

Administrative Performance and Process Improvement Assessment Related to RFP #31018

-- Final Report --

November 29, 2017



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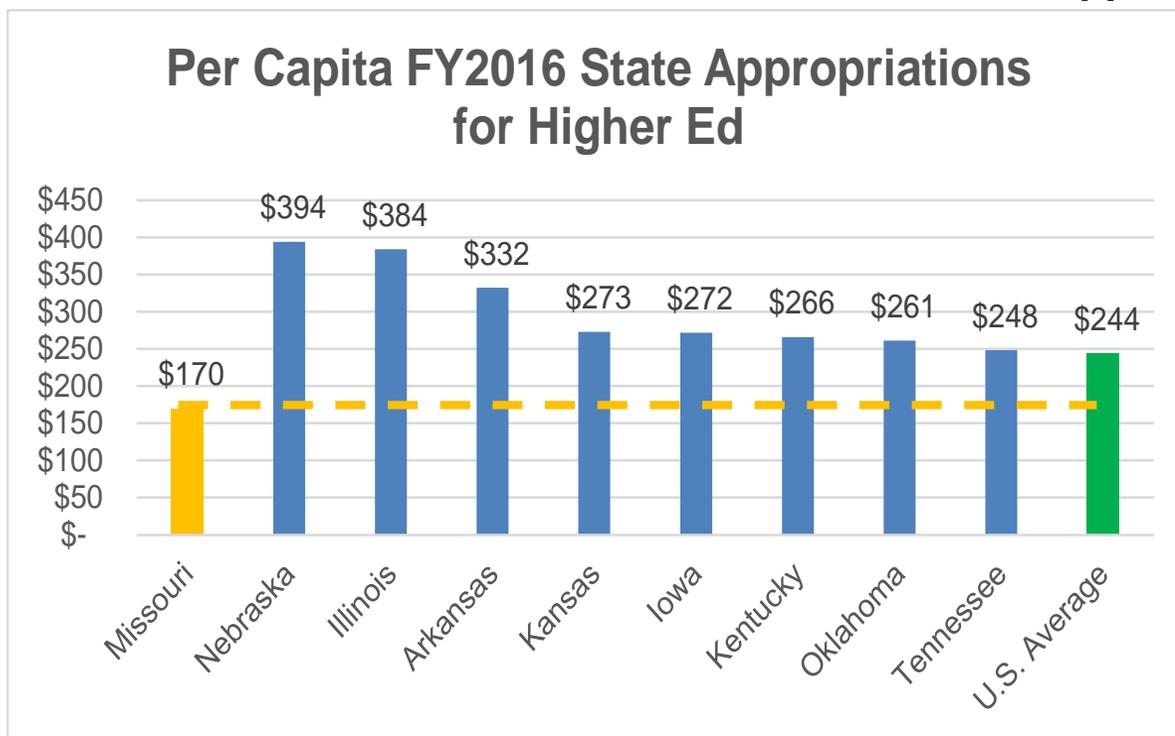
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1. Executive Summary

Assessment Context

- The University of Missouri's four campuses and System Administration addressed a budget shortfall of \$62M in FY18
- The two primary traditional revenue sources (1) State Appropriations (2) Net tuition and student fees are expected to be limited over the next five years

State Appropriations



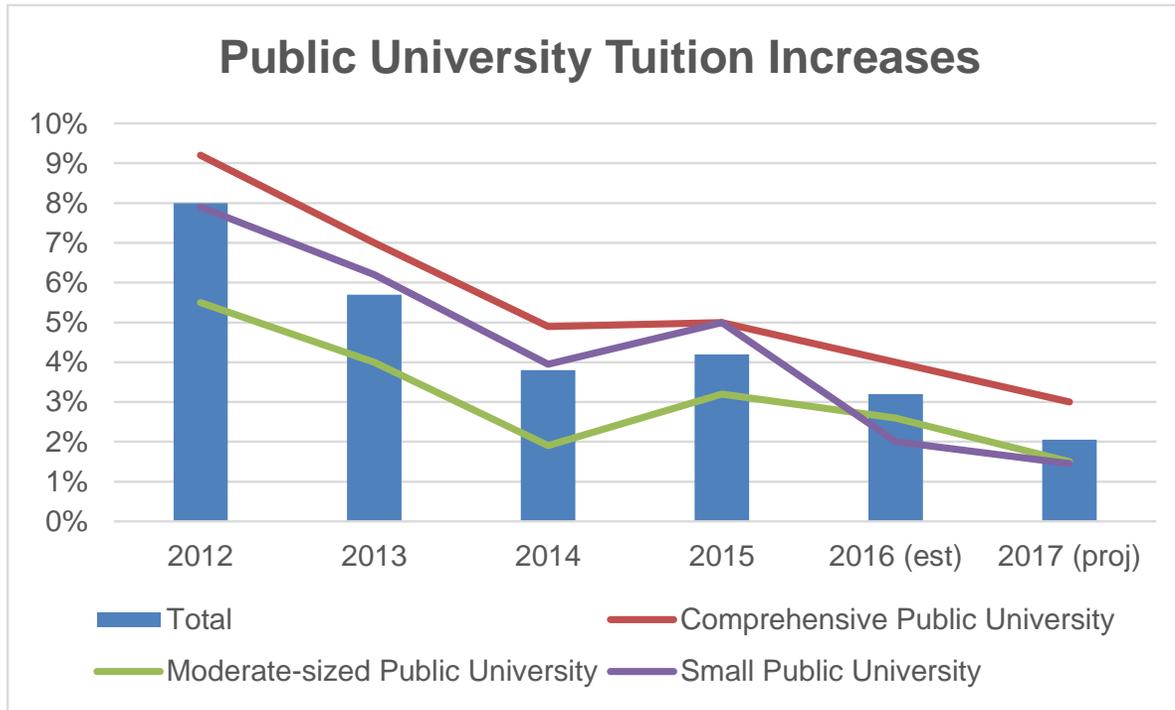
- The state of Missouri's Higher Ed appropriation amount on a per capital basis ranks 46th across the nation at \$170, the national average is \$244
- State appropriations have fallen from 62% of total revenues in 2000 to 35% in 2016
- Moody's projects lower state appropriations nationally due to competing priorities
- Moody's projects the State of Missouri revenues to drop by 7% over the upcoming five years

Note: Budget shortfall projection from June 2017 Budget Presentation; Public University Tuition Increases per Moody's Investor Services – *Universities Face Another Year of Low Net Tuition Revenue Growth*, November 2016; State of Missouri Revenue Outlook per Moody's Investor Services August 2017 Rating report

Assessment Context

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Net Tuition and Student Fees



- *“Subdued growth underscores a heightened focus on freezing or limiting tuition increases coupled with a highly competitive environment” – Moody’s*
- *“The Midwest, confronted with a declining number of high school graduates, faces the greatest amount of pressure with over 61% of survey respondents reporting decreasing enrollment in fall of 2017” – Moody’s*

Note: Budget shortfall projection from June 2017 Budget Presentation; Public University Tuition Increases per Moody’s Investor Services – *Universities Face Another Year of Low Net Tuition Revenue Growth*, November 2016

Assessment Context

- Revenue growth is not a viable path to a healthy bottom-line
- In order to balance the budget and make strategic reinvestments, UM has commissioned this report to **identify potential cost savings opportunities at MU and the UM System Office and MU** that may be implemented to improve the university's overall financial health
- UM must **expand these findings** to all campuses in order to capture additional operational benefits
- This report is **the first step in a multi-year transformation** to create operational efficiency and excellence
- Through this work, it has become clear that **the operating model will need to be transformed** in order to improve operational effectiveness and to generate and sustain savings

Assessment Overview

This document represents the findings related to the University of Missouri's "RFP #31018 -- Consulting services for identification of administrative performance and process improvement opportunities"

Scope	Approach	Limitations
<ul style="list-style-type: none"> • UM System central office and MU campus • Facilities, Finance, Human Resources and Information Technology at the UM system central office and MU campus have been analyzed • Findings that expand beyond UM System and MU campus are noted accordingly 	<ul style="list-style-type: none"> • Based on Fiscal Year 2017 data • For those changes that already occurred in FY18, findings have been adjusted • Performed over 70 interviews with key leaders and stakeholders (details p.8) • Over eight weeks the four teams collaborated to identify and quantify opportunities • Many opportunities will require robust planning to ensure successful execution 	<ul style="list-style-type: none"> • Opportunities were based on currently available data and assumptions reviewed by UM leads • Findings, while based on best available data, are directional and shouldn't be taken as final as they will be refined during future stages of work • Applicability of opportunities to other campuses will require further study

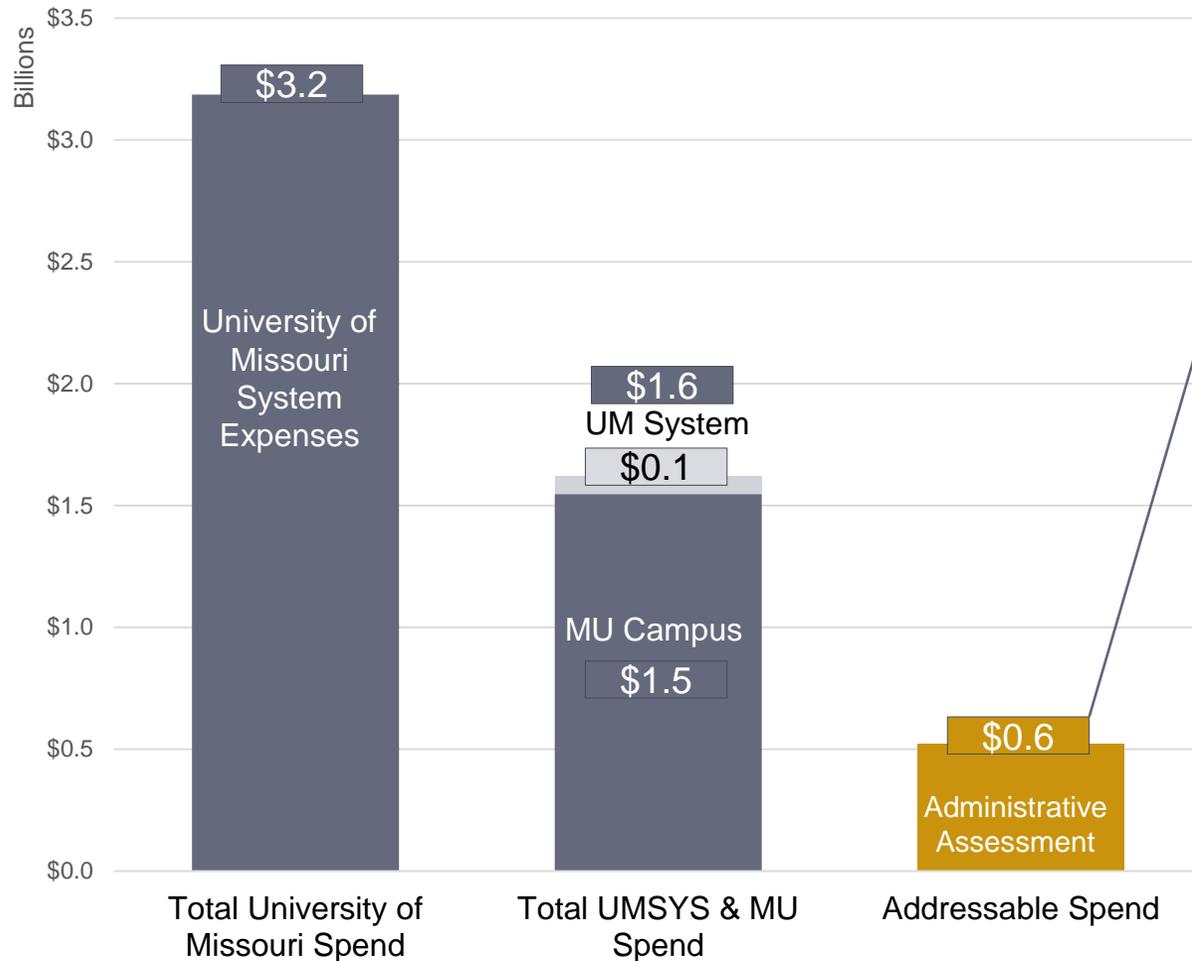
Information Gathering Process

- This assessment included an analysis of primary data sets such as the general ledger, payroll and accounts payables
- Each workstream also collected data and information to develop an understanding of operations within each functional area
- To supplement this dataset over 70 stakeholder interviews were performed to further identify and refine improvement opportunities
- Additional engagement is being planned at UMKC, UMSL and S&T

University of Missouri Stakeholder Input by Workstream	UM System	Columbia	UMKC	UMSL	S&T	Total
Faculty and Staff Representation	3	4	1	1	1	9
Facilities	3	5				8
Information Technology	10	2				12
Engagement Leadership and Communications	10	7	1			19
Finance	5	2	1	1	1	10
Human Resources	6	3				9
Supply Chain	6					6
Total:	43	23	3	2	2	72

Spend Overview

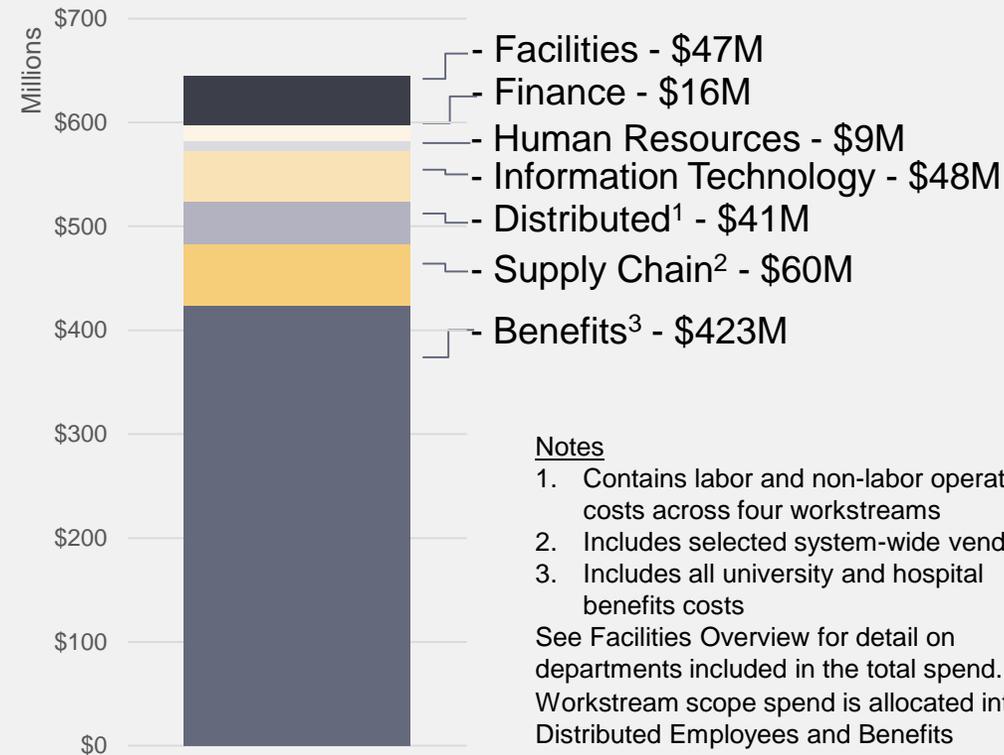
Assessment scope includes 20% (~\$0.6B) of total UM spend; a significant portion represented by benefits expenses



Note: All spend from FY17 GL

Assessment Addressable Spend Breakout (\$644M)

(Addressable spend does not reflect actual budget managed by each functional area)



Notes

1. Contains labor and non-labor operating costs across four workstreams
2. Includes selected system-wide vendors
3. Includes all university and hospital benefits costs

See Facilities Overview for detail on departments included in the total spend. Workstream scope spend is allocated into Distributed Employees and Benefits categories on this chart.

Observations

Based on the information gathered through interviews and data analysis, several observations are noteworthy and possibly explain the challenges to date in optimizing administrative operations. Consideration of these observations is needed when advancing forward with implementation



Decision Rights & Norms

- Solutions to operational issues are generally known, but coming to agreement on how to implement is a challenge
- Sustainability of changes unwinds due to lack of accountability, metrics and oversight
- Near-term budgetary constraints have hindered long-term strategic planning



Information & Data

- Executive decision making not always informed by robust and timely data
- Few leaders have access to information across organizational boundaries
- Multiple instances of key systems diminishes integrity and utility of data



Structure

- Campus independence overrides “systemness”
- Inefficiencies have been created by distributed roles and accountability across system, campuses, and divisions
- Similar administrative functions and processes exist across campuses and between departments



Change Management

- Recognition that the status quo is unsustainable
- An atmosphere of uncertainty and desire for transparency exists
- Communication and alignment across the university, including faculty and staff, will be a key to success

Keys to Success

For the University of Missouri System to implement and sustain meaningful operational efficiencies and cost savings it must:

1

Redesign the operating model to address underlying inefficiencies

- **Look across the entire system including each campus and in academic departments** in order to identify savings
- Central administrative functions have already implemented readily attainable cost savings
- Clarify **how and where decisions** are made throughout the organization
- Enable functional leaders to **manage expenses across departments** and organizational lines
- Identify and implement current leading practices to reinvest resources into strategic organizational priorities



2

Embrace a thoughtful approach to implementation

- **Develop a Transformation Management Office** to provide full time, dedicated resources to promote accountability and execution of implementation (details on p. 120-121)
- Understand non-faculty employee workload by **performing an Activity Analysis survey**
- Establish **robust change management function; develop and execute a holistic communications plan**
- Rapidly **implement near-term opportunities** to build momentum and enable **future phases to be self-funding**
- **Include faculty and staff** in the definition of strategy and vision, and during implementation

Success requires assessing and addressing administrative work in the academic enterprise.

Summary of Financial Opportunities

\$44.3M of net financial impact identified out of \$644M in total addressable spend (7%)

\$26.8M of net financial impact identified out of \$221M in non-benefits spend (12%)

Workstream ¹	# of Opportunities ⁴	Calendar Year Benefit (\$M) – “Low” Estimate		
		2018	2019	2020
Facilities²	6	\$1.2	\$1.5	\$6.8
Finance	6	\$4.4	\$8.8	\$8.8
Human Resources³	2	\$2.2	\$3.3	\$3.3
Information Technology	6	\$1.7	\$2.6	\$4.2
Supply Chain	4	\$3.7	\$3.7	\$3.7
Total Administrative Efficiency	24	\$13.2	\$19.9	\$26.8
Benefits⁵	*	-	\$17.5	\$17.5
TOTAL	24	\$13.2	\$37.4	\$44.3

Notes:

¹ Indicates opportunities are net of non-capital investments

² Facilities includes cost savings and revenue enhancement opportunities

³ HR includes administrative staff opportunity

⁴ Some opportunities have been scaled to multiple campuses to realize the benefit amount stated; details are provided within the workstream specific section

⁵ Benefits opportunities encompass several potential changes to health and welfare plans. Any plan changes should be vetted by the Total Rewards Advisory Committee and consider the impact on recruitment and retention as a part of a comprehensive total rewards package.

Summary of Required Investments

UM will need to make key strategic investments to achieve the benefits and savings of the opportunities. Certain investments below are the reallocation of resources into different functional groups. All cost savings on previous page were net of these operating investments.

Investments noted below are approximate and will be refined during the planning phase

Workstream	Investment Type and Description			
	Description	One-Time Operating	Annual Operating	Capital
Facilities	Space rationalization of real estate portfolio will require a capital outlay for furniture, fixtures, equipment, move costs, and reconfiguration / renovation of space. Reducing 3 rd party leasing will require investment to relocate functions to new locations.	-	-	\$13.7M
Finance	Expected financial investment is low, around 5 FTEs. Most of the needed investment is around people – training for talent development, communication, team building and responding to feedback. There is potential one time operating investment to reflect process changes in system(s) from consolidating functions and increasing accountability.	-	\$500K	-
Human Resources	Required investment of 30 to 50 additional FTEs in critical HR capabilities that are currently understaffed. There will also be an investment of time from HR leadership and impacted stakeholders to implement these opportunities.	-	\$2.6 - \$4.2M	-
Information Technology	The primary investment for IT is labor for implementation projects. There is a potential for minor phone or computer equipment investment if current systems can't be reused or require expansion.	\$900K	\$670K	\$175K
Supply Chain	No financial investment has been noted	-	-	-
TOTAL		\$900k	\$3.8 - \$5.4M	\$13.9M

Note:

Most investments require further data in order to calculate, however they are not expected to compose a large percentage of the total calculated financial opportunities

The opportunities for these workstreams are net of non-capital investments (these investments have already been incorporated)

2. Summary of Workstream Findings

Transformation Timeframe

This assessment report is the next phase of a multi-phased transformation to coordinate efforts currently underway at the campus level; further analysis and input will be incorporated before changes to the university's operations are implemented

1 Initial Assessment

"We Are Here"

2 Expanded Assessment

(Jan-Mar)

3 Design

(Apr-Jun)

4 Implementation

FY 2019

Purpose	Activities	Outputs
<p><i>High level assessment to determine direction and approximate magnitude of savings opportunities</i></p>	<ul style="list-style-type: none"> Identify potential improvement opportunities Quantify approximate magnitude of benefits Identify and plan to address further data needs High level opportunities development 	<ul style="list-style-type: none"> List of recommendations Go forward strategy Understanding of additional data needs
<p><i>Assess current state of operations and determine relevance of findings across other campuses</i></p>	<ul style="list-style-type: none"> Assess operations from campuses excluded from initial assessment Determine applicability of current findings and relevance of potential opportunities Improve quality and depth of data Perform activity analysis workload survey 	<ul style="list-style-type: none"> Refinement of opportunities across the system Completed activity analysis workload survey
<p><i>Design future state operating model and construct how the university will perform administrative functions</i></p>	<ul style="list-style-type: none"> Collaborative, cross campus and functional area design sessions Development of and iteration on future state design Redesign policies, procedures and processes around future design Develop new service level agreement and incentives 	<ul style="list-style-type: none"> Recommended future state design with cost benefit analysis completed including investments needed
<p><i>Execute changes to operations, measure and improve as appropriate</i></p>	<ul style="list-style-type: none"> Implement changes from design phase Pilot opportunities (as deemed appropriate) Test, refine and improve 	<ul style="list-style-type: none"> Implemented, tested and refined new set of operating norms Improved operating model

Facilities Area Overview

The Facilities workstream has identified \$6.8M to \$13.6M in net annual benefits

Key Recommendations

- Execute space utilization and rationalization opportunities
- Optimize lease portfolio to reduce operating costs
- Optimize operating costs and generate capital through partnerships and monetization opportunities

Example Action: Ending a lease to occupy underutilized space.

Opportunities identified as part of preliminary analysis

Opportunity		Implementation Duration	Implementation Risk
1	Real Property Operating Model Realignment	Two Year	4
2	Real Property Rationalization (Owned and Leased Space)	Two Year*	4
3	Rationalize Landscaping Scope	Near-Term	2

Additional opportunities to be evaluated

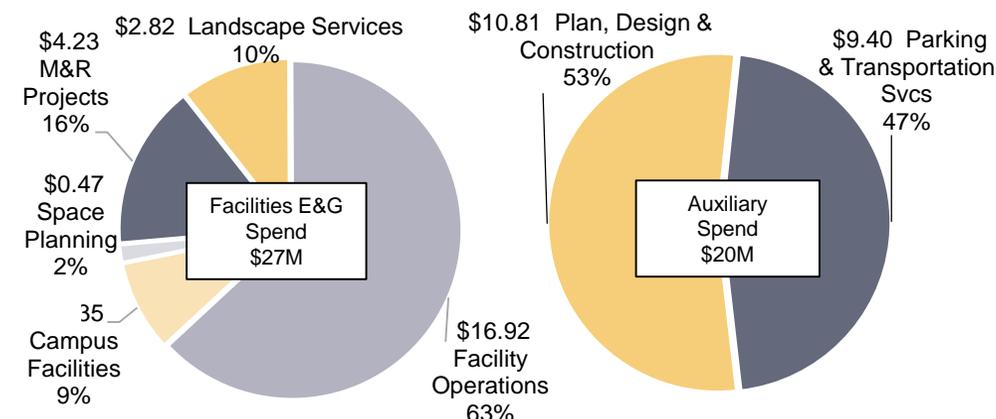
Opportunity		Implementation Duration	Implementation Risk
4	Monetize Excess and/or Underutilized Real Property Assets	Two Year*	4
5	Identify Public-Private Partnership Opportunities	Two Year	3
6	Review Staffing Model Efficiency	Two Year	4

Note: Spend represents net or gross departmental expense depending on charge-backs

Annual benefits are net of non-capital investments

*Implementation of certain opportunities can be achieved in two years others are expected to have a longer lead time

Facilities Spend* - \$47M



*Facilities spend includes select spend from certain Operations, Auxiliary and other areas, based on discussion with the Facilities Department leads. Does not represent Facilities department budget only.

Finance Area Overview

The Finance workstream identified \$8.8M to \$13.3M in net annual savings

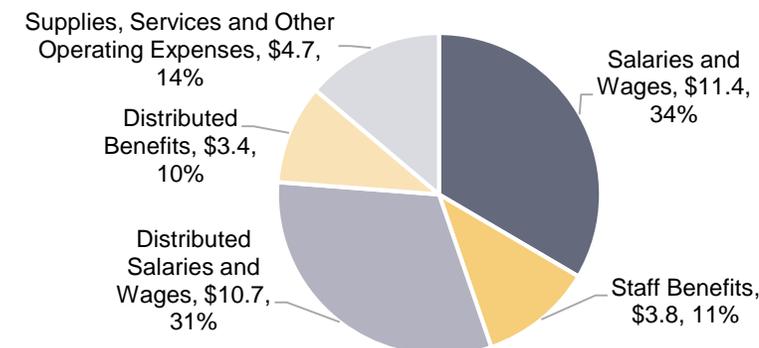
Key Recommendations

- Redesign operating model to improve efficiency of Finance-related resources across the university
- Drive broader accountability for financial results and budget targets including margin expectations and adopt an all funds approach to financial management
- Continue to leverage recently-installed technologies to improve business insight and planning capabilities
- Continue development of a Finance talent management program (recruitment, training, and progression)
- Improve supplier contract controls to allow Supply Chain to further manage vendor spend

Example Action: Creating a single point of contact for contract execution.

In Scope Finance Spend - \$34M*

(Excludes other campuses)



*Includes distributed resources

	Opportunity	Implementation Duration	Implementation Risk
1	Design Future Operating Model (Align Finance Personnel)	Six Months	4
2	Identify Opportunities to Consolidate Activities Currently Centralized at the Campus Level (Operating Model)	One Year	3
3	Identify Opportunities to Consolidate Activities Currently Occurring at the College/Department Level (Operating Model)	Two Years	5
4	Drive Broader Financial Accountability	One Year	5
5	Improve Business Insight Reporting and Planning Capabilities	One Year	4
6	Further Development of a Finance Talent Development Strategy	Two Years	3

Note: Annual savings are net of non-capital investments

Human Resources Area Overview

The Human Resources workstream identified \$2.2M to \$2.4M in net HR related savings

Total Rewards savings is \$17.5M to \$30.4M in total savings

Administrative Assistant Realignment is an additional \$1.1M to \$2.2M in savings

Key Recommendations

- Launch a formal HR Transformation effort focused on standardizing HR processes and governance structures, optimizing the usage of HR technology and redesigning the HR service delivery model
- Invest in HR technology and core HR capabilities that are currently missing or underutilized
- Involve campus leaders in the development of a system-wide “people strategy”
- Redesign benefit and pay packages to align the total dollars spent with what is most valued by employees

Example Action: Expanding the CAPS model for HR transaction processing.

HR Related Opportunities		Implementation Duration	Implementation Risk
1	HR Transformation¹		
	Efficiencies in Distributed HR Spend	Two Years	5
	Efficiencies in HR Spend	Two Years	4
	Investments in Critical HR Capabilities and Roles	Two Years	4
	Optimization of HR Technology	Two Years	4

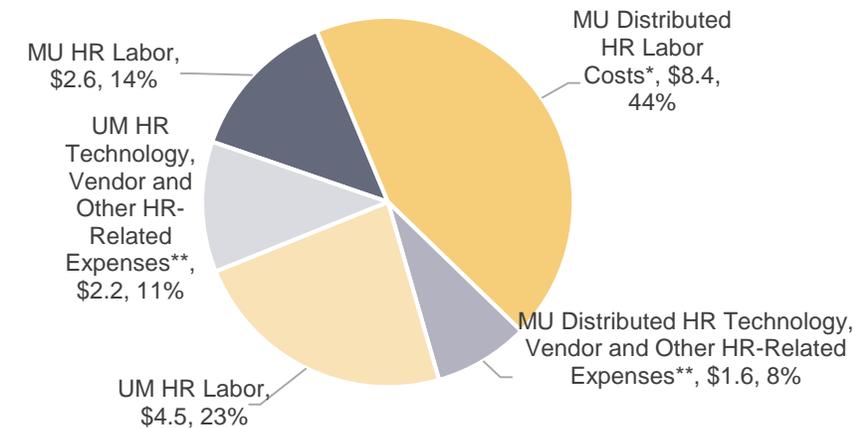
¹ Savings opportunity primarily resides in departmental spend

HR Related Opportunities		Implementation Duration	Implementation Risk
2	Total Rewards Rationalization	Two Years	5
3	Administrative Assistant Realignment	Six Months	3

Note: Annual savings are net of non-capital investments

Human Resources Spend - \$19.3M

(Excludes System-wide Benefits)



* Assumes 30% of work executed by 477 non-HR professionals identified as performing some level of HR work is attributable to HR

** May not include total costs associated with HR vendor/consultant fees and should be validated with HR; additionally, HR technology expenses may be currently mapped to IT spend and should be further validated with HR

Information Technology Area Overview

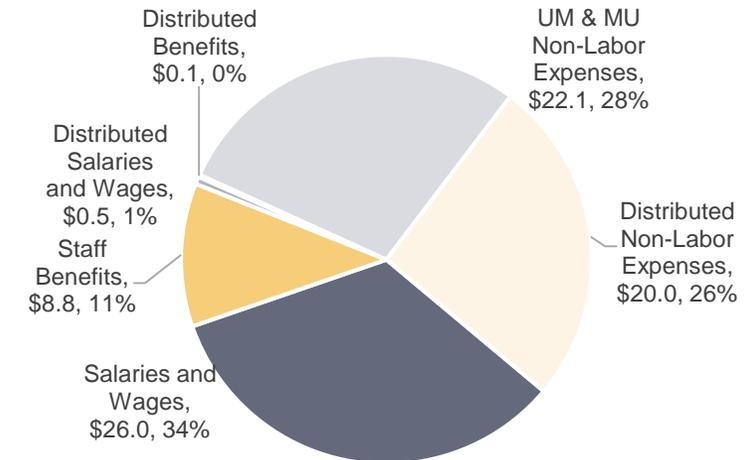
The IT workstream identified net annual savings of \$4.2M to \$7.7M

Key Recommendations

- Redesign operating model to improve efficiency of IT-related resources across the university
- Consolidate IT services to reduce risk and lower costs
- Streamline student servicing across campuses to improve efficiency
- Empower IT to operate in a strategic manner across departments and campuses to better manage functional expenses

Example Action: Implementing a standard web delivery platform.

