



---

# Facilities Management

---

City of Murfreesboro  
Tennessee

---

October 2014

---

THE UNIVERSITY of TENNESSEE 

MUNICIPAL TECHNICAL ADVISORY SERVICE

# City of Murfreesboro, Tennessee Facilities Management

## PART I

### Overview

The City of Murfreesboro, with a 2012 certified population of 109,031, is the fifth most populous city in the state of Tennessee. As a full-service municipality, the city provides a wide-array of municipal services with a workforce of approximately 800. The city also operates a city school system comprised of 12 educational facilities and other support facilities. In combination, these municipal and education operations are spread over 150+ facilities comprising over 2.2 million square feet of space. The estimated value of these holdings exceeds \$333,000,000.

On the municipal side, the city is responsible for the maintenance and repair of 1.2 million square feet of space, in buildings ranging in size to over 100,000 square feet (Sports\*Com, Patterson Community Center, and City Hall). The value of building and structures maintained by the city is approximately \$200,000,000, which is accomplished by 21 full- and part-time employees working in a decentralized environment, along with outside contractors. The superintendent of the street division, acting under the direction of the city engineer, has taken responsibility for overseeing major building repairs and improvements, in addition to his street-related maintenance duties. The current general maintenance approach is characterized as reactive; that is, the organization is focusing on fixing systems and equipment when they break, which is more expensive than planned maintenance.

The Municipal Technical Advisory Service was tasked by City Manager Robert J. Lyons to evaluate the organizations management structure for facility maintenance due to the city's major capital investment in its facilities and the ongoing operational costs associated in their maintenance and repair, as well as strategies to improve the same.

### Benchmarking

The International City Management Association (ICMA) Center for Performance Measurement benchmarks facilities management performance data from participating cities. The most recent report issued is for fiscal 2010. Albeit a bit dated, the report is useful to glean selected data from cities with a population similar to Murfreesboro for comparisons later by the city. For these purposes, all cities with a population between 100,000 – 160,000 were evaluated, as follows:

Peoria Arizona	McAllen Texas	Bellevue Washington
Rockford Illinois	Sterling Heights Michigan	Surprise Arizona
Fort Collins Colorado	Coral Springs Florida	Westminster Colorado
Elk Grove California	Olathe Kansas	

In addition, Tennessee cities participating in the study are included (Johnson City, Germantown, and Whitehouse).

A summary of the ICMA study for the selected cities is found in Exhibits 1 – 8:

## Exhibit

- 1 Facility Management Characteristics
- 2 Facility Management Square Footage
- 3 Custodial Expenditures per Square Foot
- 4 Custodial Service Requests: Emergency and Non-emergency
- 5 Customer Satisfaction with Custodial Services
- 6 Repair Expenditures per Square Foot
- 7 Capital Expenditures per Square Foot
- 8 Custodial Expenditures per Square Foot by Type of Facility

What became telling in the study data was the disconnection between city population and facilities under management by a city. Murfreesboro has more building and square footage under management and maintenance than every other city evaluated save one (Rockford Illinois), despite its modest comparative population to the others. So an evaluation of total square feet of facilities operated and maintained is also presented for two key metrics as summarized in Exhibits 9 and 10, and discussed below.

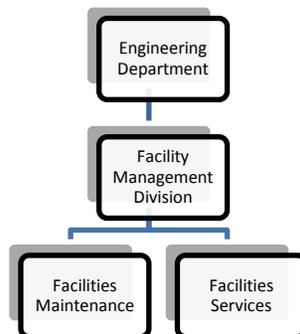
## Square Footage Maintained

Four (4) cities in the ICMA study report maintaining buildings totaling one million to 1.5 million square feet – Arlington Texas, Plano Texas, Tacoma Washington, and Lexington Massachusetts. These cities are comparable to Murfreesboro’s 1.2 million square feet.

A review of each of their websites and other online research was undertaken to further understand the organization framework for facility maintenance in each city. Following this review, Plano and Lexington are examined further due to information that could be readily found. In each case, the organizational structure placed facility management in high profile: either as a department itself or as an operating division. This is viewed as a key to success.

## Case Example 1: Plano Texas

The City of Plano Texas is located north of Dallas in the Dallas-Fort Worth Metroplex area. Facility Management is a Division in the Engineering Department. Its work is carried out in two program areas: (1) Facilities Maintenance and (2) Facilities Services:



- Facilities Maintenance – Responsible for the physical maintenance, repair, security, and improvements of all city buildings. Facilities Maintenance is also responsible for the administration of service contracts for security systems, elevators, boilers, HVAC systems, water treatments, and assists in coordinating and performing intra-office moves. \$6.7 million budget; 22 FTE.

