Huron Consulting Group
Executive Summary - Washington University Efficiency Study
March 2013

I. Introduction

WashU initiated this project to identify opportunities to reduce costs and increase productivity, with the goal of identifying $10M in savings in the CFU and $20M in savings in the distributed units and schools.

• WashU has many strengths and continues to be one of the leading academic and research institutions, but a combination of internal and external factors requires a focus on cost reduction and efficiency efforts.
• The University is entering a period of financial uncertainty due to issues such as federal research funding, healthcare changes, declining ability to raise tuition, uncertain endowment growth, and reduced demand in certain fields.
• While many institutions continue to rely on across-the-board cuts, WashU should be commended for pursuing targeted opportunities to reduce costs and improve operating efficiency.
• Over the course of about 12 weeks, Huron reviewed four areas: Facilities Management, Research Administration, CFU Business Centers, and Procurement and Strategic Sourcing. For each of the areas, Huron compiled and analyzed data, conducted interviews with WashU personnel, and leveraged leading practices to identify opportunities for improvements.
• Through this effort, Huron identified opportunities to reduce costs within the following categories:
  o Reduce costs through changes in procurement and consumption practices;
  o Enhance business processes through incremental improvements such as better use of technology; and
  o Deliver services such as facilities management, local research administration, and departmental finance/administrative services more efficiently
• Based on our review of benchmarking data for select functions, and our experience working with higher education institutions, WashU has done a good job of delivering services to the university community while also managing costs.
• In most areas WashU cost and efficiency metrics were comparable to or below those of peer groups.
  o Current and previous facilities benchmarking indicates WashU performs at or below peer groups for key metrics.
  o Central research administration functions appear to be lean compared to other institutions.
  o The only area where WashU costs were higher than peer groups was in the Landscaping/Grounds function.
• The savings proposed are possible, but will be hard won by the institution; the absence of “low-hanging fruit” will require WashU to make substantial changes in organization, processes, and culture to realize savings.

• Strategic sourcing is an opportunity to reduce costs without impacting staffing levels, but some of the initiatives will require changes to existing policies and practices, which provide customers with greater flexibility in terms of choice.

• Organizational change initiatives identified in this report will require additional analysis and discussion before WashU can proceed with the design and implementation phase.

• To achieve greater savings, WashU should explore opportunities to reduce costs in other areas outlined in this report.

To achieve the savings, WashU must be prepared to address the impact of change on the institution, including focusing on enterprise-wide solutions, establishing and enforcing institutional policies, and restricting choice in purchasing decisions.

Overview and Approach

<table>
<thead>
<tr>
<th>Overall Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify cost savings and service efficiency opportunities within the central administrative units and the distributed divisions/departments across the University</td>
</tr>
<tr>
<td>• Implement opportunities that provide the greatest possible financial impact while maintaining or strengthening the level of core services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Facilities Management</td>
</tr>
<tr>
<td>• Research Administration</td>
</tr>
<tr>
<td>• CFU Business Centers</td>
</tr>
<tr>
<td>• Procurement and Strategic Sourcing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approach/Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Confirmed project scope, objectives, and work plan</td>
</tr>
<tr>
<td>• Collected and analyze data and conducted interviews with about 125 WashU personnel</td>
</tr>
<tr>
<td>• Assessed the current state of operations within each area</td>
</tr>
<tr>
<td>• Created an opportunity assessment that highlights cost savings and operational efficiencies</td>
</tr>
<tr>
<td>• Presented findings to the Steering Committee to gain consensus on the key areas of opportunity for WashU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deliverable/Final Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A prioritized menu of opportunities identified through the process, with an estimate of potential cost savings, time and cost to implement, impact on culture, and anticipated effect on service levels</td>
</tr>
</tbody>
</table>
Key Observations/Themes

1. WashU has more decentralized operating model compared to other institutions, but the institution has been able to operate efficiently due in part to its budget model, which provides incentives to manage costs both centrally and locally.

