signalized intersections: 781
- Flashers (Intersections, Crosswalks, Fire Stations): 82
- Hawk Pedestrian Crossing Signals: 2
- RRFB Controlled Crosswalks: 12 (24 Units)
- Communication Hub Cabinets: 12

- Radar Detection Units: 134
- Miles of Fiber Optic Communication Lines Maintained: 120 miles

These safety measures aide in keeping the pedestrians, motorists and goods moving by maintaining existing traffic signals and installing new signals at intersections throughout the City of Memphis. Through the first ten months of the year they completed the following:

- Planned maintenance Actions: 479
- Count Down Pedestrian Signal Installations: 9
- Total Maintenance Actions (Maintenance Ticket Generated): 6037
- Underground Locate Actions Performed (Maintenance Ticket Generated): 1527

Survey

This year the Survey department completed over 50 survey projects including design surveys, sewer as-builts, and construction staking projects. They started replacing the destroyed City of Memphis Benchmarks using a Consulting firm to do the field work with the oversite remaining with the Survey Manager. These projects assist in providing a stronger foundation for Memphis. The department's service in strengthening Memphis' foundation can also be seen in their commitment to participated in the Salvation Army Angel Tree program and the MIFA Food Bank Drive.

Sewer

The Sewer department provides quality and timely sewer design services, plan review, capacity analysis, and maintains accurate sewer plan records so that sanitary sewer services can be provided to new developments. These duties provide an important base for the growth and development of new neighborhoods and businesses. This year the average plan review time for the fiscal year to date is 4.5 days. The department issued 22 sewer availability letters this fiscal year (39 for the calendar year). These are analyses to determine if capacity is available for new developments or new/existing industries.

Two sewer extension projects have been bid this calendar year and both are currently under construction. Those projects were designed in-house some time ago while waiting for easements. The department prepared plans (in-house) for a "constructed wetland" that was constructed by PW Heavy Equipment.

Land Development

The Land Development Dept (LDD) is responsible for insuring that all private development within the City of Memphis integrates properly with the City's infrastructure including roads, sewer, and storm water drainage. This effort results in numerous plans reviews being performed by the LDD. Submitted plans are marked up and/or commented on and returned to the developer for revision. This continual reviewing of plan sets results in a large volume of plans either being held by LDD or in transit. In an effort to streamline the process and reduce the amount of paper being used, the LDD procured a large format scanner which now takes reviewed plans and files them electronically in a "SharePoint" cloud that is accessible by developers and their engineers. Plan reviews are now accessible to the developer within minutes of completion of Engineering's review timeframe and saved a few trees in the process.

Land Development Department is participating in the City's Urban Fellow Program. Eyana Cain, a senior mechanical engineer student at the University of Memphis, is assigned to the Land Development Department.

Eyana has been tasked with creating an electronic tracking and filing system for all street cut permits. Once complete, engineering staff members will be able to access all pertinent street cut information from their PC without going through hard copy files. Eyana is also assisting Engineering's Civil Design Department by performing storm water drainage design work utilizing the City's Computer Assisted Design (CAD) software.

Building Design and Construction

Building Design and Construction (BD&C) is responsible for providing quality engineering and architectural services in support of City facilities building projects. BD&C project managers, manage CIP projects for city facilities in a timely and cost-effective manner. These projects play a huge part in the development and growth of Memphis. From playgrounds and libraries that cater to the youth in the City to Police Stations that manage public safety, each project adds an important piece to our service to Memphis citizens.

Along with managing City projects the department contributed to Junior Achievement, Feed the Need, United Way, and Angel Tree. BD&C also collaborated with Mapping and hosted one of their Summer Youth Interns. The Intern worked in BD&C flat file room, filing and organizing the city's building plans.