Information Technology Spend - \$77.5M*



* Includes \$20M of distributed non-labor IT expenses, not managed by Centralized departments, excludes depreciation

Opportunity		Implementation Duration	Implementation Risk
1	Governance and Operating Model	Three Year	5
2	IT Spend Governance	One Year	3
3	Rationalize Distributed IT Desktop / Support Services	One Year	3
4	Consolidate Web Hosting Platforms	One Year	2
5	Increase App Development/Support ROI Requirements	One Year	3
6	Reduce Innotas Licensing	Two Year	1

Note: Annual savings are net of non-capital investments

Supply Chain Overview

Supply Chain identified net annual savings of \$3.7M to \$4.0M

Key Recommendations

- Improve Supply Chain's ability to develop and enforce purchasing policies and processes in order to better manage cost
- Review departmental spend and partner with functional and academic leaders to address non-labor expense variances

Opportunity		Implementation Duration	Implementation Risk
1	Support Operating Model Redesign for Non-Labor Spend	Two Year	2
2	Improve Enforcement of Supply Chain Controls	Near-Term	2
3	Increase Spend Under Management	Near-Term	2
4	Enhance Contract Review Process	Near-Term	2

A selection of University of Missouri contracts and procurement policies were reviewed in conjunction with the Finance Workstream, labor opportunities for Supply Chain are noted in the Finance section

Note: Annual savings are net of non-capital investments

Near-Term Opportunities

Certain opportunities have been identified that can quickly impact the FY18 budget, the savings captured from these initiatives can be used to fund future strategic initiatives. Additional opportunities may be identified upon further analysis.

#	Workstream	Opportunity	Time to Complete (Months)	\$ Benefit (Low End of Range)
1	Facilities	Rationalize Landscaping Scope	6	\$50K
2	Supply Chain	Improve Enforcement of Supply Chain Controls	3	\$500K
3	Supply Chain	Increase Spend Under Management	3	\$1.5M
4	Supply Chain	Enhance Contract Review Process	3	\$1.5M

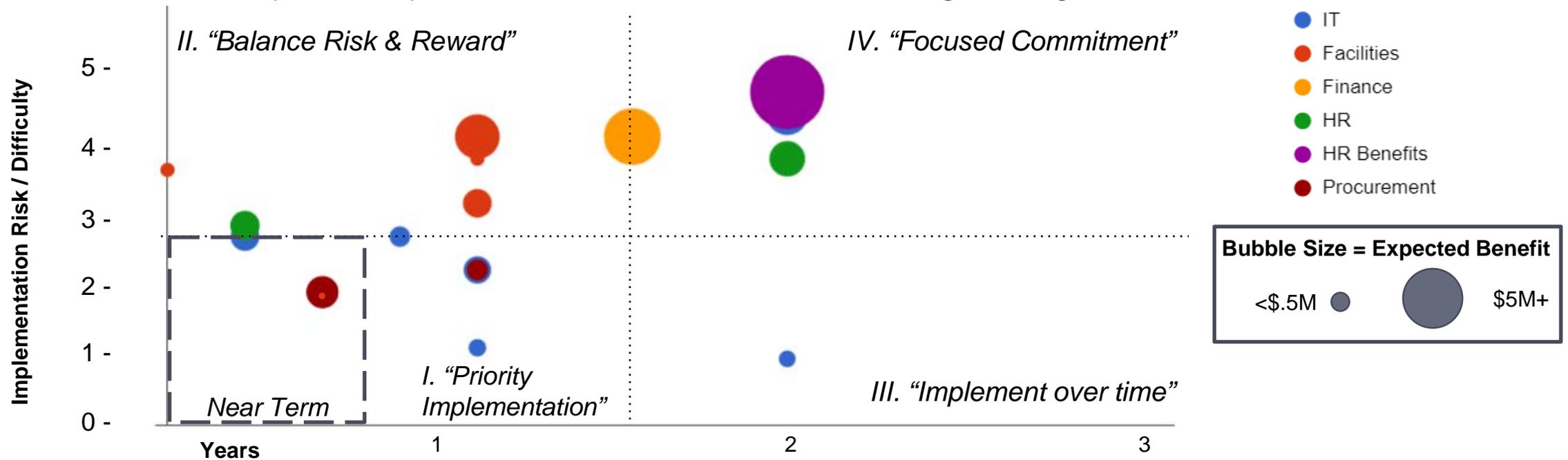
Near-Term opportunities can be fully implemented by June 30, 2018 and will result in annual savings of \$3.5M

Note:

Rapidly implementing operating model changes in the other centralized functional areas would result in additional savings in FY18
Full impact of near-term opportunities will not be realized until FY19

Opportunity Risk Scoring

The majority of the opportunities reside in “higher” risk quadrants and therefore a thoughtful approach to implementation will be required that prioritizes clear communication and change management



Implementation Risk / Difficulty Components	
Complexity	Breadth and intensity of activities required to implement
Investments	Financial and operational inputs required to implement
Stakeholder Impact	Perceived negative impact to stakeholders

Note: Enabler opportunities are excluded from graph
Annual benefits are net of non-capital investments

#	Quadrant	Risk	Time	Opportunities (#)	Opportunity (\$M)
I.	<i>Priority implementation</i>	L	L	7	\$4.7
II.	<i>Balance Risk & Reward</i>	H	L	6	\$9.3
III.	<i>Implement over time</i>	L	H	1	\$0.03
IV.	<i>Focused Commitment</i>	H	H	6	\$30.5

3. Facilities Workstream

3.1 – Facilities Workstream Summary

3.2 – Individual Opportunity Overviews

3.3 – Additional Opportunities to be evaluated

3.1 Facilities Workstream Summary

Summary

The Facilities workstream reviewed \$47M of spend and identified 6 opportunities. The initial analysis projects an identified net annual benefits of \$6.8M to \$13.6M

Workstream Approach 	Observations 	Key Recommendations 
<ul style="list-style-type: none"> Data sourced primarily from <ul style="list-style-type: none"> FY17 GL, payroll file, FY18 budget, and others Scope focused on select facilities functions Met with 8 Facilities leaders and staff throughout MU and the system Space opportunities include off campus or leased residential life buildings Areas not addressed / out of scope include construction, energy management, environmental safety, security, and parking (except for public-private partnerships) and others <p>Note: Annual benefits are net of non-capital investments</p>	<ul style="list-style-type: none"> Cost cutting measures / budget reductions over the past 15 years has significantly reduced the department's size and operating expenses The university may consider making additional investments in facilities to better manage costs The existing infrastructure and spatial footprint serves as a catalyst for underutilization of space, lack of density, growing cost inefficiencies, and deferred maintenance needs Institutional legacy overshadows strategic innovation of "next-gen" concepts Departmental strategic planning is happening but there is a lack of a unified plan across Facilities / Real Estate departments Decisions typically managed by Facilities departments reside with academic departments (e.g. space, new building leases, new buildings, renovations, construction, etc.) 	<ul style="list-style-type: none"> Address decision rights through operating model changes in order to better manage overall Facilities and Real Estate portfolio costs Execute space utilization and rationalization opportunities Optimize lease portfolio to reduce operating costs Optimize operating costs and generate capital through partnerships and monetization opportunities Facilities will likely need to make investments in this department to execute these opportunities in a timely fashion, staffing needs will be identified during the design phase

Facilities Current and Future State

Legacy decisions, especially around cost cuts, have led to positive near-term budget improvements, but a long-term strategic plan needs to be developed to manage costs more holistically

Current (Reactive, cost cutting)

- Sightlines benchmarking indicates Facilities is under-investing
- Facilities can be a vehicle to manage expenses, but investments will be required
- There is \$1.6B (system-wide) in deferred maintenance that continues to add to ongoing expenses
- Cuts have been made to the Facilities department, but having a long-term strategy will be the key to being better stewards of Facilities spend
- Thinking about meeting this year's budget expectations in lieu of long term planning
- Limited ability of Facilities to strategically impact real estate decisions made by academic departments
- Lease portfolio reflects the priorities of the different departments vs an optimized, strategic portfolio
- Real property decisions are not formally and consistently made with input from Facilities

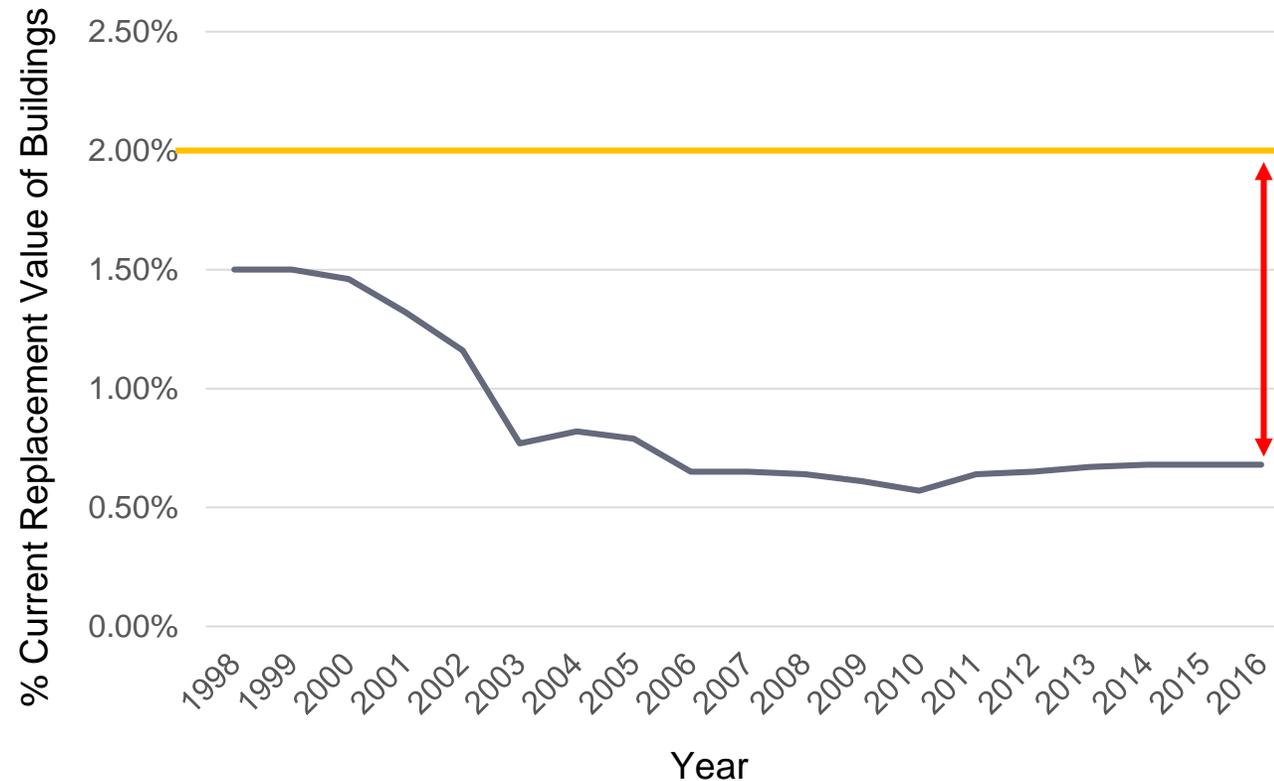
Future (Proactive, holistic expense management)

- Elevate the Finance, Real Estate, and Facilities departments to be “owners” of the entire lifecycle of real property decisions
- Develop accurate space inventory data to help drive decisions (buy, build, lease, or renovate)
- Think past this year's budget

This will require a change in operating model and decision rights around how space decisions are made

Facilities Needs Spend

External benchmarking indicates under-investment in Facilities and preventative maintenance



- History of Target Spend**
- **1994** - Analysis of Facilities determined 1.5% of Current Replacement Value (CRV) of E&G Facilities is required to maintain campus portfolio
 - **2001** - Budget cuts resulted in less investment in Facilities and increased Facilities needs
 - **2016** - Sightlines evaluation of Facilities recommends 2% of CRV of E&G space to meet Facilities needs

Note: Sightlines is engaged each year to benchmark facilities operations with peer institutions

Facilities Workstream Scope

Facilities scope includes the maintenance and upkeep of UM facilities along with real estate management and related activities

Labor Department Focus

- Facilities Administration
- Facility Operations
- Landscape Services
- Space Planning and Management
- Property Maintenance, Custodial / Janitorial
- Space Management
- Landscape Services
- Print and Mail Services

Non-Labor Areas

- Leasing Portfolio
- Space Utilization
- Public-private Partnerships

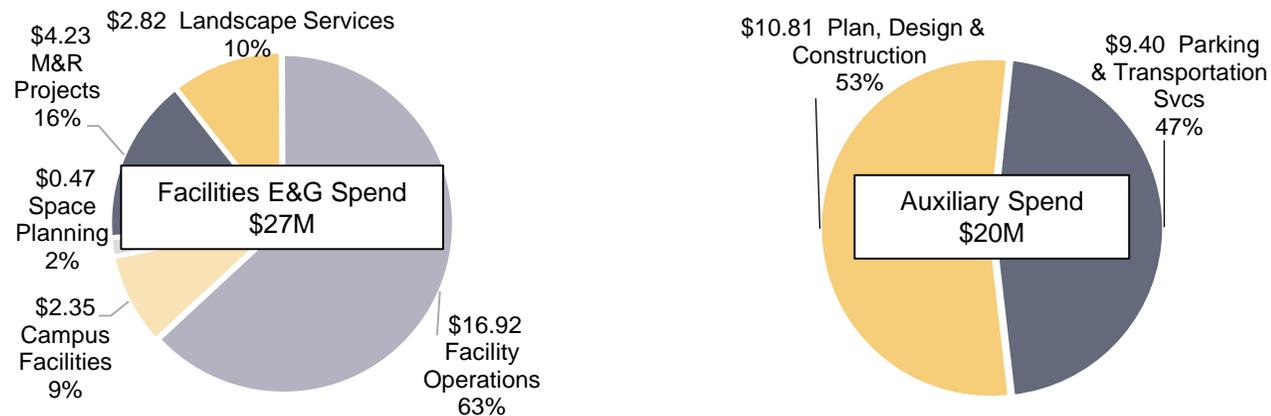
Out of Scope

- Parking and Transport Services
- Environmental Health and Safety
- Construction Management
- Security
- Sustainability
- Energy Management
- Real Estate / Lease Management

Expense Profile

FY2017 Baseline	Total Spend *	UM and MU Central Headcount
Facilities Functional Rollup	\$47M	232

Expense Breakdown*



*Facilities spend includes select spend from certain Operations, Auxiliary and other areas, based on discussion with the Facilities Department leads. Does not represent Facilities department budget only.

Note: Plan, Design & Construction includes In-House Design & Construction, and Project Management of \$150 million D&C spend

Opportunity Summary

The Facilities Workstream identified 6 opportunities with an annual benefit range of \$7.0M to \$13.6M

Opportunities identified as part of preliminary analysis

	Opportunity	Implementation Duration	Implementation Risk
1	Real Property Operating Model Realignment	Two Year	4
2	Real Property Rationalization (Owned and Leased Space)	Two Year*	4
3	Rationalize Landscaping Scope	Near-Term	2

Additional opportunities to be evaluated

	Opportunity	Implementation Duration	Implementation Risk
4	Monetize Excess and/or Underutilized Real Property Assets	Two Year*	4
5	Identify Public-Private Partnership Opportunities	Two Year	3
6	Review Staffing Model Efficiency	Two Year	4

During the design phase opportunities will undergo additional analysis to confirm savings, timeframe, and investment required

Note: Annual benefits are net of non-capital investments

*Implementation of certain opportunities can be achieved in two years others are expected to have a longer lead time

Implementation Risk Summary

Opportunities identified as part of preliminary analysis

	Opportunity	Complexity	Investments	Stakeholder Impact	Total Risk
1	Real Property Operating Model Realignment	5	4	4	4
2	Real Property Rationalization (Owned and Leased Space)	5	4	4	4
3	Rationalize Landscaping Scope	2	1	4	2

Additional opportunities to be evaluated

	Opportunity	Complexity	Investments	Stakeholder Impact	Total Risk
4	Monetize Excess and/or Underutilized Real Property Assets	5	3	3	4
5	Identify Public-Private Partnership Opportunities	5	3	3	3
6	Review Staffing Model Efficiency	5	2	5	4

Risk Assessment Key

Complexity	Assessment based on the number of actions required to implement the opportunity and the breadth of stakeholder buy-in needed
Investments	Assessment based on amount of technological, financial, personnel, and/or "soft" investments needed to implement the opportunity
Stakeholder Impact	Assessment based on the opportunity's impact to normal workflow as well as the perceived impact of the opportunity to stakeholders

Implementation Risk Score is an index that factors in (1) Complexity (2) Investment Required (3) Impact to Stakeholders

Low Risk – Limited risk to internal stakeholders; proceed with implementation,	1 – 2
Moderate Risk – Develop and execute change management, Track and manage progress closely	3
High Risk – Develop tactical work plan, execute change management strategy, involve key leaders	4 - 5

3.2 Facilities Individual Opportunities Overview

Full-time equivalent (FTE) impacts and investments require additional analysis to be performed during the design phase

1. Real Property Operating Model Realignment

Opportunity Synopsis								
Name	Real Property Operating Model Realignment							
Description	Explore opportunities for a cohesive roadmap to realign the various functions that handle real property matters for the University (e.g. facilities, real estate, leasing, operations, space planning/management, capital & strategic planning, design & construction). Identify distinct areas where centralized services can be most effective (e.g. Real Estate, Leasing, Contracting, Project Management, Technical Expertise, Code Enforcement, Reporting) and develop processes to integrate such centralized services into campus operations through formalized policies and procedures. This will effectuate consistent practices, reduce duplicative FTEs and administrative spend across campuses & System. Explore ways to implement strategies and objectives across the entire real property portfolio that create efficiencies and mitigate expense. This will involve a 360-degree analysis of the University's existing construction program, facility operations, space management & utilization and other real estate functions to enhance or improve the governing framework, service agreements, processes/controls, etc. This will likely contemplate a shared service hub and call center. Consider developing a consistent campus model across the system that fully integrates space inventory/management and master planning into a comprehensive planning, design & construction department. In conjunction with realignment efforts, explore opportunities to engage 3rd parties to aid or replace functions currently staffed by University employees. Initially this would explore 3rd parties available to provide such services, seek to compare level of service provided by such parties to services currently performed in-house, and quantify potential cost savings. See Implementation Plans for key dependencies, next steps and factors to consider when contemplating this opportunity.							
Benchmarks	<ul style="list-style-type: none"> • Comparable Higher Education models to validate current practices • Number of FTE per function • Average salary + benefits per FTE • Operation cost per square foot of space per function • Construction dollars per FTE • Benchmarked to areas commonly outsourced by other comparable organizations (from an industry and real estate footprint perspective) 							
“Soft” Benefits Achieved	<ul style="list-style-type: none"> • Improved communication across functions leads to coordination, insight into the perceived impact of decisions, and higher likelihood of success when executing real property strategy. • Right-size the current staff mix to mitigate campus inefficiencies, capitalize on cross-functional synergies and economies of scale, and reduce overhead and operating expense. • Generates a set of standardized policies, processes, and procedures that promote consistency and sound governance. 							
Spend Addressed			Design Phase Determinations			Implementation Duration	Implementation Risk	
Facilities Operating Expense Spend			<ul style="list-style-type: none"> • FTE Impact (average departmental attrition rate* – 10%) • Investment Required (Description and quantification) • Savings Ramp-Up Schedule 			Two Year	4	
Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL		
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓		

*Three year average across UM System and Columbia Campus

2. Real Property Rationalization (Owned and Leased Space)

Opportunity Synopsis							
Name	Real Property Rationalization (Owned and Leased Space)						
Description	Analyze the University's real estate and facility needs to right-size the portfolio and explore opportunities to maximize utilization, density, external funding, flexible work arrangements and, importantly, the user experience. Deferred maintenance, facility condition needs index, utilization metrics and other key performance indicators will be utilized to align the portfolio with the University's mission and needs. Stratify and analyze the University's real property portfolio to better understand business and contractual limitations associated with each space/use and explore alternative ways to optimize and reduce the University's existing space expense. This will be a multi-year process that will encompass the University's entire real estate footprint (owned and leased space), with the goal of reducing square footage and creating a self-funding real estate strategy. Review owned and leased buildings/spaces to identify each building's primary/secondary functions or purposes. Develop a list of considerations around redesign requirements necessary to repurpose certain buildings/spaces for multiple uses, increasing density and space utilization. University or leased facilities might be used for temporary purposes throughout the year, which can lead to underutilization across the portfolio. The goal is to analyze the impact of space optimization through redesign, furniture, fixtures and equipment investment, or shifts in previous operating models. Assess opportunities to right size the mix of owned vs. lease space taking into account the System's stated decision making factors for lease-build-buy-renovate decisions (e.g. availability of space and market, suitability of space, urgency of need, duration of need, adaptability, location, services required, costs, funding availability and funding type). Implement framework to require all new space requests be initiated through a formal business plan process that sets forth: program and space allocation plan, project definition/description, project justification, project costs and schedule, funding strategy, supporting documents, lease-build-buy-renovate considerations and present value analysis. Explore opportunities as it relates to spatial occupancy and rethinking the University's administrative and faculty operating model. For example, is there an opportunity to redesign the administrative model to allow certain personnel to work off campus, at home, or in more flexible space arrangements? Can the number of spaces occupied by faculty be reduced and/or identify areas or opportunities for shared space or consolidation? See Implementation Plans for key dependencies, next steps and factors to consider when contemplating this opportunity.						
Benchmarks	<ul style="list-style-type: none"> University prepared draft space analysis Reduced anticipated savings by the \$1.4M already anticipated based on planned relocations in process Market lease rates for comparable spaces in the local area Relocation cost quotes from local moving companies All administrative functions occupy campus real estate. Leading practice standards are being used to identify functions that (a) could employ a flexible work arrangement with a high-level of success and (b) would yield significant benefits and cost saving opportunities to the University 						
"Soft" Benefits Achieved	<ul style="list-style-type: none"> Updated infrastructure Improved space utilization across the portfolio both on and off campus Opportunity to realize campus and department synergies that are related to realigning physical presence Improve the University's ability to track and monitor space utilization and enhance real-time efforts to address University priorities in unison with real estate strategy Enhance the reliability, relevance, and integrity of data used at varying levels in the decision making process Increase the level of administrative time put towards maintaining and monitoring the optimal leased portfolio in lieu of simply administering a larger portfolio Establishes a controlled environment that can improve productivity and product quality With an option to remain flexible in the workplace, employee satisfaction could increase and as a result benefit the University's ability to execute its mission 						
Spend Addressed				Investment Required		Implementation Duration	Implementation Risk
Reduces Capital Costs (annual savings based on Facilities Needs, Capital Expense)				Renovation, relocation, design costs and fit-out costs		Two Years*	4
Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL	
							

3. Rationalize Landscaping Scope

Near-Term
Opportunity

Opportunity Synopsis	
Name	Rationalize Landscaping Scope
Description	Analyze the University's landscaping spend to identify opportunities to reduce cost by creating tiered landscaping requirements based on (a) student footprint, (b) campus tour routes, (c) planned facility demolition and relocation, (d) botanical garden areas, (e) safety, and (f) other aesthetic considerations. Creating tiered landscaping services may lead to cost savings, reduced FTE count, and allow high-traffic / priority areas to receive additional services. See Implementation Plans for key dependencies, next steps and factors to consider when contemplating this opportunity.
Benchmarks	<ul style="list-style-type: none"> Landscaping cost per square foot FTE per acre Land areas Anticipated savings of \$265,000 planned by landscaping department in FY18 budget
"Soft" Benefits Achieved	Introduces flexibility in the way upper-management prioritizes evaluation and continuous improvement efforts

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Landscaping Operating Expense Spend	None	Near-Term	2

Impact to:	UM System	Central Department	Distributed	UMKC	MS&T	UMSL
		 ✓	 ✓			

3.3 Facilities - Additional Opportunities to be evaluated

4. Monetize Excess and/or Underutilized Real Property Assets

Opportunity Synopsis	
Name	Monetize Excess and/or Underutilized Real Property Assets
Description	Continue and expand upon ongoing efforts to monetize current real estate holdings. Identify additional resources required for real estate staff to: quantify the value of saleable/leasable real estate; understand market dynamics; identify potential lessees/buyers; advertise and solicit offers and; negotiate real property transactions . This is intended to focus on excess land holdings and underutilized buildings that are not part of the main campus. See Implementation Plans for key dependencies, next steps and factors to consider when contemplating this opportunity.
Benchmarks	Identification of buildings & land that are nonessential to the University's mission, objectives, or real estate platform and have the potential for generating capital
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Mitigate the risk associated with incurring reactive deferred maintenance for property nonessential to the University's core and/or ancillary missions Allow employees to focus on the locations that are core to the University's mission

Design Phase Determinations	Implementation Duration	Implementation Risk
<ul style="list-style-type: none"> Spend Addressed FTE Impact Investment Required (Description and quantification) Savings Ramp-Up Schedule 	Two Year*	4

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
		 ✓	 ✓			

*Implementation of certain opportunities can be achieved in two years others are expected to have a longer lead time

5. Identify Public-Private Partnership Opportunities

Opportunity Synopsis	
Name	Identify Public-Private Partnership Opportunities
Description	Identify public-private partnership opportunities that would optimize, complement, and improve the University's financial position to fund mission-oriented needs (education/research). See Implementation Plans for key dependencies, next steps and factors to consider when contemplating this opportunity. Evaluate the ability to raise rates for parking, residential life, and other auxiliaries.
Benchmarks	<ul style="list-style-type: none"> Relevant market rents, capitalization rates, sales pricing etc. from industry surveys and public articles pertaining to other universities University financial reporting and projected capital upgrades
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Transfer financial and operating risk to a third-party operator Ability to establish key performance indicators thresholds and hold third-party operators accountable, which in turn could improve service delivery efforts

Spend Addressed
Increases Cash Inflows (minor reduction in operating costs, but more so an increase in revenue that does not currently exist)

Design Phase Determinations
<ul style="list-style-type: none"> FTE Impact Investment Required (Description and quantification) Savings Ramp-Up Schedule

Implementation Duration	Implementation Risk
Two Year	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
		 ✓	 ✓			

6. Review Staffing Model Efficiency

Opportunity Synopsis	
Name	Review Staffing Model Efficiency
Description	Assess opportunities to redefine roles and responsibilities that could be leveraged using part-time and/or student resources that command lower costs of labor and relieve pressure on University benefit packages. Consider replication of managerial functions. See Implementation Plans for key dependencies, next steps and factors to consider when contemplating this opportunity.
Benchmarks	<ul style="list-style-type: none"> Number of administrative employees across facilities department Average administrative salary & benefits costs/person Average hourly cost/student employee
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Improve connectivity between students and campus employees – an opportunity to empower students and enhance their educational experience and the overall campus culture Increase capacity that may otherwise be constrained by budget limitations Improve student employment rates and engagement in on campus operations

Spend Addressed
Operating Expense for All Operations (including Facilities) Full- and Part-Time Employees

Design Phase Determinations
<ul style="list-style-type: none"> FTE Impact Investment Required (Description and quantification) Savings Ramp-Up Schedule

Implementation Duration	Implementation Risk
Two Year	4

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
		 ✓	 ✓			

4. Finance and Supply Chain Workstream

4.1 – Finance Workstream Summary

4.2 – Individual Opportunity Overviews

4.3 – Supply Chain Workstream Summary

Summary

The Finance Workstream reviewed an estimated \$34M of spend at UM system and MU and an estimated \$6M spend at UM's other campuses and identified 6 opportunities with a projected net savings of \$8.8M to \$13.3M

Workstream Approach 	Observations 	Key Recommendations 
<ul style="list-style-type: none"> Data used <ul style="list-style-type: none"> FY17 GL and payroll file, Finance organizational trees Scope focused on traditional Finance and Supply Chain functions Met with 10 Finance leaders throughout UM, MU, including the CFOs of each campus Areas not addressed / out of scope include administrative processes and expenses related to research, e.g. sponsored programs, institutional research 	<ul style="list-style-type: none"> Significant improvements appear to have occurred in the relationship between the Finance teams at the System and the campuses. However the operating model does not support efficient leverage of Finance related resources as evidenced by significantly distributed Finance resources and responsibilities. While the campuses are able to understand how they are doing in comparison to budget, financial accountability does not appear present especially as you move into deeper levels on each campus. Opportunities to improve interim forecasting ability also exist. Reporting does not clearly link business drivers (student credit hours, research, etc.) and financial performance. Though technology improvements have been made in recent years (Tableau, Hyperion, etc.), the Finance team acknowledges the benefit from additional enhancements to improve ease of use and integrate various data sets. Finance recognizes the strength and commitment within the existing Finance team but acknowledges the need to develop a strategy to maintain, develop and recruit Finance talent. 	<ul style="list-style-type: none"> Redesign operating model to improve efficiency of Finance-related resources across the University Drive broader accountability for financial results and budget targets including margin expectations and adopt an All Funds approach to financial management. Continue to leverage recently-installed technologies to improve business insight and planning capabilities Continue development of a Finance talent management program (recruitment, training, and progression) Improve supplier contract controls to allow Supply Chain to further manage vendor spend <p>Note: An <u>activity analysis survey</u> will be key to determination of Finance activity and related FTEs</p>

Note: Annual savings are net of non-capital investments

Finance Workstream Scope

Labor Department Focus

- Finance Administration
- Accounting, Financial Information Systems, Payroll and Tax Reporting
- Risk and Insurance Management, Real Estate and Business Services, Records Management, Supplier Diversity and Small Business Development
- Budget Planning, Development and Monitoring, Appropriations Request, Supply Chain and Supply Chain
- Cash Management, Debt Management Banking Retirement and Endowment Fund Mgt.
- Finance Planning and Accounting
- Accounts Payables / Payroll
- Controller and Cash Management functions
- Supply Chain resources

Non-Labor Areas

- AP and other Finance department efficiency measures, including One Card
- Supply Chain – Selected functional spend areas (Janitorial supplies and services, office supplies)

Out of Scope

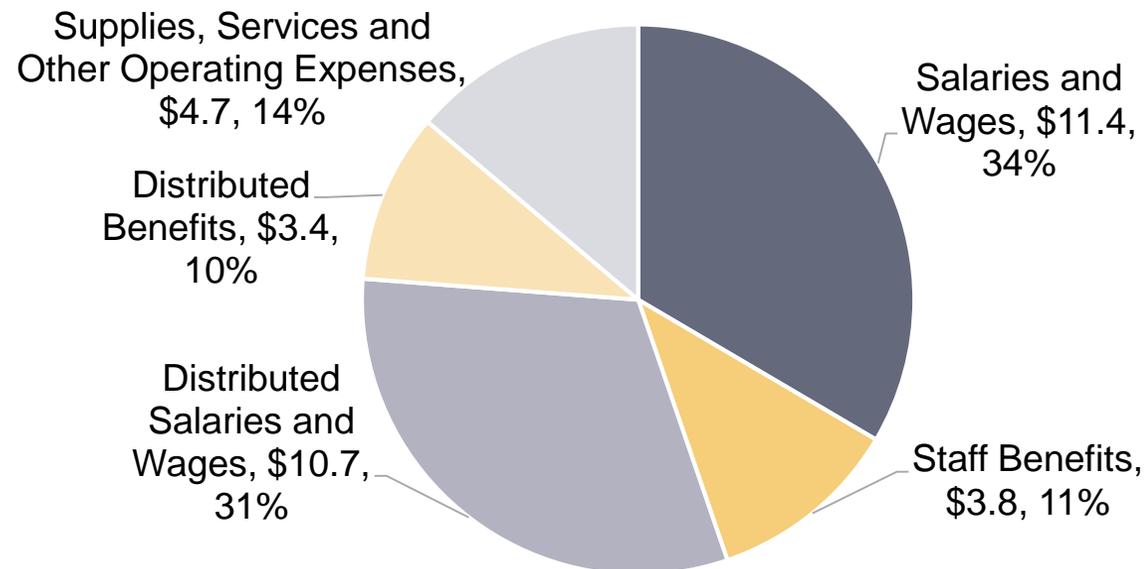
- Administrative processes and expenses related to research, e.g. sponsored programs, institutional research
- Student Services, including cashiers were not included in the spend analysis

Expense Profile

\$34M of spend was reviewed including labor and non-labor expenses, labor includes known Finance employees and a count of “Distributed” employees which will be refined through an activity analysis survey

FY2017 Baseline	Total Spend	UM and MU Central Headcount	MU Distributed Headcount
Finance Functional Rollup	\$34 M	209	1,500 (approx.)