2. Though the decentralized model is highly valued and has worked well for WashU in many respects, the current model may also contribute to several factors which can drive higher costs in the areas we reviewed, including:
   - Four major organizations involved in facilities planning, management, and service delivery.
   - Local units have created their own organizational structures, systems, and processes to support local research administration needs.
   - Growth in FTE levels across all four primary reporting units within the CFU, including the equivalent of ~60 FTE focused on performing finance and administrative business functions.

3. Based on our reviews of facilities management, research administration, and administrative processes within the CFU, some of the implications of the current service delivery model include:
   - WashU employs a wide variety of roles/positions to support financial and administrative business processes.
   - The allocation of administrative staff may not be driven by workload, operational needs, or other consistent criteria.
   - Decentralized operations may contribute to individualized processes, systems, and structures.
   - Challenges with establishing and sustaining enterprise-wide policies, standards, and solutions.

4. Based on benchmarking analysis, WashU operates efficiently compared to peer groups, but WashU also values higher service levels which other institutions may not be providing. Our review of select areas suggests that the institution has an opportunity to reduce costs without adversely impacting service levels.

Identification of Opportunities

Recent fiscal challenges have required universities of all sizes to undertake cost savings initiatives and focus on organization-wide cost efficiencies.

Based on our understanding of the WashU environment and existing service delivery model, Huron sought to identify opportunities that could generate financial benefits in the near-term as well over the long-term. Longer term strategies have a structural quality that makes them harder to implement but gives them the potential to result in lasting, transformational change. Given the structural character of the financial challenges facing the University, we believe it will be necessary for the University to implement strategies across this entire spectrum of approaches.
<table>
<thead>
<tr>
<th>Immediate</th>
<th>Incremental</th>
<th>Transformational</th>
</tr>
</thead>
</table>
| • Across the board budget cuts  
  • Delayed deferred maintenance  
  • Capital project delays/cancellations  
  • Postponed deferred maintenance  
  • Service reductions  
  • Hiring freezes  
  • Early retirements | • More across the board cuts  
  • Procurement strategies  
  • Programmatic changes/eliminations  
  • Review of individual functional areas | • Comprehensive operational and program reviews  
  • Organizational rationalization  
  • Shared services  
  • Business process redesign initiatives  
  • Budget model redesign |

Transformational approaches, while more difficult to implement, have the potential to secure long-term gains in cost savings, operating efficiency and overall performance.

**Key Improvement Themes/Opportunities**

**Transformational/Service Model Delivery Changes**
- Consolidate the four existing facilities units into a single organization organized by function.
- Create clustered or shared service centers for local research administration services.
- Establish shared services centers to deliver finance and administrative services more efficiently and effectively to both CFU organizations and schools/colleges.

**Strategic Sourcing/Demand Management**
- WashU has a preferred supplier program and has implemented cost savings initiatives in several areas, but there are additional opportunities to reduce costs.
- Savings can be achieved through pricing improvements, vendor consolidation, demand management, and other operational improvements that impact total cost of ownership.
- Implementation will require a focus on communication, change management, and compliance.

**Incremental Process Improvement Initiatives**
- Leverage existing investments in technology to automate business processes (e.g., work orders).
- Build on existing efforts to expand the scope and impact of process automation (e.g., accounts payable).
• Parallel to (or in conjunction with) pursuing organizational opportunities, share best-in-class tools and processes (e.g., local research administration).

## Estimated Savings ($1000s)

<table>
<thead>
<tr>
<th>Area</th>
<th>Low</th>
<th>High</th>
<th>Key recommendations</th>
</tr>
</thead>
</table>
| Facilities Management       | $3,145| $6,725| Optimize organization of staffing within Facilities Planning and Management  
Northeast FPM and housing-related facilities organizations |
| Research Administration     | $1,145| $4,020| Established shared service centers to provide departmental research administration support |
| CFU Business Services       | $150  | $305  | Organize business support services for CFU departments into shared services organizations |
| Procurement                 | $2,765| $3,865|                     |
| Other opportunities         | $410  | $490  |                     |
| Total                       | $7,615| $15,405|                     |
II. Facilities Management

WashU has an opportunity to realize substantial cost savings and operational efficiencies by consolidating the four existing facilities units into one and implementing other organizational and process improvements.