<b>Program Expenditures</b>	<b>2011-12 Actual</b>	<b>2012-13 Budget</b>	<b>2012-13 Estimate</b>	<b>2013-14 Budget</b>	<b>2013-14 % Change</b>
Salaries & Wages	\$1,630,962	\$1,633,784	\$1,726,361	\$1,729,559	5.9%
Operations & Maintenance	3,603,825	5,095,015	4,977,371	4,987,473	-2.1%
Reimbursements	-70	0	0	0	0.0%
Capital Outlay	3,079	0	30,200	0	0.0%
<b>TOTAL</b>	<b>\$5,237,796</b>	<b>\$6,728,799</b>	<b>\$6,733,932</b>	<b>\$6,717,032</b>	<b>-0.2%</b>
<b>Personnel Summary</b>					
Total Full-Time	22	22	22	22	
Total Part-Time	0	0	0	0	
<b>Program Measures</b>					
<b>Activity</b>					
Buildings Maintained	99	100	99	99	
Square Footage Maintained	1,451,712	1,504,476	1,454,712	1,454,712	
Work Order Requests	14,330	15,200	14,900	15,200	
Work Orders Completed	13,374	14,980	14,680	14,980	
<b>Work Orders Performed:</b>					
In-House	12,502	13,780	13,680	13,780	
Contracted	872	1,200	1,000	1,200	
<b>Performance</b>					
Work Orders Completed/Total Requested	93.3%	98.6%	98.5%	98.6%	
Work Orders Performed In-House/Work Orders Requested	87.2%	90.7%	91.8%	90.7%	

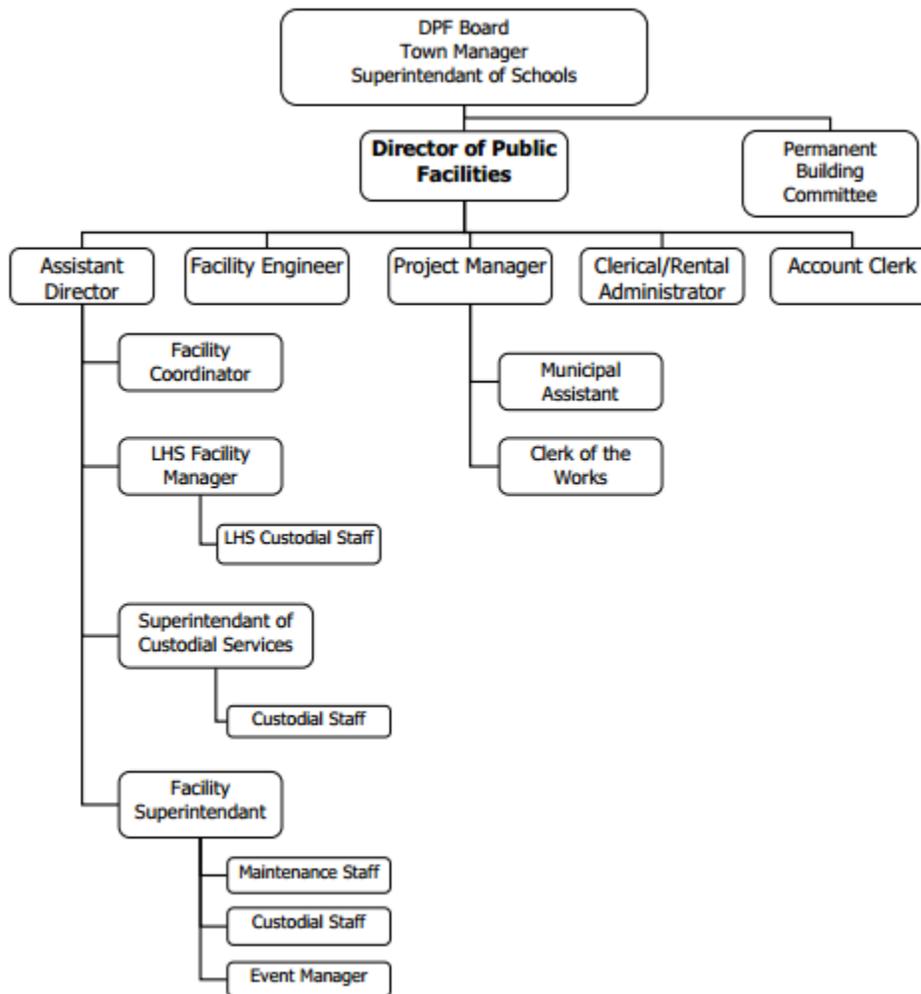
- Facilities Services – Responsible for all general building services to 94 city facilities. Services include cleaning, custodial services, pest control, indoor plant maintenance, waste/recycling disposal, modular furniture and office relocation. \$1.9M budget; 6 FTE.

