Shared Services Comprehensive Plan

April 1, 2019
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Executive Summary
Over the last 6 months, a system-wide, cross-functional team took on the challenging project of analyzing how UMass delivers services in certain Administration & Finance areas and developing a plan for a new service delivery model.

Supported by the Board of Trustees and Chancellors, the team spent significant time challenging the status quo and contributing creative ideas to a future service delivery model.

This plan is the result of that effort. It represents a significant step on our journey to a more efficient and cost-effective service delivery model in a few targeted areas, and lays a foundation to explore further efficiency opportunities.

Although much work remains as we move to design and implementation, we’re proud of what has been accomplished and we’re thankful to the dozens of UMass employees who contributed to the development of this plan.

Marty Meehan, President

Lisa Calise, Senior Vice President of Administration & Finance and Treasurer
Executive Summary - Background

Face fiscal challenges
• With higher education facing a challenging environment, effective and efficient management of resources is imperative
• The University embarked on a plan to prepare for current and future challenges, exploring the shared service delivery model to achieve improved service at a reduced cost

Build on a strong foundation
• The University has established a solid foundation by leveraging common technology and working “Better Together” (Efficiency & Effectiveness and Business Process Redesign)
• Alternative service delivery models, such as shared services, present opportunities to build on the foundation and bring significant benefits to all campuses
• Initial focus on accounts payable, procurement, and payroll

Plan collaboratively
• Commitment, direction, and support from the Board, President, and Chancellors
• Involvement and input from campus subject matter experts
• Analysis of FTE and spend data to quantify efficiency and savings opportunities
• Examination of peer systems to understand characteristics of leading service organizations
Executive Summary-Plan Highlights

Key Findings
- Campus procurement organizations work collaboratively but are limited in their impact
- Accounts payable processes vary across campuses leading to missed efficiency opportunities
- Payroll runs successfully but resources are fractional and ownership is unclear

Key Recommendations
- Establish a Unified Procurement Services Team responsible for system-wide procurement and accounts payable led by a Chief Procurement Officer (CPO)
- Establish a governance structure to ensure strong campus customer relationships
- Establish Service Level Agreements (SLAs) to manage service quality
- Continue to analyze payroll and time and labor to develop a future service delivery model

Key Benefits
- Responsive, consistent, high-quality customer service
- Cost savings (mid-range estimate of $16.5 million) achieved through a focus on efficiency and strategic sourcing/category management
- Professional development opportunities through a shift to a unified organizational structure

Implementation Timeline – FY19 – FY 21

University of Massachusetts
Background
Background

The Shared Services project was launched at the request of the President with the support of the Board to assess the potential of a shared services model at UMass

- Objectives
  - Evolve A&F organization to provide world-class service across the entire system
  - Modernize functions to provide services at lower cost
  - Re-invest savings back to academic programs and ensuring continued affordability

- Shared Services planning project should build on momentum of past initiatives:
  - 2011 Procure-to-Pay Study
  - Business Process Review (BPR)
  - Efficiency & Effectiveness Taskforce (E&E)

- Delivery of comprehensive plan by January 2019*
  - Refresh 2011 study on Procure-to-Pay and perform initial assessment of payroll
  - Collaborate with campus leadership, faculty, and staff
  - Focus on accounts payable, procurement, and payroll

* Originally December 2018 but extension granted to allow for more analysis on Procurement
### Current Context

*The UMass system needs to be more efficient given long-term enrollment projections, flat state support, and the mission to maintain affordability.*

<table>
<thead>
<tr>
<th>Enrollment (FTE)</th>
<th>State Appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY19: 65,760</td>
<td>FY19: $519,167</td>
</tr>
</tbody>
</table>

- While growth has been strong, changing demographics are expected to compromise enrollment.
- Fringe rate and collective bargaining driving state funding increases.

<table>
<thead>
<tr>
<th>Financial Aid</th>
<th>Undergrad: In State Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY19: 382,803</td>
<td>FY19: 15,155</td>
</tr>
</tbody>
</table>

- University funded aid is the largest source of “free” aid to students.
- Need for reliable sources of funds that support cost drivers.
- Increases to tuition and student need add pressure to this cost.
- Adds to student cost of attendance; impacts financial aid.

**Note:** FY17 reduction to State Appropriation reflects implementation of Tuition Retention.
Guiding Principles

Promote collaboration among campuses through an approach designed to identify and achieve efficiencies in services and to reduce the cost of operations.

- Continuous Improvement of financial/operational controls and service to campuses
- Leverage technology to modernize operations; concurrently, explore next generation ERP architecture
- Utilize economies of scale to lower campus costs and improve efficiencies
- Establish more efficient and standardized processes
- Harmonize policies and maintain campus flexibility where appropriate
- Leverage campus expertise
- Maintain campus resources needed to manage local business relationships
- Establish a shared governance structure with campus representation
- Continuous improvement to measure results (establish Service Level Agreements and Key Performance Indicators against goals and standards
- Comprehensive analysis for the best location given cost and skills required
Customer-centric Approach

- Innovation and Process Optimization
- Improved Service Delivery
- Cost Reduction
- Transparency

Campus Customers
Structure and Approach
Project Governance

A governance model was established to set strategic direction and make key decisions throughout the planning phase.

