

Engineering Division

Agency Overview

Agency Mission

The mission of the Engineering Division is to provide a variety of Public Works services to the City's residents and visitors in a fair and consistent manner that encourages public input.

Agency Overview

The Engineering Division is responsible for: (1) the design, supervision, inspection, and construction of the City's transportation system infrastructure; (2) the construction, maintenance, repair, and energy efficient retrofits to City-owned facilities; and (3) the City surveying and mapping operations.

2018 Budget Highlights

The 2018 Executive Budget includes funding for:

- Increased personnel costs based on allocating staff time to capital and utility funded projects (\$390,000).
- Continued facility lease costs for staff offices during the Madison Municipal Building (MMB) renovation (\$240,000).
- Increased City County Building (CCB) facility maintenance and custodial charges (\$60,000).
- Decreased budgeted revenue from private contract based on anticipated trends (\$50,000).

Engineering Division**Function: Public Works & Transportation***Budget Overview***Budget by Service (All Funds)**

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Revenue					
Engineering & Administration	(109,033)	(120,240)	(123,095)	(130,530)	(130,530)
Facilities Operations & Mntc	(298,438)	(321,220)	(323,651)	(252,000)	(252,000)
Mapping & Records	(52)	-	-	-	-
Total Revenue	\$ (407,523)	\$ (441,460)	\$ (446,746)	\$ (382,530)	\$ (382,530)
Expense					
Engineering & Administration	3,081,918	3,183,905	2,926,531	3,159,921	3,181,550
Facilities Management	547,990	401,456	556,970	632,836	632,886
Facilities Operations & Mntc	534,865	854,194	870,058	1,029,905	1,030,911
Mapping & Records	391,462	392,314	436,939	456,847	457,174
Total Expense	\$ 4,556,234	\$ 4,831,869	\$ 4,790,497	\$ 5,279,509	\$ 5,302,521
Net General Fund	\$ 4,148,712	\$ 4,390,409	\$ 4,343,751	\$ 4,896,979	\$ 4,919,991

Budget by Fund & Major

Fund: General

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Revenue					
Charges for Services	(289,830)	(321,220)	(325,492)	(252,000)	(252,000)
Misc Revenue	(102,018)	(120,240)	(120,539)	(130,530)	(130,530)
Transfer In	(15,674)	-	(715)	-	-
Total Revenue	\$ (407,523)	\$ (441,460)	\$ (446,746)	\$ (382,530)	\$ (382,530)
Expense					
Salaries	3,457,838	3,360,308	3,565,125	3,750,052	3,750,052
Benefits	1,162,493	1,450,198	1,262,585	1,582,683	1,584,848
Supplies	364,261	322,560	295,888	321,480	321,480
Purchased Services	638,386	820,544	788,640	815,913	875,726
Inter Departmental Charges	472,364	411,633	411,633	408,135	369,169
Inter Departmental Billing	(1,546,562)	(1,533,374)	(1,533,374)	(1,598,754)	(1,598,754)
Transfer Out	7,455	-	-	-	-
Total Expense	\$ 4,556,234	\$ 4,831,869	\$ 4,790,497	\$ 5,279,509	\$ 5,302,521
Net General Fund	\$ 4,148,712	\$ 4,390,409	\$ 4,343,751	\$ 4,896,979	\$ 4,919,991

Engineering Division

Function: Public Works & Transportation

Service Overview

Service: Engineering & Administration

Service Description

This service is responsible for management, contract administration, and administrative support to the Engineering Division's transportation and pedestrian infrastructure projects. This service oversees projects pertaining to: 1) Streets and Bridges, 2) Sidewalks, 3) Bike Paths, and 4) Environmental improvements for remediating soil and groundwater contamination.

2018 Planned Activities

- Upgrade computer software for Engineering and other Public Works agency staff to improve efficiencies in project design and mapping work.

Service Budget by Account Type

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Revenue	(109,033)	(120,240)	(123,095)	(130,530)	(130,530)
Expense	3,081,918	3,183,905	2,926,531	3,159,921	3,181,550
Net Service Budget	\$ 2,972,885	\$ 3,063,665	\$ 2,803,436	\$ 3,029,391	\$ 3,051,020

Service: Facilities Management

Service Description

This service is responsible for the design, project management, and construction supervision of remodeling and construction projects for City-owned facilities. The goal of this service is to implement projects that decrease energy use, conserve water, use renewable sources of energy, and provide high quality facilities.