<b>Program Expenditures</b>	<b>2011-12 Actual</b>	<b>2012-13 Budget</b>	<b>2012-13 Estimate</b>	<b>2013-14 Budget</b>	<b>2013-14 % Change</b>
Salaries & Wages	\$333,651	\$331,463	\$343,414	\$316,828	-4.4%
Operations & Maintenance	1,271,548	1,649,467	1,658,999	1,642,767	-0.4%
Reimbursements	0	0	0	0	0.0%
Capital Outlay	0	0	0	0	0.0%
<b>TOTAL</b>	<b>\$1,605,199</b>	<b>\$1,980,930</b>	<b>\$2,002,413</b>	<b>\$1,959,595</b>	<b>-1.1%</b>
<b>Personnel Summary</b>					
Total Full-Time	6	6	6	6	
Total Part-Time	0	0	0	0	
<b>Program Measures</b>					
<b>Activity</b>					
Buildings Maintained	99	100	99	99	
Square Footage Maintained	1,451,712	1,504,476	1,451,712	1,451,712	
Moves	36	38	38	38	
Cost per square foot	\$1.11	\$1.32	\$1.38	\$1.35	

## Case Example 2: Lexington Massachusetts

The Town of Lexington Massachusetts is located in Middlesex County. Settled in 1642, this town is famous for being the site of the first shot of the American Revolutionary War, in the Battle of Lexington on April 19, 1775.

The Department of Public Facilities is responsible for the coordination and care of all town-owned buildings under control of the town manager, library trustees, and school committee. The primary areas of service include custodial care and cleaning, building maintenance and repair (including preventative maintenance), utilities, and landscaping and grounds.



Twenty-two (22) staff members maintain municipal and shared facilities (excluding schools). This includes a director, assistant director, superintendent of custodial services, project manager, facility superintendent, and facility engineer. The total budget for municipal and share facilities is \$3 million (excluding schools).

Town of Lexington Massachusetts  
Public Facilities Budget

<b>Program Summary (All Funds)</b>	<b>FY 2012 Actual</b>	<b>FY 2013 Actual</b>	<b>FY 2014 Appropriation</b>	<b>FY 2015 Recommended</b>	<b>Dollar Increase</b>	<b>Percent Increase</b>
Education Facilities	\$ 7,022,745	\$ 7,112,927	\$ 7,167,826	\$ 7,258,223	\$ 90,398	1.26%
Municipal Facilities	\$ 1,600,204	\$ 1,610,193	\$ 1,966,409	\$ 1,965,660	\$ (749)	-0.04%
Shared Facilities	\$ 922,040	\$ 989,945	\$ 1,048,478	\$ 1,102,822	\$ 54,344	5.18%
<b>Total 2400 Public Facilities</b>	<b>\$ 9,544,988</b>	<b>\$ 9,713,065</b>	<b>\$ 10,182,713</b>	<b>\$ 10,326,706</b>	<b>\$ 143,993</b>	<b>1.41%</b>

<b>Object Code Summary (All Funds)</b>	<b>FY 2012 Actual</b>	<b>FY 2013 Actual</b>	<b>FY 2014 Appropriation</b>	<b>FY 2015 Recommended</b>	<b>Dollar Increase</b>	<b>Percent Increase</b>
Salaries & Wages	\$ 3,763,099	\$ 3,916,911	\$ 4,322,780	\$ 4,499,292	\$ 176,512	4.08%
Overtime	\$ 324,639	\$ 490,051	\$ 480,399	\$ 513,223	\$ 32,824	6.83%
Personal Services	\$ 4,087,738	\$ 4,406,962	\$ 4,803,180	\$ 5,012,515	\$ 209,335	4.36%
Contractual Services	\$ 1,629,202	\$ 1,546,425	\$ 1,373,704	\$ 1,341,810	\$ (31,894)	-2.32%
Utilities	\$ 3,138,325	\$ 3,079,883	\$ 3,199,723	\$ 3,155,179	\$ (44,544)	-1.39%
Supplies	\$ 561,358	\$ 541,937	\$ 664,200	\$ 665,200	\$ 1,000	0.15%
Small Capital	\$ 128,366	\$ 137,859	\$ 130,000	\$ 139,500	\$ 9,500	7.31%
Expenses	\$ 5,457,250	\$ 5,306,104	\$ 5,367,627	\$ 5,301,689	\$ (65,938)	-1.23%
Benefits	\$ -	\$ -	\$ 11,906	\$ 12,501	\$ 595	5.0%
<b>Total 2400 Public Facilities</b>	<b>\$ 9,544,988</b>	<b>\$ 9,713,065</b>	<b>\$ 10,182,713</b>	<b>\$ 10,326,706</b>	<b>\$ 143,993</b>	<b>1.41%</b>

## The Importance of Preventative Maintenance

Underscoring this facility management review is the desire of Manager Lyons to maximize the life of city facilities through a strong preventative maintenance (PM) program and to organize effectively to accomplish that end. This is so as a well-designed and implemented PM program will extend the life of equipment by reducing replacement costs, preventing most breakdowns that effect building occupants, maintain energy efficiency of equipment, improve the effectiveness of maintenance personnel, and improve the overall condition of a building and the environment of its occupants.

The benefits of a strong PM program are clear:

- PM extends equipment life. The biggest reason to do preventative maintenance as that it keeps equipment running longer.
- PM reduces costs. Extending the service life of equipment saves money; not only the capital cost of replacement, but also in a reduction in the hiring of outside contractors.
- PM saves energy. Energy costs can be reduced by simple PM tasks.
- PM makes the job easier. A good PM program will results in less overtime, fewer unhappy occupants, reduced stress, and more satisfaction and pride.

