FM Strategic Planning

VAPPA Conference March 2016

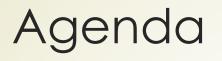
Kathy Powers, P.E., CFM

Facility Management Engineer, GMU



Kathy Powers, P.E., CFM Facility Management Engineer George Mason University 703-993-6131 kpowers6@gmu.edu

- MS and BS in Civil Engineering
- Past U.S. Navy Civil Engineer Corps Officer
- Past warranted Department of Defense Contracting Officer, and Acquisition Professional



- . Mission Statement
- 2. Vision Statement
- 3. Value Statement
- 4. Develop Goals
- 5. Develop Metrics
- 6. Develop Strategic Plan
- 7. Advertise the Plan



1. Mission Statement



Mission Statements

Mission statements define the organization's purpose and primary objectives. These statements are set in the present tense, and they explain why you exist as a business, both to members of the organization and to people outside it. Mission statements tend to be short, clear and powerful.

The Facilities Department of George Mason University exists to deliver the quality physical environment necessary to support the mission of the university.

Professionally maintain and operate state of the art facilities to provide a safe, comfortable, energy conscious, and aesthetically pleasing learning, teaching, and working environment in an economical and environmentally friendly manner that supports the Mason vision.

Sample Mission Statements

- The Smithsonian: The Office of Facilities Engineering and Operations provides world-class services and stewardship by building, operating, maintaining and ensuring a safe, secure, healthy environment that enhances the Smithsonian experience.
- American University: Facilities Management's mission is to effectively operate and maintain a safe, functional, clean, and attractive living and learning environment at American University.
- VCU: Our mission is to enable the university to carry out its mission of teaching, research and public service by providing cost effective and efficient planning, design, construction and maintenance services throughout Virginia Commonwealth University.
- Rochester: Providing reliable and cost efficient energy and building environments to our customers every day.



2. Vision Statement



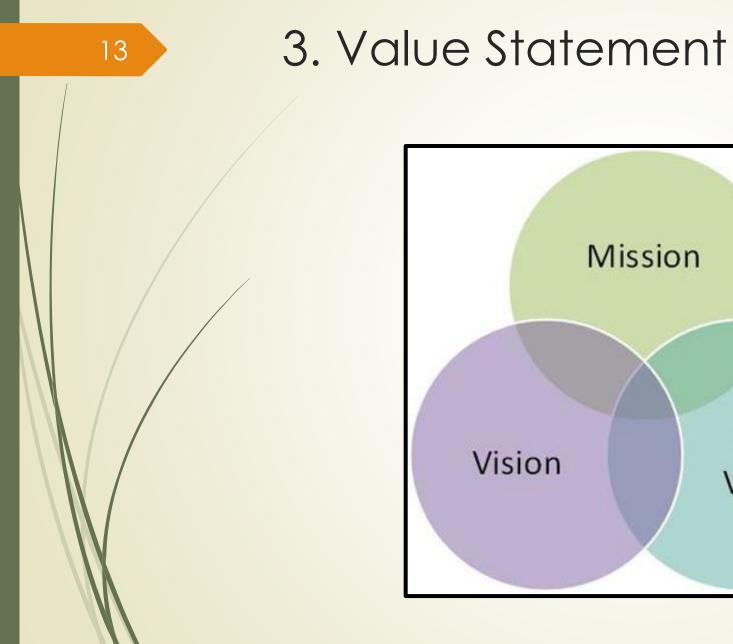
Vision Statement

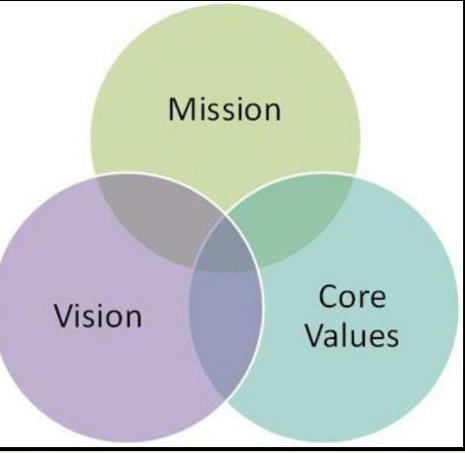
Vision statements also define your organization's purpose, but they focus on its goals and aspirations. These statements are designed to be uplifting and inspiring. They're also timeless: even if the organization changes its strategy, the vision will often stay the same.

