



AE Initiative Business Case – MRO Supplies

The purpose of the business case is to articulate the rationale for pursuing a particular course of action and to encourage consideration of the requirements and resources involved. The document should be completed with input from representatives of all affected functional areas. The business case establishes the groundwork for the activities that would occur in Phase 3, but does not replace detailed implementation planning.

Initiative Sponsorship and Ownership

Project Name:	Strategic Purchasing - Maintenance, Repair, and Operations (MRO)
Project Summary:	<p>The objective of this project is to build out the MRO supplies area within the strategic purchasing opportunities identified in Phase I of the Administrative Excellence (AE) initiative.</p> <p>The goal of this project is to maximize institution-wide savings through implementation of strategies to consolidate vendors, leverage university scale, and substitute purchases for commoditized options when possible, without sacrificing service levels.</p>
Business Unit(s):	Areas serviced by Wisconsin Union, University Housing, Facilities, Planning & Management (FP&M), UW Athletics, and University Health Services (UHS)
Business Process Owner(s):	Areas serviced by Wisconsin Union, University Housing, FP&M, UW Athletics, and UHS
Preliminary Cost Estimate:	\$170K - Supported by separate financial model document
Preliminary Savings Estimate:	~\$980 K over 5-years – Supported by separate financial model document
Proposed Go-Live Date:	~1 year– Based on <i>Proposed Milestones & Timing</i> Section

Business Need or Opportunity

Project initiatives should be driven by business needs. Provide a statement of the business need or opportunity addressed by the project. What are the needs that drive the proposed solution, both current and future? Who is the target customer/population?

The University of Wisconsin–Madison (UW-Madison or the University) currently has varying policies and procedures relating to the procurement and use of MRO supplies. The University could be more efficient through the standardization of items, implementation of “green” policies and expectations, and improved cross-campus communication. The team’s recommendations include opportunities for product standardization, sustainability initiatives, and improved communication across campus.

Proposed Solution Description

Scope

Due to the size, complexity, and volume variance of MRO supplies on campus, the team focused its analysis on more discreet categories (representing approximately 25% of estimated annual MRO supplies spend) and did *not* extrapolate its findings. The team reviewed Phase I data and identified challenges outlined in the *Report on Data* section of this document. In order to focus its analysis, the team chose four target subcategories with highly-commoditized (low unit cost, high volume) items purchased from all units on campus – paper products, trash liners, cleaning chemicals, and lighting. The team requested and received target subcategory line-item purchasing data from the five major units and performed detailed analysis within each subcategory. The team considered the following five units to be the main purchasers of MRO supplies: FP&M, Housing, Wisconsin Union, UHS, and Athletics. Through the analysis, the team developed recommendations for each subcategory.

The team identified opportunities for increased efficiency through product standardization, sustainability initiatives, and communication improvement. The MRO team recommends the following solutions be implemented:

Overview:

	Target Subcategory	Recommendation	Est. Annual Savings*
Standardization	Paper Towels	Standardize on brown preferred paper towel item in each of the following types: c-fold/single, multifold, and roll towel	\$18 K
	Toilet Tissue	Standardize on one type of one-ply toilet tissue in each of the following sizes: regular, junior jumbo, and jumbo	\$36 K
	Trash Liners	Standardize on both high- and low-density options in three of the following sizes: under 16 gallon, 33 gallon, and over 33 gallon liners	\$90 K
	Lamps	Standardize on several commonly-used lamps by lamp diameter, length, wattage, and color spectrum; standard lamps will also meet industry and State requirements	<i>See recommendation description</i>
	Chemicals	Standardize on one type of cleaning chemical (metered if possible) in each of the following subcategories: neutral cleaner, glass cleaner, disinfectant, NABC (Non-Acid Bowl Cleaner), floor finish, and hand soap	\$57 K
Sustainability Initiatives	High-Velocity Hand Dryers	Remove paper towels from select high-volume restrooms and replace paper towel dispensers with high-velocity hand dryers	\$9 K*
	Chemicals	Standardize on metered cleaning chemical stations (see above)	<i>See above</i>
Improved	Coordinated Meetings & Trainings	Establish cross-discipline education and training for all facilities staff and create user groups consisting of supervisors within each MRO discipline (janitorial and maintenance) to organize quarterly meetings, demonstrations, and trainings	\$20 K

*Up-front costs are not included in estimated annual savings

Recommendation Detail:

Standardization – The team recommends standardization of select highly-commoditized MRO supplies beginning with the following subcategories:

- **Paper**
 - **Paper towels:** The team recommends standardizing on a preferred brown paper towel item in each of the following types: c-fold/single, multifold, and roll towel.
 - **Toilet tissue:** The team recommends standardizing on three types of toilet tissue: regular, junior jumbo, and jumbo. Only one-ply options will be available, with the exception of toilet tissue purchased by for live-in residents and hotel guests.
- **Trash liners:** The team recommends standardizing on three sizes of trash liners: under 16 gallon, 33 gallon, and over 33 gallon liners. Both high- and low-density options will be available in each of the three standard types.
- **Lamps:** The team recommends standardizing commonly-used lamps by lamp diameter, length, wattage, and color spectrum. The standard lamps will be approved by industry experts and will also meet requirements set forth by the State of Wisconsin codes. The list will be cross-referenced with those lamps previously purchased by the facility department to make informed purchases from the standard lamps. Facility departments will be educated prior to implementation in order to assist in choosing the lamps that will provide the most effective and proper lighting for proper illumination of the area. *Note: Additional analysis is needed to determine savings in standardization of lamps; outstanding components include labor savings, green benefits, industry and regulatory standards, improved workplace environment, etc.*
 - **Additional Related Recommendations:**
 - The team recommends evaluating life cycle costs of all fixtures put into new buildings and implementing standard fixtures where possible.
- **Chemicals:** The team recommends standardizing on the following cleaning chemicals: neutral cleaner, glass cleaner, disinfectant, NABC, floor finish, and hand soap. See below for recommendation on standardizing all chemicals to metered chemicals.

While this team’s recommendations are specific to the commodities listed above, it is recommended that the implementation team consider opportunities to expand the standardization solution to other frequently-purchased MRO items.

Sustainability Initiatives – The team recommends exploring opportunities for sustainability and cost reduction, beginning with the following initiatives:

- **High-Velocity Hand Dryers:** The team recommends removing paper towels from select high-volume restrooms with existing hand dryer wiring and replacing the paper towels with a high-velocity hand dryer(s). High volume restrooms are defined as restrooms with more than two sinks and verified by staff as high volume. Using restrooms with existing hand dryer wiring will significantly reduce costs of installation. The team recommends selecting with 68 restrooms and performing further studies to determine whether additional conversion is feasible. The team also recommends installing Toepeners © on doors of dryer-only restrooms to mitigate the spread of germs, support stakeholder preference, and decrease paper waste. Toepeners © are U-shaped devices that are attached to the lower inside of the door opposite from the hinge and allow a person to open the door with the toe of their shoe, thus negating the need for paper towels to avoid directly touching the door handle. Toepeners © cost about \$50 each. Housing and sporting venue restrooms will be excluded from the new requirements.

- **Rationale:** This is a cost reduction measure as well as a green initiative. Installing second-generation high-velocity hand dryers can significantly reduce our paper towel usage in many restrooms. The project team anticipates that by converting to high-velocity hand dryers, the university will see cost savings on paper towel purchases *and* trash liner purchases due to less paper waste in restrooms. In addition, the implementation of this recommendation would result in a greener campus with less paper and plastic waste being sent landfills.
- **Additional Related Recommendations:**
 - First-generation heated hand dryers are deemed low performing, high-electricity cost items. Replacing first-generation heated hand dryers in high volume restrooms with the more efficient second-generation high-velocity hand dryers would further enhance savings and sustainability.
 - The team also recommends requiring all new construction and renovated buildings to install high-velocity hand dryers instead of hand towel dispensers.
- **Metered Cleaning Chemical Stations:** Each department on campus will convert to metered cleaning chemicals when available (neutral cleaner, glass cleaner, disinfectant, and NABC). The implementation team will determine which chemicals are preferred (through ‘standardization’ recommendations mentioned above), prioritizing metered chemicals. All custodial staff will be trained in the handling and use of the new metered systems.