As importantly to the city, a strong preventative maintenance program contributes to the bottom line. A dollar saved through PM is no different than a dollar generated in local sales taxes – a dollar is a dollar.

A 2000 study (Koo and Van Hoy) evaluating the return on investment (ROI) from preventative maintenance programs found a significant return from the money invested in PM.

<u>Capital Equipment Type</u>	<u>ROI</u>
Air Compressor	230%
Air Handler	100%
Boilers	850%
Centrifugal Chillers	1,100%
Reciprocating Chillers	400%
Cooling Towers	550%
Condensers (air cooled)	1,050%
DX Units	1,800%
Fire Detection Systems	10%
Centrifugal Pumps	2,300%
Fire Pumps	50%
Switch Gear	700%
Parking Lots	900%
Roofs	350%

So in the long run, a preventative maintenance program should cost nothing – and in fact should save money – for the city. Of course there are immediate costs associated with performing the work of PM, such as additional personnel to plan, direct, and implement an effective program where one is not present or mature. But with expected service life of equipment ranging to 75 years, there is no better time than now to start or enhance such a program.

<b>Expected Service Life of Selected Equipment</b>			
<u>Item</u>	<u>Years</u>	<u>Item</u>	<u>Years</u>
<b>Air Conditioning</b>		<b>Plumbing</b>	
Central Air	10-15	Black Iron Pipe	20-25
Central Chiller	20-25	Cast Iron Pipe	30-40
Cooling Towers	15-25	Circulator Pump	20-25
Window units	10	Copper Pipe	25-30
<b>Electrical</b>		Drinking Fountains	10-15
Building Wiring	20-25	Fire Sprinkler	30
Exterior Wiring	15-25	Galvanized Pipe	25-30
Lighting	20	Plastic Pipe	25
Service Equipment	20-30	Water Heaters	10
<b>Exterior</b>		<b>Roofing</b>	
Asphalt Paving	15	Asphalt Shingle	15-20
Chain Link Fence	20-30	Built Up Roof (BUR)	15-20
Lawn Irrigation	10-15	Modified Bitumen (MBR)	15-20
Sidewalks	20-25	Rubber (EPDM)	20-30
<b>Heating</b>		Standing Seam	15-25
Boiler or Furnace	20-30	<b>Structural</b>	
Electric Unit Heater	15-20	Concrete/Masonry	45-75
Gas Unit Heater	20-25	Steel Frame	35-50
Hot Water Heater	20-25	Wood Frame	25-40

## Best Practices

Seven strategic practices for effectively managing preventative maintenance have been identified for local governments through a study undertaken by the Minnesota Office of Legislative Auditor. The recommended best practices are:

1. Inventory building components and assess their conditions. This is the first step in identify needed maintenance.
2. Build the capacity for ranking maintenance projects and evaluating their costs. An evaluation tool, such as life-cycle costing, should be used to make cost-effective decisions.
3. Plan strategically for preventative maintenance in the long- and short-term. A local government should look out a minimum of three years and develop facility plans to guide maintenance; and then develop an annual work plan linked to the annual operating and capital budget.
4. Structure a framework for operating a preventative maintenance program. Preventative maintenance should be coordinated with other maintenance projects; checklists of PM tasks and frequency should be established.
5. Use tools to optimize the preventative maintenance program. Preventive tasks should be incorporated into the work order system.
6. Enhance the competence of maintenance workers and managers. Training should be provided to enhance management and maintenance skills.
7. Involve appropriate maintenance personnel in decision making and in communicating building needs. Management should include maintenance personnel in the early stages of decision making when purchasing major building components or designing space.

## Recommended Next Step

With 1.2 million of square feet of building being maintained by the city, a new focus on facility management is timely in recognition of the scope, budget, personnel, and importance of this municipal function to visitors and employees alike.

Importantly, a full-time position to assist in facility maintenance management was funded in the Fiscal 2015 budget and waits being filled in the Engineering Department. An integrated facilities maintenance function should be created within which is a key first step in improving the efficiency of city facilities, with a central decision point improving organizational capacity and providing a high-altitude look at the entire facilities portfolio and needs going forward.

Following the planned organizational and staffing enhancements that are underway, the city should embark on a long-term process to collect data on its space, condition, use, cost, current space, and space needs for the entire portfolio of buildings; and following that, refine and maintain a capital plan and institute a sound preventative maintenance program.