Expense Breakdown*



*Includes distributed resources

Distributed Methodology

- Stakeholder interviews acknowledged that significant **employees with Finance function responsibilities** exist throughout the University
- Identified **total number of individuals executing Finance-related transactions** in Finance PeopleSoft module
- Further evaluated list of individuals by **using job titles, working with campus leadership to confirm**
- Applied an estimated percent effort** to estimate the dollar value (salaries, wages, and benefits) of the distributed headcount
- Activity analysis survey will be performed to more precisely identify distributed activities

Finance is highly decentralized and opportunities for improvement exist across each aspect of the Finance operating model

Finance Organizational Structures & Roles

- Based on Finance individuals mapped to Central Finance roles (79 FTEs), University of Missouri Columbia Campus and System is below the Higher Ed benchmarks, however, it is estimated that there are an additional 223 to 279 Finance FTEs supporting Finance activities that are distributed across the organization or at UMSL, UMKC or S&T; a formal activity analysis is required to more accurately understand FTEs supporting Finance processes across the organization
- The Finance service model is highly decentralized and fragmented which creates inefficiencies, potential redundancies and quality issues
- Significant improvements appear to have occurred in the relationship between the Finance teams at the System and the campuses, however, the operating model does not support efficient leverage of Finance related resources as displayed by significantly distributed Finance resources (1500+ distributed headcount performing finance functions) and responsibilities

Finance Technology

- Though technology improvements have been made in recent years (Tableau, Hyperion, etc.), the Finance team acknowledges the benefit from additional enhancements to improve ease of use and integrate various data sets
- People do not feel empowered to use existing tools to get to key metrics and insights

Finance Processes

- The current decentralized and fragmented structure of the Finance organization results in inconsistencies in how results are analyzed and presented
- Finance recognizes the strength and commitment within the existing Finance team but acknowledges the need to develop a strategy to maintain, develop and recruit Finance talent

Representative quotes from interviews with leadership and staff across the System and all four campuses

"There is a wide variation and therefore inconsistency in talent and capabilities across fiscal roles."

"There is significant lack of economic scale due to the widely distributed nature of fiscal activity."

"Need to remain supportive of the uniqueness of each campus."

"It's more important to focus on positioning UM as a world class AAU research and academic institution. Finance, HR and IT are commodities that need to work better."

"Everyone working on their own list of priorities and individual business focus."

"Need more standardization, automation, less redundancy and lower cost of transactional processing."

"Too many finance leads and therefore difficult to interface with never mind partner with the academic departments."

"Transaction authorization to disseminated across the University leading to spending in excess of budget as well as transactions out of compliance with policy."

"Historically difficult to engage with the fiscal officers since they are accountable to the deans and other leadership at the campus."

"Development of analytic tools has led to silos of data – finance, HR, student data – that isn't easily aligned."

"There is a significant amount of activity at the department level related to intercompany transfers."

"Toolsets to manage budget non-existent, we have created workarounds using Excel."

"Departments spend a significant amount of time managing and reconciling payroll."

"Finance is held back by wide fragmentation making it hard to prioritize."

"Communication is not done well enough. Hard to get the right message to the right people."

"Need more analytical, data driven decisions."

"Need different talent to move the organization. Need critical thinkers, not just transaction processers."

"Progress has been made with Hyperion and it is more efficient than it used to be but we need to better empower people to be more effective. It's an organizational issue."

"We haven't been forceful on how things are done and we haven't limited people's ability to do transactions."

"Transactions take so much time, especially with their fragmentation."

Leading Finance organizations invest more into value-add activities by reducing effort on traditional transactional processes

Business Insight

Effective ways of working with the business to provide:

- Valued business partners
- Sustainable business growth
- Relevant and timeline performance management information

Transactional Efficiency

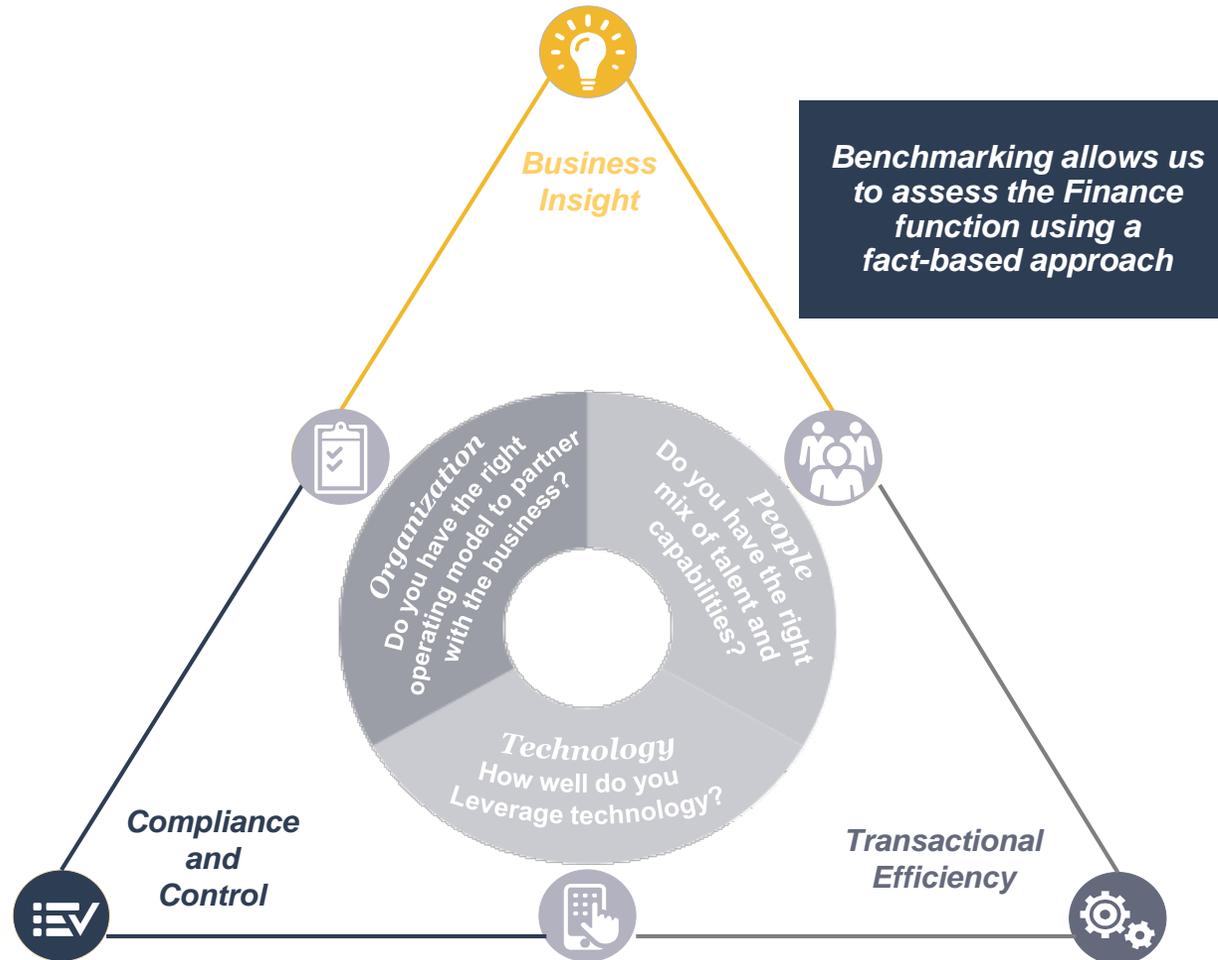
Improving task performance in a timely and cost effective manner by:

- Simplifying processes enabled by technology
- Outsourcing and using shared services for non-core activities

Compliance and Control

How to balance sustainable cost without constraining the business:

- Optimize risk management
- Stay flexible for future changes in regulation



Business Insight

- Strategy & Planning
- Budgeting & Forecasting
- Business Analysis
- Performance Improvement Projects
- Tax Planning

Transactional Efficiency

- Accounts Payable (including T&E)
- Accounts Receivable
- Credit Management
- Customer Billing
- General Accounting
- Financial / External Reporting
- Management Reporting

Compliance and Control

- Treasury
- Internal Audit
- Process Controls & Compliance
- Tax Accounting & Compliance

Finance Benchmark Scope

The project scope includes two key components –

1) Finance FTE and Cost Benchmark

- Assessment of the resources and costs supporting the Finance function
- Enables objective comparison of the Finance function with external peers and supports leading practice gap analysis
- Data collected using data collection template and participant guide
- Provides an analysis of strength and opportunities, and actionable recommendations

2) Finance Executive Interviews

- Interviews with senior Finance executives to qualify benchmark findings
- Provides a diverse view of functional priorities, challenges and direct feedback about leadership, technology, support, organization and people

Finance and Supply Chain Benchmark Taxonomy

Mapped UM FTEs and process costs to the standard Finance and Supply Chain benchmark processes to promote relevant comparisons

Finance – Transactional Efficiency

- Cash Disbursements
 - Accounts Payable
 - Travel & Entertainment Accounting
- Customer Billing
- Accounts Receivable
- Credit Management
- Debt Collection
- Payroll
- General Accounting
 - Fixed Asset Accounting
 - Intercompany Accounting
 - Inventory Accounting
 - Reconciliations, Consolidation and Closing the Books
- Financial & External Reporting
- Management Reporting

Finance – Compliance & Control

- Treasury
 - Cash Management
 - Risk Management
- Internal Audit
- Process Controls & Compliance
- Tax Accounting & Compliance

Finance – Business Insight

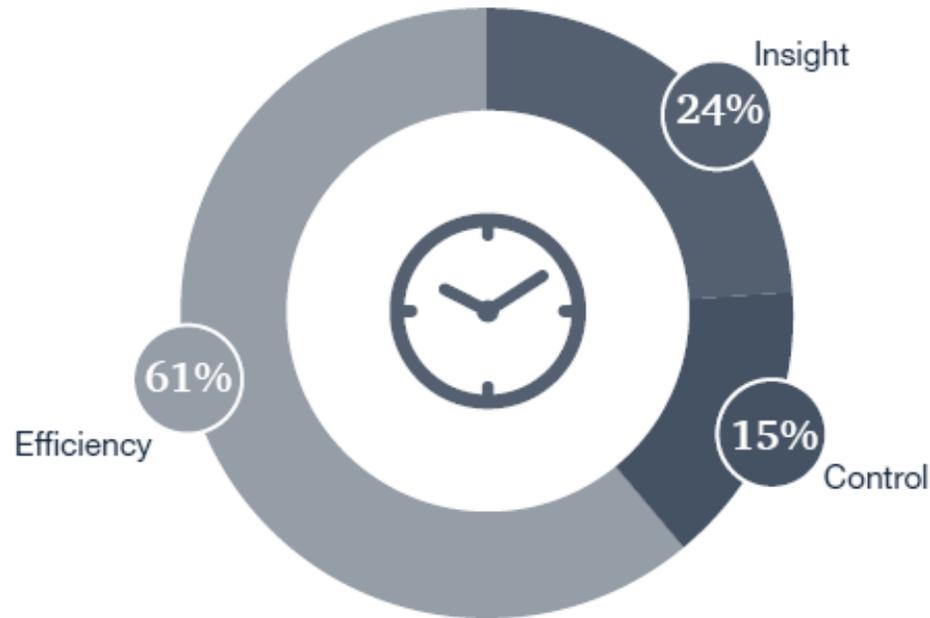
- Tax Planning
- Strategy & Planning
- Budgeting & Forecasting
- Business Analysis
 - Decision Support
 - Mergers & Acquisitions
 - Pricing & Analysis
 - Investor Relations
- Performance Improvement Projects

Supply Chain

- Transaction Processing
- Supplier & Contract Management
- Strategic Sourcing
- Performance Management

Typical Finance proportional effort on value-adding business insight activities has remained at 24% but will likely increase with rising expectations for Finance outcomes

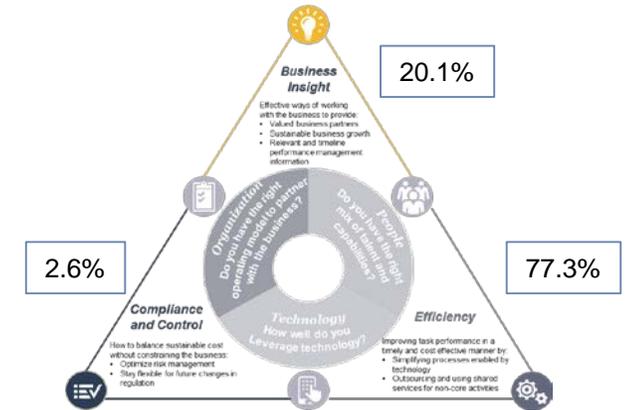
Average Distribution of Finance time - Benchmark



Source: PwC finance benchmark data

University of Missouri System Distribution of Finance time

A prior activity analysis study not only indicated a significant level of Finance activity but over 75% related to efficiency/transaction processing



Expected FTE for University of Missouri System Scope

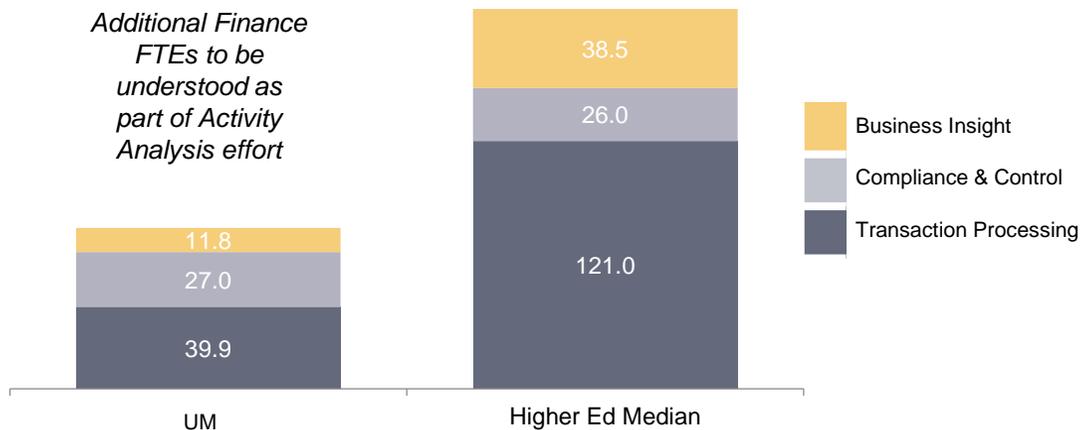
Benchmark FTEs Normalized to UM Revenue (\$2.2B)



Centralized resources at UMSYS and MU are below benchmarks

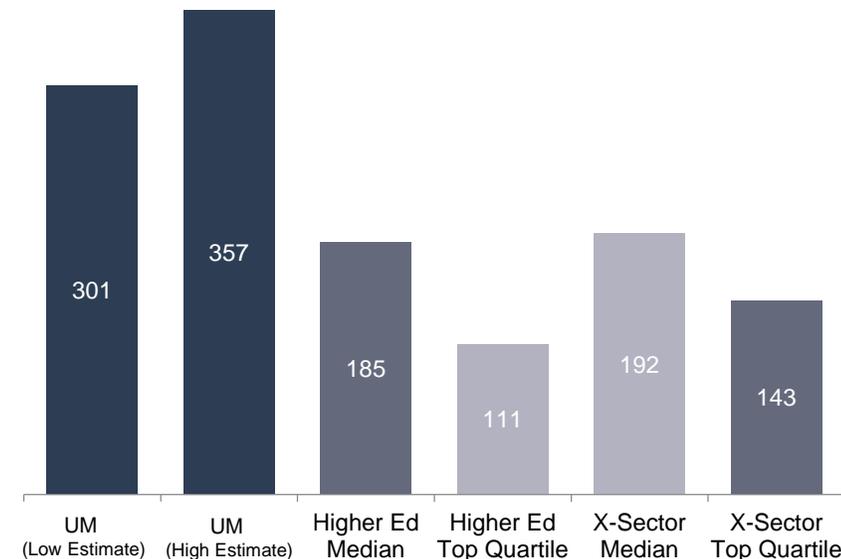
- Finance workstream had difficulty identifying the FTEs associated to functions without an activity analysis which will provide understanding of:
 - Centralized resources at the other campuses
 - Distributed resource support at all four campuses (estimated additional 222 to 278 FTEs for total of an estimated 301 to 357 FTEs)

Centralized University of Missouri System and Columbia FTEs (Excludes All Other Finance Support) to Benchmark FTEs Normalized to UM Revenue (\$2.2B)



Centralized function compares well to benchmarks

Finance FTEs Normalized to UM Revenue (\$2.2B)



Opportunity comes with estimated decentralized effort in finance

Leading Finance functions are also set apart by their ability to do the following



Build a clear role for business partners



Invest in emerging technologies



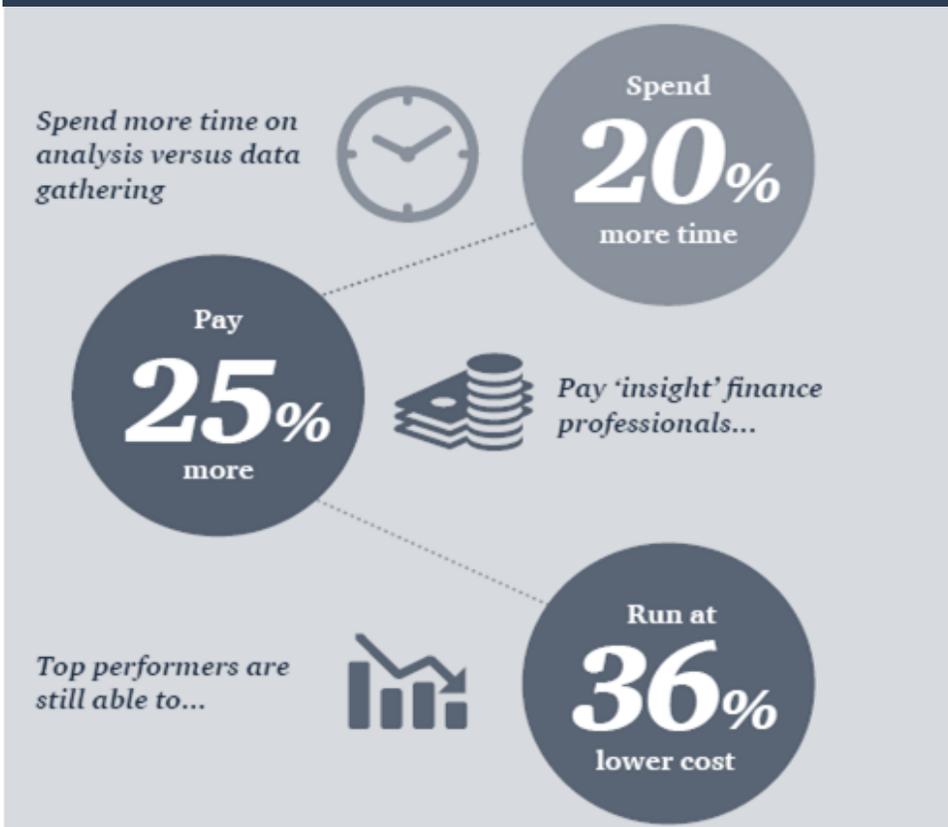
Take the lead in driving behaviour and cultural change



Drive transformation

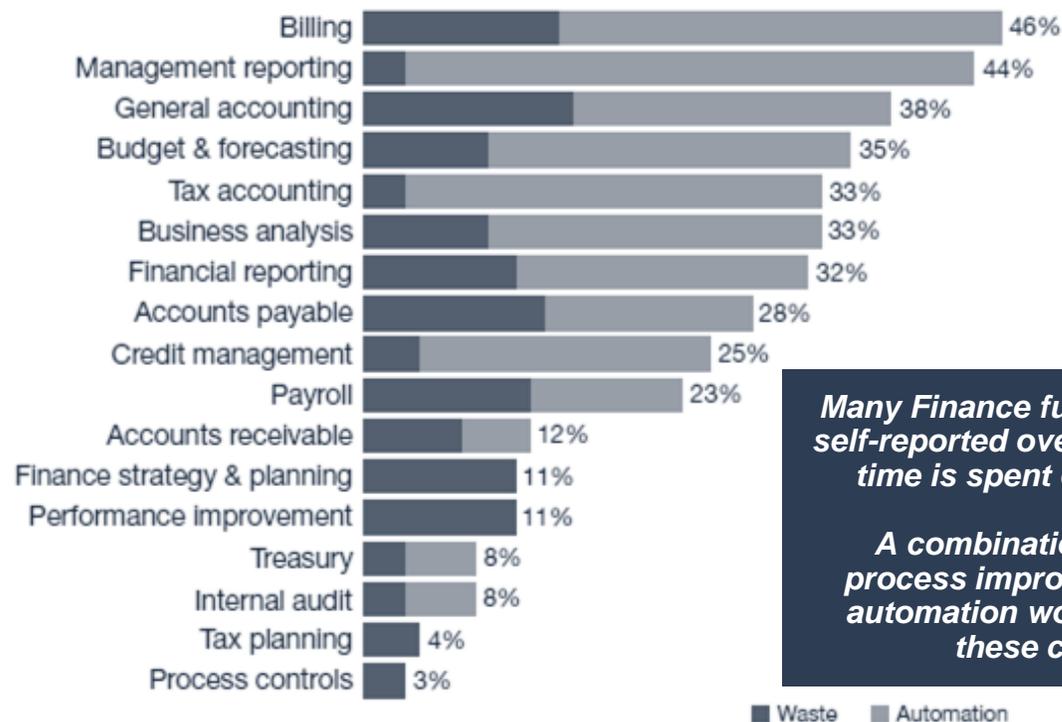
Finance leaders are improving business results by investing in commercial insight, spending less time on transactional work and running at lower costs

Top performers in the industry operate at lower cost not by reducing service levels but by standardizing and simplifying their core processes and systems – enabling them to free up resources to focus on business partnering



At UM, many of the below processes are performed across the organization. The results of a multi-function activity analysis will demonstrate the opportunities to leverage LEAN concepts to reduce effort in transactional areas.

Waste reduction and automation potential based on industry benchmarks



Many Finance functions have self-reported over 30% of their time is spent on "waste"

A combination of Lean process improvement and automation would release these costs

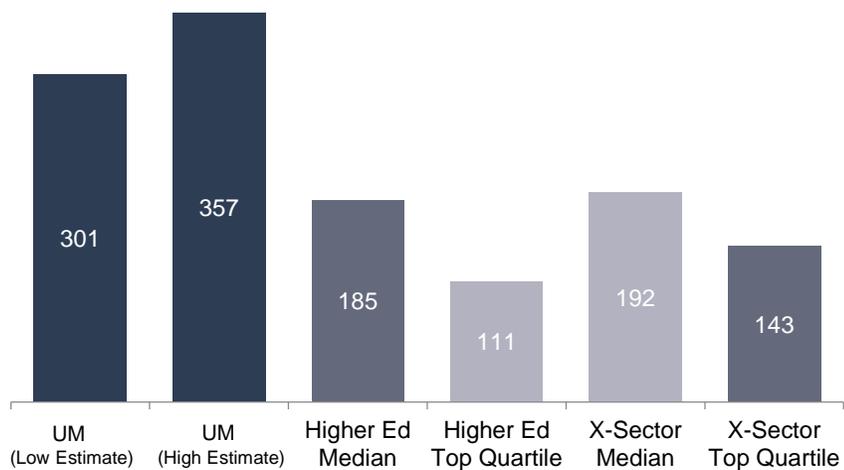
Source: PwC finance benchmark data, activity analyses

Finance Area Overview

Factoring distributed and campus FTEs into the Finance benchmark data shows a gap of 116 FTEs to 172 FTEs to median

Activity Analysis is key to the true determination of Finance activity and related FTEs beyond the estimates below

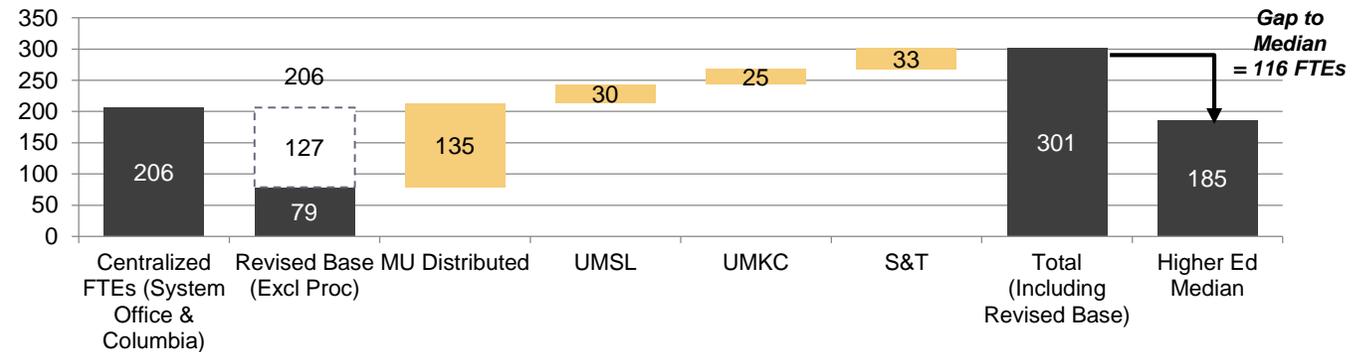
Finance FTEs Normalized to UM Revenue (\$2.2B)



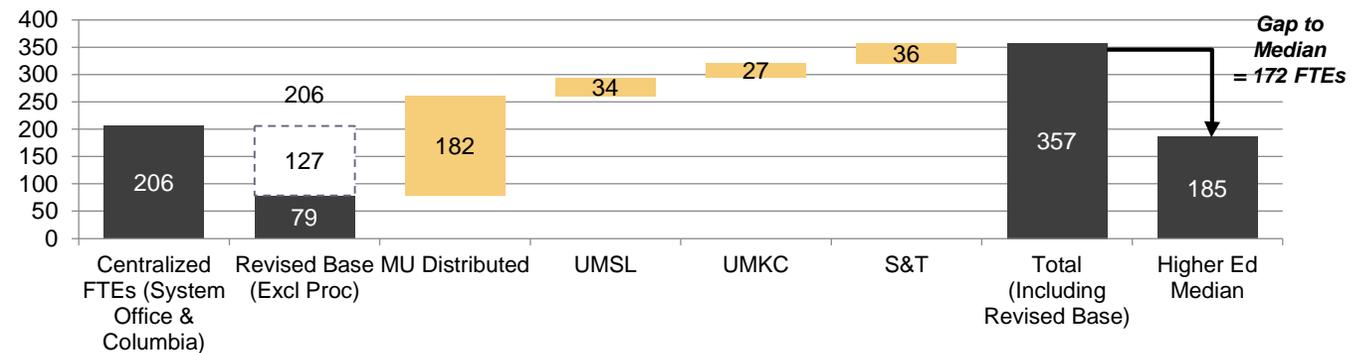
Legend

- Base of FTE Analysis
- Removal of FTEs Performing Non-Finance Roles
- Additions of FTEs

UM Finance FTE Summary (Low Estimate)



UM Finance FTE Summary (High Estimate)



Opportunity Summary

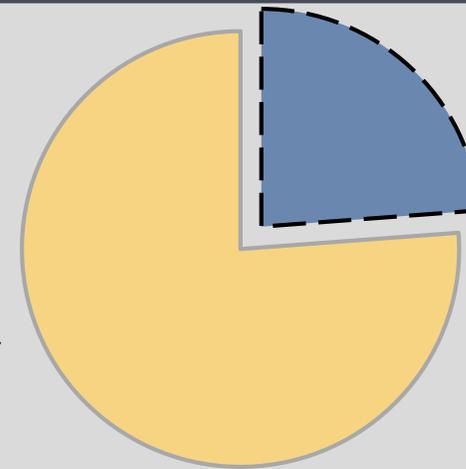
The Finance Workstream identified \$8.8M to \$13.3M in annual net savings

	Opportunity	Implementation Duration	Implementation Risk
1	Design Future Operating Model (Align Finance Personnel)	Six Months	4
2	Identify Opportunities to Consolidate Activities Currently Centralized at the Campus Level (Operating Model)	One Year	3
3	Identify Opportunities to Consolidate Activities Currently Occurring at the College/Department Level (Operating Model)	Two Years	5
4	Drive Broader Financial Accountability	One Year	5
5	Improve Business Insight Reporting and Planning Capabilities	One Year	4
6	Further Development of a Finance Talent Development Strategy	Two Years	3

Opportunity Overview

Total System-wide Spend = Estimated \$40M

Revised Base (across all campuses – detail in following slide)



Opportunity - \$8.8M
(Variance from median benchmark, includes benefits)

Note: Annual benefits are net of non-capital investment in capabilities needed

Implementation Risk Summary

Finance opportunities are tied directly to operating model changes and therefore carry a higher than average risk level

Opportunity		Complexity	Investments	Stakeholder Impact	Total Risk
1	Design Future Operating Model (Align Finance Personnel)	5	4	5	4
2	Identify Opportunities to Consolidate Activities Currently Centralized at the Campus Level (Operating Model)	4	3	4	3
3	Identify Opportunities to Consolidate Activities Currently Occurring at the College/Department Level (Operating Model)	5	5	5	5
4	Drive Broader Financial Accountability	5	5	5	5
5	Improve Business Insight Reporting and Planning Capabilities	5	4	3	4
6	Establish Finance Talent Development Strategy	3	3	3	3

Risk Assessment Key

Complexity	Assessment based on the number of actions required to implement the opportunity and the breadth of stakeholder buy-in needed
Investments	Assessment based on amount of technological, financial, personnel, and/or “soft” investments needed to implement the opportunity
Stakeholder Impact	Assessment based on the opportunity’s impact to normal workflow as well as the perceived impact of the opportunity to stakeholders

Implementation Risk Score is an index that factors in (1) Complexity (2) Investment Required (3) Impact to Stakeholders

Low Risk – Limited risk to internal stakeholders; proceed with implementation,	1- 2
Moderate Risk – Develop and execute change management, Track and manage progress closely	3
High Risk – Develop tactical work plan, execute change management strategy, involve key leaders	4-5

4.2 Finance Individual Opportunities Overview

1. Design Future Operating Model (Align Finance Personnel)

Opportunity Synopsis							
Name	Design Future Operating Model (Align Finance Personnel)						
Description	Establish direct reporting lines through the Finance function from campus Finance to system. The direct lines will allow for the establishment of an organization that becomes leaner and more focused on industry leading practice and a smaller size of the overall function. Direct lines will allow financial leadership to simplify and reduce transactional processing effort and increase focus on delivering business insights.						
	System → Campus (Chancellor, Provost) → College/School/Division (Dean, Executive) → Department (Chair/Executive)						
Benchmarks	Key Dependencies and Risks			Stakeholders			
	<ul style="list-style-type: none"> Dependent on organizational cooperation Leadership support throughout the organization Alignment and support of academic leadership to maintain campus partnering relationships <p>(Average departmental attrition rate* – 10%)</p>			<ul style="list-style-type: none"> Finance leadership at System and campus level Chancellors, Provosts, Deans, Department Chairs Finance Operations Team Fiscal officers at each campus All resources supporting Finance activities 			
Benchmarks	<ul style="list-style-type: none"> 2017 Finance Effectiveness Benchmark Report 						
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Improved line of site to campus related opportunities across the University and increased ability to standardize activities at the campus level Improve ability of the Finance organization to partner with the campuses, colleges, schools or divisions to develop and manage against their business strategies and plans 						
Spend Addressed		Investment Required			Implementation Duration		Implementation Risk
Finance labor costs		Investment in training, communication, team building and responding to feedback			Six Months		4
Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL	
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓	