Improved Communication:

- **Quarterly Meetings & Coordinated Training:** The team recommends the establishment of cross-discipline education and training for all facilities staff. The group recommends establishing user groups consisting of supervisors within each MRO discipline (janitorial and maintenance) to organize quarterly meetings, demonstrations, and trainings. This recommendation includes taking a more standardized approach to campus cleaning and maintenance through enhanced communication and collaborative efforts that allow for more consistent cleaning means and methods.
 - **Rationale:** In order to change campus culture, enable campus units to make more informed decisions, reduce training costs, and consolidate demonstrations by vendors, a committee comprised of all campus units performing these functions will be formed and charged with meeting quarterly to discuss shared topics, needs, and results. This committee will enable campus to save money overall on expenditures of MRO products and will enable custodial and maintenance staffs to learn from one another’s experiences that will lead to improvements in the quality of their work and customer service.
- **Examples:** Specific examples include:
 - consolidated training programs for all campus cleaning staff;
 - consistent training and education materials for all staff responsible for purchasing cleaning products on current campus and state contracts using approved vendors;
 - joint demonstrations of potential new products and equipment; and
 - quarterly meetings of cleaning leads across campus.

Proposed Milestones and Timing

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Below is a full and comprehensive timeline. The team anticipates that many of the recommendations can be implemented simultaneously, which will allow a portion of savings to be realized earlier.

Start Date	
General Implementation of All Recommendations (~1 year)	
Identify implementation team	1 week
Develop detailed implementation plan and methodology for each recommendation	6 months
Develop program and test with stakeholders	6 months

Standardization (31 weeks)	
Perform analysis to identify specific standard products and identify hardware requirements to support standard products	3 weeks
Solicit bids for vendors	8-12 weeks
Install correct fixtures where necessary	3-4 weeks
Develop and implement staff training and education components	6-8 weeks
Develop detailed metrics for measuring success, including quarterly cross-campus facility education and product/purchasing updates	4 weeks
High-Velocity Hand Dryers (36 weeks)	
Work with building managers and custodial supervisors to identify high volume restrooms, and specify “test” restrooms for preliminary implementation	2-3 weeks
Develop and implement cross-campus communication and plan for stakeholder stewardship	6-8 weeks
Installation of hand dryers and removal of paper towel dispensers in “test” restrooms	25 weeks
Metered Chemical Stations (28 weeks)	
Consolidate and share information regarding chemical products used, chemical testing and results, and vendor contacts amongst all MRO units.	4 weeks
Determine which chemicals to standardize on, prioritizing metered chemicals	4 weeks
Develop both purchasing and metered chemical use training for employees	12 weeks
Train employees and roll out new systems	8 weeks
Quarterly Meetings & Coordinated Training (44 weeks)	
Enlist representatives from each of the 5 campus units	4 weeks
Gather all training materials and other relevant information from each unit	8 weeks
Create combined training materials, agreed upon product lists, as well as testing and demonstration standards	16 weeks
Create feedback and success measuring tools	16 weeks

Alignment with Strategy

Indicate the degree to which this initiative supports the strategic plans of the University:

University Strategy and Related Recommendation and Degree of Impact	
<p>Applicable Strategy</p> <ul style="list-style-type: none"> • Be responsible stewards of our resources • Align resources with priorities • Promote environmental sustainability on and off campus • Make our administration more effective, efficient, and flexible 	<p>Business Case Impact</p> <ul style="list-style-type: none"> • The team’s recommendations support the <i>Campus Strategic Framework</i> in the following capacities: <ul style="list-style-type: none"> ○ The team’s recommendations support the priority to “be responsible stewards of our resources”, both in terms of monetary and environmental resources (significant) ○ The team’s recommendations will result in cost savings, allowing the University to allocate resources to strategic (and other)

Applicable Strategy (continued)	<p>priorities (significant)</p> <ul style="list-style-type: none"> ○ The team’s recommendations will promote environmental sustainability (significant)
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Source: “University Strategy For Wisconsin and the World, Campus Strategic Framework (2009-2014)” at <http://www.chancellor.wisc.edu/strategicplan.old/progress.html>

Business Services Strategy

<p>Applicable Strategy</p> <ul style="list-style-type: none"> • Perform the buying functions in a manner that provides for the lowest total cost to the university, with consideration to life cycle costs as well as transaction costs • Assess customer needs and expand classes, content, and method of training delivery based on customer feed-back • Embrace opportunities to utilize IT to increase effectiveness and responsiveness 	<p>Business Case Impact</p> <ul style="list-style-type: none"> • The team’s recommendations and the <i>Strategic Purchasing Appendix</i> address many of the ideas outlined in the <i>Business Services Strategy Plan</i>, including: <ul style="list-style-type: none"> ○ Supporting the mission of cost effectiveness (significant) ○ Improving customer service (moderate) ○ Supporting mission of well-trained staff and innovative technology (significant)
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Source: “Business Services Strategic Plan FY2012 and Mission, Vision, and Goals” at <http://www.bussvc.wisc.edu/bsnews/FY12-Mission-Vision-and-Guiding-Principles.pdf>