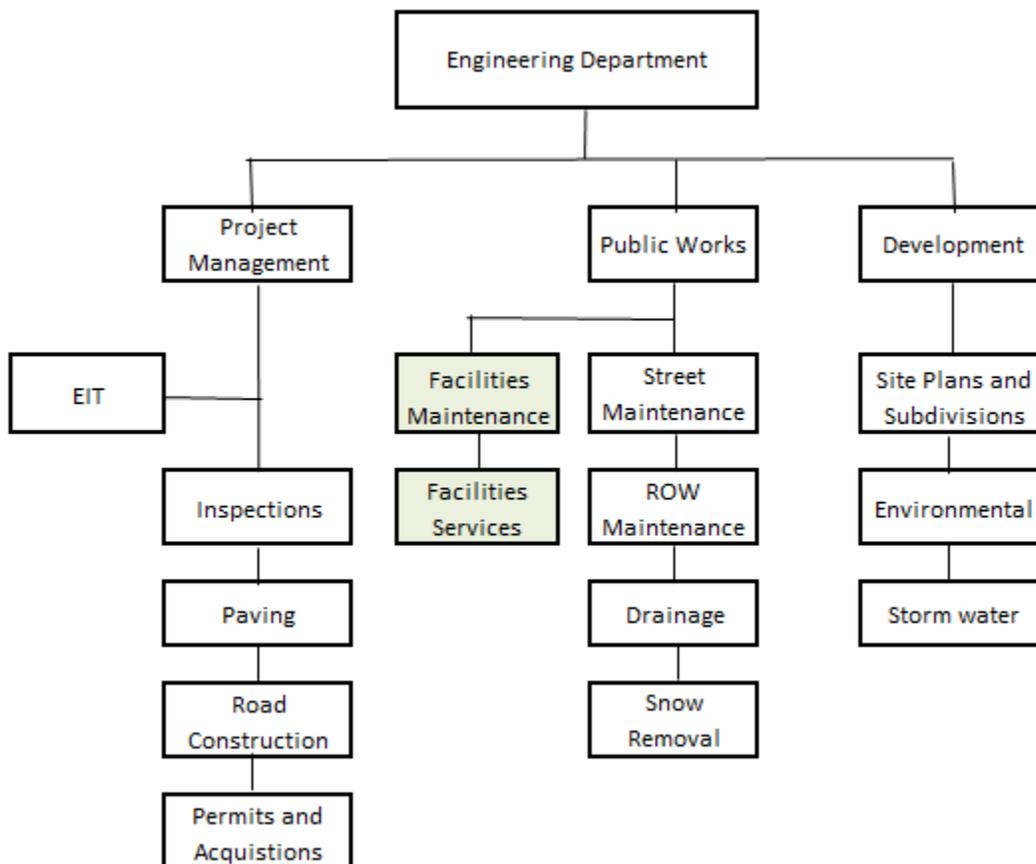
The next section of this report will look specifically at a proposed organizational chart, budget, and personnel schedule to advance facility management and maintenance in the city

## Part II

As established in Part I of this report, the City of Murfreesboro manages and maintains a vast array of buildings and structures without a centralized management approach. As further established best practices call for the centralization of this activity and coupled with that, the advent of a strong preventative maintenance program. With that as a backdrop, an organizational structure, budget, and personnel schedule was developed from the fiscal 2015 budget and is proposed as follows below.

### Organizational Chart

It is recommended that the Street Division be renamed the Public Works Division, with the newfound facilities maintenance and management duties folded-in as separate cost control centers as depicted below. Alternatively, they can be combined into a single reporting entity named Facilities Maintenance and Services.



## Budget

Personnel and other costs expended in building maintenance and janitorial services are currently budgeted in the General Fund, Airport Fund, Drug Fund, and Fleet Services Fund. The amount totals \$1,560,070 in Fiscal 2015 of which \$798,000 is payroll and benefits, \$577,620 is building services and maintenance, and \$184,450 is janitorial services.

Fund / Department	Payroll / Benefits	Buildings	Janitorial
<b>General Fund</b>			
General and Administrative	\$ 180,000	\$ 40,000	\$ 10,000
Police	\$ 86,600	\$ 85,000	\$ 18,000
Range		\$ 10,000	
Fire		\$ 63,800	\$ 33,500
Planning			
Transportation			\$ 300
Engineering			
Street	\$ 75,000	\$ 15,000	\$ 4,000
Urban Environment		\$ 4,720	\$ 2,000
Civic Plaza			\$ 300
Parks and Recreation	\$ 379,200	\$ 241,000	\$ 56,250
Senior Center	\$ 77,200	\$ 20,000	\$ 13,000
Public Golf			
Old Fort		\$ 11,000	\$ 6,000
VA course		\$ 2,000	\$ 350
Short course		\$ 1,000	\$ 500
Solid Waste		\$ 17,000	\$ 32,000
<b>Total General Fund</b>	<b>\$ 798,000</b>	<b>\$ 510,520</b>	<b>\$ 176,200</b>
Airport Fund		\$ 53,600 *	\$ 3,000
Drug Fund		\$ 500	\$ 250
Fleet Services Fund		\$ 13,000	\$ 5,000
<b>Total</b>	<b>\$ 798,000</b>	<b>\$ 577,620</b>	<b>\$ 184,450</b>
<b>Grand Total</b>	<b>\$</b>	<b>1,560,070</b>	

\* Includes buildings and grounds

It is recommended that all personnel performing building maintenance and janitorial services, as well as related costs budgeted in the General Fund, Airport Fund, and Fleet Services Fund, be transferred to the renamed Public Works Division in the Engineering Department, to be combined and classified into either Facilities Maintenance or Facilities Services, as appropriate. To maintain the financial integrity of the Drug Fund, its modest level of building and janitorial costs should remain intact and not be moved to the General Fund.