Mapping Department

The Mapping Department has over a million infrastructure related Engineering records – which are maintained and researched by the department. In order to support the initiatives of community service, Mapping has contributed the following this year:

Summer Youth Interns: For 10 plus years, the Mapping Department continues to represent the Engineering Division by taking the leadership role of working with the Annual Summer Youth Internship Program. For the 2nd year straight, Scott Blankenbeckler – took the lead coordinating this 6-week initiative which included: mentoring; daily supervision; designating work assignments; time sheets & payroll; and external field trips; *(e.g., Sewer Treatment Plant; Real Time Crime Center; Signs & Markings; etc.).*

Community Involvement / Charity Work: Scott Blankenbeckler represents the Engineering Mapping Department through his weekly community volunteer efforts in the "Mentor Memphis Program" by mentoring a 10 year old boy from Youth Villages. Mapping staff members also actively participate in each of the various City of Memphis fund-raising initiatives (*e.g., Operation Feed; United Way; Angel Tree Program; etc.*).

Special Projects Research with GIS Analysis, Support, and Maps: The Mapping Department provided GIS analysis and mapping support for several high-profile projects (e.g., "PROW – Public ROW Cost Study"; Mud Island Theme Park project; Convention Center Expansion project; Up-Town and Downtown Redevelopment; etc.) including researching, scanning, and sending thousands of mapping records.

Customer Service Information Requests: During 2017, the Mapping staff has researched and answered more than a thousand "External & Internal" infrastructure related Information Requests (*e.g., Sanitary Sewers; Street Plan & Profiles; Grading & Drainage; Off-Street Drainage; ROW; SAC; Easements; Unrecorded Plats; etc.).*

Construction Inspections

Construction Inspections work on the City's behalf to protect the public's interest by inspecting all construction activities within public rights-of-way and easements. This year the department completed the following objectives:

- 725 Curb ramps have been constructed to meet current ADA requirement.
- 17 of 23 Streets have been milled, resurfaced, and striped.
- 30 Property owners qualified under sidewalk assistance and have had their sidewalk repaired.
- 236 Property owners citied to environmental court: The city has received 32 Judgements to repair sidewalk and place tax lien against owners. 27 Other property owners repaired sidewalk after being court ordered.
- Paul Lowery street improvement was completed and on budget.
- 862 Mayor's citizen service center request were investigated and responded to.
- All 20 inspections were certified as field technicians by TDOT.
- All 20 inspections were certified as CEI (Construction, Engineering, Inspection) by TDOT.
- All 20 inspectors were certified in confined space by the City of Memphis.

Civil Engineering

Civil Engineering is responsible for providing Memphis with timely and quality engineering services in the design of Capital Improvement Program for roadway, drain, and bridge construction projects and the review of private developments to protect the safety of the public. This year civil engineering has focused on several aspects of service. The following are projects, youth initiatives, and improvement plans that were facilitated by Civil Engineering:

- Wax Myrtle drainage improvements This project was designed and constructed to mitigate frequent in-structure flooding that had been occurring over the past 15 years. From Survey, through analysis and design, till completion of construction was approximately 5 months. To date, 8 months and several significant rain events later, there have been no further complaints to Public Works.
- 3605 S Galloway drainage improvements This project was designed and constructed to mitigate in-structure and subdivision yard flooding. The project consisted of relieving an existing undersized pipe by constructing in system a new bypass pipe. From survey, through analysis and design, till the completion of construction was approximately 6 months. To date, four months and a few significant rain events later, there have been no further complaints to Public Works.

For the calendar year, there has been <u>36 flooding complaints</u> that required a review and investigation. This is a significant drop in complaints compared to last year (62). However, compared to last year, the total rainfall (in) this year to date is 39. Last year to this date, there was approximately 47 inches. The Memphis Area receives approximately 53 inches of rain annually. The reduced rainfall and a concentrated effort by Public Works to keep our drainage conveyances clear to date *may* have contributed to lower drainage complaints.

For the calendar year, <u>four (4) floodplain permits</u> were reviewed with three (3) currently under review. One permit approval was a prerequisite to the approval of a large structure development project, while the other three (3) permits allow the construction progress of specific phases of the Wolf River Greenway.

- Drainage Master Plan Study and Capital Improvement Plan- October 24th Engineering presented a Drainage Master Plan Study and Capital Improvement Plan at Christian Brothers University. The presentation was part of the Surface Water Institute Public Announcement Meeting. The subject analyzed the inadequate storm water infrastructures and storm water system. The research identified problem areas and gave solutions including funding plans to support them.
- Civil Engineering Interns

This summer, Engineering hosted five energetic interns. They were from a host of local high schools. Nate Taylor was the Civil department representative who had the opportunity to mentor, educate, and train the interns on a host of engineering design, flooding and floodplain related activities required for the office to function. The interns were very effective at helping to reduce the backlog of flooding complaint reports and FEMA floodplain data that needed to be added to the Public Works – Engineering GIS database for which the department was grateful.