Functional Area Strategy

<p>Applicable Strategy</p> <ul style="list-style-type: none"> • Improve services and clearly demonstrate to campus customers and the public that resources are used responsibly by: <ul style="list-style-type: none"> ○ Improving process efficiencies in order to enhance services and responsiveness to campus customers as well as identify cost savings and improve the institution’s financial performance. ○ Sharing services across Vice Chancellor of Administration (VCA) units and with VCA partners to increase collaboration, reduce redundancy and duplication, and free up resources for reallocation 	<p>Business Case Impact</p> <ul style="list-style-type: none"> • The team’s recommendations support the VCA <i>Strategic Plan</i> in the following capacities: <ul style="list-style-type: none"> ○ Improving process efficiencies (significant) ○ Achieving administrative cost savings (significant) ○ Resource stewardship (significant)
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Source: “VCA Strategic Plan” at http://www.vc.wisc.edu/VCA_Strat_Plan_Web_2010.pdf

Impact

Anticipated Benefits

What are the anticipated benefits of this solution?

Benefit Categories	
Improve Productivity/Efficiency	<p>Many of our recommendations will improve productivity and efficiency by creating opportunities for better utilization of recovered staff hours.</p> <p>Standardization: Through recommendations outlined above and in the <i>Strategic Purchasing Appendix</i>, users will spend fewer hours making purchases due to increased efficiencies. Standardization will also foster more consistent pricing from vendors and better bargaining position. Also, fewer types of items will be purchased and stored in inventory. Specifically applied to MRO, following the implementation of lighting recommendations, due to standardized products and life-cycle costs, facilities staff will spend fewer hours changing lamps.</p>

Improve Productivity/Efficiency (continued)	<p>Sustainability Initiatives: A shift to metered chemicals will decrease the volume of product purchased, which in turn will send less containers to the landfill. The systems are configured so that cleaning staff will get a preset concentration, which will take the guess work out of creating the correct chemical dilution for each task.</p> <p>Improved Communication: Quarterly meetings, including interim communications, consolidated training programs, cooperative purchasing, and joint demonstrations will decrease the number of staff hours spent duplicating efforts across campus; staff will also be better trained</p>
Improve Service/Product Quality	<p>The increased efficiencies realized through implementation of all recommendations will allow facilities staff to spend more time on overall service.</p> <p>Standardization: Preferred items (i.e. standard bulbs) will be carefully selected for quality. For example, standard lamps will improve lighting level and aesthetics for stakeholders in buildings and grounds by using correct illumination.</p> <p>Sustainability Initiatives: A shift to metered chemicals will assist in standardizing the level of cleaning, and reducing the volume of chemical used as the dilution rates are controlled, leading to less waste and improved the cleaning results.</p> <p>Improved Communication: Knowledge gained through cross-campus trainings will increase standard service levels by providing more consistent, high quality cleaning</p>
Engage Employees	<p>Standardization: Creating a standardized product list and improving the product purchasing process will create a better environment for purchasing supplies and empower employees to make the right decisions</p> <p>Sustainability Initiatives: New initiatives provide an educational opportunity for sustainability</p> <p>Improved Communication: Quarterly meetings and trainings will improve quality of training, employee safety, and awareness by staff who transfer between departments; furthermore, the committee itself will engage employees from multiple units</p>
Mitigate Compliance Risk	<p>Improved Communication: Consistent trainings could increase compliance with Occupational Safety and Health Administration (OHSA) regulations</p>
Enhance Sustainability Initiatives	<p>Standardization: Standard lamps will reduce energy costs by installing lower wattage, high efficiency, and longer life lamps with longer replacement times in place</p> <p>Sustainability Initiatives: A switch to metered chemicals will result in decreased usage of chemicals; a decrease in the use of paper towels will also reduce the volume of paper towels and trash liners in landfills</p>
Create Competitive Differentiation	<p>Sustainability Initiatives: Initiatives reflect University's commitment to sustainability for prospective students and employees</p>

Stakeholders Impacted & Customer Readiness

Identify the constituencies that will be impacted by this solution and the anticipated effect on those stakeholders, including changes to roles and responsibilities. Also, to what extent are users ready for the change?