1. Board of Trustees
2. President’s Council
3. Better Together (BT) Steering Committee
4. Planning Phase Project Team

Shared Services Advisory Working Group

Direction & guidance

Recommendations

Cross campus coordination
A Steering Committee and an Advisory Committee were established to set program direction, make key decisions, and provide guidance.

<table>
<thead>
<tr>
<th>Name, Campus, &amp; Title</th>
<th>Name &amp; Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Better Together Steering Committee</strong></td>
<td></td>
</tr>
<tr>
<td>• Lisa Calise, Senior Vice President for A&amp;F/Treasurer</td>
<td>• Stephen Karam, UMass Board of Trustees;</td>
</tr>
<tr>
<td>President’s Office</td>
<td>Chair, Committee on Administration and Finance</td>
</tr>
<tr>
<td>• John Lindstedt, Executive Vice Chancellor for A&amp;F</td>
<td>• Mary Burns, UMass Board of Trustees;</td>
</tr>
<tr>
<td>UMass Medical School</td>
<td>Chair, Advancement Committee</td>
</tr>
<tr>
<td>• Joanne Yestramski, Sr. Vice Chancellor for Finance,</td>
<td>• Katherine Newman, Interim Chancellor, UMass Boston</td>
</tr>
<tr>
<td>Operations and Strategic Planning, UMass Lowell</td>
<td>• John McCarthy, Provost &amp; Sr. Vice Chancellor for Academic Affairs, UMass</td>
</tr>
<tr>
<td>• Andy Mangels, Vice Chancellor for A&amp;F</td>
<td>Amherst</td>
</tr>
<tr>
<td>UMass Amherst</td>
<td>• Scott Latham, Associate Professor, UMass Lowell</td>
</tr>
<tr>
<td>• Mike Barone, Interim Vice Chancellor for Administration</td>
<td>• Lisa Calise, Sr. V.P. for A&amp;F and Treasurer, President’s Office</td>
</tr>
<tr>
<td>&amp; Fiscal Services, UMass Dartmouth</td>
<td>• John Letchford, CIO University of Massachusetts, President’s Office</td>
</tr>
<tr>
<td>• Kathleen Kirleis, Vice Chancellor for A&amp;F</td>
<td>• John Lindstedt, Executive Vice Chancellor for A&amp;F UMass Medical School</td>
</tr>
<tr>
<td>UMass Boston</td>
<td>• Mike Barone, Interim Vice Chancellor for Administration &amp; Fiscal Services,</td>
</tr>
<tr>
<td>• John Letchford, CIO University of Massachusetts</td>
<td>UMass Dartmouth</td>
</tr>
<tr>
<td>President’s Office</td>
<td></td>
</tr>
</tbody>
</table>

Advisory Working Group
The project team was comprised of functional experts from each campus. The team conducted 3 key workshops and several targeted meetings to collect feedback and input for the plan.

<table>
<thead>
<tr>
<th>Campus</th>
<th>Team Member &amp; Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amherst</td>
<td>• Norm Gousy, Controller</td>
</tr>
<tr>
<td></td>
<td>• Lynn McKenna, Budget Director</td>
</tr>
<tr>
<td></td>
<td>• Tim Cendrowski, Dir HR Systems Operations</td>
</tr>
<tr>
<td></td>
<td>• John Martin, Director of Procurement</td>
</tr>
<tr>
<td>Boston</td>
<td>• Marie Bowen, Vice Chancellor, HR</td>
</tr>
<tr>
<td></td>
<td>• Chris Giuliani, Associate Vice Chancellor</td>
</tr>
<tr>
<td></td>
<td>• KrisAnn O’Herron, Associate Controller</td>
</tr>
<tr>
<td></td>
<td>• Peter Franciosi, Director of Procurement</td>
</tr>
<tr>
<td></td>
<td>• Amy Chin, Payroll Manager</td>
</tr>
<tr>
<td>Dartmouth</td>
<td>• Suzanne Audet, Controller</td>
</tr>
<tr>
<td></td>
<td>• Mike LaGrassa, Assistant Vice President Admin. Services</td>
</tr>
<tr>
<td></td>
<td>• Elizabeth Sherry-Cazzone, Sr. HR Coordinator</td>
</tr>
<tr>
<td></td>
<td>• Jean Schlesinger, IS/FN Reporting Manager</td>
</tr>
<tr>
<td>Lowell</td>
<td>• Lauren Turner, Senior Associate Vice Chancellor, HR</td>
</tr>
<tr>
<td></td>
<td>• Steve O’Riordan, Associate Vice Chancellor, Fin. Services</td>
</tr>
<tr>
<td></td>
<td>• Tom Hoole, Chief Procurement Officer</td>
</tr>
<tr>
<td></td>
<td>• Hilary Clark, Director HR Operations and Payroll</td>
</tr>
<tr>
<td>Medical</td>
<td>• Deb Hamois, Associate Vice Chancellor HR</td>
</tr>
<tr>
<td>School</td>
<td>• Amy Miarecki, Assistant VC Grants and Contract Admin</td>
</tr>
<tr>
<td></td>
<td>• Brian Girard, Director Purchasing &amp; AP</td>
</tr>
<tr>
<td></td>
<td>• Rob Hyde, Accounts Payable Manager</td>
</tr>
<tr>
<td>President’s</td>
<td>• Barbara Cevallos, Controller</td>
</tr>
<tr>
<td>Office</td>
<td>• Matt Gorzkowicz, Associate Vice President, A&amp;F</td>
</tr>
<tr>
<td></td>
<td>• David Nero, Assistant VP Innovation and Ops Services</td>
</tr>
<tr>
<td></td>
<td>• LeeAnn Pasquini, Assistant VP Budget &amp; Planning</td>
</tr>
<tr>
<td></td>
<td>• John Dunlap, Deputy Chief Human Resources Officer</td>
</tr>
<tr>
<td></td>
<td>• John Healey, Director of Enterprise Procurement</td>
</tr>
<tr>
<td></td>
<td>• Carol Dugard, Assist Director, HR Systems</td>
</tr>
<tr>
<td></td>
<td>• Nicole Tirella, Associate Controller</td>
</tr>
<tr>
<td></td>
<td>• Lynne Farrell, Accounts Payable Manager</td>
</tr>
<tr>
<td></td>
<td>• Frank Trollo, Operations Manager</td>
</tr>
<tr>
<td></td>
<td>• Mike Rizk, Procurement Systems Specialist</td>
</tr>
<tr>
<td></td>
<td>• Irene Mauch, Business Processing Redesign Lead</td>
</tr>
<tr>
<td>UITS</td>
<td>• Doug Anderson, Associate CIO for Planning and Delivery</td>
</tr>
<tr>
<td></td>
<td>• Ellen Kanter, Associate CIO Enterprise Applications</td>
</tr>
<tr>
<td></td>
<td>• John Munroe, Director, Application Services, HR &amp; Finance</td>
</tr>
<tr>
<td></td>
<td>• Darpan Gokharu, Manager/HR Systems</td>
</tr>
<tr>
<td></td>
<td>• Megan Momtaheni, Manager/FN Systems</td>
</tr>
</tbody>
</table>
The planning phase was a 20 week assessment and the development of a plan for a shared services model.