We are a high performing facilities management team that works in collaboration striving to provide excellent service and ever-improving technical expertise to anticipate and exceed the needs of the Mason Community.

Sample FM Vision Statements

- Smithsonian: OFEO will successfully steward the national treasures that are the Smithsonian's buildings, gardens, and facilities, through the efforts of a highly professional, motivated and dedicated workforce and through collaborative partnerships with Smithsonian stakeholders.
 - VCU: To be the model of quality integrated service through excellence in planning, design, construction and craftsmanship.
 - UVA: Excellence, innovation, and leadership in our support of the education, research, health care and public service mission of the University.
- Texas State: Quality, Responsive Service: Making a Difference at Texas State. Provision of quality services that are responsive to the needs of the campus community and support creation of an Emerging Research University.
- Northwestern: As an innovative and collaborative partner, FM delivers an exceptional customer experience through superior service and stewardship. FM attracts and grows great talent within a supportive culture by offering challenging and meaningful work in a high-performing team.





Value Statements

14

Values are clear in everything you do, how you operate. Articulating values provides everyone with guiding lights, ways of choosing among competing priorities and guidelines about how people will work together. A values statement reflects the core ideology of an organization, the deeply held values that do not change over time. It answers the question, "how do we carry out our mission?" Values are what your organization lives, breathes and reflects in all its activities.

GMU FM Values

We are the foundation of the community we want to build together. We are:

- Mission Guided
- Always Reliable
- Safety Focused
- Operational Excellence
- Noble Integrity

Sample FM Values

Smithsonian:

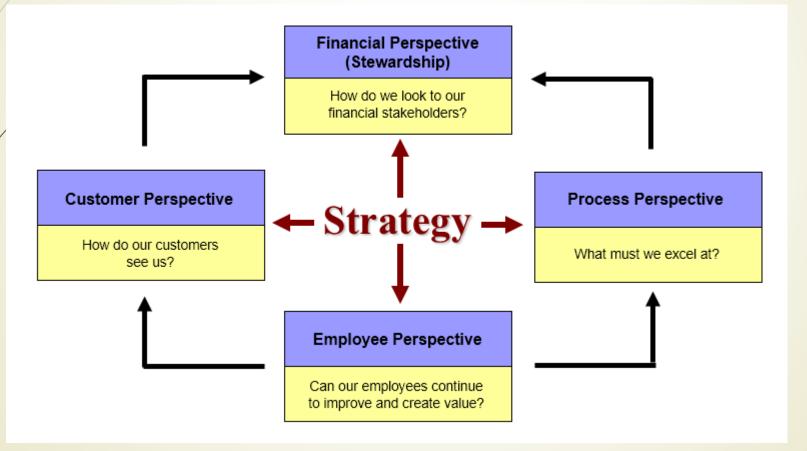
- Excellence: Developing the skills and talents of our team members to accomplish our vital work
- Leadership: Fostering an environment that rewards creativity and supports innovative ideas
- Integrity: Personally dedicated to supporting the Smithsonian's mission
- Teamwork: Succeeding together through mutual respect and support
- Effectiveness: Delivering the right service in the right place at the right time
- VA Tech: We affirm our commitment to our customers through the following five core values:
 - We are stewards of the campus environment.
 - We care for your facilities.
 - We are reliable, thorough, & professional.
 - We treat our customer with respect.
- We continuously strive to improve.
- American University:
 - Customer focused
 - Commitment to sustainability
 - Operational Excellence
- UVA:
 - Collaboration: Striving to work together and with others to accomplish the purpose and vision of the University by sharing knowledge, learning and building consensus
 - Respect: Sharing a common respect for ourselves, each other and our University community
 - Integrity: Striving for honesty and equity in all our endeavors
 - Excellence: Striving to be second to none in all that we do
 - Pride: Taking pride in the beauty of our grounds, the grandeur of our buildings and the quality of our work
 - Community: Making the University and our community a better place to study, work, heal and live



4. Develop Goals



Setting Goals: Balanced Scorecard Need to focus on 4 areas:





What needs improvement?