*Three year average across UM System and Columbia Campus

2. Identify Opportunities to Consolidate Activities Currently Centralized at the Campus Level

Opportunity Synopsis	
Name	Identify Opportunities to Consolidate Activities Currently Centralized at the Campus Level
Description	Further expand shared service focus to include additional Finance and Supply Chain transaction processing areas that are currently centralized at the campus level. Identify Finance and Supply Chain personnel by executing a multi-function activity analysis survey. These decisions should occur as a part of the Finance operating model discussion. Potential areas of benefit include contracting, accounting, gift processing, billing, cash receipts and collections. <i>Key Dependencies and Risks and Stakeholders as noted in Opportunity 1</i>
Benchmarks	<ul style="list-style-type: none"> Finance benchmark data pulled from Finance Effectiveness Benchmark ("FEB") database. UM benchmark data includes core Finance FTEs and estimates on distributed FTEs and Finance support at campuses
"Soft" Benefits Achieved	<ul style="list-style-type: none"> Ability to expand standardization of Finance and Supply Chain activities Allows for further specialization of roles within the shared service center Improved alignment and business insight support

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Finance labor costs	Potential one time operating investment to reflect process changes in system(s)	One Year	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

3. Identify Opportunities to Consolidate Activities Currently Occurring at the College/Department Level

Opportunity Synopsis	
Name	Identify Opportunities to Consolidate Activities Currently Occurring at the College/Department Level
Description	Further expand shared service focus to include additional Finance and Supply Chain transaction processing areas that are currently occurring at the college/department level. Identify Finance and Supply Chain personnel by executing a multi-function activity analysis survey. Identify areas of process waste and reduce the number of steps to complete transactions. Rationalize the location of service delivery based on a Finance operating model discussion, ensuring mission supporting activities are maintained via service level agreements and good relationships with customers. <i>Key Dependencies and Risks and Stakeholders as noted in Opportunity 1</i>
Benchmarks	<ul style="list-style-type: none"> Finance benchmark data pulled from FEB database. UM benchmark data includes core Finance FTEs and estimates on distributed FTEs and Finance support at campuses
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Ability to expand standardization of Finance and Supply Chain activities Expansion of the shared service center would ultimately allow for a reduction of “admin” roles at the campus Allows for further specialization of roles within the shared service center Improved alignment and business insight support

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Finance labor costs	Potential one time operating investment to reflect process changes in system(s)	Two Years	5

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

4. Drive Broader Financial Accountability

Opportunity Synopsis	
Name	Align Finance Personnel (Operating Model)
Description	Drive broader accountability for financial results and budget targets including margin expectations and adopt an All Funds approach to financial management. Relate financial accountability with decision making across the institution. Add financial accountability to the formal performance appraisal process for leadership across the institution. <i>Key Dependencies and Risks and Stakeholders as noted in Opportunity 1</i>
Benchmarks	<ul style="list-style-type: none"> Finance benchmark data pulled from FEB database. UM benchmark data includes core Finance FTEs and estimates on distributed FTEs and Finance support at campuses
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Improve accountability for and better alignment of budget and investments consistent with University wide and campus specific strategies Improve ability to assess, understand and react to YTD budget variances and project YE results from the department level up

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Enabler	Potential one time operating investment to reflect process changes in system(s)	One Year	5

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

5. Improve Business Insight Reporting & Planning Capabilities

Opportunity Synopsis	
Name	Improve Business Insight Reporting & Planning Capabilities
Description	<p>Improve Business Insight reporting and planning capabilities by defining a consistent approach to analyzing financial results across System, alignment with shorter forecasts and longer term strategic planning improvements and establishing a more robust strategic and annual planning process that includes the ability to generate periodic forecasts that focus on accuracy and a strategic planning cycle with a 3 to 5 year horizon. Promote resources in business insight roles have the skills and capabilities to support. Align data relationships across Finance, Student, and HR administrative pillars to provide better reporting data.</p> <p>Key Dependencies and Risks and Stakeholders as noted in Opportunity 1</p>
Benchmarks	<ul style="list-style-type: none"> Finance benchmark data pulled from PwC's Finance Effectiveness Benchmark (FEB) database UM benchmark data includes core Finance FTEs and estimates on distributed FTEs and Finance support at campuses
"Soft" Benefits Achieved	<ul style="list-style-type: none"> Ability to provide management with meaningful analysis to effectively manage the business Standard set of KPIs to measure business performance Improved strategic planning, budgeting and forecasting/long range planning Clearly defined budget and forecast processes and calendar Uniform level of data detail to allow for appropriate management reporting analysis and increased visibility

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Enabler	Potential one time operating investment to reflect process changes in system(s)	One Year	4

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

6. Further Development of Finance Talent Development Strategy

Opportunity Synopsis	
Name	Further Development of Finance Talent Development Strategy
Description	<p>Further development of a robust Finance talent development strategy to build a network of strong Finance resources across the system. This will help promote the right people with the requisite leadership and technical skills are in the right Finance jobs to perform their respective roles. The Finance function should work to create career pathways and job rotation programs to build an internal talent base with a diverse skill set. There is an opportunity to leverage existing campus programs around Finance training to build a more comprehensive and consistent Finance knowledgebase.</p> <p><i>Key Dependencies and Risks and Stakeholders as noted in Opportunity 1</i></p>
Benchmarks	<ul style="list-style-type: none"> Finance benchmark data pulled from FEB database. UM benchmark data includes core Finance FTEs and estimates on distributed FTEs and Finance support at campuses
“Soft” Benefits Achieved	<ul style="list-style-type: none"> More engaged Finance workforce Consistent application of Finance activities and processes Reduced recruitment costs and more effective talent identification and placement

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Learning and development funds	Annual investment in training	Two Years	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

4.3 Supply Chain

Supply Chain Overview and Summary

Scope & Approach

- Supply Chain is a sub-department of Finance that is responsible for managing the majority of the university's non-labor spend
- As a centralized shared service, it provides contracting and Supply Chain services to all campuses
- This review focused on contracting practices and identification of measures to reduce non-labor spend around supplies and purchased services.
- Vendor contract review covered the following areas
 - Office supplies
 - Facilities (Elevators & Janitorial Services / Supplies)
 - Food Services
 - One Card

Findings

- Supply Chain identified \$3.7M to \$4.0M in annual net savings
- Vendor contract are consistent with industry leading practices
 - Well defined scope
 - Performance expectation clauses
 - Line item pricing
 - Volume based rebates
 - Clearly established remediation process
- UM would benefit by having a Supply Chain function that can better address non-labor spend through improved enforcement
- GL account code review will result in more accurate analytics that will feed improved spend management and contracting
- Department's centralized model is **in line with leading practices** for Supply Chain management structure and strategy

Opportunity		Implementation Duration	Implementation Risk
1	Support Operating Model Redesign for Non-Labor Spend	Two Year	2
2	Improved Enforcement of Supply Chain Controls	Near-Term	2
3	Increase Spend Under Management	Near-Term	2
4	Enhance Contract Review Process	Near-Term	2
Totals			

Note: Annual savings are net of non-capital investments

Office Supplies

Supply pricing is largely on contract, with competitive pricing terms and contract conditions in place. Utilization for office supplies is better than benchmark across the system.

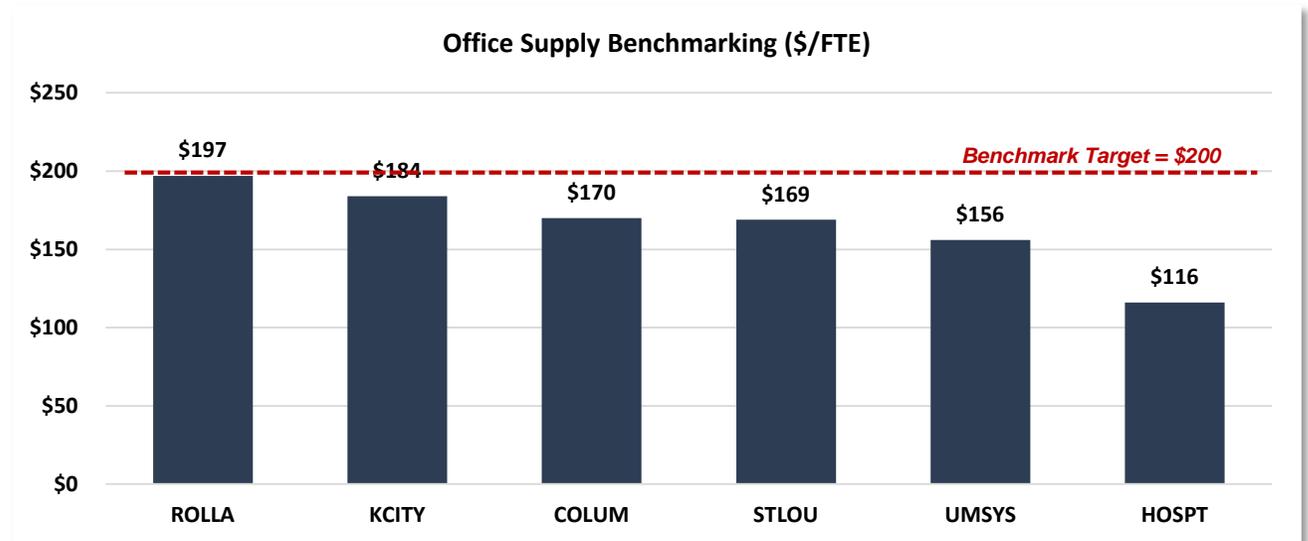
Pricing & Contracting

- Opportunities currently underway to continue to shift spend toward pre-negotiated contracts / Show Me Shop
- Contracting is strong across supply vendors, inclusive of many leading practice terms and conditions:
 - MSRP Discount (3-50% off retail) and Volume Rebates
 - Vendor profitability transparency (i.e., Hillyard ROS 1.5%)
 - Prompt Pay Discount
 - Capital equipment volume discounts
 - Market basket pricing

Office Supply Utilization:

- As a system, University of Missouri supply utilization is below benchmark (\$163 / FTE versus benchmark of \$200 / FTE).
- The majority of spend was purchased through Show-me Shop (SMS) \$3.2M, with only a small amount procured through P-cards (~\$100k).

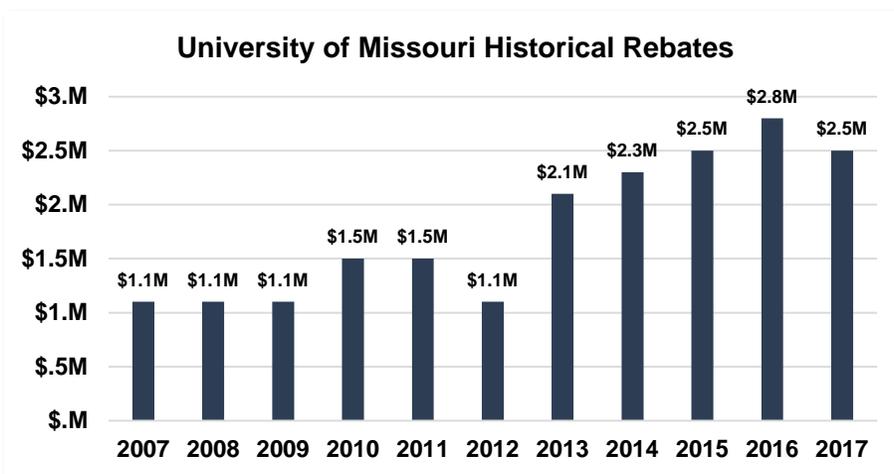
* Excludes expenses from The Home Depot (\$200k), Kaldis Coffee (\$50k), Klein Surgical Systems (\$2k), and 50% of spend from Sam's Club (\$175k).



Commercial Card Program Expense

Commercial Card is effectively utilized, with market competitive terms and rebates. This program includes One Card utilized for purchasing and travel, and single use account (SUA). FY17 program expense was ~\$150M, qualifying for \$2.5M in rebates.

- University of Missouri has a strong commercial card program in place and spend in the top tier (\$90M+) for qualifying rebates. The system has continually capitalized on the program, steadily shifting spend to commercial cards as appropriate.
- Commercial card expense is governed by robust policies and procedures, however there are minimal consequences if staff elects to use p-cards over pre-established forms of payment (PO, established contracts, etc.)
- This spend includes SUA, which needs to be targeted for growth (e.g. supplier payment terms, settlement options, et al)
- Future focus will be around building the SUA program as form of settlement to increase overall card program spend, as individual card spend will likely decline as more centralized contracts are developed.



- 2012: Program moved to the Higher Education Consortium contract resulting in rebate basis point increase of .32. Programmed dipped in 2012, due to the program moving from a calendar year rebate grid to a fiscal year. 2012 only reflects rebate against 6 months of spend.
- 2013: \$20M decrease in card program spend from 2011 to 2013, with a rebate gain of over \$600K resulting from the new contract.
- 2015: Higher Ed Consortium contract was renegotiated for an additional 5 year term. New rebates were effective in 2016. Once again, we saw a program drop in spend of \$22M compared to the previous year but still had an increase in rebate of \$321K
- As card spend continues to decline, the bank has now offered payment term escalators to increase rebate, with the intent of keeping our program neutral over the next year.

1. Support Operating Model Redesign for Non-Labor

Opportunity Synopsis	
Name	Support Operating Model Redesign for Non-Labor Spend
Description	<ul style="list-style-type: none"> Identify spend areas with variance above acceptable ranges and partner with functional service organization leadership (e.g., information technology & facilities) to develop processes and controls to manage non-labor spend. Develop strategy to monitor and enforce new spending policies and procedures Work with Finance around improving budget guidelines
Metric	Will further refine during design phase. Proposed: Expense Performance / FTE (See example in Non-Labor Departmental Expense Review Slide)
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Improved financial controls and influence over departmental spend Increased line of sight to key spend areas

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Non-Labor	None	Two Year	2

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

2. Improve Enforcement of Supply Chain Controls

Near-Term
Opportunity

Opportunity Synopsis	
Name	Improve Enforcement of Supply Chain Controls
Description	<p>Increase administrative support for Supply Chain's enforcement of department spend that is not currently on contract.</p> <ul style="list-style-type: none"> Reduce confirming orders which comprise ~12% of total Purchase Orders (POs) Direct all spend through approved appropriate channels <p>Update policy language to allow Supply Chain to enforce departmental accountability</p>
Metric	Spend Under Management / Total Spend
"Soft" Benefits Achieved	<ul style="list-style-type: none"> Improved line of site to on/off contract spend Reduction in rogue / unapproved spend for non-emergent purposes Additional checks and balances for uncontrolled spend

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Non-Labor	None	Near Term	2

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

3. Increase Spend Under Management

Near-Term
Opportunity

Opportunity Synopsis	
Name	Increase Spend Under Management
Description	<p>Add additional suppliers/contracts to Show Me Shop (SMS). Focus initially on adding a minimum of 10 suppliers/contracts to SMS. New contracts being considered:</p> <ul style="list-style-type: none"> • Amazon Marketplace • Lowes • American Education Supply • Standard Textile • MWI Veterinary Supply • Sherwin Williams and/or PPG Paints • Staples Promotional Products <p>Review Maintenance Repair and Operations (MRO) contracts to determine viability of adding new suppliers or enhancing current contracts.</p> <p>Expand contract development for goods and services currently settled under non PO vouchers, confirming orders, direct reimbursements, et al</p>
Metric	Spend Under Contract / Total Spend
“Soft” Benefits Achieved	<ul style="list-style-type: none"> • Reduced off contract spend • Delivers consistent, defensible, and centralized contracting services • Increased spend visibility due to streamlined reporting and centralization • Increase policy compliance

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Non-Labor	None	Near Term	2

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

4. Enhance Contract Review Process

Near-Term
Opportunity

Opportunity Synopsis

Name	Enhance Contract Review Process
Description	<p>Utilize advanced analytics (e.g. Primrose, et al)</p> <ul style="list-style-type: none"> Identify significant spend reduction and standardization opportunities Cultivate areas for tactical / corporate contracting <p>Develop supplier management program to produce supplier accountability</p> <ul style="list-style-type: none"> Expand supplier diversity programming and increase spend Establish performance metrics for contracts Implement business review process and score cards based on predetermined metrics for major vendors
Metric	Meet stated savings objectives
“Soft” Benefits Achieved	<ul style="list-style-type: none"> Grow spend under contract Supports consistent, defensible, and centralized contracting services Increased spend visibility due to expanded utilization of analytics

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Non-Labor	None	Near Term	2

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

5. Human Resources Workstream

5.1 – Human Resources Workstream Summary

5.2 – Individual Opportunity Overviews

5.3 – HR Observations

Summary

The Human Resources workstream reviewed \$19.3M of spend and identified two opportunities with a projected net savings of \$3.3M to \$4.6M and an additional \$17.5M to \$30.4M in projected savings from rationalizing benefits offerings

Workstream Approach 	Observations 	Key Recommendations 
<ul style="list-style-type: none"> • Data used <ul style="list-style-type: none"> ◦ FY17 GL and payroll file • Scope focused on traditional human resources and operations functions • Met with 11 Human Resources leaders (includes 2 from Engagement Leadership category) throughout the system and Columbia campus as well as representative staff 	<ul style="list-style-type: none"> • Lack of clear HR strategy, high turnover and capacity issues have inhibited ability to advance HR services in the organization and become a strategic business partner vs. purely transactional. • Decentralized structure and lack of standardization of policies/processes and availability training for non-HR professionals creates inefficiencies, redundancies and legal risk. • PeopleSoft 9.2 has been implemented, but efficiencies haven't been realized due to lack of full integration with HR processes and lack of manager and employee self-service tools. • HR staff are excited about new HR leadership, but historical tension between campuses and, UM System central office poor communication and lack of clear decision rights has created "culture of fear" for HR staff in recent years 	<ul style="list-style-type: none"> • Launch a formal HR Transformation effort focused on standardizing HR processes and governance structures, optimizing the usage of HR technology and redesigning the HR service delivery model • Invest in core HR capabilities that are currently missing or underutilized and in HR technology (e.g., self-service, case management tools) to drive efficiencies and create a seamless employee experience • Involve campus leaders in the developing of a system-wide "people strategy" and building consensus around the role that HR plays at UM in driving the "people strategy", business strategy and departmental workforce needs • Redesign health benefits offerings to align to industry standards and consider adjusting salary levels to align to market levels

Note: Annual savings are net of non-capital investments

Scope

HR scope includes generally all the functions that report in to HR leadership at MU and UM System

Labor Areas	Non-Labor Areas	Out of Scope
<ul style="list-style-type: none"> • HR Administration & Strategic Planning • Recruiting & Staffing • Learning & Development • Performance Management • Talent Management • Organizational Effectiveness & Culture • Employee Relations / Labor Relations • Support Services Center • Total Rewards & Compensation • CAPS (Core Administrative Processing Services) • HR Consultants / Specialists • Workforce Analytics • HRIS • Ratio of Executives Served per Administrative Assistant¹ 	<ul style="list-style-type: none"> • Operating expenses related to running HR functions • Benefits Offerings (Medical, Dental, Retirement, etc.)² 	<ul style="list-style-type: none"> • N/A – all typical HR functions are considered in scope

¹ Administrative Assistant ratios included in scope for Human Resources team since any workforce related changes would have to be coordinated through the HR function

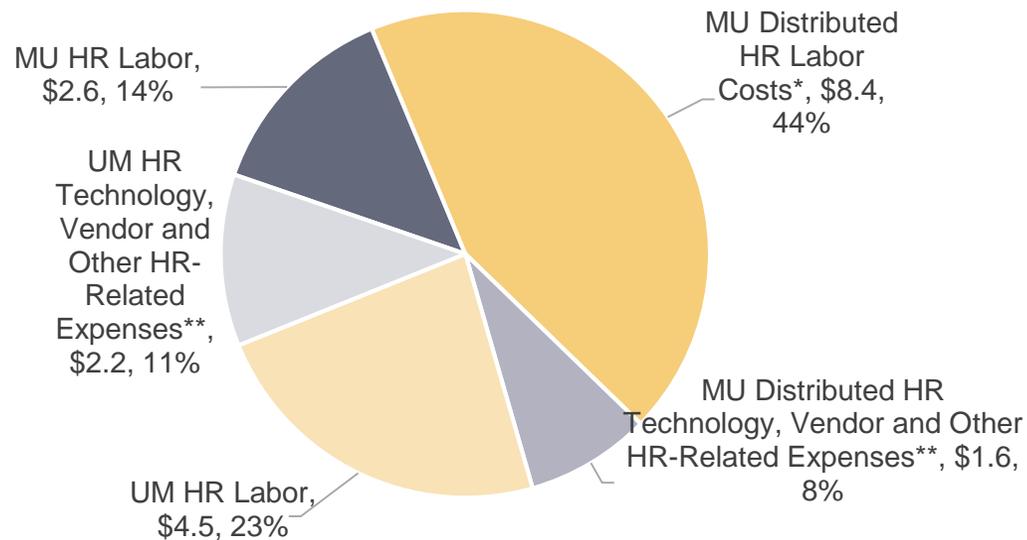
² Benefits included in Human Resources scope, although the addressable spend for Human Resources excludes total spend on benefits

Expense Profile

\$19.3M of spend was reviewed including labor and non-labor expenses, labor includes known HR employees and a count of “Distributed” employees which will be refined through an activity analysis survey

FY2017 Baseline	Total Spend	UM and MU Central Headcount	MU Distributed Headcount
Human Resources Functional Rollup	\$19.3 M	106	477

Expense Breakdown



* Assumes 30% of work executed by 477 non-HR professionals identified as performing some level of HR work is attributable to HR

** May not include total costs associated with HR vendor/consultant fees and should be validated with HR; additionally, HR technology expenses may be currently mapped to IT spend and should be further validated with HR

Distributed Methodology

- 477 non-HR professionals were identified within Columbia campus as performing some level of HR work with departments/schools/divisions
- It is also assumed that on average, 30-40% of their time is spent executing HR activities (140-190 FTEs) and the average labor cost (salary + benefits) is \$60,000
- In order to more accurately quantify the number of non-HR professionals performing HR work, an activity analysis survey is required

Opportunity Summary

- The Human Resources workstream identified \$2.2M to \$2.4M in net HR related benefits
- Total Rewards savings is \$17.5M to \$30.4M in total savings
- Administrative Assistant Realignment is an additional \$1.1M to \$2.2M in savings

Opportunity		Implementation Duration	Implementation Risk
1	HR Transformation¹		
	Efficiencies in Distributed HR Spend	Two Years	5
	Efficiencies in HR Spend	Two Years	4
	Investments in Critical HR Capabilities and Roles	Two Years	4
	Optimization of HR Technology	Two Years	4

Opportunity		Implementation Duration	Implementation Risk
2	Total Rewards Rationalization	Two Years	5
3	Administrative Assistant Realignment	Six Months	3

¹ Savings opportunity primarily resides in departmental spend

Note: Annual savings are net of non-capital investments

Implementation Risk Summary

HR Transformation and Total Rewards will require a thoughtful approach due to risk scoring

Opportunity		Complexity	Investments	Stakeholder Impact	Total Risk
1	HR Transformation	5	5	2	4

Opportunity		Complexity	Investments	Stakeholder Impact	Total Risk
2	Total Rewards Rationalization	5	4	5	5
3	Administrative Assistant Realignment	2	2	3	3

Risk Assessment Key	
Complexity	Assessment based on the number of actions required to implement the opportunity and the breadth of stakeholder buy-in needed
Investments	Assessment based on amount of technological, financial, personnel, and/or “soft” investments needed to implement the opportunity
Stakeholder Impact	Assessment based on the opportunity’s impact to normal workflow as well as the perceived impact of the opportunity to stakeholders

<i>Implementation Risk Score is an index that factors in (1) Complexity (2) Investment Required (3) Impact to Stakeholders</i>	
Low Risk – Limited risk to internal stakeholders; proceed with implementation,	1- 2
Moderate Risk – Develop and execute change management, Track and manage progress closely	3
High Risk – Develop tactical work plan, execute change management strategy, involve key leaders	4-5

5.2 Human Resources Individual Opportunities Overview

HR is highly decentralized and opportunities for improvement across each aspect of the operating model exist

HR Organizational Structure & Roles

- Based on individuals mapped to HR roles (106), **Columbia and UM System HR functions appear to be extremely lean compared to benchmarks**
- **Columbia identified 477 non-HR professionals to date that support HR-related work** and it is expected more exist across other campuses; a proper activity analysis survey is required to more accurately understand FTEs touching HR work across the system
- **HR service delivery model is highly decentralized and fragmented** which creates inefficiencies, redundancies and risk for non-HR personnel (477+) executing HR work
- **HR functions with opportunities to further centralize (where possible) and automate transactional processes** to achieve efficiencies or economies of scale across the system include: CAPS, SOS Staffing, Total Rewards, Service Center
- **HR functions that appear to be underinvested and should be further developed into Centers of Excellence** include: Recruiting, Talent Management, Learning & Development, Org Development & Culture

HR Technology

- **PeopleSoft 9.2 has been implemented, but efficiencies haven't been realized** due to functionality and technology not being utilized and lack of full integration with HR processes
- **Proper manager and employee self-service tools are not utilized today** and could result in reduced costs and ticket volume for the Service Center
- **Remedy case management tool was adopted from IT, but is not ideal for tracking HR-related tickets** and creates inefficiencies within the Service Center
- **Tableau is a relatively new tool with workforce reporting capabilities, but is currently only utilized for compliance and ad hoc reporting** rather than strategic workforce planning at the division/department/school level
- **Opportunities exist to increase the usage of digital tools to improve workflow and efficiencies** within functional areas (e.g., using DocuSign technology for intent to retire instead of paper forms and imaging)

HR Governance

- There has been a **history of “tension” between UM System HR and Columbia HR** due to lack of clarity around decision rights and poor communications, but **new HR leadership has instituted greater coordination across campuses**
- **Some committee structures are in place (e.g., HR Council, Total Rewards Advisory Committee)** but opportunity exists to streamline HR committee structures to improve communication and coordination across campuses and reduce redundancies

HR Processes

- The current decentralized structure, coupled with a lack of training capabilities for non-HR personnel creates **organizational risk in process areas with legal implications (e.g., FMLA, ADA, I-9)**
- **Divisions/departments/schools are accustomed to “old ways of working”** with custom HR processes and tools, creating inefficiencies and redundancies
- UM System is in the process of inventorying different HR processes – as of September, **450+ unique processes were identified at UM System alone** without expanding efforts to campuses

There is consensus around the need to redefine and elevate the role of HR

Observations

- Recent leadership changes (University President, Interim CHRO) have resulted in an **opportunity to rethink UM's approach to becoming an "employer of choice"** and the role HR plays in enabling UM's strategy
- In recent years, strong efforts have been made to embed HR strategic opportunities into the overarching strategy (e.g., 2020 Vision for Excellence), but the **strategy lacks a common definition around a "people strategy" and the role HR plays in driving it forward across all campuses**
- As a result of the current fragmentation of the delivery of HR services across campuses, there are **different viewpoints around the service that departments/schools/divisions expect from HR**
- Historically, Total Rewards has been utilized as a primary lever for employee satisfaction, but other **elements of a proper "people strategy" are missing** (e.g., career laddering, mobility, recruitment, learning & development, culture) that should inform the role HR plays
- Some **elements of a "people strategy" are defined, but not currently integrated with HR or are not properly being used to drive business needs/goals** (e.g., diversity & inclusion, workforce analytics)
- Climate survey results were recently presented by Rankin & Associates, but **no formal, annual employee engagement survey tool exists**

Representative Quotes

"We are in need of a real strategy around the role of HR"

"HR has struggled to find its place in the organization"

"We need greater collaboration between HR and academics"

"Previous consulting reports called HR too 'transactional', but our current model, and the expectations of departments around the old ways of working, prevent us from becoming more strategic in nature"

Initial benchmarking indicates central HR is extremely lean; however, when distributed HR headcount is included, UM is below bottom quartile

In order to accurately assess total FTEs performing HR activities across campuses, it is recommended an activity analysis is performed in order to properly validate opportunities to achieve efficiencies and/or areas of investment.

Business Unit	Total # Employees ¹	Total # HR Employees ²	Employee : HR Ratio ³	MU Distributed ⁴	Adjusted # of HR Employees ⁵	Adjusted Employee : HR Ratio ⁶
UM System	552.0	74.0		-	74.0	
Columbia	19,514.0	32.0		477.0	509.0	
Total	20,066.0	106.0	189.3	477.0	583.0	34.4

1 Total headcount across business units

2 Total HR headcount who report into HR

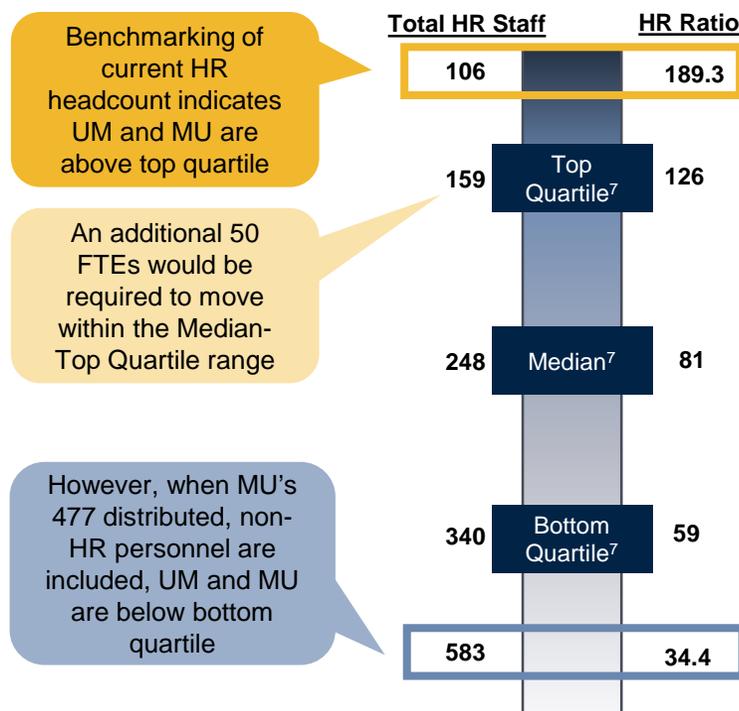
3 HR headcount ratio measures the number of regular headcount employees supported by HR employees who report into HR

4 Additional headcount embedded within business units that provide HR support; activity analysis required to validate headcount and business unit allocation

5 # of Employees HR + MU Distributed HR Headcount

6 Revised ratio incorporating # of Employees HR + MU Distributed

7 Benchmarks from the 2016 Saratoga Institute

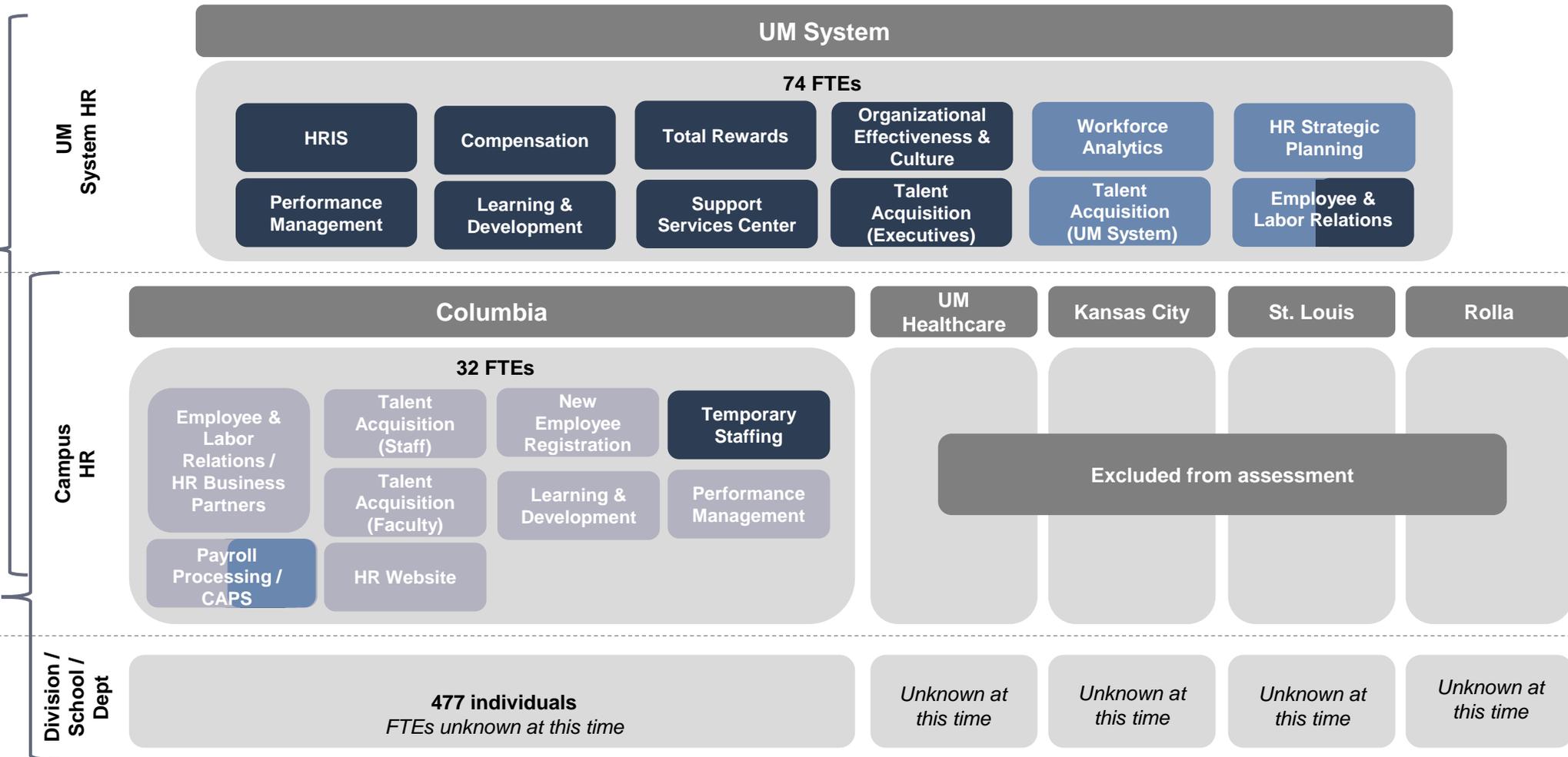


There are two primary opportunities to drive efficiencies and elevate the role of HR in the current organizational structure

- Function supports all locations
- Function supports UM System
- Function supports Columbia campus

Opportunity #1:
 Realign existing HR resources and organizational structure to align to leading practices to (a) better support UM's "people strategy", (b) create economies of scale across campuses and (c) drive consistency in the delivery of HR services

Opportunity #2:
 Redesign HR delivery model between campus HR and divisions/schools/depts. to (a) mitigate risks of non-HR personnel executing specialized HR work and (b) drive greater value by properly managing and fulfilling the workforce needs within each division/school/dept.