Stakeholders impacted by each recommendation include:

Standardization

- Purchasers (both central Purchasing Services and employees with purchasing power within the units) will need to change their habits
- See *Strategic Purchasing Appendix* for additional stakeholders that will be impacted by standardization
- End-users will need to change products and/or the processes currently used (e.g. custodians for standardization to metered cleaning chemicals)
- Patrons will be impacted by new standardized items (e.g. restrooms for standardization to one-ply toilet tissue and brown paper towel)

Sustainability Initiatives: High-Velocity Hand Dryers

The survey found that 63% of students prefer high-velocity hand dryers over paper towels, while 42% of faculty and staff prefer hand dryers. While the majority of faculty and staff prefer paper towels, only 25% of employees were somewhat likely to seek out restrooms which still have paper towel dispensers.

Other stakeholders impacted by this recommendation include:

- Employees, students, and other individuals in and adjacent to restrooms may object to the noise
- Restroom patrons may prefer paper towels to hand dryers
- Some patrons prefer to use paper towels to grasp the door handle when pulling doors open upon exiting the restroom and then disposing of the paper in a nearby trash can; in order to accommodate this preference, the team recommends the installation of Toopeners[®]
- Maintenance and custodial staff responsibilities may change with switch to hand dryers as the emphasis shifts from stocking paper towels to maintaining a piece of equipment
- Restroom patrons may push back regarding 'germ transfer' studies that oppose use of hand dryers

Improved Communication: Quarterly Meetings & Coordinated Training

- Facilities managers and supervisors will be impacted by new campus-wide perspective
- Training staff and supervisors may have fear of change or loss of roles and control
- Training staff in individual units may have fewer responsibilities in training area as campus will share training standards; these staff hours will be spent more efficiently by performing other tasks needed to improve standards
- Unit purchasers will be able to more effectively spend staff hours in performance of other tasks
- Front-line staff will be impacted by changing processes and techniques and enhanced communication between the departments

Impact on Other Initiatives

Are there inter-dependencies between this proposed solution and other initiatives underway? How will this solution challenge or enhance these other initiatives?

The team recommends that the implementation team continue to identify related projects, but the team is aware of the following University initiatives that will be impacted by our recommendations:

Office of Sustainability & WeConserve: Our sustainability initiatives will support the mission of the Office of Sustainability and WeConserve; the implementation team will work closely with the two groups to finalize the recommendations and implementation plan, and the teams will work together to implement

AE Strategic Purchasing Teams: The team's recommendations (especially around standardization and vendor consolidation) will be greatly supported by general Strategic Purchasing recommendations found in the *Strategic Purchasing Appendix*

Unit-Specific Initiatives: The team's recommendations could impact some of the current initiatives underway within various units

Project Success Factors

Change Management Plan

What efforts or activities will be used to promote understanding and acceptance of the proposed solution among affected constituencies? Have those efforts been included in the resource plan?

The team recommends that the MRO supplies implementation team works closely with the other Strategic Purchasing teams, the Office of Sustainability and/or WeConserve, and other campus groups to convey a consistent message. The implementation team should execute a campus education strategy to communicate the purpose and advantages of the recommendations as follows:

- Promote campus awareness of direct impact to sustainability efforts through various methods (e.g. point-of-usage signage, inclusion in standard Office of Sustainability promotion, etc.)
- Promote campus awareness of institutional benefits (i.e. cost reduction, improved communication, etc.)
- Address concerns raised by stakeholders (e.g. Toepeners, tiered approach to installing hand dryers)

Dependencies or Constraints

To what extent is the proposed solution reliant on the output of other initiatives?

Proposed solutions rely on support from Campus Administration as well as continued involvement of all campus units.

Several solutions will potentially require funding for up-front capital costs, and the costs will be recovered over time. For example, large up-front costs will be required for the installation of high-velocity hand dryers across campus, but costs will be recovered over a five-year period.

The team's solutions will be enhanced by the recommendations outlined in the *Strategic Purchasing Appendix*, but all MRO supplies solutions can be implemented within the current structure.

Assumptions

In order to prepare this document, certain assumptions need to be made. Please document those assumptions here.