## Personnel

All personnel currently budgeted and performing maintenance and custodial services should be moved to the Public Works Division. A total of 19 full and part-time employees are assigned these duties in the fiscal 2015 budget as follows.

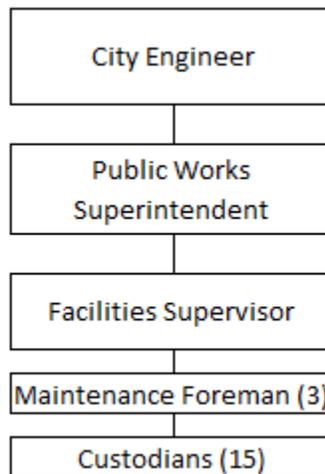
Title	General and Administrative		Police		Parks and Recreation		Senior Center		Total
	FT	PT	FT	PT	FT	PT	FT	PT	
Facilities Maintenance Supervisor	1								1
Maintenance Foreman	1				2				3
Custodian	2		2		7		2		13
Supervisor of Maintenance Workers		2							2
<b>Total</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>19</b>

Total FT	17
Total PT	2

This personnel schedule includes the newly budgeted facilities maintenance supervisor who will oversee both Facilities Services and Facilities Maintenance; and 18 other positions that primarily perform janitorial duties. Given these scope of duties, only one person – the newly created position - should be budgeted in Facilities Maintenance. All other employees should be placed in Facilities Services. However, the responsibility of the facilities maintenance supervisor will be spread between Facilities Maintenance and Facilities Services. Given the respective size of each budget and staff size, it is recommended that this position be allocated 75% to Facilities Services and 25% to Facilities Maintenance. This cost allocation should be reviewed and adjusted over time to properly reflect efforts managing the two cost centers.

Finally, it is recommended that (1) the Street Superintendent be retitled as the Public Works Superintendent and (2) the Supervisor of Maintenance Workers positions be retitled as Custodians to better reflect the scope of responsibility and duties of these positions.

The recommended reporting structure follows.



## In Summary

The recommended FY 2015 budget and human resources schedule for Facilities Maintenance and Facilities Services follows.

In addition, any budgeted capital expenditures that are not otherwise segregated and tracked in a capital improvement or capital equipment fund should likewise be placed in these cost centers.

City of Murfreesboro Tennessee  
Engineering Department  
Public Works Division

Facilities Maintenance		Facilities Services	
Personnel Costs	\$ 18,750	Personnel Costs	\$ 779,250
Operating Costs	\$ 577,120	Operating Costs	\$ 184,200
Capital Expense	\$ -	Capital Expense	\$ -
Total	\$ 595,870	Total	\$ 963,450
-----		-----	
Human Resources Summary	Staff	Human Resources Summary	Staff
Facilities Supervisor	0.25	Facilities Supervisor	0.75
		Maintenance Foreman	3.0
		Custodian (FT)	13.0
		Custodian (PT)	2.0
Total	0.25	Total	18.75

The steps to fully implement the recommended organizational restructuring and focus on facilities management include:

- Change the name of the Street Division to the Public Works Division
- Create two new cost centers in the Public Works Division: (1) Facilities Maintenance and (2) Facilities Services
- Place 25% of the payroll and benefit costs of the Facilities Supervisor in Facilities Maintenance (\$18,750)
- Move all building costs from the General Fund, Airport Fund, and Fleet Services Fund to Facilities Maintenance (\$577,120)
- Place all personnel performing janitorial services (18), as well as 75% of the payroll and benefit costs of the Facilities Supervisor in Facilities Services (\$779,250)
- Move all janitorial costs from the General Fund, Airport Fund, and Fleet Services Fund to Facilities Services (\$184,200)
- Retitle the position of Street Superintendent to Public Works Superintendent
- Retitle the positions of Supervisor of Maintenance Workers to Custodians

ICMA Center for Performance Measurement  
Facilities Management

Exhibits 1 -10

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Facilities Management Characteristics  
 Selected Cities  
 Exhibit 1

City	State	Population	Organization of Facilities Management Function	Total facilities management FTEs (custodial and repair)	Number of facilities operated and maintained	Total operating and maintenance expenditures for all maintained facilities	Total capital maintenance expenditures for all existing facilities
Peoria	AZ	160,254	Combination	33.9	52		
Rockford	IL	152,871	Centralized	10	33	\$ 2,402,982	\$ 82,861
Fort Collins	CO	143,986					
Elk Grove	CA	143,885	Centralized	1.5	7	\$ 763,957	\$ 219,880
McAllen	TX	130,831	Centralized		1	\$ 773,876	\$ 84,042
Sterling Heights	MI	128,500	Centralized	13.1	20	\$ 2,367,831	
Coral Springs	FL	127,359	Decentralized		11		
Olathe	KS	126,162	Decentralized	7	24	\$ 1,686,625	\$ 150,217
Bellevue	WA	122,363	Decentralized		18		
Surprise	AZ	109,482	Combination	16.1	45	\$ 2,573,776	\$ 64,380
Westminster	CO	109,353					
Johnson City	TN	61,990	Centralized	7.6	57		
Germantown	TN	41,011	Centralized	14.7	21	\$ 1,196,440	
White House	TN	9,891					