- The existing service delivery model requires ~650 in-house FTE, several hundred contracted FTE, and has a total operating cost of ~$60M.

<table>
<thead>
<tr>
<th></th>
<th>FPM</th>
<th>WUSM-FMD</th>
<th>Residential Life</th>
<th>Quadrangle Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total FTEs</td>
<td>Total FTEs: 173 (in-house)</td>
<td>Total FTEs: 357</td>
<td>Total FTEs: 76</td>
<td>Total FTEs: 27</td>
</tr>
<tr>
<td>Compensation</td>
<td>Compensation costs: $13.72M</td>
<td>Compensation costs: $19.14M</td>
<td>Compensation costs: $2.75M</td>
<td>Compensation costs: $1.58M</td>
</tr>
<tr>
<td>Non-compensation</td>
<td>Non-compensation costs: $12.74M</td>
<td>Non-compensation costs: $8.64M</td>
<td>Non-compensation costs: $.46M</td>
<td>Non-compensation costs: $.215M</td>
</tr>
<tr>
<td>Total costs</td>
<td>Total costs: $26.46M</td>
<td>Total costs: $27.78M</td>
<td>Total costs: $3.21M</td>
<td>Total costs: $3.73M</td>
</tr>
</tbody>
</table>

- Across the four major service delivery units there are redundant operations in most functional areas, the use of three different work order systems, multiple storeroom location, and variations in service levels, frequencies, and operational practices.
- Benchmarking suggests that WashU performs favorably compared to peer groups, but there may be opportunities to reduce costs in each major function without adversely impacting services.
- Emory, Northwestern, Yale, and the University of Michigan are examples of peer institutions that have a more integrated facilities units to serve customers across multiple campuses and/or customer groups.

Huron has identified several options for WashU leadership to consider in its evaluation of opportunities to reduce the overall cost of providing facilities management services across the institution.

Option 1: Consolidate Danforth Zones
- With Option 1, WashU maintains four facilities units (Danforth FPM, WUSM FMD, Residential Life, and Quadrangle Housing Maintenance), but implements organizational changes such as reducing the number of zones in FPM from 8 to 6.

Option 2: Consolidate Housing-Related Facilities Functions
- Building off Option 1, WashU also consolidates all facilities management-related functions currently performed in Residential Life and Quadrangle Housing into the Danforth FPM organization.

Option 3: Consolidate Housing-Related Facilities Functions and Establish a Single Planning, Design, and Construction Unit
- WashU maintains separate organizations for the Danforth Campus and Medical School facilities units; reduces the number of Danforth zones; consolidates all housing-related facilities services from Residential Life and Quadrangle Housing; and establishes a single unit to oversee planning, design, and construction functions across the institution.
**Option 4: Establish a Single, University-Wide Facilities Management Organization**

- WashU consolidates all facilities services into one university-wide organization, which would be led by a single leader reporting directly to the Executive Vice Chancellor for Administration.

Specific actions that would be implemented as part of consolidated facilities organization include:

- Establishing a new organization aligned by function, which will help to reduce overall staffing levels by leveraging economies of scale, broadening span of control, and aligning staff based on workload.
- Developing a shared services model to provide business operations functions for the new organization.
- Optimizing staffing and service levels for maintenance, custodial, and ground based on benchmarking, workload, and other consistent criteria.

A detailed design phase will assess the financial, organizational, and service delivery impacts of transitioning from the existing model to a consolidated facilities management organization.

In addition to the over-arching service delivery model opportunities, Huron has identified several other opportunities for consideration by WashU.

Key cost savings opportunities involve further reductions in energy costs and reducing contracted costs for custodial and grounds services by re-bidding existing contracts and/or reducing service levels/frequencies. While this project is focused on cost reduction, it is important for WashU to also pursue opportunities to enhance relationships between its facilities service providers and customers through improved communication, transparency, and coordination.