- 1. Holistic reliability (Hold)
- 2. Internal communication (Tad)
 - "FM / Shop Onboarding"
- 3. External facilities communication (#22)
- 4. Community communication (Hold)
 - "FM Handbook"
- 5. Purchasing process (Mike/Jimmy)
- 6. Contracting services (Kathy)
- 7. Fleet management (Scott)
- 8. Policies and procedures / Roles and responsibilities (Hold)
 - 9. Accountability (Hold)
 - 10. Recycling (Dustin)
 - 11. Grounds (Archie)
 - 12. Duplication of service providers (Frank)

- 13. PM Staffing (Quenton/Nick)
- 14. BA Staffing (Ronnie)
- 15. Technology out of date (Mike/Tad)
- 16. Supervisor Budgets/charge backs (Megan)
- 17. Training plan/matrix (Lisa/Roberta)
- 18. "Right Staffing" (Kathy)
- 19. Employee Incentives on merit (Roberta)
- 20. Project planning (Christine)
- 21. FM Services to satellite campuses (Tad/John/Mike)
- 22. MOU's #4 (Kathy)
- 23. Time clocks (Mike)
- 24. Energy (Pat)
- 25. Re-instate quarterly stewardship program (Tad)
- 26. "As-Builts" and other documents making it to archives (Ralph)
- 27. Standards of quality FM wide (Hold)

 1. What needs improvement? -PM Staffing Levels Benchmarks Industry standards 	
 What could we do to make it better? 1. Validation of School Dude Data 2. Identify equipment responsibilities 	
 What is the goal? Proper preventative maintenance of buildings How can we measure our progress? Measure PM completion Current: Goals: 	

Who should champion this initiative? Quenton

	2. What needs improvement? Quality
22	Attention to detail
What	could we do to make it better?
C	
Surve	
	anual
AI	
Wha	It is the goal?
	o increase customer satisfaction ©
How	can we measure our progress? Ask community / Internal
N -	
W	Who should champion this initiative? –Martin Myers

2	3	8. What needs improvement? Energy Working Capital Policy
	FinePrice	could we do to make it better? alize the Energy Policy pritized Energy Project List – based on ROI velop the Working Capital Fund Program
	5	at is the goal? % reduction by 2020 (based on 2015 consumption sq/ft) y can we measure our progress?
		Who should champion this initiative? Pat



5. Develop Metrics



Value of Measuring

- Transparency of operating cost at the granular level
- Facts and statistics to support decision-making processes
- Agility and speed in making decisions which can save money and improve outcomes
- Business intelligence across sectors, to compare performance, analyze the impact of investments and leverage innovations



Measure What, Why and How

26

WHAT: How do you determine what to measure, there are hundreds of facility metric? = Start with goals!

WHY: Need to determine if metrics are for internal use or external reporting (or both).

HOW: Need to establish a process for gathering, reporting and reacting to the metrics.



Measuring Can Answer

- Do you think that you could save a lot a space for your company, but just don't have a way to prove it?
- Have you thought your facility could save a lot of energy (and money) by installing lighting sensors in the rest rooms, but want some evidence?
- Do you believe your facility is spending much more on electricity than other similar facilities?
- Do you think your maintenance expenditures are considerably less than those of many other buildings and wish there were a way for you to get recognized for how well you've been managing your maintenance program?
- Do you think you could save money by outsourcing more of your operations?



Types of Metrics

- Trends: Compare last month's outcome to this month's, tracking trends
- Industry Standard: Example APPA An Facilities organization perform at a Service Level 2 should spend 75% of their time doing proactive work.
- Peers: Compare your maintenance cost/sf to other organizations like you – Example Sightlines and universities.
- Goals: Set a goal, for example 75% productivity and check if you are achieving that goal; overall for the Facilities organization and by individual groups such as shops.