**Planning Phase Timeline**

- Communicate and organize
- Prioritize processes
- Review best practices
- Collect and analyze data
- Review technology
- Draft plan
- Finalize plan

**Campus Engagement**

- September '18
- October
- November
- Dec-January '19
Planning Phase Approach

A collaborative approach was taken to develop the plan, including workshops, data analysis, and analysis of best practices and peers.

- **UMass Project Team Workshops**
  - Key resources from each campus were identified by project sponsors and steering committee members
  - 3 workshops conducted along with function specific meetings as needed to develop recommendations and input into the plan

- **Data Collection & Analysis**
  - Current state FTE & costs
  - Current state transaction specific data
  - Benchmarks (Accenture and Hackett)
  - Future state FTE & cost savings

- **Best Practices & Peer Analysis**
  - Accenture best practices
  - Examples of shared services delivered by higher education organizations

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**University of Massachusetts**
Plan Development

Taking the work of the project team, we provided draft recommendations to the governance groups, which provided feedback and made decisions.

Inputs
- Project Team Workshops
- Experience from Peer Systems
- Best Practices & Benchmarks*
- Data Analysis

Governance
- President’s Council Guidance
- Advisory Working Group Feedback
- BT Steering Committee Decision-making
- Meetings and Town Halls

Shared Service Plan
- Data Analysis
- Comparison to Best Practices and Benchmarks*
- Recommendations
- Savings Potential
- Timeline

* Accenture and Hackett Benchmarks
Key Findings
Priority Functions and Focus Areas

**Priority Functions**
- Accounts payable
- Procurement
- Payroll

**Focus Areas**
- Best practices
- Data analysis/SLAs
- Process prioritization

**Why focus on these functions?**
- Aligned with best practices
  - Repeatable & rules-based
  - Measurable
  - Low touch (vs. in-person, high-touch needed at the campus level)
  - High volume/potential savings (drive economies of scale)
- Some collaborative work already done within each area
Key Processes

Identified processes across accounts payable, procurement, and payroll were the focus for planning phase activities and recommendations.

**Accounts Payable**
- Invoice Management
- Travel & Expense
- Vendor Management

**Procurement**
- Procurement Management
- Sourcing & Category Mgmt
- Requisition/PO Processing
- Compliance Management
- Contract Management
- Procurement Technology
- Card Management

**Payroll**
- Employee Data Maintenance
- Payroll Integrations
- Time and Labor
- Employee Pay
- Schedule Management
- Payroll Processing
- Pre-Payroll
- On-Cycle
- Ad-Hoc Transactions
- Post-Confirm Processing
- Administer Retroactive Payroll
Accounts Payable Key Findings

While many aspects of the 2011 Procure-to-Pay Study have been implemented and savings realized, there are opportunities to generate more savings and efficiencies.

1. Progress has been made since 2011 to create efficiencies in Accounts Payable
   • Vendor Master data maintenance has been consolidated into one group in Amherst
   • Implementation of BuyWays has funneled all spend through one source system
   • Minimal implementation of prompt payment discounts

2. Accounts Payable activity is performed by 36.5 FTEs across the system
   • Benchmarks* and peer analysis indicate efficiency opportunities through unification of resources and a continued emphasis on automation

3. Unanimous consensus that Accounts Payable activities can be delivered via shared services

4. Accounts Payable related policies and procedures differ by campus

5. Users find the current travel and expense process and technology cumbersome

* Based on Hackett Benchmark
Procurement Key Findings (1/2)

While many aspects of the 2011 Procure-to-Pay Study have been implemented and savings realized, there are opportunities to generate more savings and efficiencies.