General

- All products (i.e. standard lamps, high-velocity hand dryers, etc.) will perform to advertised specifications
- Stakeholders will continue to support cost reduction efforts
- Certain units will not be able to comply with recommendations; see *Appendix 2: Financial Model* for exceptions and compliance estimations
- Quality of standard products is acceptable to end users

Standardization:

- Some of the standardization will be done through attrition

Sustainability Initiatives:

- Stakeholders will continue to place importance on promoting sustainability efforts

Project Risks

Every project involves some degree of risk. List the potential risks to successful implementation and ongoing functioning of this initiative and explain the proposed approach to mitigate those risks.

Standardization

- Stakeholder preference may prevent users from purchasing standard items; for example, stakeholders may feel that offices are not appropriately lit with standard bulbs
- 'Green' products may be more expensive for users; for example, standardized lamps may initially be more expensive (lamps will use less energy and decrease long-term cost) and users be hesitant to pay more (since they don't pay for their own energy) without the proper education of benefits
- Technology may change, and 'standards' may need to change more frequently than anticipated
- New government requirements may change

Sustainability Initiatives

- Overwhelming rejection by a vocal minority
- Media coverage and response needs to be considered and proactively spun
- **High-Velocity Hand Dryers:** Dryer units requiring more maintenance than anticipated following the warranty period, causing the costs of maintenance to outweigh the benefits.
- **Metered Chemicals:** Staff may not accept new cleaning products and methods which will cause inefficiencies related to coaching and retraining

Improved Communication: Commitment of units' designated representative to actively take part in meetings may not always be high and/or will the representative of each unit have the authority to make decisions without having to take it back for discussion within the unit

Criteria for Measuring Success

Every proposed solution should have specific criteria for evaluation. Performance against the criteria will be used to monitor progress and to inform future projects. Examples of criteria categories include financial, operational performance, user acceptance, tracking to schedule, costs reduced or avoided, and revenues enhanced.

Standardization:

General: Measure annual cost reductions in target subcategories by department

Lamps: Measure overall reduction in kilowatts by building or campus (consider utilizing the Wisconsin Energy Initiative energy-savings methodology)

Sustainability Initiatives:

High-Velocity Hand Dryers: Measure overall reduction in paper usage

Metered Chemicals: Measure the usage and cost of chemicals against previous years' usage, and both usage and cost should be lower

Improved Communication:

Measurement of the following:

- Savings of chemical spend due to collaborative purchasing
- Savings of staff hours spent on training overall
- More consistent cleaning methods for staff to utilize
- Less retraining of staff

Alternatives Considered

Describe the alternate solutions considered, including those related to people, process, and organizational change. Indicate why the proposed solution is the strongest of alternatives considered. Consider also the risks or implications of not proceeding.

There were a number of alternatives considered by the project team, which were identified as less effective:

General

Continuation of Current Practices: Campus could continue business as usual. The campus could maintain the current system of chemical purchasing, training, and education by having each unit continue to work within their unit boundaries. However, not changing to a more unified campus response will continue to cost the campus more funds overall in training and education, as well as chemical and consumable costs. Each unit will continue to operate independently of each other and campus will risk overspending to achieve the same results, whether positive or negative, which negatively impacts our customers by not being stewards of our resources.

Sustainability Initiatives

Removal of Office Trash Cans: The team carefully considered removing all small trash cans from personal offices and replacing the cans with centrally-located trashcans (generally in hallways).

- **Rationale for Consideration:** Currently desk trash can liners are changed several times per week (differing by unit), using staff hours that could be better utilized elsewhere and constituting a considerable amount of unnecessary plastic waste. By adopting a policy that removes all desk trash cans and replaces them with a centrally located trash can, the institution would follow the lead of other Big 10 Universities (e.g. Purdue) by reducing costs and practicing sustainability. (*Alternative:* Empower the custodian(s) and staff to use best judgment regarding when/if to change the liner and switch the can. For example, custodians may change a liner only if it is contaminated from food dumping.)
 - **Benefits:** Benefits included enhancing green initiatives (less plastic in landfill), improving productivity/efficiency (staff hours), improving service/product quality (staff hours used to perform better overall service), engaging employees (educational opportunities for sustainability), and creating competitive differentiation (reflects University's commitment to sustainability for prospective students and employees).
 - **Risks:** Issues may arise regarding defining a 'private office' versus a 'departmental office' (since we would plan to continue to remove trash from departmental offices). Employees may also throw their trash into the recycling bins, therefore creating more work for staff by contaminating the bins.
 - **Savings:** Savings would be generated by not needing to change (staff hours) or purchase the liners (product cost). Labor savings would be realized, and the hours would be re-directed to more productive cleaning.
- **Rationale for Dismissal:** Although Purdue found that only 5% of the employees were unable to accept the change, the committee received extremely negative feedback through both our student and faculty/staff surveys. Therefore the costs did not outweigh the benefits

Reduction in Paper: The team considered installing roll paper towels with and without touchless and automatic measuring systems instead of manual dispenser for paper towels

- **Rationale for Dismissal:** The costs of wholesale replacements for all dispensers did not outweigh the savings and environmental benefits. Instead, the team used a more focused approach on the second generation high- velocity hand dryers.