Metrics / Reports

Metric Description	Std.	Metric Description	Std.
Facility Condition Index (FCI)	<0.05	Stockroom Turns / Year	2 - 3
Deferred Maintenance Backlog	Trend	Annual Training Hours	>40 hrs.
On-the-job Wrench Time	>60%	Maint. Cost / Replacement Cost	3 - 4%
PM / CM Ratio	70 / 30	Percent Return Work	<5%
Unscheduled Maintenance Downtime	<2%	Mean Time Between Failures	Trend
PM Schedule Compliance	>95%	% Failures Assessed: Root Cause	>75%
CM Schedule Compliance	>90%	Maintenance OT Percentage	5-15%
Unscheduled Man-Hours	<10%	% WO Covered by Estimates	>90%
WO Turn-Around Time	Trend	On-Site Supervisor Time	>65%
Emergency Response Time	<15 min. ²	Stockroom On-Time Delivery	>97%
Stockroom Service Level	>97%	Material / Part Performance	>98%

Maintenance Metrics

metrics and targets top 10 maintenance KPIs



31

CUSTOMER SATISFACTION

Sum of all survey rating values Number of participants of survey

Industry Goal: >95%

TOP 10 WO TROUBLE CODES

Number of work orders sorted by trouble code ranked in order of highest frequency. Trouble codes are codes that illustrates why an asset failed.

Trend

FACILITY CONDITION INDEX (FCI)

A comparative industry indicator/ benchmark used to indicate the relative physical condition of a facility. group of buildings, or entire portfolio "independent" of building type, construction type, location or cost.



(FCI) = Deferred Maintenance + Capital Renewal Current Replacement Value



WORKFORCE PRODUCTIVITY Time records of WO Workforce labor. productivity accounts



for time spent on maintenance that does not include vacation and sick leave, training, shop time, safety meetings, administrative time. required breaks, and travel time.

Industry Goal: >60%



PM SCHEDULE COMPLETION RATE

Percentage of PM tasks completed within a specified time from schedule verses the total PM tasks scheduled within that time frame.

Industry Goal: >95%



Compares the amount of preventive maintenance completed within a specific timeframe to the amount of demand maintenance completed within the same timeframe.

OFMR Goal: 80% PM to 20% DM

Maintenance Metrics

top 10 maintenance KPIs

WO COMPLETION TARGET

Identifies work orders that are past due, analyzes their aging, and shows if the overall trend is increasing or decreasing. It also helps the maintenance manager to prioritize work orders based on the age and type.

Trend

STAFF TURNOVER

Number employees that leave organization

Number employees in organization in same year

Industry Goal: <10%

UNSCHEDULED DOWNTIME Reports on the reliability of critical equipment. Requires use of work type field to identify breakdowns.

