

Board of Curators Meeting - Public Session

University of Missouri System

Stotler Lounge I, II and III, Memorial Union, University of Missouri - Columbia

Jun 23, 2022 8:00 AM - 6:00 PM CDT

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**XIII. GOVERNANCE, COMPENSATION AND HUMAN RESOURCES COMMITTEE –
EXECUTIVE SESSION**

**XIV. ACADEMIC, STUDENT AFFAIRS, RESEARCH AND ECONOMIC DEVELOPMENT
COMMITTEE - EXECUTIVE SESSION**



Vision

To advance the opportunities for success and well-being for Missouri, our nation and the world through transformative teaching, research, innovation, engagement and inclusion.

Mission

To achieve excellence in the discovery, dissemination, preservation and application of knowledge. With an unwavering commitment to academic freedom and freedom of expression, the university educates students to become leaders, promotes lifelong learning by Missouri's citizens, fosters meaningful research and creative works, and serves as a catalyst for innovation, thereby advancing the educational, health, cultural, social and economic interests to benefit the people of Missouri, the nation, and the world.

Missouri Compacts for Achieving Excellence

The Missouri Compacts for Achieving Excellence provide unifying principles that inform and guide the four universities and their strategic plans. Learn more about the compacts, below, at <http://umurl.us/prespri>.



Excellence in
Student Success



Excellence in
Research and
Creative Works



Excellence in
Engagement and
Outreach



Inclusive
Excellence



Excellence in
Planning, Operations
and Stewardship

Core Values

Our institution collectively embraces a series of core values that serve as the foundation upon which we build new knowledge and provide outstanding programs for students and citizens of our state and beyond.



- Academic freedom
- Access
- Accountability
- Civility
- Collaboration
- Creativity
- Discovery
- Engagement
- Excellence
- Freedom of expression
- Inclusion
- Innovation
- Integrity
- Respect
- Responsibility
- Transparency

Guiding Principles

1. Support courageous and proactive leadership that is articulate, unified and committed to excellence in carrying out our existing core missions of teaching, research, engagement and economic development and in meeting the changing needs of the world and the state.
2. Establish a collaborative environment in which UM System universities work together to achieve collective results that cannot be achieved individually and are committed to each other and our mutual success.
3. Exercise central authority that recognizes and respects institutional distinctiveness, appropriate deference and accountability.
4. Enact informed decisions based on collaboratively developed strategic directions and planning.
5. Identify and promote systemwide core values, including respect for all people, transparency, accountability, stewardship and purposeful self-assessment of performance.

UNIVERSITY OF MISSOURI
BOARD CHAIR REPORT

There are no materials for this information item.

UNIVERSITY OF MISSOURI
PRESIDENT'S REPORT

There are no materials for this information item.

REVIEW CONSENT AGENDA

There are no materials for this information item.

CONSENT

Recommended Action - Consent Agenda

It was endorsed by President Choi, moved by Curator _____ and seconded by Curator _____, that the following items be approved by consent agenda:

CONSENT AGENDA

Action

- A. Minutes, April 21, 2022 Board of Curators Meeting
- B. Minutes, April 21, 2022 Board of Curators Committee Meetings
- C. Minutes, May 17, 2022 Board of Curators Special Meeting and Committee Meetings
- D. Degrees, Summer Semester 2022 for all Campuses
- E. Amendment, Collected Rule and Regulation 10.050, Standing Committees
- F. Naming Opportunity, MU
- G. 2022 Security Resolution

Roll call vote of the Board:	YES	NO
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Curator Brncic
Curator Chatman
Curator Graves
Curator Hoberock
Curator Holloway
Curator Layman
Curator Wenneker
Curator Williams

The motion _____.

Consent A

Recommended Action - Minutes, April 21, 2022 Board of Curators Meeting
Minutes

It was moved by Curator _____ and seconded by Curator _____, that the minutes of the April 21, 2022 Board of Curators meeting be approved as presented.

Roll call vote:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

OPEN – CONSENT – A-1

Consent B

Recommended Action - Minutes, April 21, 2022 Board of Curators Committee Meetings

It was moved by Curator _____ and seconded by Curator _____, that the minutes of the April 21, 2022 Board of Curators committee meetings, be approved as presented.

Roll call vote:

YES

NO

Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

OPEN – CONSENT – B-1

Consent C

Recommended Action - Minutes, May 17, 2022 Board of Curators Special Meeting and Committee Meetings

It was moved by Curator _____ and seconded by Curator _____, that the minutes of the May 17, 2022 Board of Curators special meeting and committee meetings be approved as presented.

Roll call vote:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

Consent D

Recommended Action – Approval of Degrees, Summer Semester 2022, for all universities

It was recommended by Chancellors, endorsed by President of the University of Missouri Mun Choi, recommended by the Academic, Student Affairs and Research & Economic Development Committee, moved by Curator_____, seconded by Curator _____that the following action be approved:

that the action of the President of the University of Missouri in awarding degrees and certificates to candidates recommended by the various faculties and committees of the four University of Missouri System campuses who fulfill the requirements for such degrees and certificates at the end of the Summer Semester 2022, shall be approved, and that the lists of said students who have been awarded degrees and certificates be included in the records of the meeting.