- **Energy Management/Cost Savings:** Installation of meters presents an opportunity to further reduce consumption through demand management and local incentives.
- **Custodial Contract Cost Savings:** Seek to reduce overall costs by rebidding the existing contracts and/or reducing service levels/frequencies.
- **Facilities Management Customer Service Improvements:** As WashU considers changes to the current service delivery model, it will be important to maintain communication with customers, improve coordination across service.
### III. Research Administration

#### High Level Opportunities

<table>
<thead>
<tr>
<th>Area</th>
<th>Observations</th>
<th>Opportunities</th>
</tr>
</thead>
</table>
| 1 Local Research Administration | • WashU’s local units (departments, schools) have created their own organization structures, systems, and processes to support their specific research management needs  
• There is relatively low sharing of research administration best practices, or resources, across these local units  
• Many institutions are rethinking this “status quo” approach in order to capture efficiencies and deliver better service | • Create clustered or shared local research administration services at WashU to help establish a more effective, efficient, consistent, compliant, and service-oriented local research administration function across WashU schools/departments  
• Consolidate job descriptions/roles related to local research administration; standardize workload allocation; ensure consistency of local support (training)  
• Share RA “best-in-class” local tools/processes |
| 2 Core Research Facilities    | • Lack of strong impetus for more strategic management of cores (and related investments)  
• Sub-optimal, localized investments in, and decisions related to, core facilities  
• Leadership needs a willingness to invest significant university resources in cores to support research | • Short- to medium-term: Continue efforts to inventory existing resources, establish policies, and provide a foundation for longer-term initiatives related to cost savings  
• Long-term: Invest strategically in cores, improve efficiency, and reduce costs |
| 3 Technology Infrastructure   | • WashU has a proliferation of research systems on campus; systems sometimes do not communicate well with each other  
• WashU’s primary research systems are becoming outdated  
• Processes often require duplicative data entry and the use of shadow systems or databases to track information  
• Department staff and PIs have identified the need for more reporting functions and features that are not in the existing research systems | • Short-term: seek opportunities to address near-term technology challenges (i.e. research reporting needs)  
• Long-term: Pursue opportunities to enhance and/or replace systems to provide greater integration, facilitate process improvement, and enhance reporting |
| 4 Dashboard of                | • Primary research                                                                                                                                                                                           | • Strengthen availability of data                                                                                                                                                                          |
| Additional Opportunities | administration functions under the VC for Research and VC for Finance (SPA) appear to be appropriately resourced in relation to benchmarks  
• Central research units generally perform well in their core function; however, a few small opportunities exist to better support customer needs | elements for interdisciplinary and T32 proposals through an information database  
• Evaluate WashU risk threshold and role of OGC in contract negotiations  
• Continue to consolidate OSRS grant resources to serve both campuses |

### Local Research Administration

Local research administration at WashU is highly decentralized. The setup contributes to individualized processes, systems, and structures, and limits communication and sharing of best practices across departments.

<table>
<thead>
<tr>
<th>Area</th>
<th>WashU Current State: Local Research Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>The local (department, center, institute) research administration infrastructure is extremely decentralized at WashU. Each department has independently developed an organizational structure to support its individual needs.</td>
</tr>
<tr>
<td>People</td>
<td>A wide variety of roles support research administration at the local level. Most of these roles only support research administration on a partial basis (e.g., 25% of their daily responsibilities).</td>
</tr>
<tr>
<td>Business Process</td>
<td>Business processes employed to support research administration at a local level are unit-specific.</td>
</tr>
<tr>
<td>Technology</td>
<td>Local units employ a wide variety of shadow systems and homegrown tools to help manage the business of research. Many of these tools have been developed to fill common gaps in need. Similar tools (e.g., Proposal trackers) have been developed and maintained in multiple departments; little sharing of best practice tools exists between departments.</td>
</tr>
<tr>
<td>Performance Measurement</td>
<td>Few, if any, metrics are employed at a local level to track the performance of research administration from a process, customer service, or resource efficiency standpoint.</td>
</tr>
</tbody>
</table>

### Primary Implications

- WashU’s decentralized local research administration organizational model, while typical amongst large research institutions, is resource inefficient.
- Skill levels of research administrators at WashU are diverse, resulting in variable service levels and a potentially risky compliance environment.
- Departments are constantly recreating the wheel by not sharing best practice processes or technology.
- Lack of tracking of key performance measures means that WashU can’t readily identify service gaps or resource inefficiencies.
IV. CFU Business Services

A shared services model for finance and administrative functions could reduce costs, facilitate standardized and streamlined processes, and enhance service delivery by reducing fragmentation of administrative staff.