All Cities Over 100,000	Total facilities management FTEs (custodial and repair)	Number of facilities operated and maintained	Total operating and maintenance expenditures for all maintained facilities	Total capital maintenance expenditures for all existing facilities
Mean	28	137	\$ 10,219,111	\$ 1,965,381
Median	26	97	\$ 4,570,408	\$ 400,000

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Square feet of Facilities Operated and Maintained  
 Selected Cities  
 Exhibit 2

City	State	Population	Organization of Facilities Management Function	Total Square Feet of Facilities Operated and Maintained									Total
				Administrative / Office	Warehouse / Industrial	24-hour dorm	Health care	Animal Care	Library	Recreation / Community Center	Detention	All other	
Rockford	IL	152,871	Centralized	154,286	3,102,216	82,729			25,900				3,365,131
Surprise	AZ	109,482	Combination	306,614	75,583	65,690			29,500	56,574		296,160	830,121
Peoria	AZ	160,254	Combination	336,743	14,800	63,287			64,816	64,590		243,223	787,459
Bellevue	WA	122,363	Decentralized	376,789	115,545	78,492				118,620		8,986	698,432
Westminster	CO	109,353											698,311
Olathe	KS	126,162	Decentralized	290,300	26,550	73,550		2,400		16,500		269,000	678,300
Fort Collins	CO	143,986											673,814
Sterling Heights	MI	128,500	Centralized	131,534	95,646	56,759		8,745	40,499	49,642			382,825
Elk Grove	CA	143,885	Centralized	97,035	68,000								165,035
McAllen	TX	130,831	Centralized									43,735	43,735
Coral Springs	FL	127,359	Decentralized	42,765	28,470								
Germantown	TN	41,011	Centralized	133,900	12,000	30,290		2,236	51,274	128,637	4,000		362,337
Johnson City	TN	61,990	Centralized	108,280					40,635	126,157	9,728	64,446	349,246
White House	TN	9,891		25,000	15,500	60,816				75,863		89,180	266,359

All Cities Over 100,000	Administrative / Office	Warehouse / Industrial	24-hour dorm	Health care	Animal Care	Library	Recreation / Community Center	Detention	All other	Total
Mean	786,163	353,381	170,602	71,632	25,173	340,876	271,612	210,047	361,295	2,118,147
Median	381,057	93,320	82,155	70,931	14,231	157,813	165,819	140,257	247,113	1,268,147

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Custodial Expenditures per Square Foot  
 Selected Cities  
 Exhibit 3

Custodial Expenditures per Square Foot (Estimated)

City	State	Population	Organization of Facilities Management Function	Administrative / Office
Rockford	IL	152,871	Centralized	\$ 0.20
Elk Grove	CA	143,885	Centralized	\$ 0.82
Surprise	AZ	109,482	Combination	\$ 1.30
Coral Springs	FL	127,359	Decentralized	\$ 1.52
Peoria	AZ	160,254	Combination	\$ 1.65

All Cities Over 100,000	
Mean	\$ 1.30
Median	\$ 1.24

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Custodial Expenditures per Square Foot - Facility Type  
 Selected Cities  
 Exhibit 4

Custodial Expenditures per Square Foot (Estimated)

City	State	Population	Organization of Facilities Management Function	Administrative/ Office facilities			Library			Recreation / Community Center			All Facilities		
				In-house	Contractual	Total	In-house	Contractual	Total	In-house	Contractual	Total	In-house	Contractual	Total
Rockford	IL	152,871	Centralized		\$ 0.20	\$ 0.20									
Elk Grove	CA	143,885	Centralized		\$ 0.82	\$ 0.82								\$ 0.75	\$ 0.75
Surprise	AZ	109,482	Combination			\$ 1.30			\$ 1.55			\$ 1.25			\$ 0.70
Coral Springs	FL	127,359	Decentralized		\$ 1.50	\$ 1.52									
Peoria	AZ	160,254	Combination			\$ 1.65			\$ 2.10			\$ 5.25			\$ 2.80
Bellevue	WA	122,363	Decentralized	\$ 0.20	\$ 0.98	\$ 1.18									
Olathe	KS	126,162	Decentralized	\$ 1.35	\$ 0.60								\$ 1.35	\$ 0.70	
Germantown	TN	41,011	Centralized					\$ 1.80							
All Cities Over 100,000															
Mean				\$ 1.26	\$ 0.91	\$ 1.30	\$ 0.37	\$ 0.93	\$ 1.20	\$ 0.94	\$ 1.10	\$ 1.75	\$ 1.62	\$ 0.95	\$ 1.46
Median				\$ 1.34	\$ 0.86	\$ 1.24	\$ 0.31	\$ 1.06	\$ 1.20	\$ 0.94	\$ 0.99	\$ 1.24	\$ 1.56	\$ 0.93	\$ 1.26