They also accompanied Mr. Taylor on construction inspection reviews which allowed them to see real hard hat construction experience. They all conveyed their enjoyment of the field visits. All five are now in Colleges and Universities ranging from South West Tennessee College, the University of Memphis and the University of Tennessee. All but one intern has committed to study engineering.

On their last day as a unit in the Engineering office, Mr. Taylor took them to lunch to have them talk about their time as an intern this summer and to discuss their plan for their future careers.

Mr. Taylor has committed a year to the Memphis Mentor Program started by Mayor Strickland. It's a unique opportunity to give back to the community. He is now mentoring two 6th graders. Eljen who really enjoys restoration of train locomotives, and Taj who likes reading Harry Potter.

Issues & Trends

The Division of Engineering's current Traffic Signal and Signs and Markings Maintenance program, funding and staffing are not adequate to address deferred maintenance. The combination of decrease staffing and increase initiatives/programs/projects remains a challenge for the division project managers and staff. The Division is experiencing difficulty in attracting talent to fill vacant positions, often posting positions multiple times. The division is anticipating a substantial increase in construction activities related to bridge projects which require CEI services (construction inspection), surveying work to be performed during and/or after construction and increase in unfunded mandate related to small cellular networks. Solving Drainage issues still remain a priority. Drainage Masterplans reports are being finalized with design projects and construction activities to follow.

Engineering is committed to serve Memphis by providing exceptional engineering services and aiding in initiatives that improve the quality of life for all Memphians. Each year the Engineering Division supports the City's efforts to combat poverty and be a beacon hope within our growing community; by helping with organizations like United Way, Angel Tree, Feed the Need, and Junior Achievement. The division will continue these efforts of community involvement and provide services that help to grow and improve our community.

Key Performance Indicators

Performance Indicator	FY17 Actual	FY18 Goal	FY18 Actual*	FY19 Goal	Category
	ADM	INISTRATION			
Review and return land development plan submittals to developers within 10 working days of submission	91%	95%	72%	85%	Government
Number of plan reviews performed monthly	49	Tracking	43	45	Government
Cumulative average time to execute all construction contracts after the bid opening	109	105	122	110	Government
Review private development sewer drawings within 7 calendar days	77%	88%	67%	80%	Government
Cumulative number of drainage design projects initiated annually	11	12	5	10	Government
Cumulative number of drainage design projects completed annually	3	7	0	2	Government
Cumulative number of months until a decision is reached (approval/rejection) on speed hump requests	26	7	11	6	Government
Cumulative number of months between approval of a speed hump request and installation	5	8	0	5	Government
	SIGNS	AND MARKINGS			
% of curb ramps in the city that are ADA compliant	63%	66%	65%	69%	Public Safety
Number of traffic signs repaired/installed annually	13864	Tracking	11739	12000	Public Safety
% of city streets re-striped annually	51%	50%	42%	50%	Public Safety
	SIGNAI	MAINTENANCE			
Complete preventative maintenance on 100% of traffic signals (998) annually	57%	100%	57%	60%	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	81%	85%	22%	50%	Public Safety
% of intersections with pedestrian countdown signals	12%	14%	15%	18%	Public Safety

* Some figures are approximate. In these cases, the reporting for FY18 was not complete before production of the budget book.