Annual Trend

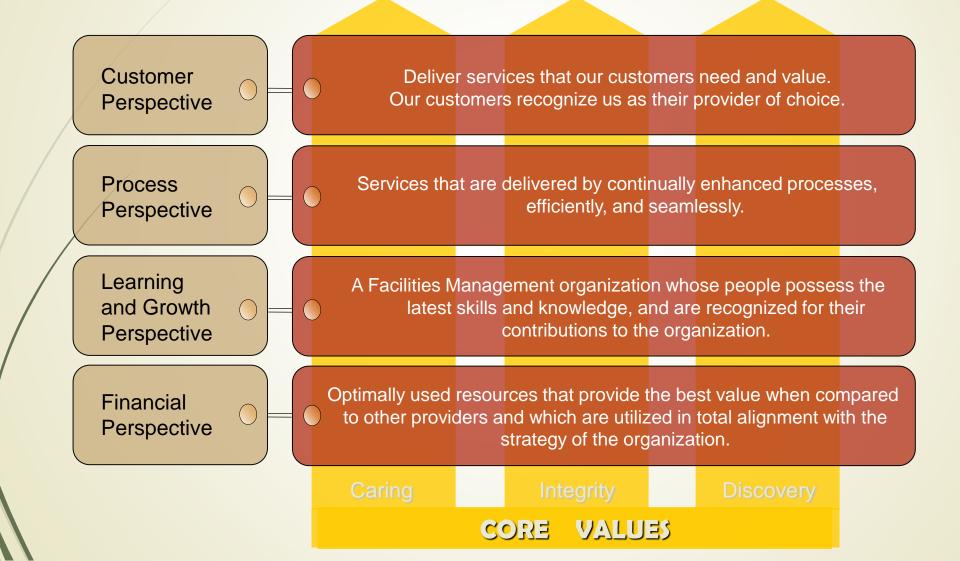
TOTAL COST OF OWNERSHIP

A dollar per square foot value associated with a facility. It is a calculation of all facilitiesspecific costs (not including furnishings or non-facility specific equipment) divided by estimated lifespan of the building and the total gross area. Building Comparison



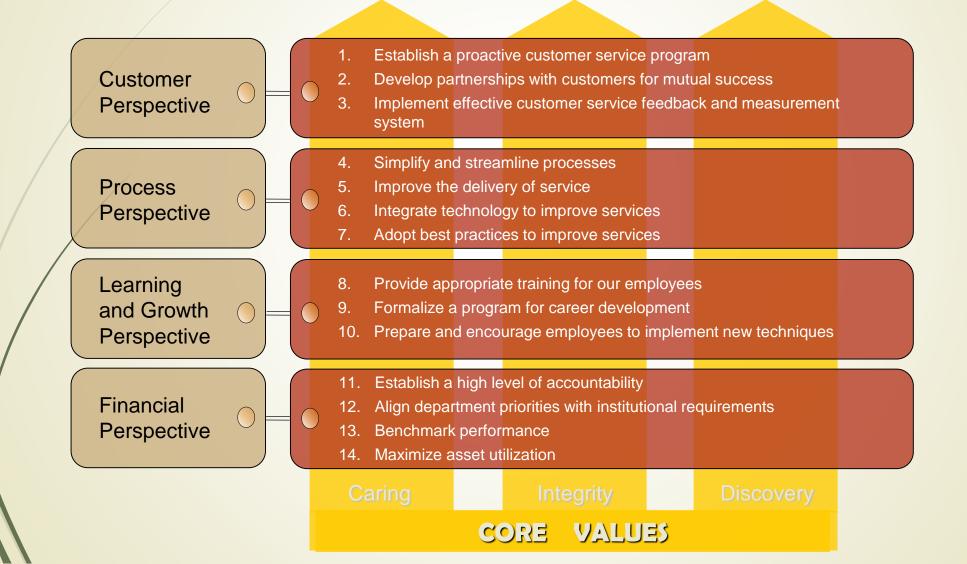
MISSION

"To provide the facilities and operational support required to fulfill the mission, vision and values of ______."



MISSION

"To provide the facilities and operational support required to fulfill the mission, vision and values of ______."