1. Progress has been made since 2011 and savings have been generated
   • Approximately $14M in savings generated through re-negotiation of enterprise-wide contracts in select categories
   • Common system implemented (i.e., BuyWays using Jaggaer)
   • Hired a President’s Office procurement director to coordinate system-wide initiatives

2. Procurement runs as a federation of independent procurement teams that works closely together on common initiatives
   • Procurement Council meets weekly to discuss strategy and initiatives
   • Collaborates on selective enterprise-wide initiatives
   • Large dollar contracts are negotiated by a lead campus
   • Coordinates strategy across campus and shares best practices

3. Procurement activity is performed by 39.6 FTEs across the system
   • Benchmarks* and peer analysis indicate an opportunity to further shift focus from transactional to strategic

* Based on Hackett Benchmark
4. Procurement responsibility varies across campuses
   • Procurement manages accounts payable on some campuses but not others
   • Procurement teams work with faculty, staff, and legal on contracts that may not involve a payment but may involve commitment of delivery of services
   • On some campuses, procurement has become a de-factor risk manager

5. A number of challenges to achieving greater benefits were identified
   • Lack of clearly defined authority
   • Lack of quality data & spend analytics & reporting
   • High volume of calls not associated with supply chain
   • Time required for more training/cross training
   • Time required to manage public records requests
Payroll Key Findings

While Payroll runs successfully every two weeks, there are many people across the system that participate in the preparation of the bi-weekly payroll. There may be opportunities to rationalize these activities and generate savings and efficiencies.

1. UMass pays 30,000+ employees accurately every 2 weeks

2. No system-wide payroll process owner
   • No clear functional or business ownership of Payroll (e.g., a system-wide Payroll Officer)
   • Payroll is run by a collaboration of independent teams comprised primarily of campus HR and President's Office UITS staff

3. ~50 people are involved in the bi-weekly processing of payroll
   • 20.3 FTEs (50 headcount) perform bi-weekly payroll related activities including the updates of employee data (e.g., tax withholding and deductions)
   • FTE and headcount numbers do not include campus-based employees performing time & attendance functions

4. UITS staff play a central role in processing of each payroll
Peer Analysis
Peer Analysis*

- A variety of higher education organizations were analyzed
  - Maine, Missouri, Colorado, Indiana
    - Public systems with mature system-wide shared services
  - Wisconsin, Illinois, New Hampshire
    - Public systems early in their shared services journey
  - California
    - Public system using a distributed/shared model
  - Yale
    - Private with evolving shared services

- Group calls, individual calls, and a site visit (Yale) were conducted to learn more about their models

- Primary focus of further analysis was placed on the public systems with mature system-wide shared services

- Key characteristics were identified

* The focus of the analysis was procurement and accounts payable. Payroll was not discussed
Peer Analysis - Key Characteristics

**Organizational Structure**
- Separate operating unit
- System-wide unified procurement services led by a Chief Procurement Officer (CPO)
- All procurement and AP staff report to CPO

**Customer Service**
- Emphasis on customer service
- Service Level Agreements (SLAs) in place
- Technology supports customer service functions

**Staffing Strategy**
- New job descriptions developed
- Leverage internal talent
- Staff co-located and campus based
### Peer Key Characteristics (Procurement and AP)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Maine</th>
<th>Missouri</th>
<th>Colorado</th>
<th>Indiana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Procurement Officer (CPO)/equivalent</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>All staff report to CPO</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>System-level unified procurement organization</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Procurement organization includes accounts payable</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Staff centrally located</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Org built with new job descriptions</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference for internal candidates</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Unified contact center/customer surveys used</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Technology enabled communication for team</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Service Level Agreements used (past or current)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Commodity-based model for procurement</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Select commodities excluded</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Governance (past or current)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Shared services costs allocated</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Spend Analysis
Spend Analysis Approach

A spend analysis was performed to articulate potential savings relative to the various functions within procurement

- Leveraged UMass financial (FY18 expenditures) and procurement data (active contracts)
- Engaged Accenture Procurement Practice to conduct an analysis and provide savings opportunities and estimates
  - Accenture ran spend data through their database to associate transactions with their spend categories
  - Accenture Category Managers analyzed and provided potential opportunities and savings estimates
Spend Analysis Results

- **$581M--Highest Savings-Potential Categories**
  - Categories where spend is concentrated, sourcing actions likely to net savings/benefits
  - Demand management and focusing spend to preferred suppliers produce additional savings

- **$329M--Lowest Savings-Potential Categories**
  - Categories where vendor options are limited due to high switching/substitution costs, products/services are highly specialized, or total spend within the category is low

- **$313M--Non-Addressable Categories**

*Does not include* P-Card spend ($37M)