2018 Planned Activities

- Maintain the existing level of service to provide for the development of various capital budget facilities projects.

Service Budget by Account Type

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Revenue	-	-	-	-	-
Expense	547,990	401,456	556,970	632,836	632,886
Net Service Budget	\$ 547,990	\$ 401,456	\$ 556,970	\$ 632,836	\$ 632,886

Service: Facilities Operations & Maintenance

Service Description

This service is responsible for the maintenance and operational oversight of City-owned facilities including: the Madison Municipal Building (MMB), the Fairchild Building, 4 district police stations, the police training center, 13 fire stations, 7 Public Works facilities, the Madison Senior Center, 6 parking ramps, 3 leased facilities, and various storage buildings. The goals of this service are to: 1) improve the operational efficiency of the facilities by implementing energy savings components to the scheduled facility improvements, and 2) optimize municipal investment by increasing the useful life of the City's facilities.

2018 Planned Activities

- Continue preventative maintenance practices and in-house installation of mechanical systems in City facilities.
- Expand the Green Power program to work toward the goal of self-generating 1 Megawatt of energy by 2020.
- Enhance the reporting functionality of the Computerized Maintenance Management System (CMMS).

Service Budget by Account Type

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Revenue	(298,438)	(321,220)	(323,651)	(252,000)	(252,000)
Expense	534,865	854,194	870,058	1,029,905	1,030,911
Net Service Budget	\$ 236,427	\$ 532,974	\$ 546,406	\$ 777,905	\$ 778,911

Engineering Division

Function: Public Works & Transportation

Service Overview

Service: Mapping & Records

Service Description

This service provides oversight for new subdivisions, land divisions, conditional use permits, parking lot plans, applications for building permits, legal land descriptions, mapping and surveying services for land acquisitions, land disposals, street rights-of-way issues, street vacations, and other requested land record services required to support the maintenance, acquisition or disposal of City of Madison real estate. The service also maintains the City's Official Map, Assessors' Parcel Maps, Fire Department Run Maps, Police Sector Maps, storm sewer records, storm water utility records and billings, sanitary sewer records, public land survey monument records and assigns street names and addresses, and conducts aerial imagery projects to provide digital imagery and electronic mapping to both internal and external customers. The goal of this service is to protect the land interests of the City of Madison and to accurately maintain the City's official maps.

2018 Planned Activities

- Update technology hardware and software to support the Mapping and GIS system network.
- Proactively retrieve records from surrounding townships in preparation of annexation to the City of Madison in the coming years.

Service Budget by Account Type

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Revenue	(52)	-	-	-	-
Expense	391,462	392,314	436,939	456,847	457,174
Net Service Budget	\$ 391,410	\$ 392,314	\$ 436,939	\$ 456,847	\$ 457,174

Engineering Division**Function: Public Works & Transportation***Line Item Detail***Agency Primary Fund: General****Charges for Service**

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Sale Of Recyclables	(2,120)	(1,000)	(1,111)	(2,000)	(2,000)
Facility Rental	(97,124)	-	(1,605)	-	-
Reimbursement Of Expense	(190,587)	(320,220)	(322,776)	(250,000)	(250,000)
TOTAL	\$ (289,830)	\$ (321,220)	\$ (325,492)	\$ (252,000)	\$ (252,000)

Misc Revenue

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Miscellaneous Revenue	(102,018)	(120,240)	(120,539)	(130,530)	(130,530)
TOTAL	\$ (102,018)	\$ (120,240)	\$ (120,539)	\$ (130,530)	\$ (130,530)

Transfer In

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Transfer In From Insurance	(15,674)	-	(715)	-	-
TOTAL	\$ (15,674)	\$ -	\$ (715)	\$ -	\$ -