- Our analysis focused on assessing the potential for a shared services model to deliver financial and administrative business processes more efficiently and effectively to CFU departments; our key observations are also likely applicable to other parts of the institution.
- WashU employees are performing a number of administrative activities throughout nearly every prime department in the CFU, highlighting an opportunity to leverage economies of scale through a shared services model.
- The analysis also found that administrative staff responsibilities are typically fragmented across multiple business processes, which can impede process standardization and effectiveness of requiring staff to maintain knowledge/skills in multiple areas.
- With the equivalent of about 61 FTE performing financial/administrative business processes, a reduction of 5-10% of business process staff through a shared services model could result in a savings of $152K-$305K.
- In addition to establishing a shared services model to deliver financial and administrative business processes to CFU units more efficiently, WashU should consider ways to share resources to deliver department-specific activities and provide administrative support for day-to-day operations.

Shared Services Defined

Shared services is a cooperative arrangement whereby a group of units (departments, divisions) share administrative resources instead of maintaining their respective administrative staff

Share Services business practices, work processes, and systems environment are:
- Consolidated under on management structure and generally do not reside within a business unit
- Designed to be common across all business unit customers
- Focused on their internal customers, balancing the requirements of the mission-central units with the most efficient and effective delivery of services
- Structured to provide services to multiple business unit customers across multiple locations
- Implemented to support activities which are required by all businesses but are not

Shared Services Is About:
- Providing high quality, consistent customer service
- Eliminating redundant efforts and systems
- Leveraging economies of scale
- Streamlining business processes
- Providing opportunities for employee success through job design and career development

Shared Services Is Not:
- Physical centralization of processes operated under a corporate mandate
- A process narrowly focused on functional redesign
- A stand-alone cost reduction measure
“unique” to a particular unit achieved through process consolidation
• Designed to provide significant improvements in service, quality, cycle time, and cost reduction

Shared services organizations are designed to capture the efficiencies available through consolidated services while focusing on efficiency, effectiveness, and customer service.

<table>
<thead>
<tr>
<th>Decentralized Services</th>
<th>Shared Services</th>
<th>Centralized Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Higher costs due to lack of economies of scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Variable service standards across departments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Differing control environments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Duplication of effort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Greater consistency of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pooled experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Enhanced career progression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lean, flat organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Recognition of group functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dissemination of best practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Continuous process improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Perceived as unresponsive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No departmental control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Inflexible to departmental needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Remote from customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lack of customization/flexibility</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Departments retain control of key decisions
Recognition of local priorities
Responsive to customer needs
Common policies and procedures
Consistent standard & control
Economies of scale
Critical mass of skills

Effective governance, service level agreements, and the use of metrics help shared service centers maintain high levels of responsiveness and customer service.

**Benefits of Shared Services**

The benefits of shared services models include opportunities to reduce costs, align workforce planning with strategic and financial priorities, improve service delivery consistency, and leverage staff talent and expertise.

<table>
<thead>
<tr>
<th>Strategic</th>
<th>• Allow units to focus on core mission and competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Meet changing/increased demand for services more efficiently</td>
</tr>
<tr>
<td></td>
<td>• Link workforce planning with administrative service delivery models</td>
</tr>
<tr>
<td>Financial</td>
<td>• Reduce administrative and operating costs</td>
</tr>
<tr>
<td></td>
<td>• Leverage institutional investments in systems and reporting tools</td>
</tr>
<tr>
<td></td>
<td>• Identify savings that could be reallocated to other priorities</td>
</tr>
<tr>
<td>Operational</td>
<td>• Improve processes through standardization, streamlining, and automation</td>
</tr>
<tr>
<td></td>
<td>• Continuity of service; back-up resources to provide service when needed</td>
</tr>
<tr>
<td>Talent</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>• Manage services through SLAs, reporting, and performance metrics</td>
<td></td>
</tr>
<tr>
<td>• Align staff resources based on competencies, workload and other criteria</td>
<td></td>
</tr>
<tr>
<td>• Provide opportunities for employee growth and development</td>
<td></td>
</tr>
<tr>
<td>• Develop centers of expertise for work requiring specialized knowledge</td>
<td></td>
</tr>
</tbody>
</table>

A shared services model can provide consistency in knowledge, service, processes, interpretation and application of rules and regulations, while also eliminating non-value-added activities.