Note: Addressable spend determination based on Accenture methodology
# Highest Savings Potential Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Spend</th>
<th>Vendor Count</th>
<th>Sub-Category Examples</th>
</tr>
</thead>
</table>
| Equipment, Engineering, Construction               | $141M       | 533          | • Capital Equipment  
• Construction Materials & Services  
• Engineering/Architecture                  |
| Professional Services                              | $140M       | 488          | • Management Consulting  
• Professional Services                      |
| Technology                                         | $100M       | 331          | • IT Infrastructure & IT Software  
• IT Services  
• Telecommunications                           |
| Facilities                                         | $90M        | 131          | • Cleaning  
• Grounds  
• Office Supplies                               |
| Energy                                             | $51M        | 19           | • Electricity  
• Natural Gas                                   |
| Industrial and Maintenance, Repair, and Operations (MRO) | $34M        | 270          | • MRO Equipment & Services  
• Industrial – Metals                             |
| Marketing                                          | $21M        | 146          | • Agency  
• Market Research  
• Media                                         |
| **Totals**                                         | **$581M**   | **1,918**    |                                                            |

1 Vendor count is based on the distinct number of vendors for the respective category
## Lowest Savings Potential Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Spend</th>
<th>Vendor Count</th>
<th>Sub-Category Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Dollar Tail Spend</td>
<td>$131M</td>
<td>17,136</td>
<td>• Suppliers not in Accenture’s database&lt;br&gt;• Typically small to medium sized businesses</td>
</tr>
<tr>
<td>Other (Education Specific)</td>
<td>$84M</td>
<td>257</td>
<td>• Other Universities&lt;br&gt;• Healthcare Providers&lt;br&gt;• Academic related vendors</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>$48M</td>
<td>99</td>
<td>• Agricultural Products&lt;br&gt;• Chemicals, Dyes, Pigments, Paints&lt;br&gt;• Manufacturing – Drugs and Food</td>
</tr>
<tr>
<td>HR and Benefits</td>
<td>$38M</td>
<td>102</td>
<td>• Benefits Providers&lt;br&gt;• Recruiting &amp; Relocation Services</td>
</tr>
<tr>
<td>Travel</td>
<td>$21M</td>
<td>106</td>
<td>• Meetings&lt;br&gt;• Retail Purchases&lt;br&gt;• Travel Expenses</td>
</tr>
<tr>
<td>Logistics</td>
<td>$3M</td>
<td>32</td>
<td>• Air Cargo Transport&lt;br&gt;• Small Package</td>
</tr>
<tr>
<td>Packaging</td>
<td>$1M</td>
<td>14</td>
<td>• Converted Paper-based Packaging&lt;br&gt;• Industrial Packaging&lt;br&gt;• Miscellaneous Packaging</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$329M</strong></td>
<td><strong>17,746</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 Vendor count is based on the distinct number of vendors for the respective category
## Non-Addressable Spend Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Category Total</th>
<th>Payee Examples</th>
</tr>
</thead>
</table>
| Internal                              | $306M          | • Commonwealth of Massachusetts  
• University of Massachusetts Building Authority |
| Fees, Fines, Licenses & Permits       | $5M            | • Varies public, private, and not-for-profit entities |
| Taxes                                 | $2M            | • Varies public, private, and not-for-profit entities |
| **TOTAL**                             | **$313M**      |                                                                               |
Recommendations
Overarching Recommendations

1. Create a Unified Procurement Services Team that includes a customer service function

2. Provide services to all campuses through the Unified Procurement Services Team

3. Establish a shared governance structure with strong campus customer representation

4. Maintain campus presence to manage local relationships

5. Measure and report results against agreed-upon Service Level Agreements (SLAs) and Key Performance Indicators (KPIs)
Procurement Recommendations

1. Create a Unified Procurement Services Team
   • Manage transaction and other related tasks
   • Manage implement strategic sourcing and category management
   • Manage spend/data analytics/reporting
   • Manage a customer service function
   • Manage procurement technology and user support

2. Create a position of system-wide Chief Procurement Officer
   • Assign accountability for all UMass addressable spend
   • Assign reporting relationships of all Procurement team resources to the CPO
   • Maintain presence on campuses for demand and customer relationship management
   • Define isolated commodities to be managed by select campuses

3. Harmonize policies considering campus needs where appropriate
   • Transaction approval thresholds
   • Contracting terms

4. Set annual targets for cost savings
Accounts Payable Recommendations

1. Create a Unified Procurement Services Team
   • Create a customer service function to handle inquiries/requests
   • Manage data entry and other repetitive tasks

2. Harmonize policies considering campus needs where appropriate
   • Transaction approval thresholds
   • Travel & Expense policies
   • Vendor master maintenance policies

3. Automate accounts payable-related activities
   • Perform due diligence on travel & expense processing tools
   • Perform analysis of opportunities to automate invoice processing

4. Pursue prompt payment discounts
   • Benchmark data* indicates savings opportunities if prompt pay discounts are included in eligible vendor contracts and managed via invoice processing

* Accenture Benchmark
Current Procure to Pay Structure

- 6 separate campus procurement and AP functions
- 3 campuses with procurement and AP separate, 2 combined (Dartmouth AP managed by President’s Office)

