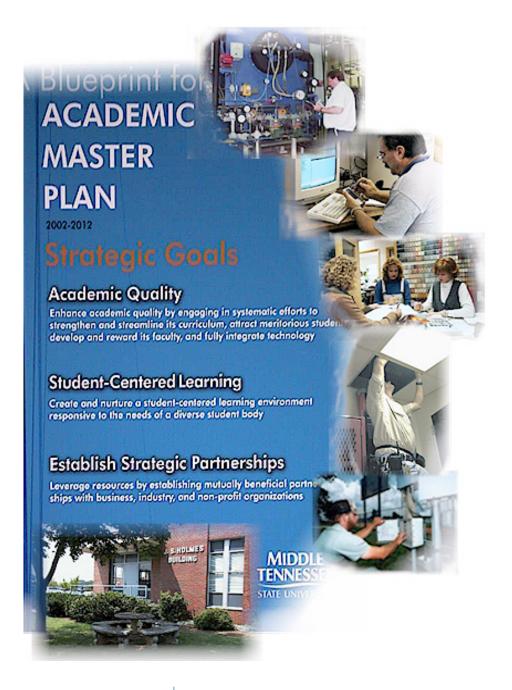
# SUMMARY OF SERVICES FSD









March 2004

### FACILITIES SERVICES DEPARTMENT

Middle Tennessee State University | PO Box 32 Murfreesboro, Tennessee 37132 Phone 615-898-2414 | Fax 615-898-5071 www.mtsu.edu/~facserv

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The mission of Facilities Services is to prepare and present the facilities/grounds to the university tenants and the public in a safe, clean, and functional condition while managing the resources and assets in accordance with applicable requirements, procedures, and constraints.

A Tennessee Board of Regents University, MTSU is an equal opportunity, non-racially identifiable, educational institution that does not discriminate against individuals with disabilities.

Facilities Services is a department reporting to the vice president of the Division of Business and Finance.

#### **DIRECTOR'S SUMMARY**

DAVID GRAY

The Facilities Services Department (FSD) is committed to accomplishing its mission for the MTSU community. We believe that facilities need to be safe, clean, and functional to support the educational mission of the university. We strive to provide these important services as effectively and efficiently as



possible. To that end, we are proud of many accomplishments that have been achieved in recent years in the areas of facilities and grounds. New buildings, updated utilities infrastructure, modernization projects, and improved customer communications through on-line services are a few areas where real progress can been seen.

Many of these accomplishments have come in the face of serious challenges and constraints that remain today. Increasing campus population and footprint, aging facilities, inadequate capital maintenance funding, and reduced operating budgets all contribute

to a condition of increasing needs and decreasing resources. For this reason, FSD continually pursues efficiency improvements and innovation in each area of responsibility to meet our mission.

"...facilities need to be safe, clean, and functional to sup - port the educational mission of the university."

Many of our goals for 2003-2004 reflect our commitment to our mission and to continuous improvement by focusing on areas such as:

- Employee productivity (management, training, scheduling, etc)
- Customer service and communication
- Inter-departmental coordination
- Service providers, contractors and vendors
- Capital funding

The Summary of Services Report provides information related to routine work, highlights recent accomplishments, and outlines some near-term goals for each work unit in FSD. In documenting and presenting these items, we hope to be more open and accountable for our service to the university.



David Gray

#### 4

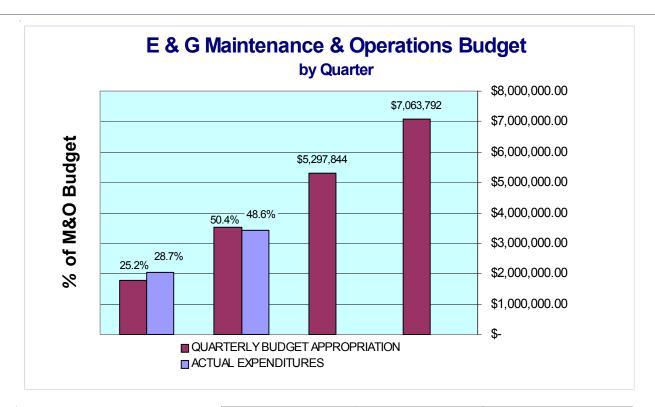
# CENTRAL ADMINISTRATION ACCOUNTING INFORMATION SERVICES

JOE WHITEFIELD, LA'KEITH MILLER

#### Mid-Year Accomplishments/Highlights

- Updated billing procedures
- Updated Murphy Center custodial services accounting procedures
- Served on THEC Subcommittee for M&O and Utilities Funding Formula