Investments in HR will be required to ultimately generate savings and improve overall HR delivery

Opportunity #1: <i>Realign Existing HR Capabilities & Resources</i>	Opportunity #2: <i>Redesign the Campus HR Delivery Model</i>
<p>A deeper dive into individual HR functional areas within the UM System central office and Main Campus indicates:</p> <ul style="list-style-type: none"> ➤ Opportunities to invest in building core HR capabilities in the following areas: Recruiting & Staffing, Talent Management, Learning & Development, Organizational Effectiveness & Engagement ➤ Potential efficiencies can be achieved by realigning resources to gain scale across the system, optimizing the usage of technology or improving processes in the following areas: Service Center, CAPS, Retirement Plan ➤ Opportunities to realign resources or repurpose work to focus current resources on more value-add HR activities in the following areas: Employee Relations, HRIS, Compensation, Workforce Analytics, HR Strategic Planning 	<p>There are opportunities to reduce departmental spend by redesigning how HR services are performed and delivered within departments/divisions/schools based on the following assumptions:</p> <ul style="list-style-type: none"> ➤ 477 non-HR professionals performing HR work spend an average of 30% of their time executing HR activities ➤ Approximately 50% of efficiencies within this population of non-HR personnel can be gained by redesigning the HR delivery model ➤ Additional investment would be required to shift to more formal HR Business Partner (HRBP) roles to supplement existing MU labor relations staff ➤ Opportunities may exist to repurpose existing non-HR personnel roles executing HR work into formal HRBP roles

In order to drive efficiencies and create a seamless employee experience, the portfolio of HR technology should be more closely assessed and coordinated with IT to develop a proper business case outlining specific investment needs and resource requirements

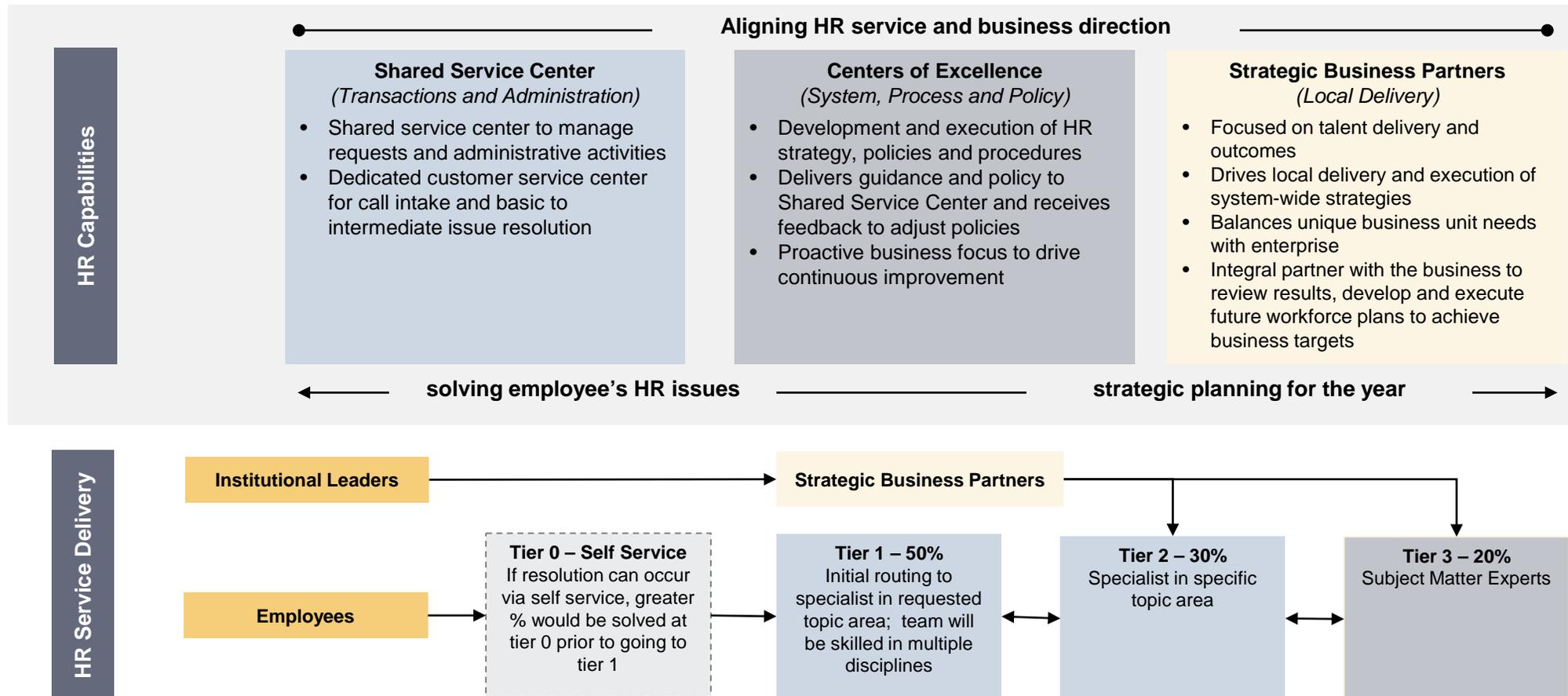
An integrated HR technology strategy should be developed to support the long-term HR service delivery model and evolving needs of UM

	PeopleSoft 9.2 HCM	Self-Service	Case Management	Tableau	Other HR Technologies
Opportunities to reassess usage of HR technology	<ul style="list-style-type: none"> Assess opportunities within current platform to enable functionality that will result in increased efficiencies and visibility into HR activities (e.g., applicant tracking, candidate communication, absence management, benefits administration) 	<ul style="list-style-type: none"> Implement manager and employee self-service tools (e.g., Oracle) to provide all managers and employees with a single point of entry for HR information and processes, empower managers and improve HR workflow across campuses and UM System. 	<ul style="list-style-type: none"> Optimize, upgrade or replace current case management tool (Remedy) with another HR case management tool to drive efficiencies within the Service Center and improve customer satisfaction 	<ul style="list-style-type: none"> Explore usage of Tableau functionality and identify opportunities to access and/or automate reporting for divisions / departments / schools to support recruiting and workforce planning needs 	<ul style="list-style-type: none"> Assess effectiveness and opportunities to enhance UM and MU employee web portals to align to delivery model Assess opportunities to increase the usage of digital tools to improve efficiencies in functional areas (e.g., DocuSign for intent to retire forms) Assess ability to integrate phone tree capabilities for all Shared Service functions (e.g., IT, HR, Payroll)

By optimizing the usage of technology and embracing a cloud-based, employee-centric view, organizations can see structural benefits that lie beyond technology advantages. This digital model makes it possible to connect various HR opportunities and technology across the enterprise. It integrates design, user experience, and the nature of service delivery to create a consistent, user-friendly and impactful environment - making HR more effective.

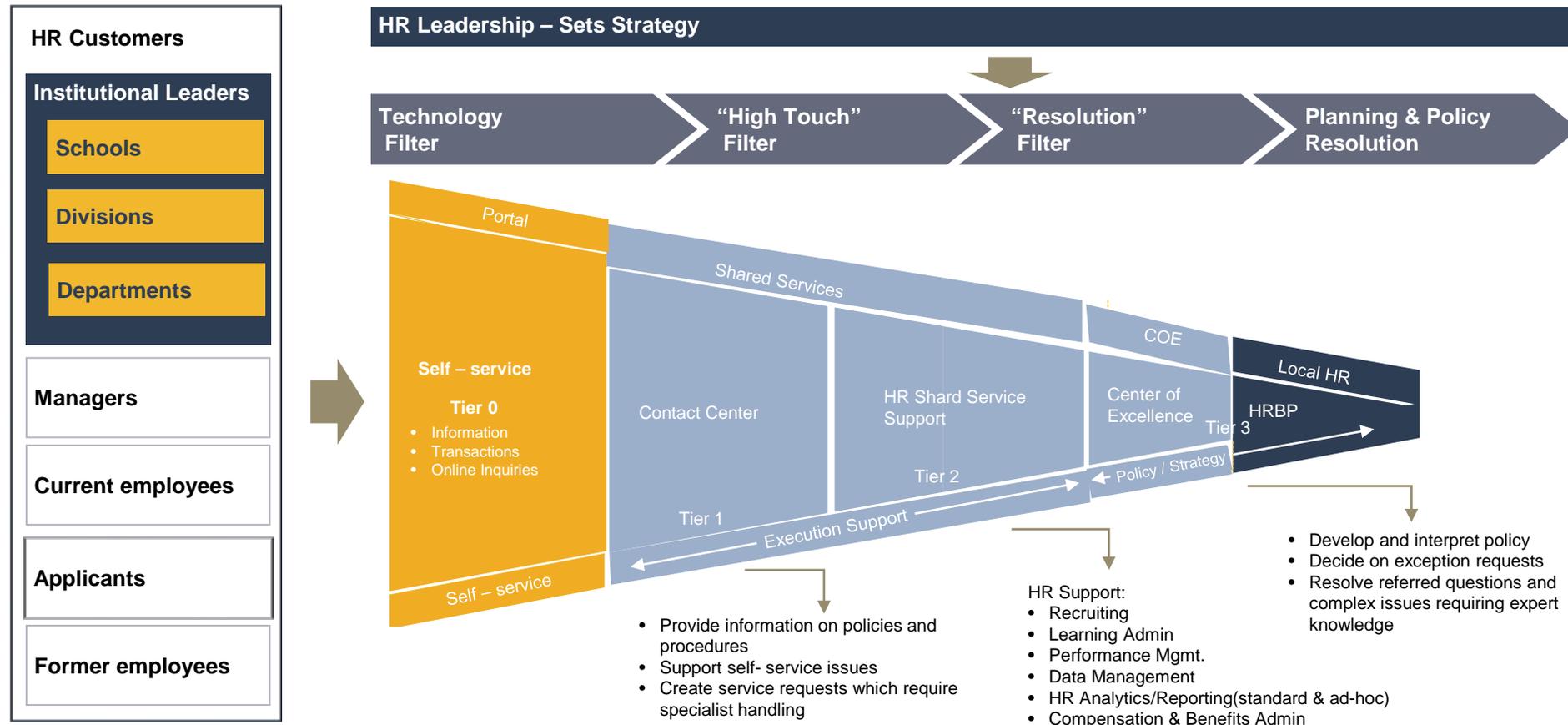
The following framework can be used as a guideline for redesigning the HR delivery model

HR Conceptual Organizational Structure



As proper investments are made in HR's capabilities, delivery model and technology, UM can align more closely to a leading practice HR service delivery model

HR Service Delivery Model

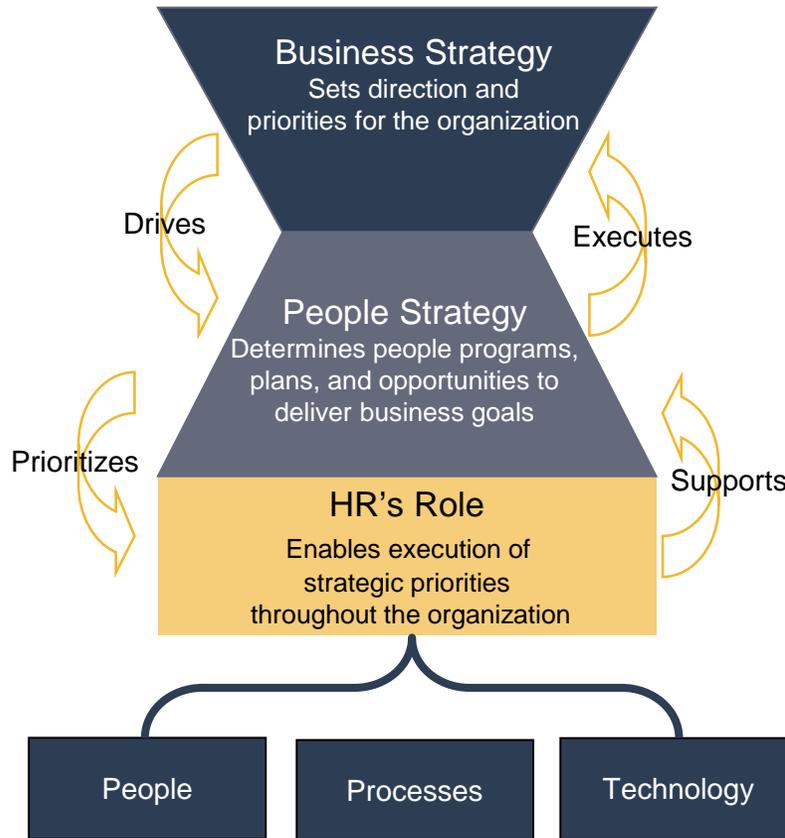


Gaining alignment around a “people strategy” is at the core of shifting HR to a more strategic function...

Alignment of HR’s Role in the Organization

HR must have the capabilities to:

- Understand business strategy
- Develop and drive execution of aligned talent strategies
- Equip and enable business leaders and managers with the tools to effectively manage talent
- Manage its own HR costs and measure HR’s impact on financial performance
- Measure the return on human capital and ROI of talent programs



Measurement (SAMPLE)

Business Strategies	People Strategies	People Drivers	Outcome Measures
Goal #1 <i>Expand and strengthen programs that improve the lives of citizens of Missouri, the nation and the world</i>	Develop a nimble, talented workforce	Improve Quality of Hire Develop High Potential Leaders Invest in Employee Training & Development	Quality Hire Rate Bench Strength Training Cost Factor
Goal #2 <i>Build the Mizzou Advantage to capitalize on existing strengths and bring new international distinction to MU</i>	Become an “employer of choice” and improve employer reputation	Engage Employees Pay Employees Appropriately Develop Culture	Employee Engagement Scores Compa-Ratio Average Tenure, Voluntary Separation
Goal #3 <i>Promote MU has the infrastructure and human/ financial resources to support innovation and excellence</i>	Develop a sustainable workforce	Retain High Performers Increase Workforce Productivity Enable a Diverse & Inclusive Workforce	Retention Rate Enrollment per FTE, HR Cost per Employee Diverse Hires

... and involves defining UM's desired Employee Value Proposition and the role HR plays in enabling the "EVP"

Being an "employer of choice" means...

Instilling a sense of pride in where you work:

- Create a sense of community and belonging
- Recognition of hard work, new ideas, and driving employee desire to stay in face of competing offers
- Strong employer brand recognition
- Creating an environment that you would recommend to friends / family

Creating an environment where employees feel heard / valued:

- Creating a "family feel" where employees can build relationships and friendships with colleagues
- Teamwork is valued, everyone matters, and "we're all in it together"
- Competitive pay and benefits commensurate with value add

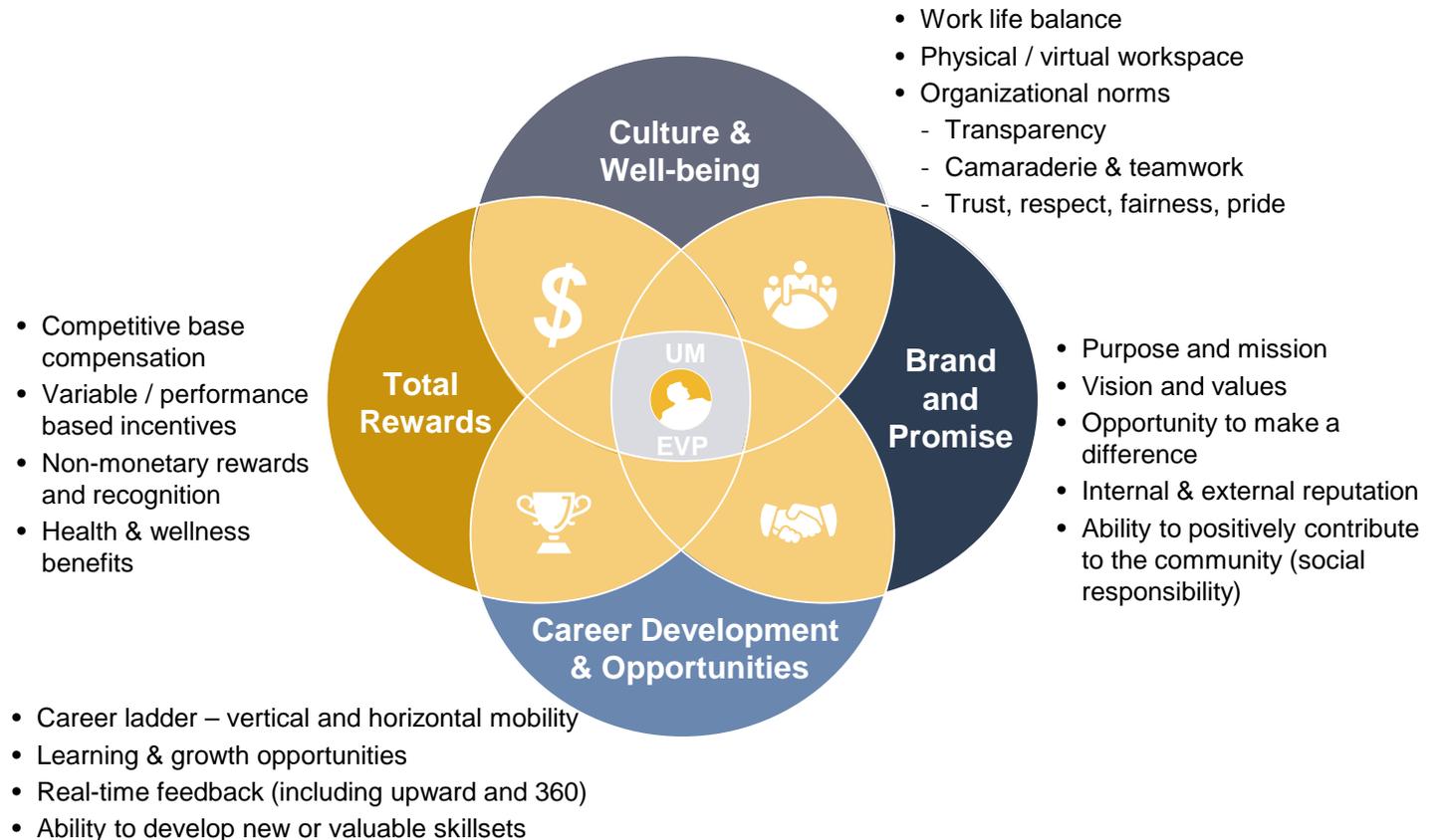
Building a platform for continuous employee development:

- Working with talented colleagues who challenge one another and drive excellence
- Learning and development opportunities that enable staff to grow, adapt and learn
- Opportunities for long term career trajectories (vertically and horizontally)

Providing transparency on inner workings of the organization

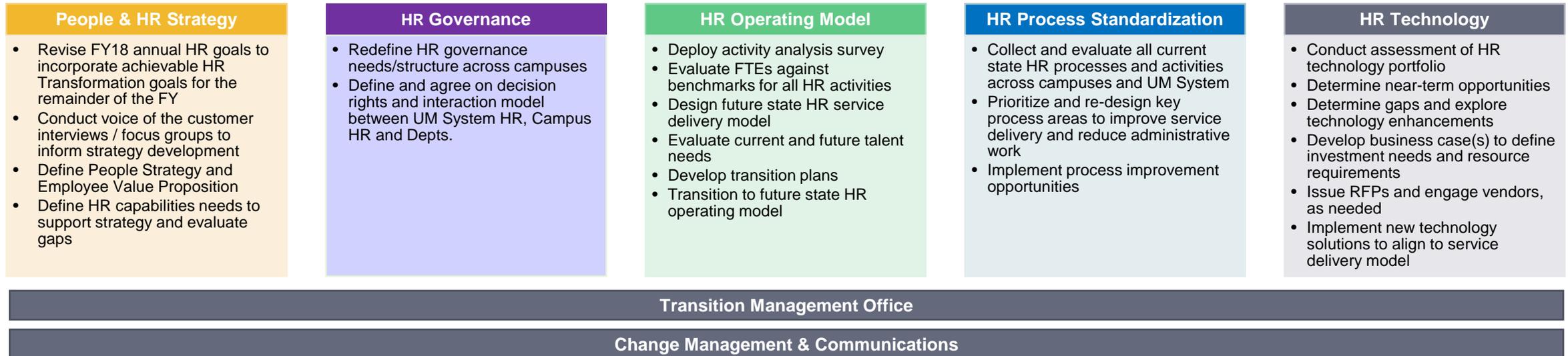
- Frequent communication on job stability and changing workplace dynamics
- Ability to develop meaningful relationships with supervisors and leaders

The Employee Value Proposition ("EVP") articulates why people want to work for UM



UM will require a structured approach to align organizational priorities, obtain stakeholder buy-in and sequence HR redesign activities appropriately

Proposed workstreams for HR Transformation effort



A number of key dependencies that should be considered as part of the transformation efforts include:

- Inclusion of faculty and staff members in the definition of a people strategy, HR vision, role and strategic objectives
- Capacity of HR to drive to target state while continuing to support the needs of the organization
- HR's role in managing change and supporting the transition of other potential workforce changes resulting from the Administrative Review process

1. HR Transformation

Opportunity Synopsis								
Name	HR Transformation							
Description	<p>Launch a formal HR Transformation effort that will elevate the role of HR to support talent/workforce needs of the organization, drive efficiencies throughout the system and is focused on the following areas:</p> <ul style="list-style-type: none"> a. People & HR Strategy – Engage campus, school, department and UM System HR leaders to align on a consistent definition on the role HR plays in (1) partnering with institutional leaders to deliver on organizational goals and (2) enabling an employee experience that positions UM as an employer of choice. b. HR Process Standardization – Evaluate variation in policies and process across campuses and standardize and launch formal training and communication efforts to minimize risk in key process areas (e.g., FMLA, ADA, I-9 processing) c. HR Governance – Clarify accountabilities between divisions/schools/departments, campus HR and UM System HR and increase the degree of formal cross-campus, cross-functional HR committees to improve collaboration within HR d. HR Technology Enablement – Launch effort to evaluate and deploy new technologies and/or enhancements to existing technologies to improve automation of manual processes and improve access to HR services for employees (e.g., optimizing PeopleSoft 9.2, deploying manager and employee self-service tools, implementing a new case management tool) e. HR Operating Model – Redesign the HR delivery model and organization structure to shift transactional activities into a shared services model, build centers of excellence focused on system-wide strategy/policy and enhance the local delivery model to departments, divisions and schools by redefining the role of HR business partners across campuses) <p>(Average departmental attrition rate* – 10%)</p>							
Benchmarks	<ul style="list-style-type: none"> • 106 individuals were mapped to UM System and main campus (Columbia) HR functions, with another 477 non-HR individuals identified on main campus that execute some degree of HR work activities • Although a proper activity analysis is required to accurately estimate opportunities for efficiencies, additional investments may be required to achieve efficiencies in distributed HR staff to support the new delivery model. 							
“Soft” Benefits Achieved	<ul style="list-style-type: none"> • Improved communication and coordination across campuses • Reduced organizational risk in process areas with legal implications (e.g., FMLA, ADA, I-9) 							
Spend Addressed			Investment Required				Implementation Duration	Implementation Risk
Departmental labor cost savings, HR labor costs (savings and investment), HR technology			Investment in critical HR capabilities; Cost to launch and support new HR tech				Two Years	4
Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL		
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓		

*Three year average across UM System and Columbia Campus

2. Total Rewards Rationalization

Opportunity Synopsis	
Name	Total Rewards Rationalization
Description	The Total Rewards Advisory Committee (“TRAC”) should work with HR leadership to further evaluate potential adjustments to health and wellness benefit offerings. Any adjustments to health and wellness benefits should be coordinated with any planned changes to retirement benefits and increases in compensation as part of a holistic Total Rewards strategy for UM faculty and staff. A proper communication strategy and plan is critical for impacted employees to understand the net impact to their compensation levels and deductions.
Benchmarks	2017 PwC Health and Well-Being Touchstone Survey of PPO, CNP, and HSA plans, as well as ancillary benefits, in Higher Education.
“Soft” Benefits Achieved	Wellness program will promote health and wellness, preventative care, etc. for UM employees and staff

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Health and wellness benefit offerings	Adjustments to faculty and staff benefits to align with market compensation benchmarks	Two Years	5

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

While benchmarks indicate an opportunity to reduce health benefits, any adjustments to health benefit offerings should be done as part of a holistic, comprehensive approach to evaluate UM's total rewards strategy (including aligning compensation to market levels) and should not come at the expense of losing key contributors towards the institutional mission. TRAC should help evaluate any changes.