Improved Communication

- **Solution Considered:** Maintain the current system of chemical purchasing, training, and education by having each unit continue to work within their respective boundaries.
- **Rationale for Dismissal:** Not changing to a more unified approach will continue to cost the campus (overall) more funds in training and education, as-well-as chemical and consumable costs. Each unit will continue to operate independently of each other and campus will risk overspending to achieve the same results, whether positive or negative, which negatively impacts our customers by not being stewards of our resources.

Other Ideas

There were several recommendations brainstormed by the team that were determined to be out of scope or without enough support to become final recommendations. These ideas included the following:

Standardization

- **Solution Considered:** All new and remodeled buildings architects and engineers are provided a list of standard fixtures (in order to accommodate standard lamps) to install in all new construction and building remodel projects on campus

Sustainability Initiatives

- **Solution Considered:** Invest in digital controls for lights in order to practice sustainability and increase energy savings
- **Solution Considered:** Deploy UW team to reach out to (or visit) peer universities to research best practices
- **Solution Considered:** Hire an outside/independent expert to evaluate the current cleaning programs at UW-Madison with the stated desire to minimize the chemical usage and improve the programs to encompass environmentally friendly initiatives. The stated goal of this exercise is to have all cleaning programs be designed and executed to the standard required for United States Green Building Council Leed certification. Benefits include both cost savings and environmental impacts.
 - **Risks:** Risks include difficulty obtaining stakeholder buy-in, difficulty implementing recommended solutions, and inability to agree upon a standard 'green' cleaning method
 - **Reasons Not Finalized:** Recommendation requires additional research and cost analysis by future teams

Warehousing MRO Supplies

- **Solution Considered:** Consolidate the products used on campus, develop a bulk purchasing program that allows for monthly deliveries from vendors, and allow for as needed delivery to campus locations by (MDS) or alternate. The goal is to provide better overall pricing to the institution, better price consistency between departments, fewer vendors and transactions that need to be processed by campus, eliminated warehouse costs that are currently incurred by campus departments to carry the supplies needed to operate, reduction of vendor deliveries to campus, reduction of time spent by staff on deliveries, reduction of carbon footprint by having fewer trucks on campus, and reduction of duplication of services by other warehouses.
 - **Reasons Not Finalized:** Recommendation requires substantial out-of-scope analysis

Supporting Documents

Please attach any supporting product information, project schedules, and timelines.

1. **Appendix 1:** Financial Model
2. **Appendix 2:** AE Initiative Strategic Purchasing Appendix
3. **Appendix 3:** Student and Faculty/Staff Survey Results

Signoffs

Advisory Committee	<i>Fully endorsed by Advisory Committee</i>
Steering Committee	<i>Approved May 16, 2012</i>

Report on Data

Please provide an overview of the data collection lessons learned through the teams' work. Questions to consider include:

- *Were data readily available via databases (either locally or in the data warehouse) or were data collected via interviews and surveys?*
- *What data would have helped but was not available?*

The team's first challenge was to identify MRO spend across campus. The only centrally-available information was total spend by vendor across campus, which did not always make it possible to separate strictly MRO supplies spend. For example, many facilities vendors provide both services and supplies, and we were unable to separate the two types of purchases. There was also difficulty determining which items were 'commoditized' without line-item detail. For example, large spend with an assumed MRO supplies vendor could mean units are purchasing either highly commoditized items or a few large items – it is not possible to determine without line-item detail.

Therefore the team focused its analysis on assumed highly-commoditized (low unit cost, high volume) items purchased by all groups across campus. The team chose to perform detailed analysis in the following areas: paper, trash liners, cleaning chemicals, and lighting. The team considered the following units to be the main purchasers of MRO supplies: FP&M, Housing, Wisconsin Union, UHS, and Athletics.