Salaries

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Permanent Wages	3,090,980	5,140,708	3,247,403	3,580,452	3,580,452
Salary Savings	-	(200,000)	-	(200,000)	(200,000)
Salary Reimbursed	-	(1,950,000)	-	-	-
Premium Pay	15,136	15,500	14,115	15,500	15,500
Workers Compensation Wages	8,175	-	701	-	-
Compensated Absence	51,125	45,000	39,053	45,000	45,000
Hourly Wages	144,965	158,200	152,429	158,200	158,200
Overtime Wages Permanent	142,348	143,200	106,049	143,200	143,200
Overtime Wages Hourly	4,867	7,700	5,034	7,700	7,700
Election Officials Wages	240	-	341	-	-
TOTAL	\$ 3,457,838	\$ 3,360,308	\$ 3,565,125	\$ 3,750,052	\$ 3,750,052

Benefits

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Comp Absence Escrow	64,199	65,000	60,527	65,000	65,000
Benefit Savings	-	(620,000)	-	-	-
Health Insurance Benefit	588,771	929,996	641,212	675,510	682,511
Wage Insurance Benefit	11,527	28,989	13,060	19,918	19,918
WRS	219,717	475,888	235,081	369,791	366,215
FICA Medicare Benefits	254,993	529,982	273,697	412,356	411,096
Licenses & Certifications	1,035	500	480	1,000	1,000
Post Employment Health Plans	22,249	39,843	38,529	39,108	39,108
TOTAL	\$ 1,162,493	\$ 1,450,198	\$ 1,262,585	\$ 1,582,683	\$ 1,584,848

Engineering Division**Function: Public Works & Transportation***Line Item Detail***Agency Primary Fund: General****Supplies**

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Office Supplies	6,605	8,910	6,902	8,000	8,000
Copy Printing Supplies	8,757	8,200	4,423	8,800	8,800
Furniture	540	2,250	1,674	2,500	2,500
Hardware Supplies	44,887	15,000	19,929	15,000	15,000
Software Lic & Supplies	42,308	5,000	15,014	19,220	19,220
Postage	14,580	13,000	13,000	15,000	15,000
Books & Subscriptions	1,308	1,500	1,029	1,500	1,500
Work Supplies	51,762	52,100	42,152	52,100	52,100
Janitorial Supplies	31,508	25,000	55,000	30,000	30,000
Safety Supplies	9,234	5,000	5,000	8,000	8,000
Uniform Clothing Supplies	722	2,600	1,341	750	750
Food And Beverage	181	-	-	-	-
Building Supplies	19,933	21,600	14,864	25,000	25,000
Electrical Supplies	29,253	24,600	25,743	25,000	25,000
HVAC Supplies	49,447	33,740	34,874	50,000	50,000
Plumbing Supplies	28,821	13,060	15,918	25,000	25,000
Landscaping Supplies	4,960	16,000	5,604	12,000	12,000
Trees Shrubs Plants	110	8,000	-	-	-
Machinery And Equipment	11,428	11,700	20,662	7,110	7,110
Equipment Supplies	7,915	55,300	12,758	16,500	16,500
TOTAL	\$ 364,261	\$ 322,560	\$ 295,888	\$ 321,480	\$ 321,480

Engineering DivisionFunction: **Public Works & Transportation***Line Item Detail*Agency Primary Fund: **General****Purchased Services**

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Natural Gas	28,347	17,000	14,398	21,730	21,730
Electricity	111,757	12,190	6,495	30,050	30,050
Water	9,335	12,130	10,000	12,150	12,150
Sewer	1,328	160	841	390	390
Stormwater	18,175	19,000	17,971	19,590	19,590
Telephone	4,909	5,243	4,198	5,412	5,412
Cellular Telephone	8,586	8,584	8,234	10,270	10,270
Building Improv Repair Maint	27,049	20,000	14,409	25,000	25,000
Pest Control	6,462	3,775	6,066	6,500	6,500
Elevator Repair	4,866	4,800	4,800	1,550	1,550
Facility Rental	-	291,454	291,454	242,870	242,870
Custodial Bldg Use Charges	37,034	37,494	37,494	37,494	97,307
Process Fees Recyclables	595	300	851	750	750
Grounds Improv Repair Maint	5,443	6,500	6,500	6,500	6,500
Landscaping	143,052	150,500	123,654	145,000	145,000
Office Equipment Repair	-	200	-	200	200
Equipment Mntc	7,973	5,000	9,986	8,000	8,000
System & Software Mntc	40,449	44,090	42,375	43,275	43,275
Vehicle Repair & Mntc	6,420	8,500	3,431	7,500	7,500
Rental Of Equipment	5,396	3,350	4,601	3,350	3,350
Street Mntc	527	-	-	-	-
Plant In Service Mntc	-	-	3	-	-
Recruitment	1,978	500	500	1,000	1,000
Mileage	17,726	18,000	19,484	18,000	18,000
Conferences & Training	16,081	10,000	14,634	15,000	15,000
Memberships	9,916	10,904	8,671	10,911	10,911
Medical Services	277	600	118	850	850
Delivery Freight Charges	496	750	1,098	750	750
Storage Services	820	970	907	891	891
Mortgage & Title Services	-	-	1,500	-	-
Consulting Services	65,274	55,540	55,540	64,040	64,040
Advertising Services	2,361	2,700	2,561	2,500	2,500
Inspection Services	4,026	7,500	4,437	5,000	5,000
Parking Towing Services	50	-	-	-	-
Security Services	2,891	320	-	1,750	1,750
Other Services & Expenses	36,130	55,000	53,813	45,700	45,700
Taxes & Special Assessments	11,425	6,000	15,691	20,450	20,450
Permits & Licenses	1,232	1,490	1,928	1,490	1,490
TOTAL	\$ 638,386	\$ 820,544	\$ 788,640	\$ 815,913	\$ 875,726