**Common Shared Services Processes/Activities**

Candidate processes for shared services range from high-volume, low-value-add to high-value, knowledge-intensive services.

Processes that are common (i.e., performed across numerous schools or units) and have one or more of the following characteristics.

<table>
<thead>
<tr>
<th>High Volume, Routine Transactions (e.g., travel and expense reimbursement, invoice processing)</th>
<th>Knowledge/Expertise-Focused Functions (e.g., recruitment and on-boarding, procurement specialists, IT specialists)</th>
<th>University-Wide Information (e.g., research project information, performance measures)</th>
</tr>
</thead>
</table>

Many institutions elect to focus initial efforts on transaction processing activities before evaluating opportunities for more knowledge-intensive functions.
V. Procurement and Strategic Sourcing

Building off its foundation of preferred suppliers and contracting initiatives, WashU can further reduce costs through strategies such as supplier price negotiation, demand management, and focus on total cost of ownership.

Key Observations/Opportunities

- WashU has achieved favorable pricing in most categories; however, Huron’s analysis identified opportunities to negotiate more competitive pricing in several areas. These opportunities can be combined with tactics to negotiate other financial incentives such as rebates and prompt payment discounts.
- WashU has high product proliferation in categories such as computers, IT peripherals, and office supplies, indicating an opportunity to reduce costs through product rationalization and demand management initiatives.
- In addition to consolidating spend with primary vendors, there are opportunities to use policy marketing, and potentially the WashU Marketplace to drive greater utilization of established contracts and limit rogue spending.

<table>
<thead>
<tr>
<th>Pricing</th>
<th>Demand Management</th>
<th>Vendor Consolidation</th>
<th>Additional Financial Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate savings opportunities generated by improvements in price paid for high spend items</td>
<td>Determine savings opportunities gained from altering purchasing behavior and utilization of items</td>
<td>Estimate savings opportunities gained from the consolidation and leverage of fragmented spend across numerous vendors</td>
<td>Analyze potential savings opportunities from additional financial incentives received from establishing long-term vendor relationships.</td>
</tr>
</tbody>
</table>

To realize maximum value, strategic sourcing should be viewed as a continuous process to obtain the best product/service for the best value, while also addressing levers such as internal processes and operational practices to reduce costs.

Strategic Sourcing Levers

WashU has established a preferred supplier program and has implemented initiatives to reduce category specific costs. Additional opportunities may exist by focusing on sourcing levels such as demand management, product/specification rationalization, and policy compliance.

<table>
<thead>
<tr>
<th>Strategic Sourcing Levers</th>
<th>Approaches</th>
</tr>
</thead>
</table>
| Price Opportunity         | • Evaluate costs  
                          • Obtain lowest cost from incumbent supplier; if not, consider lower cost suppliers |
| Buying Power Leverage     | • Concentrate volume  
                          • Conduct best price evaluation  
                          • Introduce new suppliers |
**Demand Management**
- Modify consumption
- Find alternative ways of fulfilling need

**Product/Service Specification Rationalization**
- Standardize specifications
- Simplify specifications to reduce costs

**Policy Review and Compliance**
- Increase policy compliance
- Create or modify supplier or consumption policies

**eProcurement**
- Channel users to preferred supplier agreements
- Provide marketplace visibility for preferred suppliers
- Create operating efficiencies for suppliers
- Pay vendors more rapidly

### Strategic Sourcing Opportunities

Specific tactics to realize the estimated savings are outlined below; it is important to note that strategies such as consolidating vendors/specification and limiting choice will require a significant focus on change management.