Amherst
- Accounts Payable (Controller)
- Procurement

Boston
- Accounts Payable (Controller)
- Procurement

Dartmouth
- Procurement

Lowell
- Accounts Payable and Procurement

Medical School
- Accounts Payable and Procurement

President’s Office
- Accounts Payable (Controller)
- Procurement

Governance
- VCs of A&F
- Procurement Council
- Controllers
Recommended Future State

Recommending a Unified Procurement Services Team across 4 functional areas*:

- Procurement Operations
- Strategic Procurement
- Accounts Payable/Travel
- Customer Service

* Recommended structure based on peer analysis and Hackett benchmarks
Recommended Organization/Governance Structure

**Unified Procurement Services Team**

- **SVP of Administration and Finance**
- **Chief Procurement Officer**

**Governance**

- **Steering Committee**
- **Customer Advisory Committee**

**Key Governance Elements**
- All campuses represented
- Customer-driven focus
- Collaborative strategy and prioritization of resources
- Continuous performance and service reporting

*Customer Service function expected to provide services across broader A&F functions*
Key Customer Service Elements

Customer Contact Center

- One Phone Number
- One Email Address
- Knowledgebase
- Self-Service

Unified Procurement Services

Customer Service Team

- Log inquiries as cases
- Work with customer to understand and attempt to resolve the case
- Escalate as needed

Unified Procurement Services

Functional Teams

- Manage cases that can’t be resolved by Customer Service Team
- Work with customer and Customer Service Team to resolve the case

Status, Updates, Closing the Loop

Escalation and Feedback
Payroll Recommendations

1. Perform a deep dive analysis on payroll processes to identify efficiency opportunities

2. Perform deep dive analysis on time & attendance to identify efficiency opportunities

3. Harmonize policies considering campus needs where appropriate

4. Continue automation of payroll-related activities, including:
   - Further expand employee self-service
   - Further automate workflow for approvals and notifications
   - Further enhance reporting capabilities
   - Further expand use of digital forms and signatures

Additional Accenture recommendations to be reconsidered after deep dive analysis

1. Create a position of system-wide Payroll Officer

2. Create a Unified Payroll Services team
   - Create a customer service function
   - Move data entry and other repetitive tasks to Unified Payroll services
   - Create a group within the Unified Services Team to manage international employee data
## Savings Opportunity Overview

<table>
<thead>
<tr>
<th>Strategic Sourcing and Category Management</th>
<th>Operational Efficiency</th>
<th>Prompt Pay Discounts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$13.75 million</strong>*</td>
<td><strong>$1.5 million</strong>**</td>
<td><strong>$1.25 million</strong>***</td>
</tr>
<tr>
<td>Estimated, ongoing savings attributed to increased emphasis on strategic sourcing and category management</td>
<td>Estimated annual savings attributed to a shift to a Unified Procurement Services Team model</td>
<td>Estimated annual savings attributed to greater utilization of prompt pay discounts</td>
</tr>
</tbody>
</table>

**$16.5 million total estimated savings**

---

*Mid-point savings estimate from Accenture spend analysis (range from $5.3M to $22.1M)*  
**Mid-point savings estimate from FTE analysis (range from $1.25M to $1.75M)*  
***Mid-point savings estimate from Accenture benchmark (range from $1.0M to $1.5M)*
<table>
<thead>
<tr>
<th>Savings Opportunity Groups</th>
<th>Low Est. Savings</th>
<th>Mid Est. Savings</th>
<th>High Est. Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Sourcing Savings Opportunity</td>
<td>$4.4</td>
<td>$7.0</td>
<td>$9.5</td>
</tr>
<tr>
<td>Category Management Savings Opportunity</td>
<td>$0.9</td>
<td>$5.0</td>
<td>$9.3</td>
</tr>
<tr>
<td>High Potential Category Savings Total</td>
<td>$5.3M</td>
<td>$12M</td>
<td>$18.8M</td>
</tr>
<tr>
<td>% Savings Total (against $581M)</td>
<td>0.9%</td>
<td>2.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Low Potential Category Opportunity</td>
<td>$0.0</td>
<td>$1.0</td>
<td>$2.0</td>
</tr>
<tr>
<td>Low-Dollar Tail Spend Opportunity</td>
<td>$0.0</td>
<td>$0.75</td>
<td>$1.3</td>
</tr>
<tr>
<td>Low Potential Category Savings Total</td>
<td>$0.0M</td>
<td>$1.75M</td>
<td>$3.3M</td>
</tr>
<tr>
<td>% Savings Total (against $329M)</td>
<td>0.0%</td>
<td>0.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Grand Total Savings</td>
<td>$5.3M</td>
<td>$13.75M</td>
<td>$22.1M</td>
</tr>
<tr>
<td>Grand Total % Savings (against $910M)</td>
<td>0.6%</td>
<td>1.5%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>
Strategic Sourcing/Category Management Savings Opportunity

*Mid-point target of $13.75M in estimated savings from implementing strategic sourcing and category management (including tail spend management)*

- **Target $7M** in potential savings through increased strategic sourcing on targeted subcategories  
  o Typical savings capture timeline of 6-12 months

- **Target $5M** in potential savings through category management discipline  
  o Typical savings capture timeline of 12-24 months  
  o Shorter for UMass because of existing shared technology (BuyWays)

- **Target $1.75M** in potential savings between low opportunity categories & tail spend management