- Evaluate and prioritize projects and initiatives to meet available resources
- Established energy savings accounting procedures for energy projects
- Employee training



	1st Quarter	2nd Quarter	YTD Totals
Total M&O Expenditures	\$2,870,100	\$2,423,594	\$5,293,694
Accounts Pay/Rec	\$145,000	\$145,000	\$145,000
Work for Others	(\$987,159)	(\$1,018,348)	(\$2,005,507)
Net E&G Expenditures	\$2,027,941	\$1,550,246	\$3,433,187
E&G Budget	* \$7,063,792	* \$7,063,792	* \$7,063,792
% of Budget	28.71%	21.95%	48.60%

<sup>\*</sup> Note: \$401,600 appropriated for Property Insurance not included in Total Budget

### CENTRAL ADMINISTRATION CENTER FOR ENERGY EFFICIENCY

JOE WHITEFIELD, LINDA HARDYMON

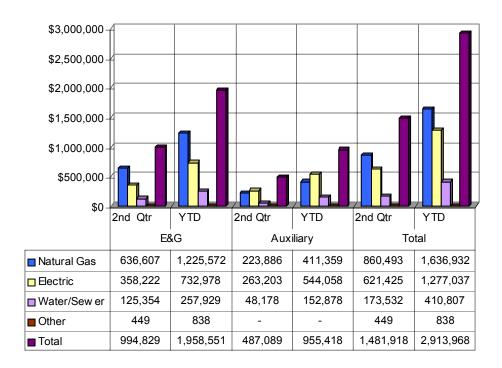
#### Mid-Year Accomplishments/Highlights

- Implemented Delivery Order #1 for MTSU Energy Savings Performance Contract (ESPC)
- Obtained State Building Commission approval for Delivery Order #2 for MTSU ESPC
- Updated electrical cost allocation for non-E&G customers
- Served on Research Council for APPA
- Participated with MTSU/TVA Partnership
- · Assisted TBR with Facilities Survey

#### **End-of-Year Goals**

- Complete ESPC Delivery Order #1
- Implement ESPC Delivery Order #2
- Support MTSU Engineering Technology and Industrial Studies classes related to energy and the environment
- Provide opportunities for professional development and relevant technical training to energy professionals and to each FSD employee

### Campus Utilities 2003-2004



Energ	y Savings Performance Co	ontract Pro	ject Status
Delivery Order	Scope	Investment	Status
#1	Lighting improvements - 23 buildings Steam/controls - 1 building Central Plant - chiller optimization	\$106M	Construction phase
#2	BDA - mechanical work Generator sets	\$6.6M	Pre-construction phase

### CENTRAL ADMINISTRATION WORK ORDER SERVICES

JOE WHITEFIELD, JOYCE REED

#### Mid-Year Accomplishments/Highlights

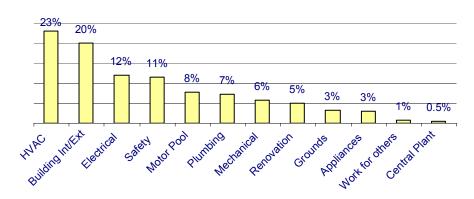
- Established new procedures for tracking and posting invoices, with emphasis on contract work
- Upgraded computer operating systems and office productivity software; staff trained on new systems
- Added Tennessee Miller Coliseum maintenance activity to work order system.
- Conducted daily production meetings with Engineering & Building Services, directed reports to enhance communication and work order process

#### **End-of Year Goals**

- Train FSD managers/supervisors to access and utilize work order data.
- Design easily customizable reports to be accessed and updated by department personnel.
- Continue efforts to upgrade older computers, server, and operating systems to meet minimum campus standards; install new version of work order software on server and all client computers.

	Work Orde	rs Originate	ed		
	2nd G	)uarter	Y	ΓD	
Description	#WO % of Total		#WO	% of Total	
Appliances	99	2.85%	232	3.02%	
Building Interior/Exterior	705	20.28%	1,543	20.08%	
Central Plant	15	.43%	30	0.39%	
Electrical	447	12.86%	923	12.01%	
Grounds	103	2.96%	250	3.25%	
HVAC	705	20.28%	1,776	23.11%	
Mechanical	224	6.44%	450	5.85%	
Motor Pool	300	8.63%	599	7.79%	
Plumbing	248	7.13%	565	7.35%	
Renovation	170	4.89%	383	4.98%	
Work for Others	26	0.75%	60	0.78%	
Safety	434	12.51%	875	11.38%	
Total	3,468	100.00%	7,786	100.00%	