Total Rewards Advisory Committee ("TRAC")

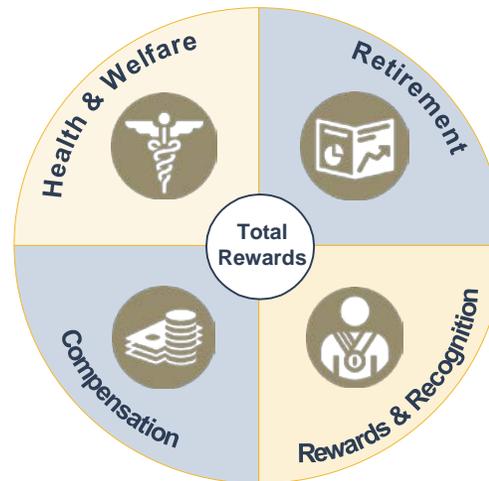
Charter: The Total Rewards Advisory Committee serves in an **advisory capacity** in matters related to benefits programs and in the treatment of pay and benefits as interrelated parts of the University's overall Total Rewards

Membership: VP of HR or designee (1), Faculty member from each campus (4), Staff member from each campus (4), Hospital representative (1), Retiree representative as appointed by the VP of Human Resources from nomination from campuses, retiree associations and self-nominations (1), Additional at large committee members (at discretion of VP of HR)

Goals of Rationalizing Total Rewards

- Optimize the usage of total rewards to align to the organizational strategy, employee preferences and budgetary goals
- Design a core set of benefits (health & welfare, retirement) that is both market competitive and cost effective
- Evaluate compensation levels to ensure market competitiveness and internal equity
- Institute a set of performance-based rewards (monetary and non-monetary) to recognize performance and motivate employees

Elements of Total Rewards



Change Management Considerations

- Ensure proper buy-in from representative faculty and staff members prior to any changes
- Rollout changes to total rewards as a comprehensive approach rather than an incremental set of changes
- Provide transparency into the net financial impact to employees and how total benefits and compensation levels compare to others in the market
- Ensure appropriate lead-time in order to address areas of complexity and rollout proper communication plans

3. Administrative Assistant Realignment

Opportunity Synopsis	
Name	Administrative Assistant Realignment
Description	Increase the ratio of executives per administrative assistant from 1.25:1 to 3:1 across UM System and Columbia campus
Benchmarks	<p>Leading practice for creating efficiencies in the utilization of administrative assistant positions is a 3:1 ratio of executives per administrative assistant. The current average ratio system-wide is 1.25.</p> <p>Currently, administrative assistants are used inconsistently across departments/divisions/schools and many have broader facility or functional support responsibilities than traditional administrative staff roles. As a result, an activity analysis should be utilized to better understand the distribution of administrative assistant responsibilities and more accurately assess the opportunity to optimize administrative assistant roles.</p> <p><i>An activity analysis survey will be required in order to better identify administrative workload</i></p>
“Soft” Benefits Achieved	Standardization of executive support across the system

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Administrative Assistant Labor Costs	None	Six Months	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

5.3 HR Observations

Service Center, Employee Relations, HRIS, CAPS Observations

Category	Functions	Alignment to Leading Practice	Findings	Opportunity Type
Shared Services	Service Center		<ul style="list-style-type: none"> Largest area of opportunity is upgrading technology to automate manual processing and reduce call volumes/tickets: <ul style="list-style-type: none"> PS 9.2 modules currently not utilized (e.g., direct deposit processing) Manager and employee self-service tools Case management tool Current Service Center staff recently absorbed Wellness program processing and should look to realign to Total Rewards or outsource 	<ul style="list-style-type: none"> Operational efficiencies Tech optimization Realignment of work Call volume reduction
	Employee & Labor Relations		<ul style="list-style-type: none"> Decentralized model – Columbia campus has 6 FTEs assigned to divisions Union negotiations are managed centrally at UM System, with local campuses attending meet and confer's and managing local labor relations Biggest risk area is non-HR personnel on campus processing FMLA, ADA and other legal processes without appropriate training/expertise Potential opportunity to centralize FMLA and other components of employee relations 	<ul style="list-style-type: none"> Cost avoidance Process Standardization Realignment of reporting lines
	HRIS & HR Technology		<ul style="list-style-type: none"> Significant challenges with execution of PS9.2 rollout Director position vacant for last 10+ months Team currently focused on PS9.2 bug fixes, enhancements / customizations requested by campuses and responding to inquiries Responsibilities not currently executed due to limited bandwidth include strategic planning for HR technology, active HR data management and managing web portal technology centrally Opportunity to refocus HRIS team on value-add work through proper rationalization of HR technology, and/or once bulk of fixes with current PS9.2 platform are complete 	<ul style="list-style-type: none"> Redeployment on value-add work Tech optimization Realignment of work
	Payroll / Time & Attendance (CAPS)		<ul style="list-style-type: none"> MU CAPS center highly regarded as “leading practice” within the organization Manual reconciliations of Kronos from MU Health creates inefficiencies Largest area of opportunity is to centralize and scale CAPS services across system Additional efficiencies can be gained by appropriately training time approvers and time keepers within divisions/schools/departments (300+ identified at MU) 	<ul style="list-style-type: none"> Economies of scale Realignment of resources

Total Rewards Observations

Category	Functions	Alignment to Leading Practice	Findings	Opportunity Type
Total Rewards	Compensation		<ul style="list-style-type: none"> New staff compensation model and titling scheme rolled out within last two years Change management raised as concern with rollout which has caused high volume of JFIs (Justification For Increases) and PCQs (job reclassifications) Current Compensation team spends majority of time processing JFIs/PCQs, maintaining compensation and title structure and consulting campuses on JFI/PCQ requests (700+ PCQs processed within last year for Columbia campus) Currently, all academic compensation and job titling is handled by schools Potential opportunity to realign Compensation function with Total Rewards function and to consult schools and monitor academic comp and titling centrally 	<ul style="list-style-type: none"> Realignment of resources
	Benefits (Health, Retirement, Wellness)		<ul style="list-style-type: none"> Health plan administration and design is conducted in-house Identified operational improvements for administration of retirement plan include: <ul style="list-style-type: none"> Migrating retirement data (e.g., contributions) to a single platform to improve calculation efficiencies (1,000+ completed annually) and reduce risk Establishing standards and improving training/communication to divisions/schools/departments on reporting retirement eligibility and employee information at time of retirement (currently, 50% of information provided is incorrect) Seeking opportunities to shift from manual processing of "intent to retire" forms to an automated tool such as DocuSign 6 FTEs processing Wellness benefits recently terminated; responsibilities absorbed by existing Total Rewards and Service Center staff While currently some Total Rewards administration is outsourced (e.g., portion of pension calculations), additional efficiencies can possibly be gained by fully outsourcing health, retirement and wellness administration functions, however, outsourcing these functions is not recommended until a broader HR service delivery model is determined 	<ul style="list-style-type: none"> Savings potential Realignment of resources Process improvement

Recruiting & Staffing Observations

Category	Functions	Alignment to Leading Practice	Findings	Opportunity Type
Talent Alignment	Recruiting & Staffing		<ul style="list-style-type: none"> Staff recruiting function at campus-level is completely decentralized with HR owning the opening and closing of requisitions Departments own talent acquisition process which is done very inconsistently across departments and campuses and creates limited visibility into success rate of candidate searches and hires Academic recruiting is also handled by departments; MU has one resource who specializes in academic employment contracting, but only supports these efforts part time and does not have a succession plan currently in place UM System handles executive recruiting across campuses as well as staff recruiting for UM System functions – currently in process of establishing criteria for using executive search firms to reduce total spend on exec search consultants and developing a full life-cycle recruitment program focused on improving the candidate experience, reducing time to hire and improving quality hires system-wide SOS Temp Staffing has received excellent reviews from faculty and staff; opportunity exists to expand this offering more formally across other campuses as a service offering Opportunity exists to better integrate the Diversity and & Inclusion function with recruiting efforts to build a diverse workforce and to better integrate workforce analytics capabilities in recruiting efforts to predict and plan talent pipeline needs Opportunity to create center of excellence for recruiting and staffing and increase the role HR plays in driving and managing the talent pipeline for all employees 	<ul style="list-style-type: none"> Investment area Capability development Process standardization Realignment of resources



Capability does not exist or is missing critical components



Some leading practices in place, but inefficiencies still exist



Consistent with leading practice

Talent Management, Learning & Development Observations

Category	Functions	Alignment to Leading Practice	Findings	Opportunity Type
Talent Alignment	Talent Management		<ul style="list-style-type: none"> • “My Performance” opportunity launched within last year; majority of departments/divisions/schools are using common performance management tool • Currently, UM System is responsible for oversight of PM tool and process • Mobility across departments/schools/divisions is a common practice, but there is no standard process in place for supporting employees through the transition process • Interim leader assigned to oversee Careers and Culture function, but focus is primarily around leadership development training and there is an opportunity to further define and establish plans around career laddering, career trajectory, coaching and mentoring, mobility, performance management and succession planning 	<ul style="list-style-type: none"> • Investment area • Capability development
	Learning & Development		<ul style="list-style-type: none"> • Central L&D team focuses primarily on leadership development training, however there is opportunity to increase levels of technical training or training for non-HR personnel executing HR work within divisions/departments/schools • Minimal L&D staff exist at campus level and focus is primarily on large training events (2-3 per year) rather than ongoing, continuous learning and development needs of campus staff and faculty • Opportunity exists to further evaluate L&D needs, staffing requirements and ability to expand the UM System L&D function into a Center of Excellence model to develop and drive a broader L&D strategy across campuses • Learning Management System, SkillSoft, currently used for eLearnings; opportunity exists to expand online training to support employee onboarding, orientation, timekeeping, ePAFs, eRecruit and other critical HR processes that are decentralized 	<ul style="list-style-type: none"> • Investment area • Capability development • Technology optimization • Process standardization



Workforce Strategy Observations

Category	Functions	Alignment to Leading Practice	Findings	Opportunity Type
Workforce Strategy	Workforce Intelligence & Analytics		<ul style="list-style-type: none"> Workforce analytics team recently formed – utilizes Tableau to support compliance and ad hoc reporting needs (e.g., span of control, demographics) Team has coordinated with Total Rewards function to support retirement eligibility analytics for retirement plan administration Opportunity exists to expand scope of responsibilities to provide campuses, divisions, departments and schools with analytics to support workforce planning needs (e.g., diversity hiring goals, retirement eligibility/succession planning needs, training needs, etc.) 	<ul style="list-style-type: none"> Capability development
	HR Strategic Planning		<ul style="list-style-type: none"> UM System leader of HR Operations currently oversees HR strategic planning and system-wide labor relations Currently in process of inventorying HR processes across the UM System central office As the “people strategy” and HR role are further defined, opportunity exists to formalize HR Operations role to program manage all HR strategic opportunities 	<ul style="list-style-type: none"> Process Improvement
	Org Effectiveness, Culture & Engagement		<ul style="list-style-type: none"> Climate survey recently conducted by Rankin & Associates; there currently is no annual employee engagement or workplace survey administered by HR Careers and Culture function has historically focused on leadership development training; opportunity exists to expand change management, org effectiveness, employee engagement and employee experience capabilities 	<ul style="list-style-type: none"> Investment area Capability development



Capability does not exist or is missing critical components



Some leading practices in place, but inefficiencies still exist



Consistent with leading practice

6. IT Workstream

6.1 - IT Workstream Summary

6.2 - Individual Opportunity Overviews

6.1 IT Workstream Summary

Summary

The IT workstream reviewed \$77.5M of spend and identified 6 opportunities with a projected net savings of \$4.2M to \$7.7M

Workstream Approach 	Observations 	Key Recommendations 
<ul style="list-style-type: none"> Data used <ul style="list-style-type: none"> FY17 GL and payroll file Scope focused on traditional IT functions Met with 12 IT leaders in Columbia and the UM System central office Areas not addressed / out of scope include research computing and MoreNet 	<ul style="list-style-type: none"> DoIT does not manage all IT spend in Columbia, significant purchasing decisions are made in the departments DoIT is completing the process to centralize IT resources through the development of the “Distributed” IT function DoIT works with Supply Chain to develop purchased services and supplies contracts that are competitive with the market 	<ul style="list-style-type: none"> Consolidate IT services to reduce risk and lower costs Streamline student servicing across campuses to improve efficiency

*Opportunity details contain implementation estimates to achieve savings.
Projects selected and scheduling will change implementation costs*

Note: Annual savings are net of non-capital investments

IT Functional Area Current State

The Department of IT is focused on reducing cost where they have direct control. The 25% of IT spending controlled by departments can be reduced by changing governance of IT spend and IT delivery models. In order to drive down costs that are currently in distributed department budgets, IT will need to increase it's ability to impact these budgets.



Academic and functional leaders will need to drive the changes that create IT cost savings.



IT leaders have started consolidation and efficiency projects.

- Consolidated IT technicians, rebalanced work and labor cost
- Department supported servers are identified with some work underway to move them to DoIT support.



IT competes with commercial providers, and frequently benchmarks itself to prove its value proposition to the university.

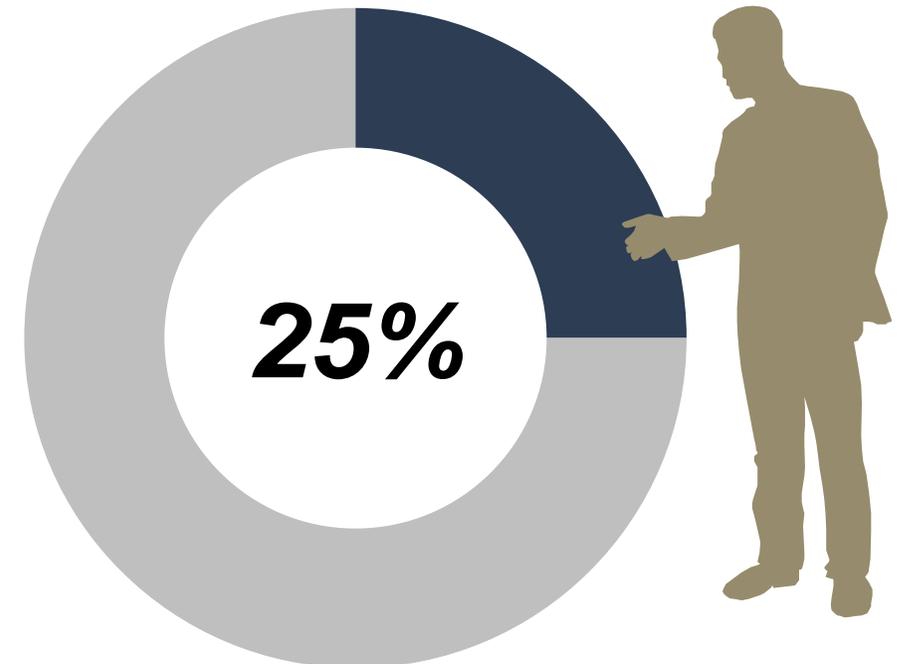
- IT services are compared to Amazon Web Services pricing on a quarterly basis



Process changes across campuses and changes in IT delivery models offer the best opportunity for substantial cost reduction.

- 7,500 people using over 400 applications perform student servicing in different ways at the four campuses. Shared services and simplification can produce significant benefit.
- A shift from desk side PC support to remote support can double the number of people a technician can support.

75% of all IT-related spend is managed by the central IT department. **IT does not have a line of sight to or lacks control over a quarter of total IT spend.**



Additional Observations

- The chargeback system for IT services is a leading practice to help business self regulate demand
- IT chargeback rates are compared to commercial services on a regular basis
- Currently there is no formal financial evaluation process for IT application development project requests. Especially in a time of resource constraint, a more formal business case assessment process that determines the cost and benefit of these projects (with participation by Finance) is warranted. A minimum hurdle rate for project return on investment is advised as a part of this.
- IT infrastructure services (servers, storage, network) are commodities that can scale at a relatively small incremental cost. Sequestering of IT systems by distributed organization units adds cost to the operation without bringing competitive advantage. Failure to fully leverage economies of scales raises costs for the University of Missouri.
- The Columbia IT helpdesk serves 20% to 200% more users per agent than the other campuses
- The use of IT Service Pros embedded in the business units is an expensive service model compared to remote support model common in IT organizations

Scope

The IT Workstream includes the provision of services and supplies related to technology and telecommunications

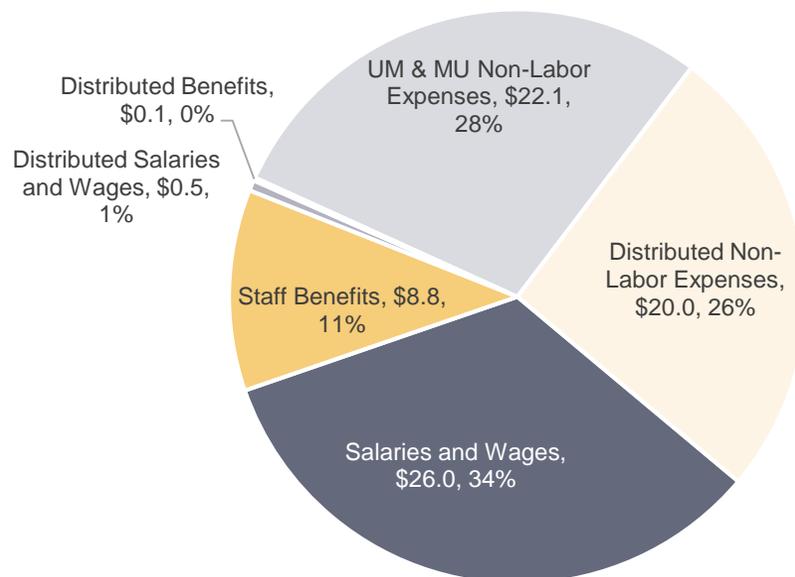
Labor Areas	Non-Labor Areas	Out of Scope
<ul style="list-style-type: none">• IAT Systems Admin• IT Systems Support• Security• Systems & Operations Support• Telecommunications• UM Information and Computing Services• VP of IS• Distributed IT within academic or other departments	<ul style="list-style-type: none">• Software / licenses• Cloud computing• Storage• Hardware• Purchased services• 3rd party labor	<ul style="list-style-type: none">• Research computing• MOREnet• IT services and supplies related to research (e.g. sponsored programs & institutional research)

Expense Profile

\$77.5M of spend was reviewed including labor and non-labor expenses, labor includes known IT employees and a count of “Distributed” employees which will be refined through an activity analysis survey

FY2017 Baseline	Total Spend	UM and MU Central Headcount	MU Distributed Headcount
Information Technology Functional Rollup	\$77.5 M	427	67

Expense Breakdown*



* Includes \$20M of distributed non-labor IT expenses, not managed by Centralized departments, does not include depreciation

Distributed Methodology

- Gleaned from stakeholder interviews that **employees with information technology function responsibilities** exist throughout the University
- Executed **keyword search for IT job titles** in employee list for Columbia and UM System
- Identified employees with **same job titles as available in Central IT which were not part of the IT orgs** (including: System Admin, Network Engineer, User Support Analyst, System Support Analyst, Support System Admin, DB Programmer Analyst, DB Administrator and Programmer Analyst)
- **Applied a percent effort** to estimate the dollar value (salaries, wages, and benefits) of the distributed headcount
- Activity analysis survey will be performed to more precisely identify distributed activities

Expense and Operational Benchmarking

Decisions made throughout the organization have impacted the staffing model and cost structure within IT

Metric	Benchmark	UM	Performance	Calculation	Interpretation
Total revenue per IT FTE	\$167,613	\$84,706	● Red Lower revenue than benchmark	\$1,373M Columbia and UMSYS revenue / 16,214 FTE	Indicates overall staffing level at UM is higher than peers with similar revenue.
IT spend at UMSYS and Columbia as a percentage of UMSYS and Columbia revenue	5.70%	5.64%	● Green Lower spend than benchmark	\$77.5M / \$1,373M Revenue	Overall, IT spending is slightly lower than peers.
IT spend per employee (UMSYS and Columbia) per FTE (UMSYS and Columbia)	\$8,200	\$4,780	● Green Lower spend than benchmark	\$77.5M / 16,214 FTE	Spend per employee is lower than peers.
IT staff as a percentage of Columbia and UMSYS Staff	4.80%	2.63%	● Green Lower ratio than benchmark	427 IT staff / 16,214 FTE	The low ratio of IT staff to employees correlates with the other metrics. These show the system has a higher number of employees than typical for the revenue level.
The number of supported users per IT technician	333:1	178:1	● Red Higher ratio than benchmark	18,826 People supported / 105.75 FTE	UM uses a high touch desk-side IT support model. This is more labor intensive and costly than the remote support model which is widely used in industry.

Activity Analysis is key to the true determination of IT activity and related FTEs beyond the benchmarks above

Opportunity Summary

The IT Workstream identified six opportunities with a net savings of \$4.2M to \$7.7M

	Opportunity	Implementation Duration	Implementation Risk
1	Governance and Operating Model	Three Year	5
2	IT Spend Governance	One Year	3
3	Rationalize Distributed IT Desktop / Support Services	One Year	3
4	Consolidate Web Hosting Platforms	One Year	2
5	Increase App Development/Support ROI Requirements	One Year	3
6	Reduce Innotas Licensing	Two Year	1

Note: Annual benefits are net of non-capital investment in capabilities needed

Implementation Risk Summary

Relative to other Workstreams many IT opportunities carry a lower risk score

Opportunity		Complexity	Investments	Stakeholder Impact	Total Risk
1	Governance and Operating Model	5	5	4	5
2	IT Spend Governance	4	2	4	3
3	Rationalize Distributed IT Desktop / Support Services	3	3	3	3
4	Consolidate Web Hosting Platforms	3	2	2	2
5	Consolidate Web Hosting Platforms	3	2	2	2
6	Reduce Innotas Licensing	1	1	1	1

Risk Assessment Key	
Complexity	Assessment based on the number of actions required to implement the opportunity and the breadth of stakeholder buy-in needed
Investments	Assessment based on amount of technological, financial, personnel, and/or "soft" investments needed to implement the opportunity
Stakeholder Impact	Assessment based on the opportunity's impact to normal workflow as well as the perceived impact of the opportunity to stakeholders

<i>Implementation Risk Score is an index that factors in (1) Complexity (2) Investment Required (3) Impact to Stakeholders</i>	
Low Risk – Limited risk to internal stakeholders; proceed with implementation,	1- 2
Moderate Risk – Develop and execute change management, Track and manage progress closely	3
High Risk – Develop tactical work plan, execute change management strategy, involve key leaders	4-5

6.2 IT Individual Opportunities Overview

1. Governance and Operating Model

Opportunity Synopsis							
Name	Governance and Operating Model						
Description	<p>The University of Missouri operates as four businesses with four different IT organizations. This operating and governance model has produced duplication in IT services and cost. There are multiple opportunities to consolidate back office processes that are not adding competitive advantage. These opportunities include: Consolidation of hosting and management of servers, consolidation of Help Desk services, creating common student servicing processes and consolidating the 400+ applications and 4 PeopleSoft instances that support today's constellation of processes</p> <p>A high level of autonomy and decision making exists within the campuses and departments around IT. Central IT is not positioned to lead and enforce functional decisions. This leads to a technology landscape that meets or exceeds end user wants and needs, but comes at a significant cost. The University needs to undertake a process to rationalize whether this model is in the best interest of the business units.</p> <p>(Average departmental attrition rate* – 10%)</p>						
Benchmarks	<ul style="list-style-type: none"> 750 servers to consolidate across campuses and within Columbia. \$4.2M difference between current equipment and labor and DoIT server rates. Helpdesk calculated by applying Columbia campus/DoIT HD staff ratio to other campuses. Staff change is \$.1M-\$.6M reduction. Combining student servicing processes and moving to one PeopleSoft image reduces IT hardware by \$.5M (DoIT estimate). There are 7,500 active student service functional users, 400 applications and 4 versions of the same PeopleSoft platform to provide the same services to the four campuses. There is a significant opportunity to simplify this environment and reduce costs. 						
“Soft” Benefits Achieved	Improved risk posture, lower physical security risk, reduction in people with system administrator access, reduction in system complexity which reduces cost and time to maintain and upgrade systems, and reduced complexity makes it easier to adopt new technology						
Spend Addressed	Investment Required					Implementation Duration	Implementation Risk
IT and Functional Area OPEX	Transfer of FTE to Central IT. Labor to transition servers and helpdesk, to create and manage IT governance and project selection processes, and to consolidate student servicing processes, applications and PeopleSoft instances					Three Year	5
Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL	
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓	

*Three year average across UM System and Columbia Campus

2. IT Spend Governance

Opportunity Synopsis	
Name	IT Spend Governance
Description	Reduce the \$20M spent outside of DoIT on IT related products and services by 2% to 4% by promoting re-use, use of DoIT, and conservation.
Benchmarks	FY2017 Ledger Review
“Soft” Benefits Achieved	Non-IT directed spend is the majority of IT spend on the Columbia campus. Action is needed in this area prioritize investments to improve the return to the University of Missouri

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
Functional Area OPEX	Education and communication of gating for IT purchasing. Enforcement of policies, revision of policies possible change in process. Project Manager and communications support for 6 months.	One Year	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

3. Rationalize Distributed IT Desktop / Support Services

Opportunity Synopsis	
Name	Rationalize Distributed IT Desktop / Support Services
Description	<p>Continue ongoing negotiations with departments to yield savings of 3-5 FTE over the next year. This will be in addition to the 30 FTEs that have already been reduced as a result of the formation of the Distributed IT organization in 2016. IT is building a second level desktop support capacity that is being piloted in the School of Arts and Sciences. This support model is similar to industry where 333 FTEs/technicians is the median compared to 178 FTEs/technicians in the university.</p> <p>The staff changes will result in longer waits for service, a change to remote support, less 1 on 1 support. It is expected that departments will complain that IT has reduced services as a result.</p>
Benchmarks	PCs or Desktop per support staff members for midsize organizations range between 232 to 541 with a median of 333
“Soft” Benefits Achieved	As remote support matures problem resolution time decreases.

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
IT and Functional area Labor	IT management time and change in service expectation (move from on site support to more mobile support).	One Year	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓			

4. Consolidate Web Hosting Platforms

Opportunity Synopsis	
Name	Consolidate Web Hosting Platforms
Description	Implement a single centralized web management platform to meet the university's marketing and communications needs by contracting with a provider to support both WordPress and Drupal. This consolidation, especially of the department level websites, will reduce risk and provide the university with significant cost savings. (In Process)
Benchmarks	The MU Digital Presence Business Case provided by DoIT
“Soft” Benefits Achieved	Better control of the University of Missouri brand. Risk reduction through fewer independently managed websites

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
IT and Functional OPEX	In Plan	One Year	2

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

5. Increase App Development/Support ROI Requirements

Opportunity Synopsis	
Name	Increase App Development/Support ROI Requirements
Description	Raise the expectations for return on investment for IT projects. Create a governance process for IT project initiation. Set and communicate a hurdle rate for acceptance of new application development projects. The higher hurdle rate will control the demand for development resources.
Benchmarks	The reduction in requests for new development can reduce up to 20% of total FTE capacity in the custom application group
“Soft” Benefits Achieved	Increases the return on investment for IT development projects. Helps ensure the right projects are funded and expedited.

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
IT Labor	None	One Year	3

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

6. Reduce Innotas Licensing

Opportunity Synopsis	
Name	Reduce Innotas Licensing
Description	Reduce the licensing for Innotas Project Management tools from \$75K to \$35K. Continue to use as the project management tool until the planned adoption of Office 365 is complete. (In Process)
Benchmarks	Innotas license count reduction
“Soft” Benefits Achieved	Continuity of project management toolset

Spend Addressed	Investment Required	Implementation Duration	Implementation Risk
IT Operating Expense	None	Two Year	1

Impact to:	UM System	Central Department	Distributed	UMKC	S&T	UMSL
	 ✓	 ✓	 ✓	 ✓	 ✓	 ✓

7. Sustainability and Operating Model

Operating Model Current State Findings

The organization of the University of Missouri system and legacy decisions have created a distributed labor force and an operating model that varies across campuses and departments

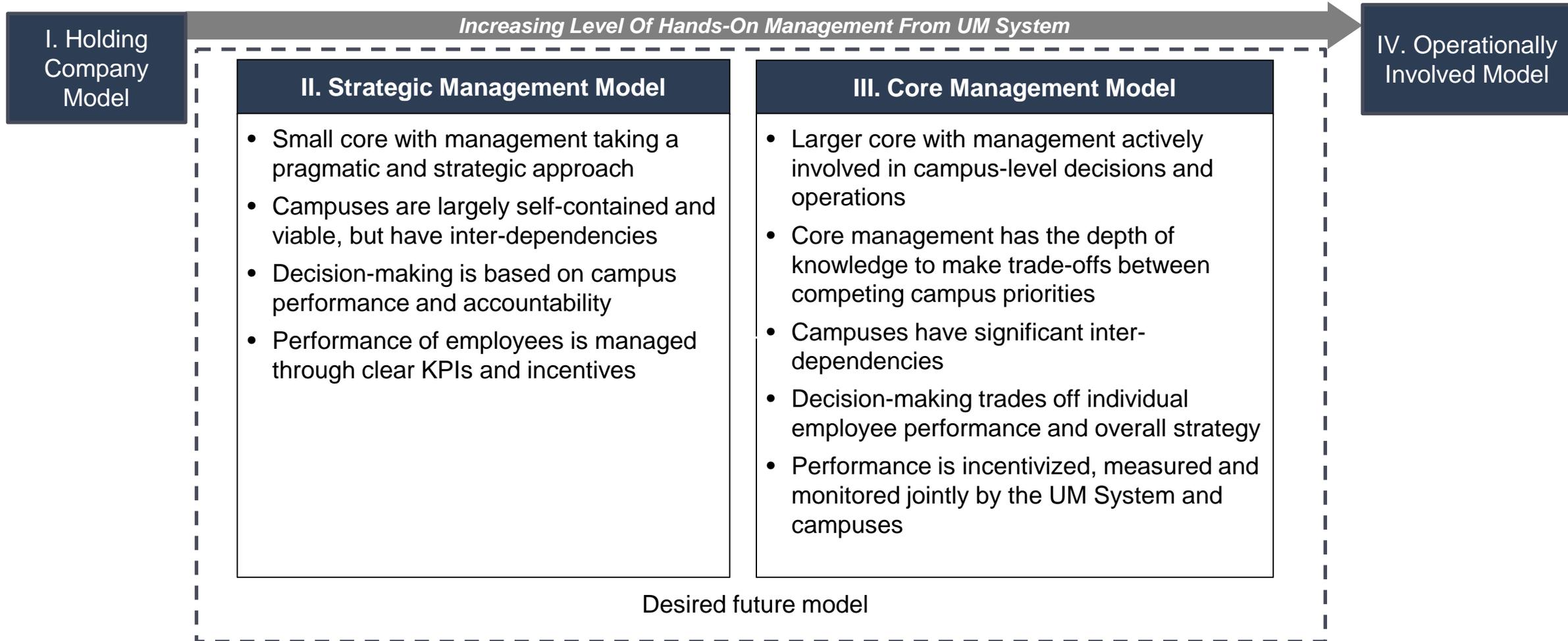


Functional Area	UM and MU Central Headcount	Estimated MU Distributed Headcount	Estimated Total Functional Headcount	Percent Distributed	Methodology
Facilities	232	296	528	56%	• 2:1 relationship of MU campus buildings to building managers
Finance	209	1,500	1,709	88%	• Peoplesoft Finance transactions
Human Resources	106	477	583	82%	• Peoplesoft HR users and MU HR outreach and research
IT	427	67	494	14%	• Job title search and IT system users
Totals	974	2,346	3,314	71%	

Nearly 2,400 MU campus individuals appear to be performing tasks that are related to Facilities, Finance, Human Resources or IT

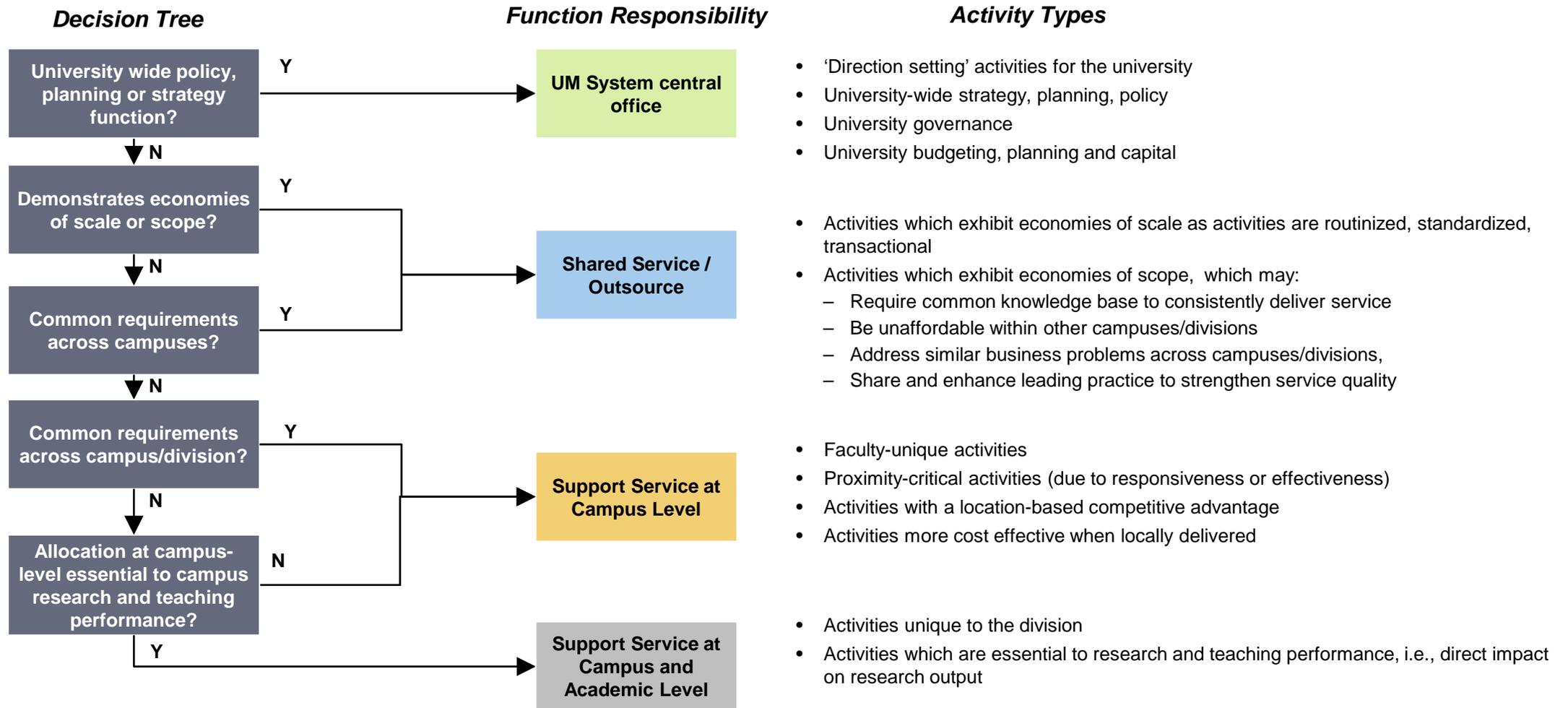
UM System Role

In order to achieve the operational efficiencies noted, the University **must determine the role of the UM System central office** and its functional relationship with the campuses