City Engineering • Division Detail

Category	FY 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
PERSONNEL SERVICES				
Full-Time Salaries	\$ 4,810,805	\$ 6,337,259	\$ 5,809,471	\$ 6,538,571
Holiday Salary Full Time	284,898	0	131,167	0
Vacation Leave	404,248	0	207,022	0
Bonus Leave	52,328	0	19,801	0
Sick Leave	247,870	0	169,799	0
Overtime	353,995	141,200	206,641	141,200
Out of Rank Pay	12,572	35,757	35,904	35,757
Hazardous Duty Pay	(3)	0	0	0
Longevity Pay	6,483	0	6,497	0
Shift Differential	10,645	12,360	12,360	12,360
Retirement Benefits	7,182	91,000	126,000	91,000
Required Special License Pay	64	0	0	0
Pension	317,321	347,369	347,369	244,159
Social Security	4,161	0	2,761	0
Pension ADC Funding	633,600	631,593	631,593	832,403
Group Life Insurance	14,440	17,525	17,416	17,054
Unemployment	17,200	8,560	8,560	8,720
Medicare	84,584	86,223	86,223	97,526
Long Term Disability	15,130	17,221	17,222	18,234
Health Insurance - Basic	19,977	0	0	0
Health Insurance - Value PPO	9,022	15,467	15,468	0
Health Insurance - Premier	593,360	541,894	541,894	461,544
Benefits Adjustments	0	66,579	0	63,540
Health Insurance-Local Plus Plan	198,551	332,911	335,706	378,780
Salaries - Part Time/Temporary	67,118	152,800	157,578	164,800
On the Job Injury	79,465	25,000	32,202	32,500
Attrition	0	(249,449)	(249,449)	(81,189)
Bonus Pay	37,799	0	500	0
Expense Recovery - Personnel	(784,181)	(1,000,000)	(1,000,928)	(1,000,000)
Total Personnel Services	\$ 7,498,635	\$ 7,611,268	\$ 7,668,776	\$ 8,056,959
MATERIALS AND SUPPLIES				
City Storeroom Supplies	\$ 369	\$ 4,640	\$ 4,640	\$ 4,640
City Shop Charges	190,958	128,343	135,230	245,713
City Shop Fuel	83,684	102,178	102,178	118,999
City Computer Svc Equipment	611	11,513	11,923	7,230
City Telephone/Communications	24,446	27,810	27,810	23,310
Printing - Outside	0	820	892	820
Supplies - Outside	25,909	37,858	38,458	37,858
Hand Tools	8,026	10,504	9,000	11,000

City Engineering • Division Detail (continued)

Category	FY 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
Clothing	24,624	30,533	30,601	30,533
Safety Equipment	8,908	11,365	11,365	11,365
Drafting/Photo Supplies	0	1,000	1,000	1,000
Outside Postage	413	1,575	1,575	1,575
Paints Oils & Glass	298,707	400,000	400,000	400,000
Steel & Iron Products	66,149	90,000	90,000	150,000
Pipe Fittings & Castings	2,853	3,000	3,000	7,000
Lime Cement & Gravel	172	1,000	1,000	1,000
Materials and Supplies	245,716	255,233	241,770	324,047
Maintenance Traffic Signal System	0	4,000	4,000	200,000
Outside Vehicle Repair	1,176	4,840	4,840	4,840
Outside Equipment Repair/Maintenance	53,375	57,029	57,029	57,029
Internal Repairs and Maintenance	175,614	228,694	228,694	228,694
Legal Services/Court Cost	135	0	0	0
Advertising/Publication	0	0	550	1,000
Outside Phone/Communications	0	0	11,151	10,500
Janitorial Services	7,159	8,000	14,597	8,000
Seminars/Training/Education	4,708	41,711	44,307	41,711
Misc Professional Services	1,498,006	980,500	1,542,318	980,650
Travel Expense	3,410	3,750	4,759	3,750
Unreported Travel	444	400	(44)	400
Outside Fuel	1,035	0	0	0
Mileage	151,203	188,351	188,351	188,351
Utilities	179,945	180,608	180,608	180,608
Insurance	38,873	63,780	63,895	51,296
Claims	0	300,000	301,823	300,000
Lawsuits	4,800	23,630	23,630	23,630
Dues/Memberships/Periodicals	8,070	13,648	13,648	13,648
Radio Trunking Lease	0	2,000	2,000	2,000
Misc Services and Charges	536,022	385,000	545,106	410,000
Urban Art Maintenance	7,440	10,000	15,000	35,000
Equipment Rental	326,100	326,100	326,100	0
Expense Recovery - M & S	(63,569)	(31,000)	(35,038)	(31,000)
Total Materials and Supplies	\$ 3,915,489	\$ 3,908,413	\$ 4,647,767	\$ 4,086,197
CAPITAL OUTLAY				
Prod/Constr/Maint Equipment	\$ 392	\$ 44,000	\$ 46,746	\$ 44,000
Equipment	13,777	41,000	41,000	\$ 44,000 41,000
Total Capital Outlay	\$ 14,169	\$ 85,000	\$ 87,746	\$ 85,000