Work Orders Originated By Description YTD



# CENTRAL ADMINISTRATION EMPLOYEE DEVELOPMENT SERVICES

JOE WHITEFIELD, CONNIE HAGBERG

#### Mid-Year Accomplishments/Highlights

- · Facilitated educational training sessions for FSD Central Administration
- · Reviewed internet-based employee safety training programs for Engineering and Building Services and Safety Officer
- Customized FSD employee evaluation process
- Performed various M&O productivity and cost studies for FSD
- Attended APPA/NACUBO Educational Leadership Forum, International Conference on Cultural Diversity, and the MTSU College of Business "Leadership Essentials: Improving Your Leadership Potential"
- Assisted with production and editing of the FSD Summary of Services Mid-Year Report

- Organize and coordinate work unit training pursuant to requests of managers or supervisors
- Follow-up on internet-based employee safety-training program
- Further review and analysis regarding productivity and cost studies
- Attend educational programs and seminars

	FS	D Staff T	raining	Records	•		
		Leader D	ship/Profe	ssional nt	Technical Training		
Dy Training Type	Employees	Fundamen	Total Hours			Total Hours	
By Training Type	(Full-Time)	Employees	In-House	Conference	Employees	In-House	Conference
Central Administration							
Director's Office	3	2		24			
Accounting Info Svcs	2	2	4	5			
Center for Energy Effic	3	3	8	17	2		23
Work Orders	3	3	12				
Employee Development	1	1	6	28.5			
Engineering & Building Svcs	25	2			2		80
Energy Services	21	1	3				
Construction Administration	4	1		30			
Construction/Renovation	4	0					
Grounds/Motor Pool Svcs	16	0					
Custodial Services	41	0					

By Hours per Employee (Full-Time)	Employees	0 Hours	1-10 Hours	11-20 Hours	>20 Hours
Central Administration					
Director's Office	3	1	1	1	
Accounting Information Services	2		2		
Center for Energy Efficiency	3		1	1	1
Work Orders	3		3		
Employee Development	1				1
Engineering & Building Services	25	23			2
Energy Services	21	20	1		
Construction Administration	4	3			1
Construction/Renovation	4	4			
Grounds/Motor Pool Services	16	16			
Custodial Services	41	41			

# **ENERGY** SERVICES CENTRAL PLANT AND HVAC

REGGIE FLOYD

### Mid-Year Accomplishments/Highlights—Central Plant

- Responded to 202 callbacks
- · Assisted in contract re-bids for turbine maintenance and natural gas
- Moved into another phase of campus underground steam line replacement project
- Employee of the Year Award from the Division of Business and Finance presented to Ken Buggs (2003)
- No unplanned steam plant outages
- No unplanned chilled water plant outages

#### End-of-Year Goals—Central Plant

- · Minimize unplanned outages
- Ezell chilled water line
- Keep E & G energy costs under \$1.78/SF
- Review zone maintenance and multiple shifts
- Employee training

	Ce	entral P	lant Equipme	nt Peak	Operatio	nal Levels	8	
	ral Gas f ne/Gene		Stear	n Boilers		C	Chillers	
5N	1W (nomin	al)	85,000 Pou	nds/Hour (p	oeak)	6,000	Tons (pea	ak)
	2nd Qtr	YTD		2nd Qtr	YTD		2nd Qtr	YTD
0.44	_	_	Ave Daily #/hr	30,885	23,960	Dealetere	0.404	4.047
Output	5	5	Peak #/hr	45,000	46,000	Peak tons	3,194	4,847

### Mid-Year Accomplishments/Highlights—HVAC

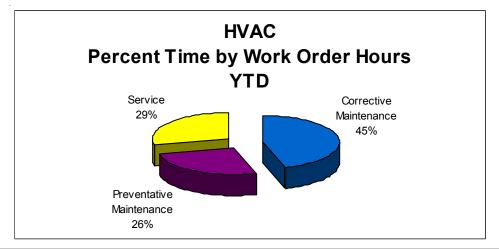
- Responded to 80 callbacks
- Assisted in completing Facilities Survey for TBR

#### End-of-Year Goals—HVAC

- Support Wellness Center Addition
- Begin coil replacement project
- Complete Saunders Fine Arts chilled water study
- Control project for James Union Building
- Complete productivity study on zone maintenance, shift work, etc.
- Investigate percentage of work orders closed past due reported in performance measures
- Employee training