Inter-Departmental Charges

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
ID Charge From Engineering	9,837	13,080	13,080	13,080	13,080
ID Charge From Fleet Services	101,382	46,458	46,458	31,299	31,299
ID Charge From Landfill	8,316	7,000	7,000	8,400	8,400
ID Charge From Traffic Eng	4,791	7,437	7,437	4,698	4,698
ID Charge From Insurance	54,109	38,999	38,999	38,999	54,002
ID Charge From Workers Comp	140,328	156,659	156,659	156,659	102,690
ID Charge From Sewer	75,483	70,000	70,000	75,000	75,000
ID Charge From Stormwater	78,118	72,000	72,000	80,000	80,000
TOTAL	\$ 472,364	\$ 411,633	\$ 411,633	\$ 408,135	\$ 369,169

Engineering Division**Function: Public Works & Transportation***Line Item Detail***Agency Primary Fund: General****Inter-Departmental Billings**

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
ID Billing To Finance	(7,072)	-	-	-	-
ID Billing To Human Resources	(33,767)	(33,767)	(33,767)	(33,767)	(33,767)
ID Billing To Information Tec	(37,769)	(969)	(969)	(969)	(969)
ID Billing To Fire	(278,213)	(278,163)	(278,163)	(278,163)	(278,163)
ID Billing To Police	(533,701)	(536,303)	(536,303)	(611,303)	(611,303)
ID Billing To Public Health	(13,130)	(13,130)	(13,130)	(13,130)	(13,130)
ID Billing To Engineering	(9,837)	(13,080)	(13,080)	(13,080)	(13,080)
ID Billing To Fleet Services	(27,065)	(27,065)	(27,065)	(27,065)	(27,065)
ID Billing To Landfill	(12,274)	(12,468)	(12,468)	(12,468)	(12,468)
ID Billing To Streets	(55,152)	(55,152)	(55,152)	(55,152)	(55,152)
ID Billing To Traffic Eng	(54,540)	(54,539)	(54,539)	(54,539)	(54,539)
ID Billing To Library	(3,537)	(3,537)	(3,537)	(3,537)	(3,537)
ID Billing To Parks	(14,111)	(14,111)	(14,111)	(14,111)	(14,111)
ID Billing To Bldg Inspection	(62,598)	(62,598)	(62,598)	(62,598)	(62,598)
ID Billing To CDBG	(41,703)	(41,703)	(41,703)	(41,703)	(41,703)
ID Billing To Community Dev	(38,090)	(38,090)	(38,090)	(38,090)	(38,090)
ID Billing To Economic Dev	(54,539)	(59,539)	(59,539)	(59,539)	(59,539)
ID Billing To Office Of Dir PI	(16,245)	(16,245)	(16,245)	(16,245)	(16,245)
ID Billing To Planning	(79,364)	(79,364)	(79,364)	(79,364)	(79,364)
ID Billing To Parking	(37,269)	(37,269)	(37,269)	(37,269)	(37,269)
ID Billing To Sewer	(51,355)	(64,167)	(64,167)	(56,917)	(56,917)
ID Billing To Stormwater	(34,021)	(40,906)	(40,906)	(38,536)	(38,536)
ID Billing To CDA	(51,209)	(51,209)	(51,209)	(51,209)	(51,209)
TOTAL	\$ (1,546,562)	\$ (1,533,374)	\$ (1,533,374)	\$ (1,598,754)	\$ (1,598,754)