- **Additional opportunity** with recurring cycles driven by category managers/CPO  
  - Revisit major categories for changes in/consolidation of demand  
  - Concentrate spend, consolidate preferred suppliers, establish and refresh preferred rates  
  - Enhance buying channels and expand/refresh content  
  - Enhance analytic capabilities and actionable insights
Strategic Sourcing Context

*UMass has a strong history of strategic sourcing through the Procurement Council and E&E efforts. A unified procurement model places an additional emphasis to obtain greater savings*

**Key Characteristics**
- Engagement of incumbent or competitive suppliers in one-time events to drive price savings, added value incentives, or preferred terms
- Repeated on 24-48 month cycles depending on the category

**Strategies**
- RFPs or incumbent negotiations using market insights/price data
- Contract terms benchmarking
- Establishing rate cards for professional services
- Selecting preferred vendors for high frequency services (catering, charter busses, maintenance)
Category Management Context

*UMass has a limited history of category management because resources are spread across campuses and have diverse responsibilities. A unified procurement model expands the category management function to obtain greater savings*

**Key Characteristics**

- Use of an array of analytic insights to prioritize and influence buying behavior
- Reduce or optimize consumption
- Determine preferred suppliers with favorable terms and limited risk
- Consolidate spend across groups
- Drive continuous improvement in the total cost of ownership or service delivery

**Strategies**

- Supplier relationship management
- Continuous improvement enforcement for long-term providers
- Supplier consolidation
- Buying channel enhancement
- eCatalog enablement
- Policy simplification and enablement
# Key Terms for Savings Calculation

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addressability</strong></td>
<td>Likelihood that spend within a subcategory is able to be sourced or actively managed to lock in a better price, reduce/optimize the quantity consumed, or generate other favorable value. Established through mining historical trends and event data from Accenture client service provided across industries.</td>
</tr>
<tr>
<td><strong>Tail Spend</strong></td>
<td>Transaction amounts where return on savings efforts are challenging because of low amounts/fractionalization</td>
</tr>
<tr>
<td><strong>Reviewed Spend</strong></td>
<td>The amount of spend that was reviewed for savings opportunities.</td>
</tr>
<tr>
<td><strong>Sourcing Target</strong></td>
<td>The amount of reviewed spend that is targeted for strategic sourcing. It’s the calculation of Reviewed Spend and Addressability</td>
</tr>
<tr>
<td><strong>Target Spend</strong></td>
<td>The amount of spend that can be targeted for category management based on experience</td>
</tr>
</tbody>
</table>
## Accenture Strategic Sourcing Analysis
### Highest Savings Opportunity Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Spend</th>
<th>Reviewed Spend</th>
<th>Addressability</th>
<th>Sourcing Target</th>
<th>Low Est. Savings</th>
<th>Mid Est. Savings</th>
<th>High Est. Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment, Engineering, &amp; Construction*</td>
<td>$141.4</td>
<td>$140.7</td>
<td>40.8%</td>
<td>$57.3</td>
<td>$1.7</td>
<td>$2.6</td>
<td>$3.4</td>
</tr>
<tr>
<td>Professional Services</td>
<td>140.9</td>
<td>31.9</td>
<td>80.0%</td>
<td>25.5</td>
<td>0.9</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Technology**</td>
<td>100.5</td>
<td>30.1</td>
<td>0.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Facilities</td>
<td>90.8</td>
<td>46.4</td>
<td>83.6%</td>
<td>38.8</td>
<td>0.6</td>
<td>1.0</td>
<td>1.4</td>
</tr>
<tr>
<td>Energy</td>
<td>51.9</td>
<td>51.9</td>
<td>80.0%</td>
<td>41.5</td>
<td>0.4</td>
<td>1.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Industrial &amp; MRO</td>
<td>34.1</td>
<td>19.8</td>
<td>92.0%</td>
<td>18.2</td>
<td>0.9</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Marketing</td>
<td>21.6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$581.3M</strong></td>
<td><strong>$290.7M</strong></td>
<td><strong>--</strong></td>
<td><strong>$181.3M</strong></td>
<td><strong>$4.4M</strong></td>
<td><strong>$7.0M</strong></td>
<td><strong>$9.5M</strong></td>
</tr>
</tbody>
</table>

* Capital construction is heavily regulated and may influence the potential savings opportunity
** Technology addressability set to 0% based on typical higher ed pricing agreements. Savings are likely with additional analysis
## Accenture Category Management Analysis