CITY ENGINEERING • DIVISION DETAIL

City Engineering • Division Detail (continued)

	FY 2017	FY 2018	FY 2018	FY 2019
Category	Actual	Adopted	Forecast	Adopted
GRANTS AND SUBSIDIES				
Death Benefits	\$ 5,000	\$ 0	\$ 0	\$ 0
Total Grants and Subsidies	\$ 5,000	\$ 0	\$ 0	\$0
EXPENSE RECOVERY				
Expense Recovery - State Street Aid	\$ (3,720,498)	\$ (3,800,000)	\$ (3,800,000)	\$ (4,185,300)
Total Expense Recovery	\$ (3,720,498)	\$ (3,800,000)	\$ (3,800,000)	\$ (4,185,300)
SERVICE CHARGES				
Credit Card Fees - Expense	\$ 67,654	\$ 41,000	\$ 41,000	\$ 41,000
Total Service Charges	\$ 67,654	\$ 41,000	\$ 41,000	\$ 41,000
TOTAL EXPENDITURES	\$ 7,780,449	\$ 7,845,680	\$ 8,645,288	\$ 8,083,856
LOCAL TAXES				
Fiber Optic Franchise Fees	\$ 0	\$ 350,000	\$ 350,000	\$ 350,000
Total Local Taxes	\$ 0	\$ 350,000	\$ 350,000	\$ 350,000
LICENSES AND PERMITS				
Sidewalk Permit Fees	\$ 28,407	\$ 88,000	\$ 88,000	\$ 88,000
Total Licenses and Permits	\$ 28,407	\$ 88,000	\$ 88,000	\$ 88,000
CHARGES FOR SERVICES				
Subdivision Plan Inspection Fee	\$ 139,342	\$ 90,000	\$ 90,000	\$ 90,000
Street Cut Inspection Fee	438,747	250,000	250,000	250,000
Traffic Signals	286,128	200,000	200,000	200,000
Signs-Loading Zones	31,874	15,000	15,000	15,000
Arc Lights	3,981	4,000	4,000	4,000
MLG&W Rent	2,600	2,400	2,400	2,400
Subdivision Development Fees Total Charges for Services	47 \$ 902,718	0 \$ 561,400	13 \$ 561,413	0 \$ 561,400
	<i>\$</i> 502,710	\$ 50 1,400	\$ 50 1,415	\$ 50 1/100
STATE GRANTS				
St TN Highway Maint Grant	\$ 297,421	\$ 95,000	\$ 95,000	\$ 95,000
Total State Grants	\$ 297,421	\$ 95,000	\$ 95,000	\$ 95,000
OTHER REVENUES				
Sale Of Reports	\$ 12,868	\$ 26,363	\$ 26,363	\$ 26,363
Recovery Of Prior Year Expense	0	0	514	0

City Engineering • Division Detail (continued)

Category	FY 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
Total Other Revenues	\$ 12,868	\$ 26,363	\$ 26,877	\$ 26,363
TOTAL REVENUES	\$ (1,241,415)	\$ (1,120,763)	\$ (1,121,290)	\$ (1,120,763)
NET EXPENDITURES	\$ 6,539,034	\$ 6,724,917	\$ 7,523,998	\$ 6,963,093

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 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
EXPENDITURES				
Personnel Services	\$ 3,272,984	\$ 3,345,293	\$ 3,355,208	\$ 3,666,230
Materials and Supplies	2,331,686	2,268,336	2,941,940	1,997,291
Capital Outlay	13,777	41,000	41,000	41,000
Expense Recovery	(928,827)	(3,800,000)	(3,800,000)	(4,185,300)
Service Charges	67,654	41,000	41,000	41,000
Total Expenditures	\$ 4,757,273	\$ 1,895,629	\$ 2,579,148	\$ 1,560,221
Total Revenues	\$ (943,993)	\$ (1,025,763)	\$ (1,026,290)	\$ (1,025,763)
NET EXPENDITURES	\$ 3,813,280	\$ 869,866	\$ 1,552,858	\$ 534,458