**ENERGY** SERVICES, CONTINUED CENTRAL PLANT AND HVAC

REGGIE FLOYD



Corrective Maintenance (CM) Work Order Performance Measures												
Description	#WO Completed		WO Completed Man Hours Avg MH/WO % Closed Past Du									
Description	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD				
Appliances	48	120	201.5	483.0	4.19	2.39	22.92%	19.17%				
HVAC	241	592	1,110.8	2,646.6	4.61	4.47	26.97%	25.17%				
Mechanical	36	61	364	812	10.11	13.31	22.22%	21.82%				
Total	325	773	1,676.3	3,941.6	5.16	5.10	25.85%	23.42%				

Preventative Maintenance (PM) Work Order Performance Measures										
Description	#WO Completed		#WO Completed Man Hours Avg MH/WO % Closed Past D							
Description	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD		
Central Plant	6	11	165	3,56.5	27.5	32.4	0.00%	9.09%		
HVAC	223	473	662.5	1,529	3	3.2	20.63%	16.07%		
Mechanical	216	354	525	901	2.4	2.5	4.63%	2.82%		
Total	445	838	1,352.5	2,786.5	4.47	4.28	12.58%	10.38%		

Service Work Order Performance Measures										
Description	#WO Completed Man Hours Avg MH/WO % Closed Past									
Description	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD		
Appliances	11	37	39.0	102.0	3.5	2.8	27.27%	35.14%		
Central Plant	9	8	3,075.5	6,838.3	341.7	346.6	44.44%	33.33%		
HVAC	204	610	716.5	1,666.6	3.5	2.7	24.02%	21.64%		
Mechanical	169	331	1,173.5	2,475.8	6.9	7.5	1.78%	1.81%		
Total	393	986	5,004.5	11,083.7	4.5	4.3	15.01%	15.76%		

### ENGINEERING AND BUILDING SERVICES AND ENVIRONMENTAL HEALTH AND SAFETY

GERALD CAUDILL

#### Mid-Year Accomplishments/Highlights

- Improved condition of exterior lights on campus
- Initiated use of PDA's in order to move toward a paperless work order system
- Re-built LRC 221 lecture hall seating and desks
- Keyed Horse Science and Miller Coliseum
- Implemented electronic access control in Cope Administration Building, Athletic Enhancement, Dyslexia Center and Telecommunications Building
- Completed Fairview Building renovation
- Completed renovation of multiple offices in Ezell
- Supported academics in removal of hazardous waste from MTSU facilities

- Hosted three inspections by Tennessee Division of Risk Management and insurance carrier loss control personnel
- Various staff attended the TOSHA Congress for E, H & S training and began the series of maintenance management certification courses at the University of Alabama
- Coordinated generation of PMs with motor pool to improve completion rates
- Assisted in TBR Facilities Survey

#### **End-of-Year Goals**

- Complete review of Central Plant switchgear project
- Review of services to auxiliaries on campus
- Review of zone maintenance and multiple shifts
- Review issue of personnel replacement/ outsourcing
- Investigate percentage of work orders closed past due reported in performance measures
- Employee training

Correc	tive Main	tenanc	e (CM) V	ork Ord	er Perfo	rmance	e Measure	s
Description	#WO Completed		Man Hours		Avg MH/WO		% Closed Past Due	
Description	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD
Appliances	25	54	81.5	113.0	3.26	2.09	12.00%	7.41%
Building Interior/ Exterior	362	820	862	2,477.3	2.4	3.0	19.67%	8.29%
Electrical	329	672	802.7	1,539	2.4	2.3	7.29%	6.25%
Plumbing	218	498	517.2	1,035	2.4	2.1	5.50%	4.42%
Safety	14	33	51	102	3.6	3.1	0.00%	3.03%
Total	946	2077	2315	5266	2.4	2.5	7.49%	6.40%

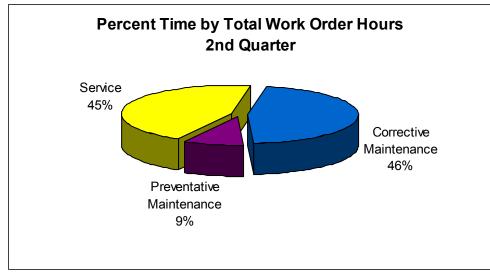
YTD 76	Man H 2nd Qtr	ours YTD	Avg Mi 2nd Qtr	H/WO YTD	% Closed	Past Due
		YTD	2nd Qtr	YTD	2nd Qtr	YTD
76						
70	50.5	92.0	1.4	1.2	2.70%	18.42%
58	8.3	16.5	0.2	0.3	62.86%	56.90%
779	253	534.5	0.7	0.7	0.26%	0.13%
926	453	918	1.3	1.4	5.15%	5.18%
		779 253	779 253 534.5	779 253 534.5 0.7	779 253 534.5 0.7 0.7	779 253 534.5 0.7 0.7 0.26%