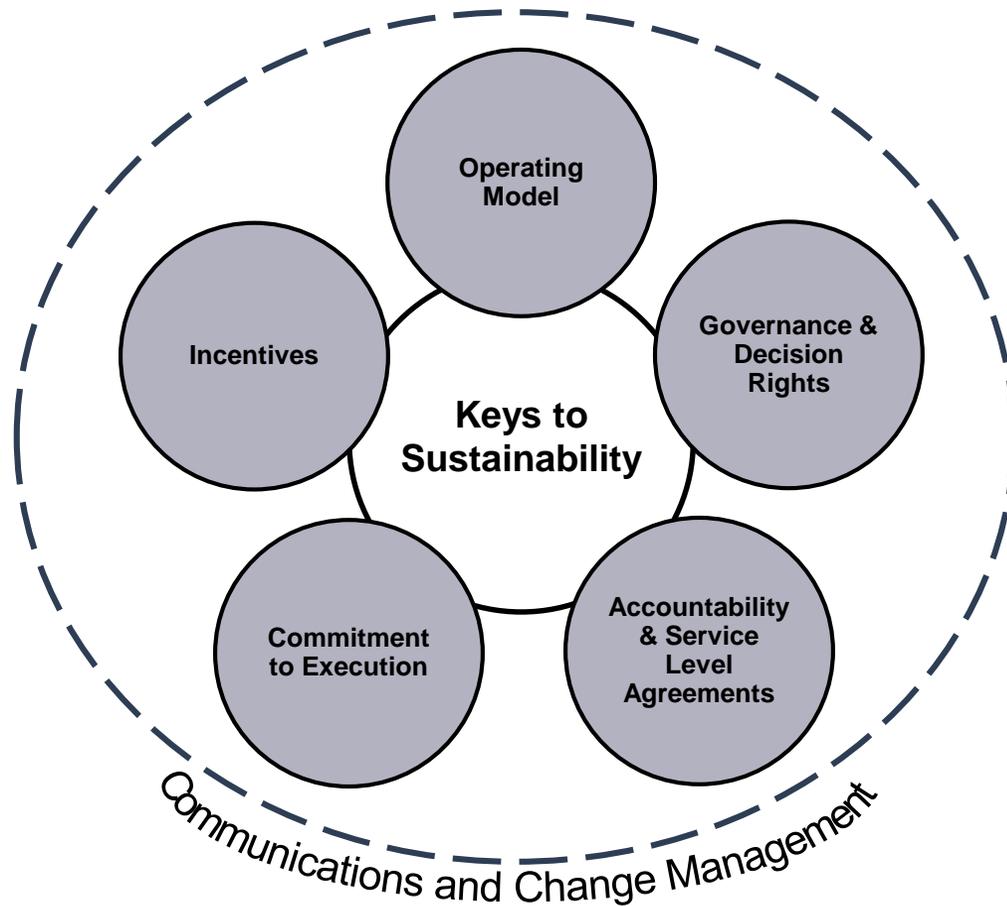
Administrative Services Delivery Decision Process

Determining the appropriate operating model requires a series of decisions relative to function, desired service level and location needs as seen in the illustrative model below



Foundations of Sustainability

Organizations often struggle to implement large-scale change opportunities across multiple organizations because they fail to take into account the components and resources necessary to implement and sustain change

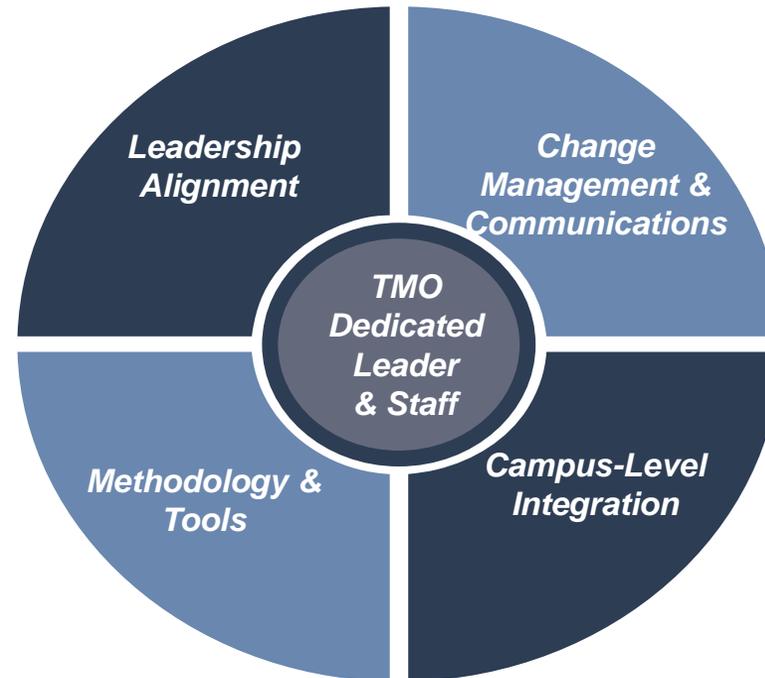


A ***Transformation Management Office*** with **direct reporting to executive leadership** and a **process that engages stakeholders** is required to integrate these components into implementation planning effectively

Transformation Management Office

A dedicated TMO is necessary for successful implementation of large-scale, high-complex transformations. TMO should be housed with an existing executive and built with existing resources

- Leadership engagement and alignment
- Encourage leadership by example
- Eliminate “opt-outs”
- Develop common methodologies, approach to promote consistency across opportunities
- Build repository of analytics tools to support tracking of progress



- Develop and execute holistic communications plan
- Create stakeholder outreach to minimize anxiety and disruption
- Serve as central clearinghouse for feedback to process
- Embed with entity resources to build lines of communication between Workstreams and campuses
- Develop tactics to address unique needs of entity leaders/functions
- Encourage “change agents” for system-wide solutions

- *Embed performance benchmarking mentality in all functions / at all levels as part of the daily routine*
- *Deploy operational performance scorecards at all levels and operational dashboards that provide direction for daily management of processes*
- *Cultivate “source of truth” data and common definitions across the system to aid in internal benchmarking*

Business Intelligence & Analytics

Training & Education

- *Build Performance Improvement into the culture to continually look for means to become more efficient*
- *As processes change, develop user and super-user training on new ways of doing business*

8. Implementation Timelines

8.1 – High Level Implementation Approach

8.2 – Opportunity Implementation Plans

- A) Facilities Implementation Workplan
- B) Finance and Supply Chain Implementation Workplans
- C) Human Resources Implementation Workplan
- D) IT Implementation Workplan

8.1 High Level Implementation Approach

- This section includes preliminary workplan timelines
- These will be used to help guide the sequencing of activities during the design phase
- Timing is dependent on if/when the university decides to move forward with certain activities

High Level Implementation Timeline

Mobilization for the Activity Analysis Survey and Campus Assessment is currently underway, this will enable UM to achieve operational improvements in FY19

2018				2019				2020	
Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Jun	Jul - Dec
I. Activity Analysis									
- Develop and execute AA survey - Identify FTEs workload by function - Inform operating model decisions									
II. Campus Assessment									
- Understand current state each campus - Engage functional stakeholders - Bring all campuses into engagement									
III. Transformation Management Office									
- Design TMO - Secure resources and budget - Develop and track Service Level Agreements and Key Performance Indicators									
- Engage campus stakeholders - Execute change management and communications									
IV. Operating Model (Across all 4 functional areas)									
- Integrate campuses into design process - Streamline distributed / duplicated functions - Assess operations for additional underutilized resources									
- Implement near term opportunities - Optimize functional processes									
V. Operational Efficiencies (15 Opportunities)									
- Integrate campuses into design process - Design in/outsourcing strategy - Execute demand management strategies									
- Implement near term opportunities - Execute bid strategy									
VI. Revenue Enhancement / P3 (3 Opportunities)									
- Identify potential third-party partnership candidates - Solicit P3 proposals from selected candidates									
- Understand feasibility and impact of P3 - Select P3 partner(s) and measure impact									
TMO Operational		Near-term opportunities realized		Op Model Implementation		Quarterly board updates		Full Savings Run Rate Achieved	

Implementation Roadmap – Campus Assessment and Integration

Calendar Year

2018

Jan – Mar

Apr – Jun

Jul – Sep

Oct – Dec

Activity Analysis

Distribute AA survey system wide

Analyze survey results

Campus Assessment

Develop communication plan for functional assessment across all campuses

Engage functional leads at campus level to begin operating model discussions

Identify and interview key stakeholders to understand current state

Gather data and assess functional operations

Identify leading practices at campuses

Integrate campus and System/Columbia analyses

Review and refine functional opportunities across UM system

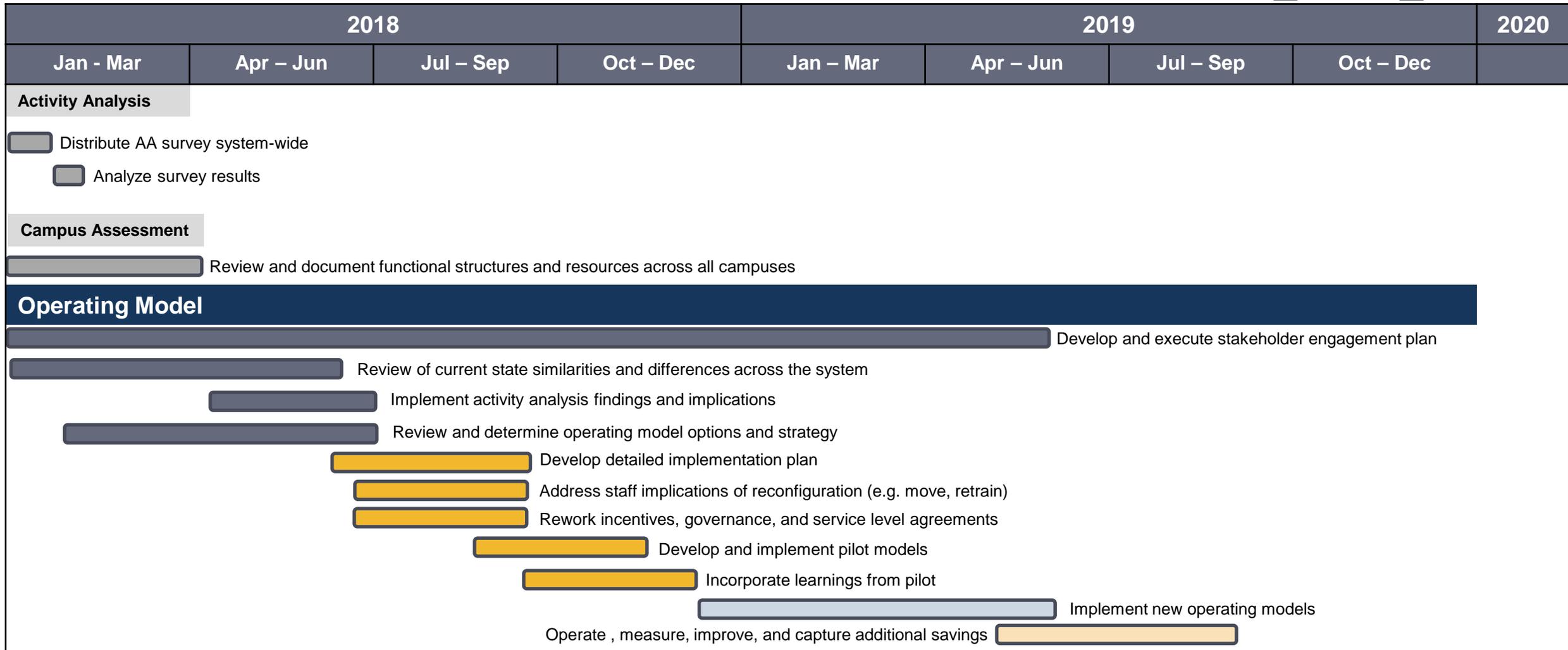
Integrate campuses into opportunity workstreams

Implementation Roadmap – Operating Model

Calendar Year

Design
 Implement

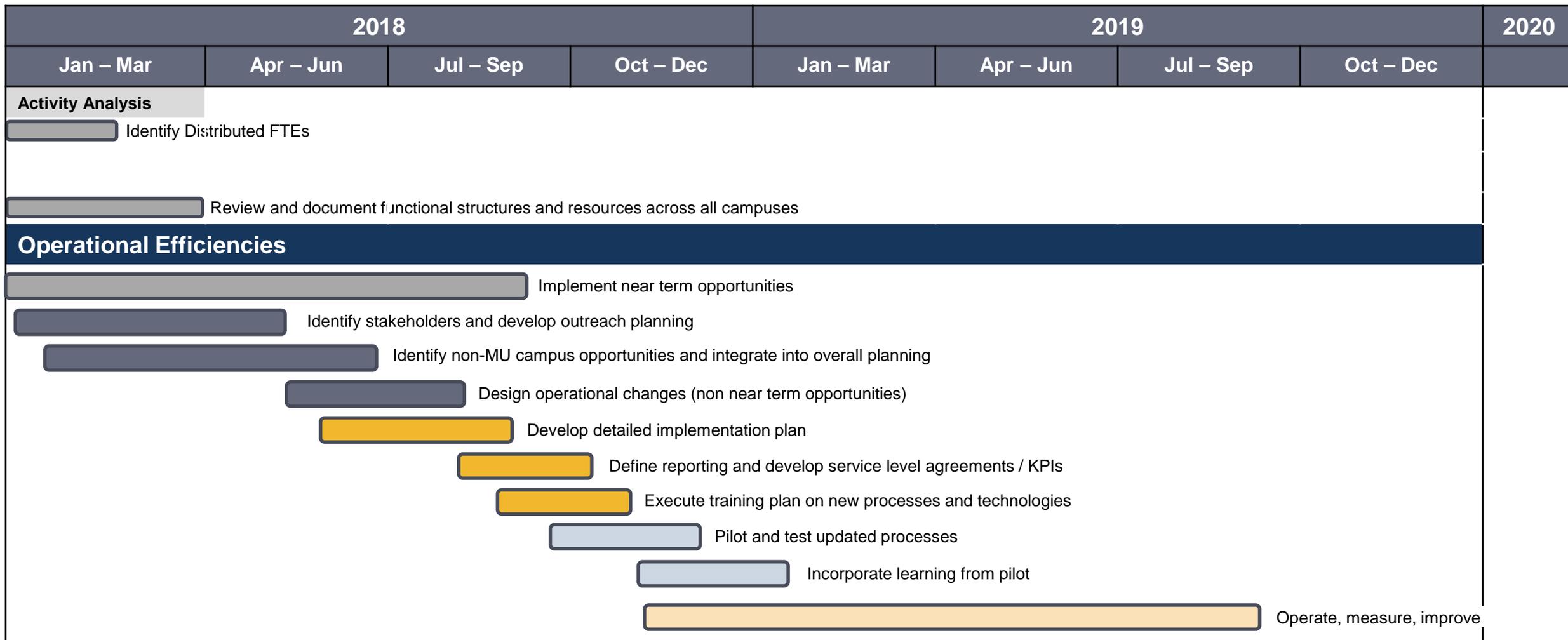
Construct
 Operate & Review



Implementation Roadmap – Operational Efficiencies

Calendar Year

Design
 Implement
 Construct
 Operate & Review



Implementation Roadmap – Revenue Enhancement

Calendar Year

Design
 Implement

 Construct
 Operate & Review

2018

2019

2020

Jan – Mar

Apr – Jun

Jul – Sep

Oct – Dec

Jan – Mar

Apr – Jun

Jul – Sep

Oct – Dec

Jan – Mar

Apr – Jun

Jul – Sep

Oct – Dec

Campus Assessment

Review and document functional structures and resources across all campuses

Revenue Enhancement

Identify facilities/real estate assets across campus(es)

Prioritize and sequence opportunities based off return on investment

Identify 3rd party partnerships

Assess implications of P3 on operations, Finance, and strategy

Develop detailed implementation plan

Negotiate and finalize opportunities

Transition and implement according to negotiated plan

Monitor and adjust for continuous improvement

8.2 Implementation Timelines

8.2A Facilities Implementation Workplan

Facilities Implementation Plan

Opportunities identified as part of preliminary analysis

Calendar Year

	2018				2019				2020			
	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec
Real Property Operating Model Realignment												
Real Property Rationalization												
Rationalize Landscaping Scope												

Additional opportunities to be evaluated

Calendar Year

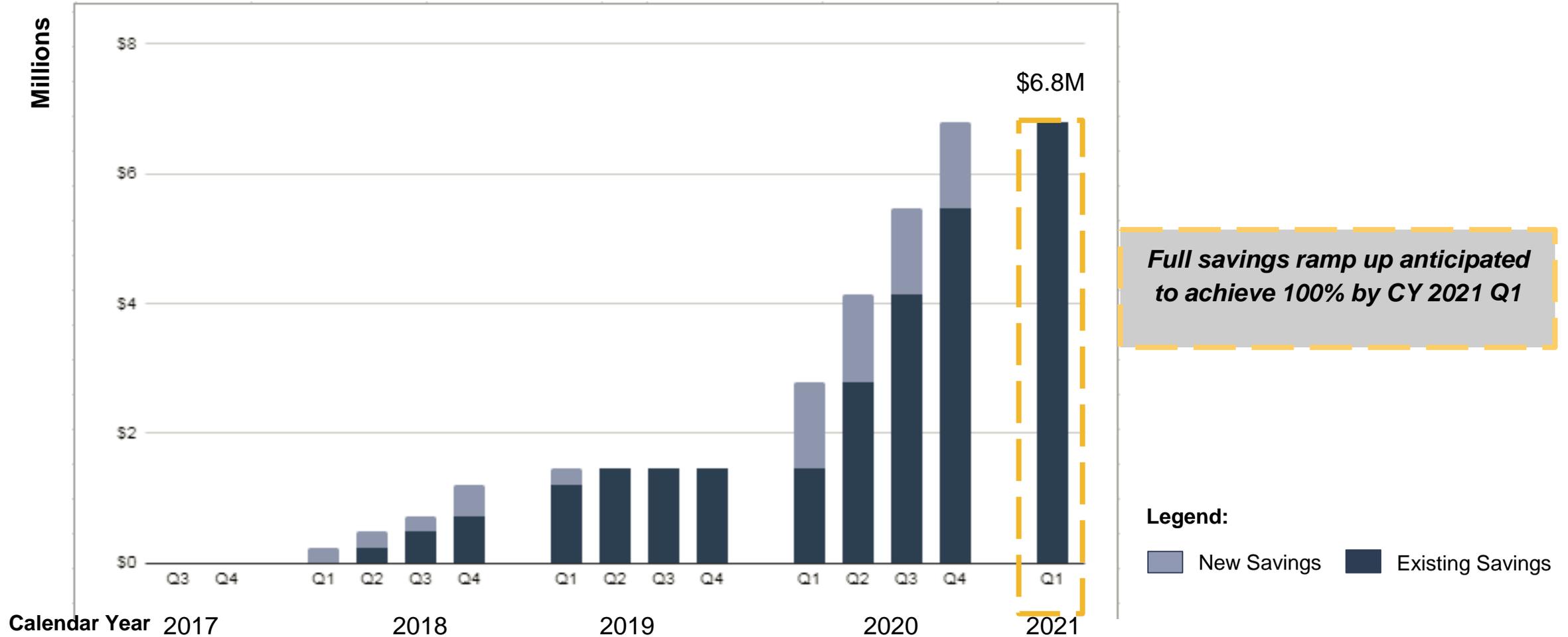
	2018				2019				2020			
	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec
Monetize Excess and/or Underutilized Real Property												
Identify Public-Private Partnership Opportunities												
Review Staffing Model Efficiency												

Design Phase
 Construct Phase
 Implement Phase
 Operate and Review Phase

- Timelines are preliminary and will be refined during Design phase, certain investments may be required in order to achieve these milestones

Facilities Savings Ramp Up

Over half of the Facilities Workstream savings will be captured by the middle of 2020



Note: Annual benefits are net of non-capital investment in capabilities needed, Savings of initial opportunity realized in 2018, additional savings realized in perpetuity

Facilities Opportunities Identified – Implementation Plan (1 of 4)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
1. Real Property Operating Model Realignment			
<p>FY18 Q3 - FY18 Q4</p> <ol style="list-style-type: none"> 1. Perform an activity analysis across campuses and System to identify and map current resources with real property responsibilities (informed by the proposed framework) 2. Gather stakeholder initial reactions to the conceptual roadmap and re-evaluate the impact of suggestions to the proposed framework 3. Perform a deep dive analysis around each function built into the framework and the cost-benefit associated with centralizing vs. decentralizing each function 4. Perform an activity analysis to identify what each individual within the department is doing and who within the University is performing related functions (e.g. work order management, leasing) 5. Identify potential service providers for areas of highest spend (e.g. maintenance, landscaping, construction, custodial, etc.) 6. Assess the impact of the proposed realignment against the current model. Adjust and simplify the various processes to the extent possible, and layer in an updated framework to complement the operating structure 	<p>FY19 Q1 - FY19 Q2</p> <ol style="list-style-type: none"> 1. Using industry leading practice models and the University of Missouri's requirements, map proposed FTE counts against framework. 2. Develop a change management framework to guide the implementation process. 3. Obtain vendor quotes for each of the highest spend areas identified 4. Analyze internal costs (all-inclusive) compared to vendor quotes with level-set of service-levels 5. Identify the capital investment required to execute the proposed plan. 6. Highlight estimated cost savings as a result of FTE realignment and measure against the capital investment required. 7. Consolidate the framework into a multi-phase project plan outlining the detailed action steps required to execute the transformation. Gain plan approval from stakeholders. 	<p>FY19 Q3 - FY20 Q4</p> <ol style="list-style-type: none"> 1. Develop the policies, processes, and procedures that serve as the governing documents guiding the reporting hierarchy (establishing the governance structure). 2. Execute the action plan, using change management protocols to guide the transformation process and limit disruption to on-going operations. 3. Benchmark progress to pre-determined objectives and milestones. Adjust plan action steps where necessary and maintain flexibility to realign the approach to on-going developments. 	<p>Ongoing</p> <ol style="list-style-type: none"> 1. Maintain and review change management protocols to mitigate business disruption risks 2. Encourage recurring check-ins to evaluate and adjust the structure as needed (more frequent check-ins at the onset) 3. Review University "needs" on an annual basis to assess and address skill-gaps, opportunities for technological investment, and performance.

Timelines are preliminary and will be refined during Design phase, certain investments may be required in order to achieve these milestones

Facilities Opportunities Identified – Implementation Plan (2 of 4)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
2. Real Property Rationalization (Owned & Leased Space)			
FY18 Q3 - FY 18 Q4 <ol style="list-style-type: none"> 1. Consider existing plans to reduce 500,000 square feet and achieve operating reductions of \$1.4 M anticipated 2. Conduct accurate space utilization study using physical inspection and presence detection technology 3. Assess 5 year staff, faculty and student growth projections 4. Create mapping of current use by person / department and align with future projections 5. Assess space use (density) and design requirements against industry standards and adjust as needed 6. Define goals and objectives of space redesign / moving people around campuses 7. Identify facilities that could be structurally redesigned to allow more stakeholder usage and variety 8. Identify use of each leased space 9. Stratify leases as needed vs desired 10. Focus on leases that expire by 12/31/2018 first, then the remainder 11. Define a standard leasing process that includes, for example, approvals needed, required consult with the Real Estate department, rental rate thresholds, use of brokers, etc. 	FY19 Q1 - FY19 Q2 <ol style="list-style-type: none"> 1. Map out multi-year relocation plan across campuses to meet goals and objectives (classify plan into "near term opportunities" and longer term) 2. Classify buildings into categories for demolition, retrofitting, new build, etc. 3. Identify capital needs to effect the relocation plan 4. Identify public-private partnerships, monetization, bond/financing, or other sources of capital to effect the plan 5. Define design standards, Furniture, fixtures, and equipment needs, etc. by department 6. Achieve stakeholder buy-in for relocation plan, redesign standards, funding, etc. 7. Consider remote options / hoteling systems in redesign plans and space rationalization analysis 8. Identify leases that could be terminated 9. Obtain stakeholder buy-in for those impacted by a move 	FY 19 Q3 - FY 21 Q3 <ol style="list-style-type: none"> 1. Execute on near term opportunities 2. Monetize assets that are underutilized / liquid / high value assets (see public-private partnerships and Monetization opportunities for more details) 3. Demolish, refurbish, build as needed and execute relocations / multi-purpose redesign 4. Roll out hoteling on select areas 5. Determine specific roles / employees to start working remotely and effect that change 6. Hold discussions with landlords to terminate leases 7. Establish a business case for each remaining leased location 	FY 21 Q3 - Ongoing <ol style="list-style-type: none"> 1. Maintain and review change management protocols to mitigate business disruption risks 2. Implement bi-annual utilization assessment to assess changes needed 3. Review real estate holdings annually for monetization opportunities 4. Regularly review multi-purpose space to analyze if intended uses are effective 5. Monitor use of technology / remote working and employee / student satisfaction 6. Maintain and review change management protocols to mitigate business disruption risks 7. Establish a standard leasing process

Timelines are preliminary and will be refined during Design phase, certain investments may be required in order to achieve these milestones

Facilities Opportunities Identified – Implementation Plan (3 of 4)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
3. Rationalize Landscaping Scope			
FY 18 Q3 1. Consider needs based on known \$265,000 in cuts planned for FY18 under budget reductions 2. Identify campus zones and map individuals / costs to coverage areas 3. Determine areas for service reduction based on 3 service tiers (annual mow n blow, monthly maintenance, botanical garden classification)	FY 18 Q3 1. Obtain stakeholder buy-in for reduction in service plan 2. Determine cost savings and additional effort needed from those remaining on staff 3. Consider 3rd party services for lower-maintenance needs (annual and monthly needs) - follow process noted in other opportunity	FY 18 Q3 - FY 18 Q4 1. Effect cost savings through staff reductions 2. Execute contracts with vendors 3. Identify in-house or 3rd party vendor to quality-check vendors and in-house staff against Service Level Agreements and leading practices	FY 19 Q1 - Ongoing 1. Perform quarterly reviews of vendor performance against Service Level Agreements 2. Obtain annual survey reports from stakeholders to promote satisfaction with vendor / in-house performance
Design	Construct	Implement	Operate and Review
4. Monetize Excess and/or Underutilized Real Property Assets			
FY 18 Q2 - FY18 Q4 1. Identify use of all owned land parcels and buildings owned by the System and all campuses 2. Stratify portfolio between (a) currently used (b) planned for future use (c) not in use 3. Achieve stakeholder buy-in on how funds from sales will be utilized (e.g., fund space rationalization xx%, research efforts yy%, etc.)	FY 19 Q1 1. Stratify not in use holdings by potential sale date (considering ease of sale, market interest, and potential sales revenue) 2. Obtain appraisals of holdings planned for sale within 9 months (a continual process of appraisal within 9 months of planned sale to avoid stale valuation estimates) 3. Identify potential buyers 4. Create plan for real estate gifts received (e.g. immediate sale, income generating opportunities, incorporate into campus use, etc.)	FY 19 Q4 – FY 21 Q1 1. Obtain appraisals as needed prior to sales 2. Engage potential buyers in discussions 3. Execute sales 4. Fund space rationalization efforts and others as defined in Design stage	FY 21 Q1 - Ongoing 1. Review real estate holdings annually for monetization opportunities 2. Perform look-back testing as sales occur to assess accuracy of appraisers

Timelines are preliminary and will be refined during Design phase, certain investments may be required in order to achieve these milestones

Facilities Opportunities Identified – Implementation Plan (4 of 4)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
5. Identify Public-Private Partnership Opportunities			
FY 18 Q3 - FY18 Q4 1. Define public-private partnership opportunities that are of interest to the University by campus (e.g., student housing, parking, dining facilities, retail) 2. Determine which structuring opportunities are allowed under the University's known legal restrictions and obtain General Counsel buy-in 3. promote public-private partnership opportunities are aligned with the portfolio's right sizing plan and University's Master Plans 4. Prepare models to quantify annual and capital opportunities through various public-private partnership options and substantiate with market information	FY 19 Q1 – FY 19 Q3 1. Identify public-private partnership partners by opportunity 2. Request proposals from partners and promote RFP process is aligned with University's broader plans / needs 3. Achieve stakeholder buy-in for identified opportunities	FY 19 Q4 – FY 20 Q4 1. Sign contracts with public-private partnership partners and commence design / construction work 2. Implement service level checks using an outside vendor or in-house staff to promote quality of public-private partnership partner work 3. Market public-private partnership opportunities to the public in alignment with the University's other changes	Ongoing 1. Maintain and review change management protocols to mitigate business disruption risks 2. Implement quarterly Service Level Agreement assessment to promote public-private partnership partner execution 3. Align departmental job descriptions / compensation with public-private partnerships execution to promote quality
6. Review Staffing Model Efficiency			
FY 18 Q3 1. Identify accurate FTE count and student employee count 2. Perform an activity analysis 3. Identify FTE functions that could be performed by students 4. Identify student employee functions that could be performed by 3rd party vendors (e.g., custodial), smart technology systems (e.g., parking tickets), or a shared service center (e.g., administrative)	FY 18 Q4 1. Analyze potential 3rd party alternatives (see opportunity on 3rd party vendors for process) 2. Analyze break-even of an FTE to student resources to determine viability of fewer FTEs with more student resources 3. Analyze potential of shared service center in connection with broader shared service center considerations	FY 19 Q1 - FY 19 Q2 1. Implement changes to staffing model based on results of analyses	FY 19 Q3 - Ongoing 1. Annually, assess model and potential for additional efficiencies

Timelines are preliminary and will be refined during Design phase, certain investments may be required in order to achieve these milestones

8.2B Finance and Supply Chain Implementation Workplans

Finance Opportunity Roll-out

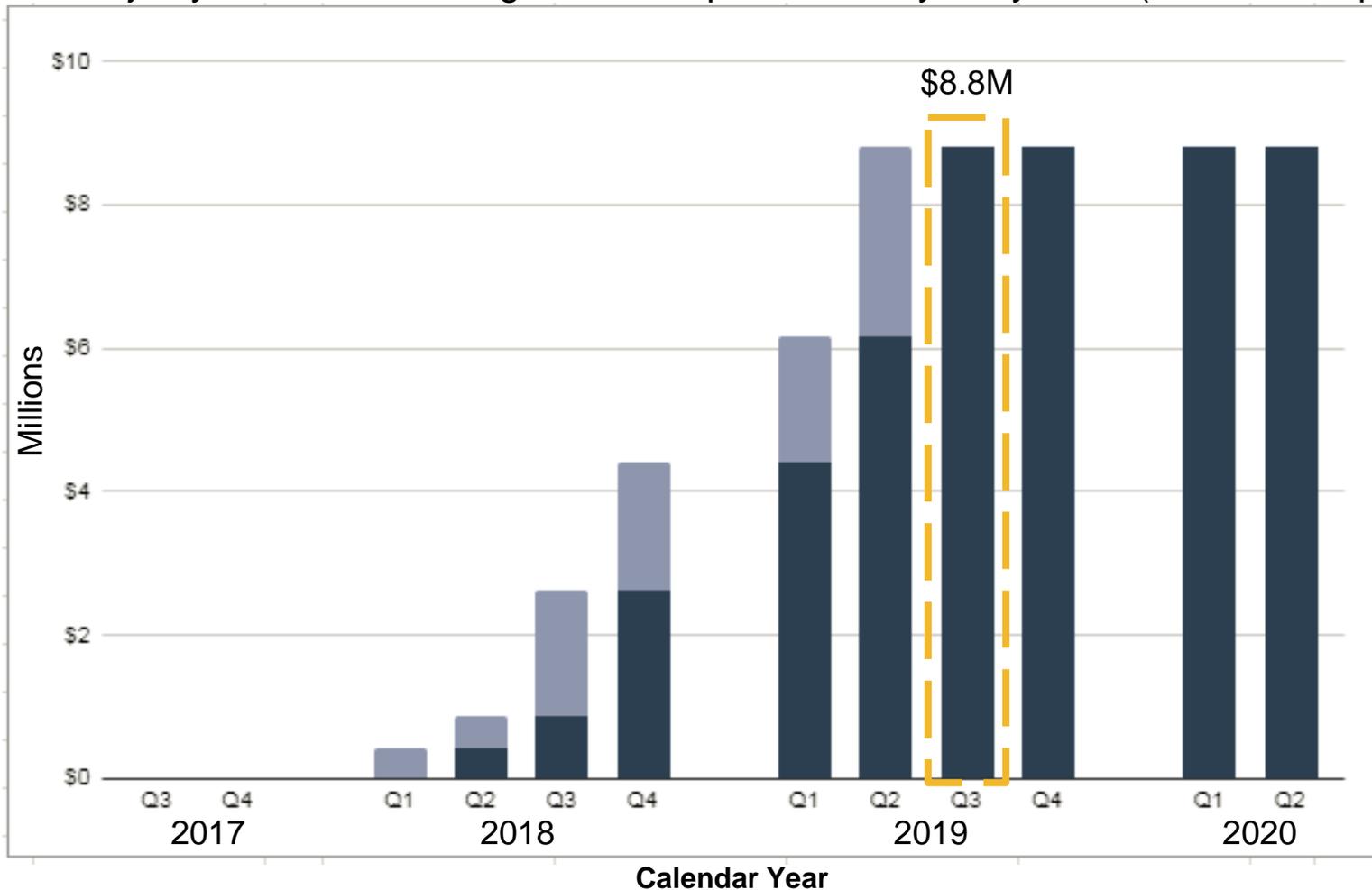
The following implementation plan will be used to guide our path forward

CY2017		CY2018												CY2019											
Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		(1) Align Finance Personnel (Operating Model)												Continue with adjustments to staffing levels in alignment with (3) below											
(2&3) Operating Model – Execute Activity Analysis survey		(4) Drive Broader Financial Accountability																							
		(2) Consolidate Activities Currently Centralized at the Campus Level (Operating Model)																							
		(3) Identify Opportunities to Consolidate Activities Currently Occurring at the College/Department Level (Operating Model)																							
		(5) Improve Business Insight Reporting & Planning Capabilities (Phase 1)						(5) Improve Business Insight Reporting & Planning Capabilities (Phase 2)																	
		(6) Further Development of Finance Talent Development Strategy						Continue as organizational changes are made																	

Note: This includes a high-level summary of the opportunities timing and prioritization. Additional details to be defined as a part of the mobilization stage.