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Customer Satisfaction with Custodial Services  
 Selected Cities  
 Exhibit 5

City	State	Population	Organization of Facilities Management Function	Customer Satisfaction with Custodial Services			
				Excellent	Good	Fair	Poor
Coral Springs	FL	127,359	Decentralized	75%	25%		
Surprise	AZ	109,482	Combination	48%	44%	6%	2%
Olathe	KS	126,162	Decentralized	41%	43%	12%	4%

All Cities Over 100,000			
Mean	34%	44%	7%
Median	30%	44%	4%

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Repair Expenditures per Square Foot  
 Selected Cities  
 Exhibit 6

Repair Expenditures per Square Foot

City	State	Population	Organization of Facilities Management Function	Administrative/ Office facilities			All Facilities		
				In-house	Contractual	Total	In-house	Contractual	Total
Rockford	IL	152,871	Centralized		\$ 0.20	\$ 0.20			
Elk Grove	CA	143,885	Centralized		\$ 0.62	\$ 0.62		\$ 0.50	
Surprise	AZ	109,482	Combination	\$ 0.45	\$ 0.15		\$ 0.60	\$ 0.15	\$ 0.78
Peoria	AZ	160,254	Combination			\$ 3.30			\$ 2.80
Olathe	KS	126,162	Decentralized	\$ 1.40	\$ 0.50		\$ 0.78	\$ 0.32	
Germantown	TN	41,011	Centralized		\$ 0.65				

All Cities Over 100,000						
Mean	\$ 1.05	\$ 0.45	\$ 1.24	\$ 1.08	\$ 0.37	\$ 1.74
Median	\$ 1.22	\$ 0.29	\$ 1.00	\$ 0.91	\$ 0.28	\$ 1.50

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Repair Requests per 100,000 Square Feet Maintained  
 Selected Cities  
 Exhibit 7

Repair Requests per 100,000 Square Feet  
 Maintained

	Emergency	Non-emergency	Non-emergency Response Time (in days)
All Cities Over 100,000			
Mean	54	500	28
Median	12.5	292	4

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Custodial Expenditures per Square Foot - Facility Type  
 Selected Cities  
 Exhibit 8

Custodial Expenditures per Square Foot (Estimated)

	Administrative/ Office facilities			Library			Recreation / Community Center			All Facilities		
	In-house	Contractual	Total	In-house	Contractual	Total	In-house	Contractual	Total	In-house	Contractual	Total
All Cities Over 100,000												
Mean	\$ 1.26	\$ 0.91	\$ 1.30	\$ 0.37	\$ 0.93	\$ 1.20	\$ 0.94	\$ 1.10	\$ 1.75	\$ 1.62	\$ 0.95	\$ 1.46
Median	\$ 1.34	\$ 0.86	\$ 1.24	\$ 0.31	\$ 1.06	\$ 1.20	\$ 0.94	\$ 0.99	\$ 1.24	\$ 1.56	\$ 0.93	\$ 1.26

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Facilities Management Characteristics  
 Cities Maintaining 1 - 1.5 M SF  
 Exhibit 9

City	State	Population	Organization of Facilities Management Function	Total facilities management FTEs (custodial and repair)	Number of facilities operated and maintained	Total operating and maintenance expenditures for all maintained facilities	Total capital maintenance expenditures for all existing facilities
Arlington	TX	380,072	Combination	22.3	110		\$ 1,977,032
Plano	TX	264,560	Combination		76	\$ 6,809,237	\$ 1,627,307
Tacoma	WA	215,058	Decentralized	50.2	50	\$ 7,366,422	\$ 850,950
Lexington	MA	29,959	Centralized		22	\$ 9,670,963	\$ 3,059,533

ICMA Center for Performance Measurement  
 FY 2010 Facilities Management  
 Square feet of Facilities Operated and Maintained  
 Selected Cities  
 Exhibit 10

City	State	Population	Organization of Facilities Management Function	Total Square Feet of Facilities Operated and Maintained									
				Administrative / Office	Warehouse / Industrial	24-hour dorm	Health care	Animal Care	Library	Recreation / Community Center	Detention	All other	Total
Arlington	TX	380,072	Combination	571,106	148,185	112,633		19,950	121,956	205,029	19,950	278,852	1,475,661
Plano	TX	264,560	Combination	322,602	214,918	127,938		23,624	221,731	449,202	61,681	17,863	1,439,559
Tacoma	WA	215,058	Decentralized	385,329	210,822	102,370			164,635	301,130		247,410	1,411,692
Lexington	MA	29,959	Centralized	79,600		17,240			62,500	9,236		1,130,000	1,298,576