### Highest Savings Opportunity Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Spend</th>
<th>Target Spend</th>
<th>Low Est. Savings</th>
<th>Mid Est. Savings</th>
<th>High Est. Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment, Engineering and Construction</td>
<td>$141.4</td>
<td>$84.1</td>
<td>$0.1</td>
<td>$0.5</td>
<td>$0.8</td>
</tr>
<tr>
<td>Professional Services</td>
<td>$140.9</td>
<td>$115.3</td>
<td>$0.3</td>
<td>$1.8</td>
<td>$3.5</td>
</tr>
<tr>
<td>Technology</td>
<td>$100.5</td>
<td>$100.5</td>
<td>$0.3</td>
<td>$1.7</td>
<td>$3.0</td>
</tr>
<tr>
<td>Facilities</td>
<td>$90.8</td>
<td>$52.0</td>
<td>$0.1</td>
<td>$0.6</td>
<td>$1.0</td>
</tr>
<tr>
<td>Energy</td>
<td>$51.9</td>
<td>$10.4</td>
<td>$0.0</td>
<td>$0.1</td>
<td>$0.2</td>
</tr>
<tr>
<td>Industrial and MRO</td>
<td>$34.1</td>
<td>$15.9</td>
<td>$0.0</td>
<td>$0.15</td>
<td>$0.3</td>
</tr>
<tr>
<td>Marketing</td>
<td>$21.6</td>
<td>$21.6</td>
<td>$0.1</td>
<td>$0.25</td>
<td>$0.4</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$581.3M</strong></td>
<td><strong>$399.9M</strong></td>
<td><strong>$0.9M</strong></td>
<td><strong>$5.0M</strong></td>
<td><strong>$9.3M</strong></td>
</tr>
<tr>
<td>Category</td>
<td>Low Savings Potential Categories</td>
<td>Low Savings</td>
<td>Mid Savings</td>
<td>High Savings</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>Spend Total</td>
<td>$198</td>
<td>$0</td>
<td>$1.0</td>
<td>$2.0</td>
<td></td>
</tr>
<tr>
<td>Low Dollar Tail Spend*</td>
<td>$131</td>
<td>$0</td>
<td>$0.7</td>
<td>$1.3</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>$329M</td>
<td>$0M</td>
<td>$1.7M</td>
<td>$3.3M</td>
<td></td>
</tr>
</tbody>
</table>

*Low Dollar Tail Spend are small purchases made from a large number of suppliers. Higher education organizations tend to have higher Low Dollar Tail Spend than other industries. Low Dollar Tail Spend Programs typically do not yield significant savings, but through category management activities, some savings can be achieved.
Operational Efficiency Savings Opportunity

Based on an analysis of FTE and transactional data, the UMass system can realize savings and increased efficiencies by shifting to a Unified Procurement Services model

Shift from a distributed to a unified procurement services model
- Establish a separate operating unit to provide accounts payable and procurement services across the system
- Emphasize professional development opportunities in a unified model
- Work with campuses and labor to mitigate a reduction in FTEs through attrition and other campus-based opportunities

Establish consistent, efficient processes leveraging model technology
- Leverage existing campus best practices and expertise
- Leverage existing technology, strategically invest where appropriate
- Establish more efficient and uniform operations with an emphasis on both transactional and strategic functions
- Measure and report results and develop a continuous improvement mindset

Estimated cost savings
- $1.25M - $1.75M in potential savings from a unified procurement services model
Prompt Pay Discount Savings Opportunity

Benchmark data* indicates additional savings opportunities if prompt pay is added to eligible vendor contracts and taken across related vendor invoices.

Widespread utilization of prompt pay discounts, driving up to $1.5M in savings

<table>
<thead>
<tr>
<th></th>
<th>Low Estimate</th>
<th>High Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Spend</td>
<td>$500M</td>
<td>$500M</td>
</tr>
<tr>
<td>Benchmark* Discount Yield</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Annual Discount Potential</td>
<td>$1.0M</td>
<td>$1.5M</td>
</tr>
</tbody>
</table>

* Accenture Benchmark
Roadmap
Roadmap

<table>
<thead>
<tr>
<th>Project Management and Change Management/Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AP and Procurement Phase</strong></td>
</tr>
<tr>
<td>FY 2019</td>
</tr>
<tr>
<td>Establish Organization, Processes, Enabling Technology</td>
</tr>
<tr>
<td>Vendors, Invoices, Req to PO, Customer Service Design</td>
</tr>
<tr>
<td><strong>Socialization &amp; Mobilization Phase 1-3 months</strong></td>
</tr>
<tr>
<td>Payroll Phase</td>
</tr>
<tr>
<td>Payroll Deep Dive Analysis</td>
</tr>
<tr>
<td><strong>Payroll Phase</strong></td>
</tr>
<tr>
<td>Payroll Processing Design</td>
</tr>
<tr>
<td>Employee Data Mgmt Design</td>
</tr>
<tr>
<td><strong>FY 2020</strong></td>
</tr>
<tr>
<td>Vendors, Invoices, Req to PO, Customer Service Design</td>
</tr>
<tr>
<td>Cat. Mgmt, Strat. Sourcing, Spend Analytics, Contracts</td>
</tr>
<tr>
<td>Design</td>
</tr>
<tr>
<td>Travel &amp; Expense, Card Management Technology Assessment</td>
</tr>
<tr>
<td><strong>FY 2021</strong></td>
</tr>
<tr>
<td>Cat. Mgmt, Strat. Sourcing, Spend Analytics, Contracts</td>
</tr>
<tr>
<td>Implementation</td>
</tr>
<tr>
<td>Travel &amp; Expense, Card Management Design</td>
</tr>
<tr>
<td>Establish Organization, Processes</td>
</tr>
<tr>
<td>Payroll Processing Implementation</td>
</tr>
<tr>
<td>Employee Data Mgmt Implementation</td>
</tr>
<tr>
<td>Time and Labor Design</td>
</tr>
<tr>
<td>Time and Labor Implementation</td>
</tr>
</tbody>
</table>