Authorized Complement

59

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 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
EXPENDITURES				
Personnel Services	\$ 2,002,223	\$ 2,063,568	\$ 2,051,362	\$ 2,182,626
Materials and Supplies	720,102	883,020	881,382	1,014,923
Capital Outlay	0	22,000	22,000	22,000
Grants and Subsidies	5,000	0	0	0
Expense Recovery	(1,308,184)	0	0	0
Total Expenditures	\$ 1,419,141	\$ 2,968,588	\$ 2,954,744	\$ 3,219,549
Total Revenues	\$ (297,421)	\$ (95,000)	\$ (95,000)	\$ (95,000)
NET EXPENDITURES	\$ 1,121,720	\$ 2,873,588	\$ 2,859,744	\$ 3,124,549

Authorized Complement

28

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 2017 Actual	FY 2018 Adopted	FY 2018 Forecast	FY 2019 Adopted
EXPENDITURES				
Personnel Services	\$ 2,223,428	\$ 2,202,407	\$ 2,262,206	\$ 2,208,103
Materials and Supplies	863,701	757,057	824,445	1,073,983
Capital Outlay	392	22,000	24,746	22,000
Expense Recovery	(1,483,486)	0	0	0
Total Expenditures	\$ 1,604,034	\$ 2,981,464	\$ 3,111,396	\$ 3,304,086
NET EXPENDITURES	\$ 1,604,034	\$ 2,981,464	\$ 3,111,396	\$ 3,304,086

Authorized Complement

28

City Engineering • **Authorized Complement**

Position Title	Authorized Positions	Position Title	Authorized Positions
ADMINISTRATION		SIGNAL MAINTENANCE	
ADMR LAND DEVELOP BUDGET	1	AIDE TRAFFIC SIGNAL	9
ADMR TRAFFIC ENGINEERING	1	MGR SIGNAL MNT CONST	1
ANALYST GIS TECHNICAL	1	SPEC CUST SVC ADMIN	1
ANALYST GIS TECHNICAL SENIOR	1	SPEC PROCUREMENT	1
ASST EXECUTIVE	1	TECH TRAFFIC SIGNAL	16
CLERK ACCOUNTING A	1	Total Signal Maintenance	28
COLLECTOR METER	1	· · · · · · · · · · · · · · · · · · ·	
COORD ADMIN SUPPORT	1	TOTAL City Engineering	<u>115</u>
COORD LAND DEV	1	<u></u>	<u> </u>
COORD PLANS REVIEW PROJECT I	1		
COORD RAILROAD/COMPLIANCE	1		
DIRECTOR ENGINEERING DEPUTY	1		
ENG DESIGNER	3		
ENGINEER CITY	1		
ENGINEER CITY CIVIL DESIGN	1		
ENGINEER DESIGN	2		
ENGINEER DESIGN SENIOR	4		
INSP ZONE CONSTRUCTION	11		
MGR BIKEWAY PEDESTRIAN PROG	1		
MGR CONSTRUCTION INSP	1		
MGR ENG PROJECT	5		
MGR GIS MAPPING	1		
MGR GIS MAPPING MGR SURVEYOR	1		
MGR TRANSPORTATION PLANNING PROG	1		
REPAIRER PARKING METER	1		
SPEC CUST SVC ADMIN	2		
SPEC DOCUMENT	2		
SPEC ITS MONITORING	1		
SPECTIS MONITORING SUPER CONSTRUCTION INSP	4		
SUPER CONSTRUCTION INSP SUPER OFFICE ENG	4		
SUPER OFFICE ENG	1		
TECH PARKING ENFORCEMENT	4		
Total Administration	5 9		
SIGNS & MARKINGS			
COUNTER TRAFFIC	3		
MGR STREET SIGNS MARK	3		
PAINTER	3		
PAINTER PAINTER SIGNS AND MARKING			
	14 2		
PAINTER SIGNS AND MARKING LO	2		
SPEC FLAGMAN OFFICER	5		
Total Signs & Markings	28		