Finance Savings Ramp Up

The majority of Finance savings will be implemented by early 2019 (excludes Supply Chain opportunities)



Full savings ramp up anticipated to achieve 100% by CY 2019 Q3

Legend:

■ New Savings ■ Existing Savings

Note: Annual benefits are net of non-capital investment in capabilities needed

Finance Implementation Plan (1 of 6)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
1. Align Finance Personnel (Operating Model)			
<ul style="list-style-type: none"> Determine and initiate process to engage stakeholders throughout opportunity execution Review and document Finance structures and resources across all campuses, including reporting lines for existing dedicated Finance resources (e.g., System, campus centralized and college and division fiscal officers) and known resources with Finance accountability (e.g., the Finance leads) Analyze alternative options for aligning Finance personnel while maintaining the balance between accountability at the System to the campuses, colleges, etc. Determine future state reporting lines through the Finance function from campus Finance to System 	<ul style="list-style-type: none"> Develop and socialize changes to organizational model which will require alignment and support of academic leadership to maintain campus partnering relationship Develop detailing implementation plan – phase 1 – alignment of existing dedicated resources. Develop implementation plan – phase 2 – alignment of ‘distributed’ resources – must be done in conjunction with alignment of other functional accountabilities (e.g., HR) 	<ul style="list-style-type: none"> Execute phase 1 implementation plan Execute phase 2 implementation plan 	<ul style="list-style-type: none"> Solicit feedback on operating model changes

Finance Implementation Plan (2 of 6)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
2. Identify Opportunities to Consolidate Activities Currently Centralized at the Campus Level (Operating Model)			
<ul style="list-style-type: none"> Determine and initiate process to engage stakeholders throughout opportunity execution Define survey participant population, including key demographic information for each participant Design a multi-function activity analysis survey to determine functional support across the organization 	<ul style="list-style-type: none"> Execute activity analysis survey Analyze activity analysis survey results to identify all resources that are supporting Finance and Supply Chain activities Evaluate opportunity to consolidate existing campus services across the University <ul style="list-style-type: none"> Accounting Services Business Services, Contracting Spans, layers and organizational rationalization within centralized Finance services (e.g., Card process, PO processing, Supplier Registration Process) Other transactional processes included as part of sponsored research, student services and advancement/giving should be considered concurrently UMAPSS & Supply Chain already a shared service supporting all campuses Design process and organizational support for transaction processes (cash disbursements, accounts receivable / debt collection, credit management, customer billing, general accounting, financial and external reporting, management reporting), decision support processes (tax planning, strategy and planning, budgeting and forecasting, business analysis and performance improvement) and specialty services (treasury, internal audit, process controls and compliance and tax accounting and compliance) Determine best alignment of consolidated and/or shared service capabilities and evaluate the need for new or modified SLAs Develop a implementation plan for each shared service and Finance and Supply Chain change 	<ul style="list-style-type: none"> Execute implementation plan 	<ul style="list-style-type: none"> Solicit feedback on operating model changes

Finance Implementation Plan (3 of 6)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
3. Consolidate Activities Currently Occurring at the College/Department Level (Operating Model)			
<ul style="list-style-type: none"> Determine and initiate process to engage stakeholders throughout opportunity execution Define survey participant population, including key demographic information for each participant Design a multi-function activity analysis survey to determine functional support across the organization 	<ul style="list-style-type: none"> Execute activity analysis survey Analyze activity analysis survey results to identify all resources that are supporting Finance and Supply Chain activities Evaluate opportunity to move additional transaction processes to a shared service center (e.g., accounting services and processes such as T&E which are done at department level). Evaluate in conjunction with appropriate segregation of duties and necessary service level. Determine best alignment of consolidated and/or shared service capabilities. All activities performed at the department level should be evaluated to determine if those activities can be performed more effectively and efficiently through another approach (e.g., arranging travel) Design process and organizational support for transaction processes (cash disbursements, accounts receivable / debt collection, credit management, customer billing, general accounting, financial and external reporting, management reporting), decision support processes (tax planning, strategy and planning, budgeting and forecasting, business analysis and performance improvement) and specialty services (treasury, internal audit, process controls and compliance and tax accounting and compliance) Assess opportunity to align Finance resources within the new operating model by campus to improve quality and consistency of business insight and other capabilities, enable a reduction of FTEs and align more consistently with size and complexity of College / School / Division (e.g. 21 fiscal officers at MU) Evaluate the need for new or modified service level agreements Develop a implementation plan for each shared service and Finance and Supply Chain change 	<ul style="list-style-type: none"> Execute implementation plan 	<ul style="list-style-type: none"> Solicit feedback on operating model changes

Finance Implementation Plan (4 of 6)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
4. Drive Broader Financial Accountability			
<ul style="list-style-type: none"> Determine and initiate process to engage stakeholders throughout opportunity execution 	<ul style="list-style-type: none"> Determine appropriate responsibility center management approach for the University to include not only spend (including appropriate indirect costs) but revenue (including key metrics/drivers) and margin expectations down to college/school/division level Determine appropriate approach at the department and faculty level Formalize all funds budgeting approach principles as well as reporting (operating, research, endowment and other specific purpose use funds) Develop implementation plan including the revamped budgeting approach 	<ul style="list-style-type: none"> Execute implementation plan 	<ul style="list-style-type: none"> Solicit feedback on all funds budgeting approach and identify ways to further educate and inform the organization on the new approach and reports

Finance Implementation Plan (5 of 6)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
5. Improve Business Insight Reporting and Planning Capabilities			
<ul style="list-style-type: none"> • Determine and initiate process to engage stakeholders throughout opportunity execution • Understand and catalog current state business insight reporting tools, reports inventory and processes • Understand current state strategic, budget and forecast capabilities through workshops and/or interviews • Evaluate current state reports and processes against better practice and identify gaps • Assess current state strategic, budget and forecast capabilities against better practice to determine gaps and identify issues and opportunities for improvement across process, organization, and supporting technology areas 	<ul style="list-style-type: none"> • Conduct report standardization workshops to define and validate report content requirements and validate that existing reporting tools support • Conduct workshops with key business stakeholders to define and achieve consensus on future state planning capabilities. This would need to prioritize System spend and campus investments and also support an operational understanding of financial results. These short and longer term capabilities would need to include Academic, Research and Other • Create reporting standards, including: formatting, defined source systems, frequency, ownership / distribution, and archiving • Develop and finalize standardized reports • Establish processes and technology to sustain report standardization and rationalization improvements • Communicate and conduct training to roll out business insight approach and reports to the organization • As a part of the talent development strategy, work to improve the skills and capabilities of resources supporting business insight roles at the campus level which may result in fewer, higher paid partnering resources • Develop implementation plan (which will likely include a multi-phase approach to meet near and longer term goals) 	<ul style="list-style-type: none"> • Execute implementation plan 	<ul style="list-style-type: none"> • Solicit feedback on processes and technology supporting business insight reporting capabilities • Monitor Key Performance Indicators related to business insight reporting capabilities (e.g. days to forecast, etc.)

Finance Implementation Plan (6 of 6)

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
6. Further Development of Finance Talent Development Strategy			
<ul style="list-style-type: none"> Determine and initiate process to engage stakeholders throughout opportunity execution Perform a high-level skills and training needs assessment to identify resource and training gaps Identify additional talent requirements based on organization realignment 	<ul style="list-style-type: none"> Develop Finance career paths, including succession plans and identification of career mentors. This will help provide employees with an understanding of career path options and key contacts for career path support Develop job rotation within a campus and across campuses, within a specialized area and between areas (e.g. within transaction processing and between Internal Audit and Fiscal officers) Establish learning and development plans by resource role and level to help promote employees are involved in formalized learning opportunities throughout the year. This should also include in-role training so resources understand expectations for financial accountability, standardized reporting processes, etc. Develop approach to identify and actively manage high performer roles and opportunities Develop implementation plan which includes, the plan to: (1) Hire and retrain workforce based on talent requirements and gaps identified from high-level skills and training needs assessment, (2) Roll out talent changes related to career paths, job rotation programs, training and higher performer management and (3) promote the appropriate resources are in the correct roles and re-align as needed 	<ul style="list-style-type: none"> Execute implementation plan 	<ul style="list-style-type: none"> Solicit feedback on talent development capabilities Monitor Key Performance Indicators related to Finance talent (e.g. resignation %, talent group as a % of Finance staff, Learning & Development hours per FTE, etc.)

Supply Chain Implementation Plan

An implementation plan based on four clearly defined phases will help guide the path forward

Design	Construct	Implement	Operate and Review
1. Support Operating Model Redesign for Non-Labor Spend			
FY18 Q2 <ul style="list-style-type: none"> Perform spend analysis by department Identify outliers by GL expense, & review detail within each area Socialize findings with departments 	FY18 Q3 <ul style="list-style-type: none"> Informed by the spend analysis, work with outlying departments to develop targeted opportunities for spend reduction (dues and subscriptions, office supplies, etc.) Socialize opportunities with leadership and key stakeholders 	FY18 Q4 <ul style="list-style-type: none"> Conduct GL training and communication roll out in coordination with the controllers office 	FY19 Q2 - Ongoing <ul style="list-style-type: none"> Measure and monitor performance, utilization and services delivered
2. Improved Enforcement of Supply Chain Controls			
FY18 Q2 <ul style="list-style-type: none"> Perform source analysis to determine departmental compliance with Supply Chain processes 	FY18 Q3 <ul style="list-style-type: none"> Update policy language to allow Supply Chain to enforce departmental accountability Enforce existing PO policies and procedures to ensure department compliance 	FY18 Q3 – FY18 Q4 <ul style="list-style-type: none"> Meet with departments to review Supply Chain process and level set expectations of PO / Supply Chain moving forward Implement controls and approval thresholds to promote confirming orders are captured within normal PO processes 	FY19 Q1 - Ongoing <ul style="list-style-type: none"> Monitor Confirming Order % and address slippage as needed
3. Increase Spend Under Supply Chain Management			
FY18 Q2 <ul style="list-style-type: none"> Opportunity implementation already underway. Confirm vendors for Show Me Shop incorporation, and identify any additional areas for consideration (ongoing) 	FY18 Q3 <ul style="list-style-type: none"> Review Maintenance Repair and Operations (MRO) contracts to determine viability of adding new suppliers or enhancing current contracts. Gain alignment on centralization of contract management for business services at S&T, UMKC, UMSL in cooperation with MU Finance 	FY18 Q3 – FY18 Q4 <ul style="list-style-type: none"> Ongoing roll out of vendors on SMS 	FY19 Q1 - Ongoing <ul style="list-style-type: none"> Monitor SMS vs P-Card utilization for further insights into key vendors for potential onboarding
4. Enhance Contract Review Process			
FY18 Q2 <ul style="list-style-type: none"> Create performance metric standards 	FY18 Q3 <ul style="list-style-type: none"> Utilize advanced analytics (e.g. Primrose, et al) to identify significant spend reduction opportunities Identify areas for tactical / corporate contracting Establish performance metrics for contracts 	FY18 Q4 <ul style="list-style-type: none"> Implement business review process and score cards based on predetermined metrics for major vendors 	FY19 Q1 - Ongoing <ul style="list-style-type: none"> Continue to identify areas for strategic contracts and contract collaboration that meet department needs, provide cost savings and bring forth value.

8.2C Human Resources Implementation Workplan

Typically, an HR Transformation can take two to three years; the journey begins with aligning institutional leaders on UM's "people strategy" and a common delivery model for HR services

HR Transformation Journey

Establish HR strategy and build the foundation

- Obtain buy-in from institutional leaders on people strategy
- Employment Value Proposition ("EVP") and human capital opportunities
- Gain alignment on HR scope of services and service delivery model (re-align and re-allocate resources as needed)
- Standardize HR processes to enable an effective service delivery model and drive efficiencies, where possible
- Establish strategy for optimizing usage of HR technology (e.g., HRIS, digital, cloud, automation, etc.)
- Clarify HR roles & responsibilities / refine HR processes
- Define and deploy employee engagement strategies and tools (e.g., annual survey)

1

2

3

Optimize HR to drive people-oriented culture

- Redesign HR reporting lines, roles and responsibilities
- Develop and implement strategic workforce planning capability and talent acquisition / onboarding process that promotes the right talent is in the right roles at the right time
- Implement technology solutions to drive greater efficiency / effectiveness and access to real-time, actionable data
- Establish feedback loop between the business / HR

Continuously seek and gain organizational buy-in and live the Employment Value Proposition

- Strategic partnership between the business and HR – shared accountability for talent outcomes and cultural transformation
- Utilize data to drive strategic planning and decision making
- Robust pipeline of internal / external candidates

HR Implementation Plan

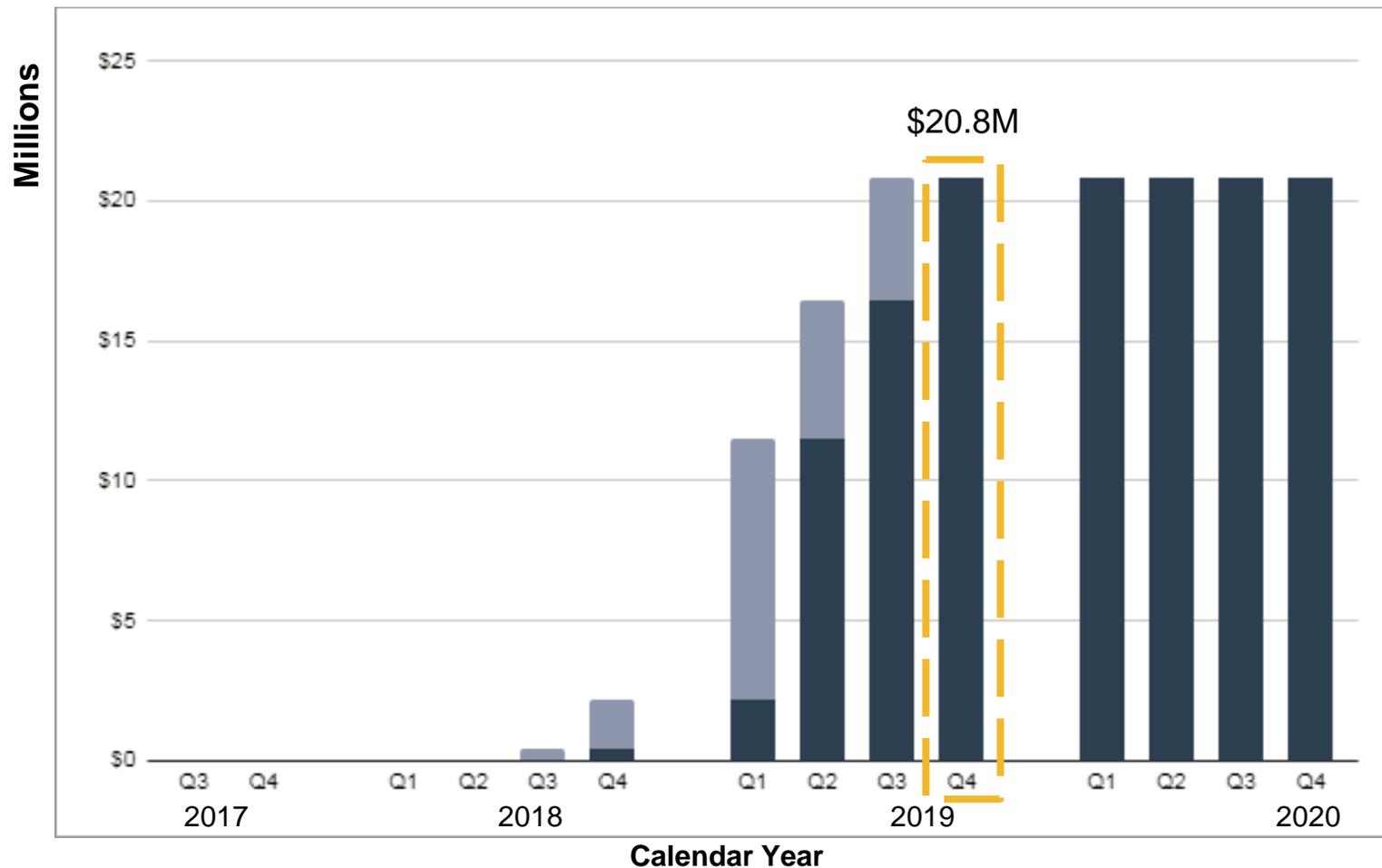
The bulk of the HR opportunities are achievable by the end of 2019, however more than half of the savings potential for rationalizing health benefits won't be realized until the end of the following year

	2018				2019				2020			
	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec
1 HR Transformation	Design Phase	Construct Phase	Implement Phase	Operate and Review Phase								
2 Total Rewards	Design Phase	Construct Phase	Implement Phase	Operate and Review Phase								
3 Administrative Assistant Realignment	Design Phase	Construct Phase	Implement Phase	Operate and Review Phase								
Total Year Savings (Low)	\$2.2M				\$20.8M				\$20.8M			

Design Phase
 Construct Phase
 Implement Phase
 Operate and Review Phase

HR Savings Ramp Up

HR's full savings will be realized in 2020 to allow for changes to employee benefits



Full savings ramp up anticipated to achieve 100% by CY 2019 Q4

Legend:

■ New Savings ■ Existing Savings

Note: Annual savings are net of non-capital investments

8.2D IT Implementation Workplan

IT Implementation Plan

After projects are approved, this plan will be revised to balance resources and adjusted for dependencies

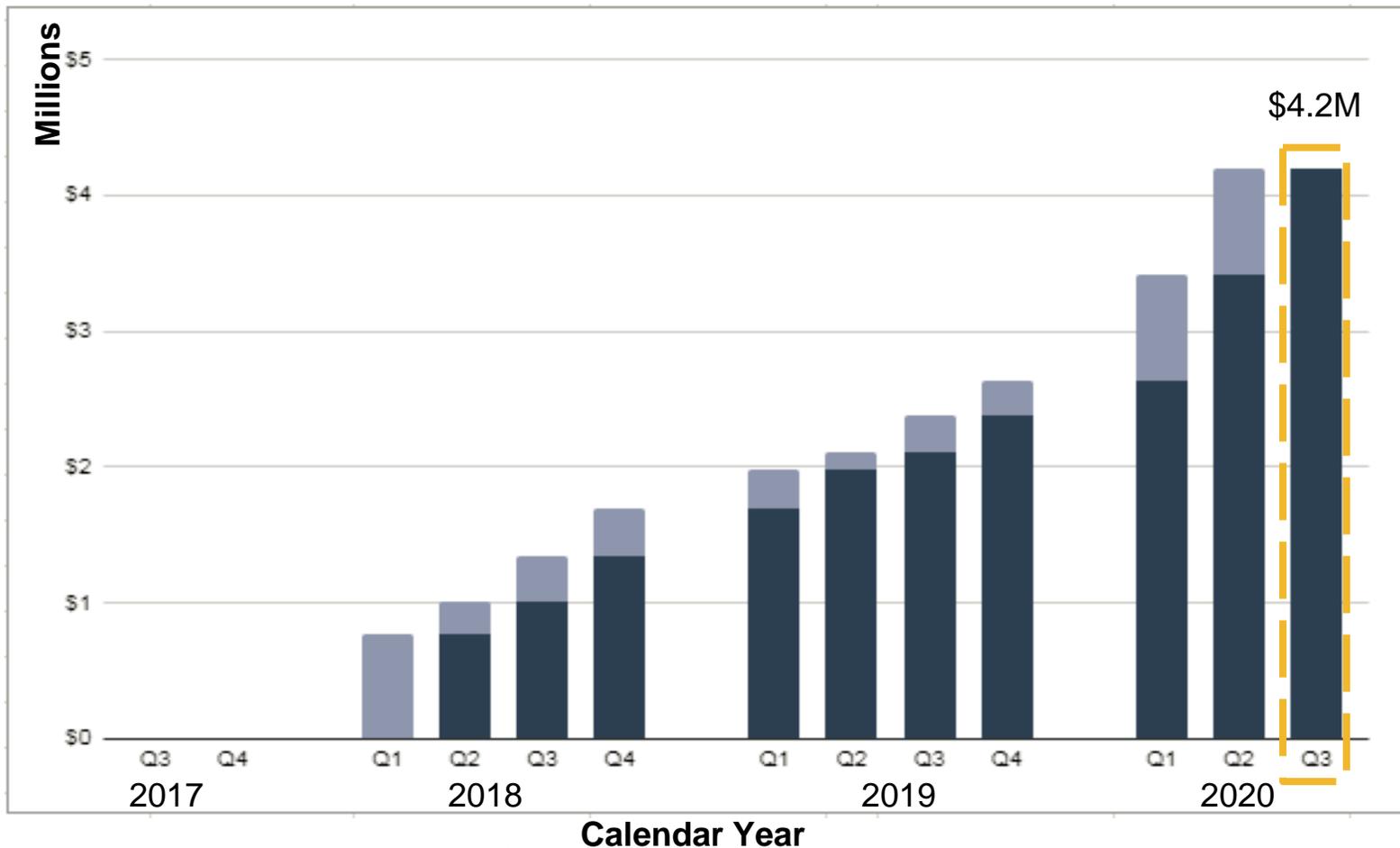
Calendar Year

		2017	2018				2019				2020			
		Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec
1	Governance and Operating Model													
2	IT Spend Governance													
3	Rationalize Distributed IT Desktop / Support Services													
4	Consolidate Web Hosting Platforms													
5	Increase App Development/Support ROI Requirements													
6	Reduce Innotas Licensing		Implementing											

Design Phase
 Construct Phase
 Implement Phase
 Operate and Review Phase

IT Savings Ramp Up

IT's full savings will be realized in 2020



Full savings ramp up anticipated to achieve 100% by CY 2020 Q3

Legend:

■ New Savings

■ Existing Savings

Note: Annual investments are net of non-capital investments

IT Implementation Planning Steps (1 of 2)

An implementation plan based on four clearly defined phases will help guide the path forward.

Design	Construct	Implement	Operate and Review
1. Governance and Operating Model			
FY18 Q3 – FY19 Q1 1. Define goals for the project. Create program charter. Align incentives. Assign executives to champion the program. 2. Prepare process maps, identify processes that provide competitive advantage or address a unique requirement 3. Map servers to applications, identify capacity needed to host servers, plan migration groups, plan staff roles 4. Inspect phone system and plan maintenance or upgrade for call volume. Plan call routing. 5. Identify Level 1 and Level 2 skills, call flow and dispatch processes.	FY19 Q2 - FY20 Q1 1. Install target servicing image. Configure the image with common processes. 2. Install common applications. Plan sunseting of applications 3. Install seed equipment for migration 4. Update HD procedures, stage phone system changes	FY20 Q2 - FY20 Q4 1. Move new student servicing image and supporting applications into production. 2. Stage cutover to new system and processes by campus. 3. Migrate servers by group 4. Begin call routing to central HD by campus	FY21 Q1 1. Use metrics and feedback to adjust processes. 2. Maintain a incident database and track resolution of incidents. 3. Create a problem database and start a problem management/root cause elimination quality process.
2. IT Spend Governance			
FY18 Q3 Devise and implement gating process and begin communicating process.	FY18 Q4 Implement gating process for IT purchases.	FY19 Q1 Establish purchasing review board Inject IT thought leadership and review in budgeting process	FY19 Q2 Monitor transactions with IT vendors to validate effectiveness of gating process.

Note: Prioritization, resourcing and dependency mapping will be done before project schedules can be approved

IT Support is needed to complete opportunities from other work streams. These projects will need to be added to this list for prioritization and planning

IT Implementation Planning Steps (2 of 2)

An implementation plan based on four clearly defined phases will help guide the path forward.

Design	Construct	Implement	Operate and Review
3. Rationalize Distributed IT Desktop / Support Services			
FY18 Q3 1. Review distributed team's workload and determine potential rebalancing 2. Inform business units on changes in IT support 3. Identify actions to be taken	FY18 Q4 1. Communicate changes 2. Staffing Changes	FY19 Q1 1. Measure and monitor performance, utilization and services being delivered through the new operating model 2. Make changes if needed based on utilization and performance of teams	FY19 Q2 1. Measure and monitor performance, utilization and services being delivered through the new operating model 2. Make changes if needed based on utilization and performance of teams
4. Consolidate Web Hosting Platforms			
FY18 Q3 1. Get approval and buy-in for the business case to adopt a central platform for web hosting strategy 2. Create and review implementation project plan with key stakeholders and align on implementation timeline and milestones	FY18 Q4 Begin implementation as per project plan	FY19 Q1 1. Monitor progress, remediate risks and engage stakeholders regularly to remove obstacles to project plan 2. Reduce roles that were previously engaged in managing different web hosting platforms across departments and campuses	FY19 Q2 Continue to consolidate web platforms and reduce roles across other campuses and departments
5. Increase App Development/Support ROI Requirements			
FY18 Q3 Create IT intake governance process and publish to organization	FY18 Q4 1. Revise pipeline 2. Plan staffing adjustments	FY19 Q1 1. Manage pipeline 2. Adjust staffing	FY19 Q2 1. Manage pipeline 2. Adjust staffing
6. Reduce Innotas Licensing			
Currently Implementing	N/A	N/A	N/A

Note: Prioritization, resourcing and dependency mapping will be done before project schedules can be approved

IT Support is needed to complete opportunities from other work streams. These projects will need to be added to this list for prioritization and planning



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Appendix

Stakeholders Engaged in Process

Over seventy stakeholders have contributed to this engagement

Engagement Leadership & Communication (18)

- Catlynn Adkins
- Gary Allen
- Ashley Berg
- Alex Cartwright
- Mun Choi
- Marsha Fischer
- Rhonda Gibler
- Patti Haberberger
- Chrissy Kintner
- Katie Lockwood
- Camila Manrique
- Ryan Rapp
- David Russell
- Garnett Stokes
- Gary Ward
- Kelly Wiemann
- Carly Wrisinger
- Jerry Wyckoff

Facilities (8)

- Beth Asbury
- Jeff Brown
- John Haynes
- Kevin Hogg
- Pete Millier
- Gerald Morgan
- Mike Sokoff
- Steve Wild

Finance (10)

- Rick Baniak
- Karla Dowd
- Tracy Greenup
- Ed Knollmeyer
- Sharon Lindenbaum
- Todd Mackley
- Michelle Piranio
- Cuba Plain
- Thomas Richards
- Eric Vogelweid

Human Resources (9)

- Jessica Baker
- Allen Johanning
- Tonya Loucks
- Amy McKenzie
- Mackenzie Moorefield
- Greg Nelson
- Jatha Sadowski
- Derek Smith
- Carol Wilson

Faculty and Staff Representatives (9)

- Melanie Barger
- Elizabeth Beal
- Sean Brown
- David Fannin
- Jean Kirch-Holliday
- Mark McIntosh
- Sahra Sedighsarvestani
- Pamela Stuerke
- Alan Toigo

Information Technology (12)

- Kevin Bailey
- Aaron Berlin
- Benjamin Canlas
- Rusty Crawford
- Hala Dawood
- Megan Hartz
- Brandon Hough
- Kirk Keller
- Jason Lockwood
- Terry Robb
- Bryan Roesslet
- Nikki Witting

Supply Chain (6)

- Jennifer Alexander
- Tony Hall
- Marcy Maddox
- Kristin Meade
- Heather Reed
- Teresa Vest

Note: Many stakeholders engaged with multiple workstreams over the course of this assessment

Scoring Matrix Methodology

Risk Quantification Methodology



Scoring Guiding Questions

A) Complexity

Low (1)	Medium (3)	High (5)
A1) How many different actions need to be taken in order to implement this opportunity? Few, relatively simple workplan	Some, but relatively contained within functional area	Multi-step, significant dependencies that will need to be coordinated and across different business units
A2) Are the decisions regarding implementation contained largely within each functional area and campus, or will buy-in from a larger stakeholder group be required, including 3rd parties? Yes, at full discretion with the functional area leads	Requires informed / consult from other leaders, but limited to no involvement with 3rd parties	Requires buy-in from multiple leaders who may have concerns over opportunity and/or involves action steps from 3rd parties

B) Investments

Low (1)	Medium (3)	High (5)
Are there technology or other financial investments that need to be made to enable implementation and realize the full savings goal? No, no investments will be required to achieve opportunity	Yes, some investment, but within norms of reasonable budget requests	Yes, significant investment required, need sponsoring executive and Finance dept. approval
What personnel or other "soft" investments including staff time will need to be made in order to achieve the benefits of this opportunity? No additional investments identified	Yes, soft investments will be required, but fall within normal operating norms.	Yes, significant investment required, including the hiring of new FTEs / positions or implementing new capabilities

C) Impact to Stakeholders

Low (1)	Medium (3)	High (5)
What classification of stakeholders are being impacted? No impact to employees or other stakeholders	Changes to the way work is done, but not fundamentally disruptive	Significant risk of negative impact to identified stakeholders
Is the overall perceived impact to stakeholders negative or positive? Extremely Positive	Neutral	Extremely Negative

Inputs to scoring matrix

- Bubble Size - Overall Expected Net Benefit to the University** -- This should incorporate all financial savings or increases in revenues less costs associated with implementation.
- X-Axis - Time in Years** -- Taken to achieve full savings (indicated by when the full run rate of savings has been achieved). Select between 1, 2 or 3 years to implement. Measure time in the length of time needed to achieve full implementation, not as a measure from today
- Y-Axis - Risk to Implementation** -- This measure has subcomponents that will need to be individually scored on a 1 to 5 scale. 1 carrying the lowest risk and 5 the highest. The following subcomponents should be discussed and scored independently.

Scoring matrix