Strategic Plan Example

Non- the state is state in state in state is state in state is state in state in state is state in state is state in state in state is state in state in state is state in state is state in state in state is state in state in state is state in state i	Goals	Strategic Objectives	Metrics	Target	Strategic Initiatives	Champion(s)	Metric	Target	Action Items
Under state Processionally marketin and operate facilities. Processionally marketin and operate facilities. Description Rates (Last PM completion rates by shop clust PM completion rates by shop rate pM completion rates by shop clust PM completion rates by shop receive PM completion rates pM completion rate PM completion rates pM completion raterad pM completion rates pM completion rate PM comple	Proactive	Provide a safe			-	Kathy		2	Complete Eagle Bank and Student Services MOU.
Under state Processionally marketin and operate facilities. Processionally marketin and operate facilities. Description Rates (Last PM completion rates by shop clust PM completion rates by shop rate pM completion rates by shop clust PM completion rates by shop receive PM completion rates pM completion rate PM completion rates pM completion raterad pM completion rates pM completion rate PM comple	eptional, F omer Servi	comfortable and aesthetically pleasing learning, teaching and		>80%	Institute Customer Surveys	Kathy	-		Write sample survey
New procession of the second	Deliver Exco Custo					Bob			
Notestigned	Seamless			>95%		Quenton/Nick	actual PM completion rate		Nicole to establish a reportable metric in School
Notestigned	lanced & S	maintain and operate				Kathy	under contract	100%	Need electrical, roll-up doors, and HVAC
Notest Number of the second seco	Continually Enl Pro		Overdue Work Orders	<5%	Streamline purchasing process.	Mike/Jimmy		?	
Source Employee Incentives Bigwen / year Declaration memployee incentive Lisa/Roberta Integral Implace	cforce	team that provides ever-improving			Increase internal communications	Tad/Lisa	internal communication		emails, use of bulletin boards, regular meetings
Source Employee Incentives Bigwen / year Declaration memployee incentive Lisa/Roberta Integral Implace	eness of our Work		Productivity	>80%		Kathy & Supers			
Source Employee Incentives Bigwen / year Declaration memployee incentive Lisa/Roberta Integral Implace					Update technology	Tad/Mike/Luis		by JAN	
Source Employee Incentives Bigwen / year Declaration memployee incentive Lisa/Roberta Integral Implace	fective					Mike			Buy 5 additional clocks, track lost time
Source Employee Incentives Bigwen / year Declaration memployee incentive Lisa/Roberta Integral Implace	ase the Ef		Annual Training Hours	hrs/year	tracking training needs and hours	Lisa/Roberta	for safety	0%	
Note Partial Scale Protein Cost of Ownership (TCO) Protein Co	Incre		Employee Incentives	incentives given /		Lisa/Roberta			
	son's Resources		Total Cost of Ownership	~¢E/SE		Scott	in School Dude with maintenance	100%	Establish University Vehicle Policy
	rds of Ma		(тсо)	~,5751	Establish budgets by shop	Megan	actual		Megan and Tad developing a plan.
	ing Stewa	environmentally			Determine TCO by campus		to calculate		
	Dutstand		Energy Goals	Reduction		Frank/Pat	revolving fund	by FY16	
	d as (by 2020	action plans with users	Pat			University Energy policy
	specte		Recycling Goals (Total	10%		Dustin	Diversion Rate		
	Be Re:				Diversion Rate Increase	Dustin		35%	

Strategic Plan Customer

	<u> </u>										
	Goals	Strategic Objectives	Metrics	Target	Current	Strategic Initiatives	Champion(s)	Action Items	Status		
	Customer Service	Provide a safe, comfortable and aesthetically				Improve communications with end-users through establishing MOUs.	Kathy/Tad	Complete Eagle Bank and Student Services MOU.	Tad working on Eagle Bank. Draft Student Services written		
	Deliver Exceptional, Proactive Cus		Customer			Update FM website	Website Team	Work with Aurora on website format.	Work with supervisors on website content.		
		pleasing learning, teaching and working environment.	Satisfaction Surveys	>80%	N/A	Institute Customer Surveys	Kathy/Mike	Add survey to website (Kathy). Institute automatic work order surveys through SchoolDude (Mike).	Discuss survey options		
						Reinstitute stewardship program in UT Shop.	Jose/Bob/Steve	Calculate % complete.	UTs performing inspections		

Strategic Plan Process

Goals	Strategic Objectives	Metrics	Target	Current	Strategic Initiatives	Champion(s)	Action Items	Status
& Seamless	Profession ally	Preventive Maintenance Completion Rates	>95%	53%	Develop process for measuring actual PM completion rates by shop	Quenton/Nick	Roll-out new metric's report	New metrics set
	maintain and	PM/DM	75%	37%	Develop process for measuring PM/DM	Kathy	Roll-out new metrics' report	New metrics set
ally Enhanced Processes	operate state of the art	Overdue	<u>د ۲</u> ۹/	> 2 000	Establish FM services contracting plan	Kathy	Need electrical, roll-up doors, and HVAC	Electrical awarded, doors advertised, HVAC SOW written
Continually	facilities.		<5%	>2,000	Establish FM supply contracting plan	Kathy/ Hassan	Need to create supply contract's list	Working on list