<table>
<thead>
<tr>
<th>Commodity Area Reviewed</th>
<th>Estimated Area Spend</th>
<th>Estimated Dollar Savings</th>
<th>Key Savings Opportunities</th>
</tr>
</thead>
</table>
| Desktops/Laptops        | $11.6M               | $460K-$860K              | • Huron experience indicates improved pricing and cost savings can be achieved through desktop standardization with a target discount of 35% to 40%  
                         |                      |                          | • Significant demand management related savings can be achieved through the creation of University purchasing guidelines which requires a valid business need for Apple desktop/laptop purchases  
                         |                      |                          | • University-wide computer purchase standardization would generate significant cost savings depending on actual standards utilization by end users.  
                         |                      |                          | • Potential opportunity to negotiate financial incentives |
| Office-Related Products | $4.4M                | $405K-$660K              | • Implementation of university-wide demand management practices and focus on effective use of the core list would generate significant cost savings.  
                         |                      |                          | • Ink & toner supplier base consolidation, and leveraging spend through one preferred supplier, would generate additional cost savings. |
| Computer Hardware Peripherals | $3.4M           | $209K-$395K              | • Consolidate IT peripheral purchases to a single primary vendor by negotiating an agreement; negotiate commercial terms directly with the primary vendor.  
                         |                      |                          | • Compare pricing amongst suppliers and negotiate |
best pricing with primary vendor
• Use of demand management practices; standardize on desktop printer purchases or even eliminate desktop printers by sending print jobs to MFDs.
• Use policy, marketing efforts and potential WashU Marketplace to drive utilization of established contract

| Maintenance and Repair Products | $2.2M | Low | • Maintain existing processes and practices to drive spend to preferred vendor |
| Scientific Supplies              | $10.5M | $1.2M-$1.5M | • Pursue general CDC pricing improvements and hot list discount improvements with Fisher  
• Pursue product pricing improvements with VWR  
• Consolidate spend with a preferred provider to realize additional savings  
• Eliminate existing stockrooms through next day delivery. |

Other opportunities

WashU has an opportunity to standardize and streamline business processes in several areas, with key improvement themes focused on automation and adoption of best practices.

Representative examples of process improvement opportunities are highlighted below.

<table>
<thead>
<tr>
<th>Area</th>
<th>Key Observations</th>
<th>Improvement Opportunities</th>
</tr>
</thead>
</table>
| Procurement/ Accounts  | • WashU has achieved some success in automating processes, but there are         | • Drive additional automation of invoices  
| Payable                | opportunities for incremental invoice and payment method automation that could    | • Evaluate the automation of invoice processing through optical character recognition (OCR) |
|                        | generate additional savings and improve staff productivity                       | • Develop a comprehensive settlement plan  
|                        |                                                                                  | • Drive additional automation of payments  
|                        |                                                                                  | • Develop a joint vision across Purchasing and Accounts Payable  
|                        |                                                                                  | • Create a single contract management tool as the centralized repository for procurement and non-procurement contracts  
|                        |                                                                                  | • Implement a commodity code structure to enhance analyzing spend for strategic sourcing activities  
|                        |                                                                                  | • Centralize the vendor management function  
|                        |                                                                                  | • Redefine existing positions, identify new positions, and de-duplicate |

| Travel Expense/Reporting | • Travel program responsibilities are fragmented  
• The current reimbursement process has significant inefficiencies for both departments and AP  
• Limited use of WashU travel agencies | • Identify a Travel Manager who has full responsibility over the travel life cycle  
• Implement a fully automated expense reimbursement solution to remove duplicative entry  
• Offer a company-paid credit card to reduce use of personal cards, which can also increase the rebate paid to WashU by ~$150K annually |
| Work Order Processing | • Redundant data entry is required by both the requesting unit/customer and facilities organization  
• Limited integration between work order and other administrative systems  
• Limited use of mobile technologies | • Leverage the capabilities of Maximo to automate, standardize, and streamline the work order process, which combined with the use of mobile technologies, could boost staff productivity and mitigate the impact of organizational change |

Establishing key performance indicators to measure and monitor process improvement effort will provide a foundation for continuous improvement efforts.