Transfer Out

	2016 Actual	2017 Adopted	2017 Projected	2018 Request	2018 Executive
Transfer Out To Grants	7,455	-	-	-	-
TOTAL	\$ 7,455	\$ -	\$ -	\$ -	\$ -

Engineering Division

Function: Public Works & Transportation

Position Summary

	CG	2017 Budget		2018 Request		Executive	
		FTEs	Amount	FTEs	Amount	FTEs	Amount
ACCOUNTANT	18	2.00	134,143	2.00	119,511	2.00	119,511
ADMIN ASST	20	1.00	50,126	1.00	55,530	1.00	55,530
ARCHITECT	18	4.00	342,964	4.00	354,262	4.00	354,262
ASST CITY ENGINEER	18	2.00	233,696	2.00	238,364	2.00	238,364
CCTV INSPEC TECH	15	3.00	173,621	3.00	189,511	3.00	189,511
CIVIL TECH	16	1.00	61,092	1.00	62,743	1.00	62,743
COMP MAP/GIS COORD	18	1.00	92,906	1.00	103,886	1.00	103,886
CONSTRUCT INSP	15	12.00	778,487	12.00	805,749	12.00	805,749
CONSTRUCTION MGR	18	3.00	219,679	3.00	239,441	3.00	239,441
CUSTODIAL SERV COORD	16	1.00	48,941	1.00	49,912	1.00	49,912
CUSTODIAL WKR	16	12.50	639,062	12.50	609,518	12.50	609,518
ELECTRICIAN	71	2.00	134,788	2.00	140,411	2.00	140,411
ELECTRICIAN FOREPERS	71	1.00	70,124	1.00	75,297	1.00	75,297
ENGINEER	18	19.00	1,476,733	19.00	1,576,027	19.00	1,576,027
ENGINEERING FINANCIAL MAN	18	1.00	101,983	1.00	105,078	1.00	105,078
ENGR CITY	21	1.00	146,371	1.00	146,585	1.00	146,585
ENGR FIELD AIDE	15	2.00	100,296	2.00	118,805	2.00	118,805
ENGR OPER LDWKR	15	2.00	114,612	2.00	127,846	2.00	127,846
ENGR PROG SPEC	16	3.00	218,069	3.00	208,855	3.00	208,855
FAC/SUS MGR	18	1.00	113,156	1.00	116,583	1.00	116,583
HYDROGEOLOGIST	18	0.60	48,928	0.60	51,081	0.60	51,081
IT SPEC	18	1.00	74,176	1.00	83,175	1.00	83,175
LANDSCAPE ARCHITECT	18	1.00	59,191	1.00	63,193	1.00	63,193
MAINT MECH	15	1.00	63,490	1.00	64,758	1.00	64,758
MAINT MECH	16	4.00	248,315	4.00	255,352	4.00	255,352
PLUMBER	71	1.00	69,049	1.00	70,428	1.00	70,428
PRINCIPAL ARCHITECT	18	1.00	89,550	1.00	91,338	1.00	91,338
PRINCIPAL ENGR	18	2.00	212,737	2.00	216,987	2.00	216,987
PRINICPAL ENGR	18	3.00	338,174	3.00	344,929	3.00	344,929
PROG ASST	17	1.00	46,181	1.00	49,644	1.00	49,644
PROG ASST	20	4.00	216,140	4.00	217,272	4.00	217,272
PW DEV MGR	18	2.00	156,413	2.00	160,520	2.00	160,520
S/D MAINT TECH	15	2.00	118,453	2.00	121,895	2.00	121,895
SIDEWALK PROG SUPERV	18	1.00	76,888	1.00	80,960	1.00	80,960
SSMO	15	11.00	526,482	11.00	544,766	11.00	544,766
SURVEYOR	18	2.00	151,953	2.00	155,606	2.00	155,606
TOTAL		112.10	\$ 7,746,969	112.10	\$ 8,015,819	112.10	\$ 8,015,819