Strategic Plan Staff

Goals	Strategic Objectives	Metrics	Target	Current	Strategic Initiatives	ategic Initiatives Champion(s) Action Items Status			
our Workforce	Objectives	Due du eti i			Increase internal communications	Tad/Lisa	New hires on-boarding process, regular internal emails, use of bulletin boards, and general calendar.	Take pictures of new hires. Working on calendar.	
of our W	High- performing FM team	Productivi ty	>80%	75%	Establish Roles & Responsibilities and right- size	Kathy & Supers	Staffing analysis complete	Waiting on new FM	
Effectiveness	that provides ever-				Update technology	Tad/Mike/ Luis	Institute usage of handhelds. Problem with phones? New computers.	Working on pilot for 12 new pads.	
Increase the Effec	improving technical expertise.	Annual Training Hours	8,000 hrs/year	?	Develop training program includes tracking training needs and hours (need software)	Lisa/Roberta	Investigate training tracking software. Set training approval process. Set training goals.	?	
Increa		Employee Incentives	# of incentives given / year	?	Establish FM employee incentive program	Lisa/Roberta	List current available incentives. Discuss with supervisors. Establish expectations.	Report incentives to Lisa for tracking.	

Strategic Plan Stewardship

	Goals	Strategic Objectives	Metrics	Target	Current	Strategic Initiatives	Champion(s)	Action Items	Status
	ug Stewards of Mason's In a fiscal sound an		Total Cost of Ownership (TCO)	<\$5/SF	?	Centralize management of Mason's Fleet	Scott	Establish University Vehicle Policy	Risk Management has lead - Legal has recommended minor changes. Tom to look into.
		In a ficcally				Establish budgets by shop	Megan	Megan and Tad developing a plan.	Almost done
V		sound and	Energy Goals	5%		Determine energy saving projects	Frank/Pat	Hire consultant	SOW written
	Outstanding S Resources	environme ntally friendly		Reduction by 2020	?	Establish energy management action plans with users	Pat	Need to establish University Energy policy	Facilities Admin has lead. Legal reviewing
	as	manner.	Recycling			Identify every stream & actual diversion	Dustin	Purchase recycling stream software.	Pilot
	Respected		Goals (Total Cost of	10% Reduction	\$1.7M	rates/pricing	Dustin	Hire consultant to study various initiatives	
			Recycling & Waste	by FY17				Composting food waste.	Pilot
	Be R	1	Management)			Diversion Rate Increase	Dustin	Institute GMU Recycling Policy	Margaret

Calculating Metrics

Α	В	с	D	E	F	G	н	I	J	к	L	М	N	ο	Р	Q	R	S	т	U
Available Shop Hours	Total Hours In School Dude	Total Additiona I Hours	Total Leave Hours	Total Hours of Shop Admin	Total Shop Training Hours	Wrench Turning Time	Productivit y (Wrench Turning Time/(Tot al Hours - Leave))	Service Calls	# of Open Work Orders	Orders (30 days		Average Time per Service Call	FIVIS	Assigned	PM Completi on Rate (PMs complete d/ assigned)	Logged this Month		PM/CM Ratio (PM hours / Total PM + Correctiv e Hours)		PM Voids
Based on the number of working days in the month. This doesn't come from SD. Includes supervisor s and wage employee s.	Hours recorded in SD in a given month.	Comp Time	Vacation, sick leave and holidays?	ADMIN	Hours	B - C - D - E - F Note: Does not include OT or comp time	G/(B-D) Note: Does not include OT or comp time	e Repairs,	All work orders	All work orders	PMs, Correctiv e Repairs, & Minor Improve ment only	hours / No. of "I" WO	PMs only	PMs only	N/O	PMs only	Correctiv e Repairs only	Q/(Q + R)	Requeste d Work Orders Classified as "Services / Stewards hip"	Orders with status change d to VOID in