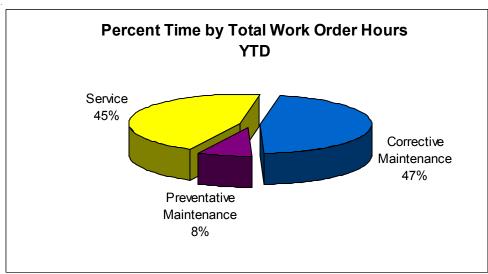
\* Generator PMs performed by Motor Pool

# Engineering and Building Services and Environmental Health and Safety, continued

GERALD CAUDILL

Service Work Order Performance Measures								
Description	#WO Completed		Man Hours		Avg MH/WO		% Closed Past Due	
Description	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD
Appliances	7	28	3.50	38.0	0.5	1.4	28.57%	7.14%
Building Interior/ Exterior	235	525	860.7	2,118.8	3.7	4.0	15.74%	15.05%
Electrical	81	152	246.5	463.6	3.0	3.0	23.46%	19.74%
Plumbing	22	52	19.2	71.5	0.9	1.4	18.18%	9.62%
Renovation	160	357	1,054.5	2,340.7	6.6	6.6	15.63%	16.25%
Safety	24	51	47.7	78.2	2.0	1.5	12.5%	7.84%
Total	529	1,165	2,232.1	5,110.7	4.4	4.4	16.64%	15.11%





## CONSTRUCTION ADMINISTRATION AND CONSTRUCTION/RENOVATION SERVICES

JAY WALLACE

#### Mid-Year Accomplishments/Highlights

- Designed a web-based sign-off procedure and published construction schedules to assist customers in understanding the process which will hold project managers and vendors accountable
- Completed capital projects: Wood-Stegall Center, steam line project Phase IV, Rutherford Blvd. parking lot (980 spaces), and Founder's Lane parking lot (187 spaces)
- Construction Administration published periodic construction updates in "The Record" with several articles highlighting Construction/Renovation personnel
- Various staff participated in the APPA Institute for Facilities Management conference in California, NEOCON session in Atlanta, IIDA LEED and Design seminars, a regional SCUP convention, the AIA Tennessee convention, and an MTSU Leadership session

- Enhance customer understanding and satisfaction through increased communication relative to construction scheduling and periodic financial reporting
- Educate customer base through periodic informative articles in various University publications and publication of architectural design milestones
- Schedule sufficient time for final bid document review prior to release
- Provide environment that encourages staff growth and promotion
- Educate and encourage campus community to submit projects early
- · Participate in construction partnerships using private donations to help complete planned growth of MTSU

Construction Administration Capital Project Summary							
	1st Qua	rter Totals	2nd Qu	arter Totals	Mid-Year Totals		
	# Projects	\$ Projects Value	# Projects	\$ Projects Value	# Projects	\$ Projects Value	
Beginning Active Projects	10	\$17,434,650	9	\$16,972,324	10	\$17,434,650	
Added Projects	1	\$197,674	2	\$1,642,259	3	\$1,839,933	
Completed Projects	2	\$660,000	2	\$1,284,410	4	\$1,944,410	
Ending Active Projects	9	\$16,972,324	9	\$17,330,173	9	\$17,330,173	

Construction/Renovation Project Summary							
	1st Qua	rter Totals	2nd Qu	arter Totals	Mid-Year Totals		
	# Projects	\$ Projects Value	# Projects	\$ Projects Value	# Projects	\$ Projects Value	
Beginning Active Projects	30	\$1,031,479	32	\$603,314	39	\$1,031,479	
Added Projects	15	\$246,145	5	\$22,684	20	\$268,829	
Completed Projects	22	\$674,310	22	\$347,915	44	\$1,022,225	
Ending Active Projects	32	\$603,314	15	\$278,083	15	\$278,083	