Metadata

Please provide commentary regarding the data structures currently used to capture data within the scope of the work team. This section should specifically reference the anticipated metrics for future-state reporting and analysis and the suitability of current data structures to meet those reporting needs

The team requested and received line-item detail for the target subcategories (paper products, trash liners, cleaning chemicals, and lighting equipment) from the following units: FP&M, Housing, Wisconsin Union, UHS, and Athletics. The data received contained line-item detail for a full year with the following information:

- Vendor Name
- Item/SKU #
- Item Description
- Manufacturer
- Unit of Measure
- Quantity Purchased
- Unit UW Price
- Total UW Spend
- Dilution Rate (if applicable)
- Notes (if applicable)

Data Accuracy

Please provide input regarding the accuracy of data collected. Insofar as they exist, is there a source for common data definitions within the scope of this work team?

The data was received directly from the five units, and the units obtained the data in various ways. Some units were required to pull purchase orders and re-key the data into a central Excel template, increasing the chance of inaccuracy. Other units had more sophisticated shadow systems to track purchasing, decreasing the chances of inaccuracy. Therefore the information from some units may be incomplete.

Data Recommendations

Please provide recommendations to improve the suitability, availability, accuracy, and commonality of data in this area.

As mentioned, under the current purchasing data collection and maintenance, it was not possible to accurately identify all MRO purchases across campus. The Strategic Purchasing Appendix, prepared by all strategic purchasing work teams, addresses this need for establishing policies and procedures for maintaining purchasing data. Once these general recommendations are implemented, the university can confidently identify other opportunities for standardization in MRO supplies purchasing.

Submission and Approval Process

Completed business cases with all necessary signoffs must be submitted to the Steering Committee at least one week before the Steering Committee meeting scheduled to consider the business case.



AE Initiative Financial Model

Anticipated Solution Costs

	Up-Front (One-time)	Notes
Sustainability Initiatives (installed cost of dryers)	\$170,000	<i>Sustainability recommendations have large up-front cost and break even over five years regardless of scale</i>
TOTAL COSTS	\$170,000	

One-Year Anticipated Savings, Revenues, and Cost Avoidance

	Recurring (annually)	Notes
Standardization of Paper Towels	\$18,000	
Standardization of Toilet Tissue	\$36,000	
Standardization of Trash Liners	\$90,000	
Standardization of Lamps	<i>See rec above</i>	
Standardization of Chemicals	\$57,000	
Hand Dryers Sustainability Initiative	\$9,000*	
Metered Chemicals Sustainability Initiative	<i>See rec above</i>	
Improved Communication	\$20,000	
TOTAL ONE-YEAR SAVINGS	\$230,000	

Five-Year High-Level Financial Projection

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Up-Front Costs (\$)	-\$170,000	TBD ¹	TBD	TBD	TBD	-\$170,000
Recurring Annual Savings	\$230,000	\$230,000	\$230,000	\$230,000	\$230,000	\$1,150,000
NET SAVINGS/(COSTS)	\$60,000	\$230,000	\$230,000	\$230,000	\$230,000	\$980,000

Note (1): TBD – See Resource Plan below

Resource Plan

Identify the resources needed to implement the proposed solution. For each individual listed, identify the duration of their involvement in the implementation and the anticipated number of hours per week that each would be needed.

Resource plan outlined in *Strategic Purchasing Appendix*; details to be provided by Strategic Purchasing Team.

Proposed Funding

What will be the source of any needed up-front investment?

Funding plan is TBD



Advisory Committee: Themes and Q&A#

Advisory Committee Meeting: May 3, 2012 10:00am-11:30am

The MRO team presented its recommendations to the Advisory committee on May 3, 2012, and received full endorsement to carry its recommendations to the Steering Committee. Themes and questions raised by the Advisory Committee are detailed below.

Themes:

- Savings outlined in the financial model do not include the positive impacts of potential reduced labor hours and improved safety of workers; 'soft' positive impacts should be highlighted in communication plan to campus
- The implementation team should continue to consider the entire UW-Madison environmental footprint by weighing the benefits of reduced costs with the benefits of increased sustainability

Discussed Q&A:

Question – *Did the team include the electrical costs associated with the use of high-velocity hand dryers?* **Answer** – Yes - the team worked with contacts in the Electric Shop (within Facilities, Planning, and Management) to estimate the current and future state costs of electricity. Details are provided in the team financial model.