Metric Reporting

Arlington 0 0 0 #DV/01 #DV/01 #DV/01 0 0 AA 0 0 0 #DV/01 0 0 #DV/01 #DV/01 #DV/01 0 0 AA 0 0 0 0 0 0 #DV/01 #DV/01 #DV/01 #DV/01 0 0 Carpenter 1344 445.5 947.5 60% 70 300 154 1.41 126.09% 4.19% 0 0 0 CHCP 2744 116.5 2833.17 95% 173 115 14 12.19 72.58% 91.76% 0 16 Electric 2048 42.75 1498.2 85% 111 180 79 6.34 51.43% 20.24% 0 2 Fire Alarm 1016 0 707.5 81% 133 179 44 2.21 80.43% 45.75% 0 0 18	Training Hours
Carpenter1344445.5947.560%703001541.41126.09%4.19%00CHCP2744116.52833.1795%1731151412.1972.58%91.76%016Electric204842.751498.285%111180796.3451.43%20.24%02Fire Alarm10160707.581%133179442.2180.43%45.75%00Grounds2088305.5125772%23323325.5830.36%47.31%018	0
CHCP2744116.52833.1795%1731151412.1972.58%91.76%016Electric204842.751498.285%111180796.3451.43%20.24%02Fire Alarm10160707.581%133179442.2180.43%45.75%00Grounds2088305.5125772%23323325.5830.36%47.31%018	0
Electric 2048 42.75 1498.2 85% 111 180 79 6.34 51.43% 20.24% 0 2 Fire Alarm 1016 0 707.5 81% 133 179 44 2.21 80.43% 45.75% 0 0 Grounds 2088 305.5 1257 72% 23 32 33 25.58 30.36% 47.31% 0 18	30
Fire Alarm 1016 0 707.5 81% 133 179 44 2.21 80.43% 45.75% 0 0 Grounds 2088 305.5 1257 72% 23 32 33 25.58 30.36% 47.31% 0 18	12.5
Grounds 2088 305.5 1257 72% 23 32 33 25.58 30.36% 47.31% 0 18	15
	0
HVAC 2192 177.75 923.75 72% 175 236 147 4.46 67.57% 36.70% 0 1	5
	35
Paint 1848 925.7 1479.7 58% 0 131 60 #DIV/0! 0.00% 0.00% 0 0	0
Plumbing 1440 165.5 842.25 83% 150 321 182 2.21 48.94% 29.78% 0 26	0
PM 2432 425 1860.75 75% 396 1569 1135 4.19 39.26% 94.82% 0 395	0
PWC 1936.5 374.25 1621.25 79% 232 259 64 3.32 48.18% 45.86% 0 O	0
Recycling 0 0 #DIV/0! #DIV/0! #DIV/0! 0 0	0
Sign 504 85.5 323.25 79% 37 36 5 3.17 0.00% 11.86% 0 0	0
UT 2216 617.75 1212.25 57% 126 308 92 5.35 75.00% 16.17% 0 6	0
Average 75% 244.4 134 53% 37%	
Provided By Shops	
Calculated And And And And And And And And And An	
Directly from School Dude	
Gathered Outside of School Dude (Banner)	



7. Advertise The Plan



Why Worry About Public Relations?

FMs are at best seen as quiet fulfillers of organizational needs, at worst as expensive noncontributors to corporate revenues and goals.

44

It is not enough to do a good job, your customers and bosses need to know it too.

The FM needs to increase service awareness, knowledge while decreasing resistance to Facility policies & procedures.



Set Realistic PR Objectives

Increase awareness of facility services.

Decrease resistance to Facility policies.

Improve the image of Facilities as a service provider.
 Enhance customer's knowledge about facility services.

Disclose facility metrics.



How to Spread the Word

46

- > Website
- Report Metrics
- Annual Facilities Report
- Advertise Facilities Mission/Vision/Values/Goals:

Truck signs

- Signature blocks
- Business cards
- Posters (for shops)
- T-shirts
- Hats



Kathy Powers, P.E., CFM Facility Management Engineer George Mason University 703-993-6131 Facilities Management (<u>http://facilities.gmu.edu</u>)

We are Your Facilities Management Team Dedicated Professionals Providing World-Class Facilities Delivering Exceptional Customer Service





Questions?



Never tick off a guy that owns a backhoe!