### GROUNDS / MOTOR POOL SERVICES

JAMES LUTER

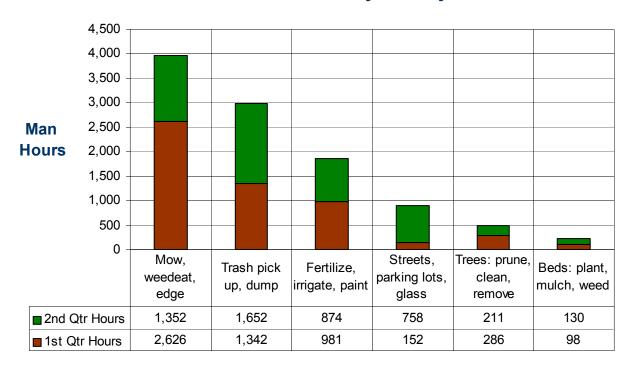
#### Mid-Year Accomplishments/Highlights

- Provided support for ROTC to land helicopter in KUC courtyard
- Purchase sanitation truck
- Support recycle/reuse resources on campus (roof rocks and soil)
- · Landscaped James Union Building
- Prepared rainfall/temperature records
- Planted dedication trees on campus
- Purchased two new Micro Buses for Motor Pool
- Major effort to collect and close-out old paperwork

#### **End-of-Year Goals**

- Continue 25-year tree planting plan
- Landscape Ezell
- Support campus special events
- Review department work loads
- Continue campus renovation support
- Continue to improve paperwork for Motor Pool
- Reorganization of preventive maintenance for campus vehicles
- Training program for department employees
- Better coordination of PMs on generators

# **Grounds Services Allocation of Labor by Activity**



### 14 MTSU Facilities Services Department—Summary of Services

# GROUNDS / MOTOR POOL SERVICES, CONTINUED

James Luter

	Grounds Work Order Performance Measures							
	# WO Completed		Man Hours		Avg MH/WO		% Closed Past Due	
	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD
Maintenance	15	31	85	122	3.5	3.9	13.33%	6.45%
Preventative (PM)	10	10	34	34	3.4	3.4	10.00%	10.00%
Corrective (CM)	7	23	19	89	2.7	3.9	14.29%	4.35%
Service	86	210	1,075	2,139	12.5	10.2	18.60%	14.76%
Total	101	241	1,127	2281	11.2	9.4	17.82%	13.69%

Motor Pool Work Order Performance Measures								
	# WO Completed		Man Hours		Avg MH/WO		% Closed Past Due	
	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD	2nd Qtr	YTD
Maintenance	96	197	215	627	2.2	3.2	32.29%	39.09%
Preventative (PM)	77	154	147	311	1.9	2.0	33.77%	43.51%
Corrective (CM)	19	43	68	312	3.6	7.3	26.32%	23.26%
Service	169	331	1,174	2,477	6.9	7.5	12.43%	10.27%
Total	265	528	1,389	3,104	5.2	5.9	19.62%	21.02%



#### **CUSTODIAL** SERVICES

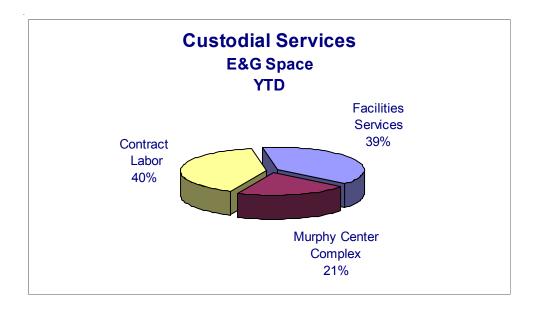
DAVID FEAGANS, JOHN KNOX, JOHN BOURGEOIS

#### Mid-Year Accomplishments/Highlights

- Improved utilization of personnel on trash pick-up
- · Initiated equipment inventory tracking procedures
- Provided custodial services for new facilities: Tennessee Miller Coliseum, Horse Science Center, Paul W. Martin, Sr. Honors Building, Wood-Stegall Center, Fairview Building, and the new office for Parking and Transportation Services
- Supported special events

- Revisit standard operating sheets for cleaning
- Bring Todd Building on-line
- Clean to an established level at a reduced rate
- Continue improvement in productivity
- Ongoing support of campus events
- Review contractor performance

YTD Gross Square Footage E&G Space					
Facilities Services	1,046,893				
Murphy Center Complex	575,142				
Contract Labor	1,093,248				
Total	2,715,283				



### MTSU Facilities Services Department—Summary of Services



### Summary of Services Mid-Year Report

This report is produced by the FSD director and staff and published by FSD Central Administration.
Linda Hardymon, Publishing Coordinator



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