Roll call vote of Board:

YES

NO

Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion_____.

Amendment, Collected Rule and Regulation 10.050, Standing Committees

Executive Summary

The proposed amendment to Collected Rule and Regulation, 10.050, Standing Committees, would clarify that the Board Chair has the authority to appoint committee members when a new curator(s) takes office or when a vacancy occurs on the Board or a committee prior to the next regular meeting. The Board Chair would have the authority to temporarily appoint the new Curator(s), non-curator member or reassign current Curators to standing committees. Their permanent appointment would be subject to approval of the full Board at the next regular meeting.

June 23, 2022

Consent E

Recommended Action - Amendment, Collected Rule and Regulation 10.050,
Standing Committees

It was recommended by Chair Chatman, moved by Curator _____,
seconded by Curator _____, that the following action be approved:

Collected Rule and Regulation 10.050, Standing Committees be amended as in the
attached document.

Roll call vote Full Board:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

10.050 Standing Committees

Bd. Min. 11-10-67, p. 33,579; Amended 8-6-71, p. 35,988; Amended 5-23-03; Amended 9-9-04; Amended 3-23-06, Amended 7-21-06, Amended 10-6-06, Amended 4-6-07, Amended 6-1-07, Amended 2-6-09, Amended 9-24-10, Amended 5-19-11, Amended 4-15-16, Amended 9-15-16, Amended Bd. Min. 2-1-18; Amended Bd. Min. 2-6-20; Amended Bd. Min. 4-9-2020-; Amended Bd. Min. 6-23-22.

The Chair of the Board of Curators, subject to the approval of the Board, shall appoint the following standing committees: ACADEMIC, STUDENT AFFAIRS, RESEARCH AND ECONOMIC DEVELOPMENT COMMITTEE; AUDIT, COMPLIANCE AND ETHICS COMMITTEE; GOVERNANCE AND COMPENSATION AND HUMAN RESOURCES COMMITTEE; FINANCE COMMITTEE; and HEALTH AFFAIRS COMMITTEE. In the event a new Curator(s) takes office or a vacancy on the Board or any committee occurs prior to the next regular Board meeting, the Board Chair has the authority to temporarily appoint the new Curator(s) ,- non-curator member or reassign current Curators to standing committees. Their permanent appointment shall be subject to the approval of the Board at the next regular Board meeting. The Board Chair shall designate one member of each committee as committee chair. The Chair of the Board shall consider in making such appointment that no committee should be left without continuity. If a committee chair is unavailable for a meeting, they shall have the ability to designate a temporary appointment as committee chair or the Board Chair may designate the temporary appointment if the committee chair is unable to.

- A. Academic, Student Affairs, Research and Economic Development Committee -
The Academic, Student Affairs, Research and Economic Development Committee may have referred to it matters relating to curricula, faculty, students, research and economic development and intercollegiate athletics.
- B. Audit, Compliance and Ethics Committee -
The Audit Committee will assist the Board of Curators in fulfilling its oversight responsibilities relating to: the integrity of the University's financial statements, the systems of internal control, the performance of the University's independent auditors and internal audit function, the independent auditor's qualifications and independence, and the University's compliance with legal and regulatory requirements.
- C. Governance, Compensation and Human Resources Committee -
Governance, Compensation and Human Resources Committee will help the Board function effectively, efficiently and with integrity and may have referred to it matters relating to the compensation, benefits and other human resource functions of the University and associated programs and policies.
- D. Finance Committee - The Finance Committee may have referred to it matters relating to the fiscal, accounting and fundraising functions of the University and associated programs and policies.
- E. Health Affairs Committee - The Health Affairs Committee will assist the Board of Curators in overseeing the clinical health care operations of the University and in coordinating those operations in furtherance of the University's teaching, research, and clinical missions. The Health Affairs

June 23, 2022

Committee shall receive and review regular reports from University of Missouri Health Care ("MU Health Care") and the MU School of Medicine's faculty practice plan ("University Physicians").

F. Duties

1. Each Committee shall receive such other matters as may be referred to it by the Chair of the Board of Curators.
2. Said Committees shall investigate the matters referred to them and make recommendations to the Board.
3. Each of said Committees shall meet as business requires and upon the call of the Chair of the Committee.
4. Each Committee shall review and, if necessary, revise its charter on an annual basis.
5. Committee charters shall be presented to the full Board for approval each year and published on the Board's website.

10.050 Standing Committees

Bd. Min. 11-10-67, p. 33,579; Amended 8-6-71, p. 35,988; Amended 5-23-03; Amended 9-9-04; Amended 3-23-06, Amended 7-21-06, Amended 10-6-06, Amended 4-6-07, Amended 6-1-07, Amended 2-6-09, Amended 9-24-10, Amended 5-19-11, Amended 4-15-16, Amended 9-15-16, Amended Bd. Min. 2-1-18; Amended Bd. Min. 2-6-20; Amended Bd. Min. 4-9-2020; Amended Bd. Min. 6-23-22.

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- C. Governance, Compensation and Human Resources Committee -
Governance, Compensation and Human Resources Committee will help the Board function effectively, efficiently and with integrity and may have referred to it matters relating to the compensation, benefits and other human resource functions of the University and associated programs and policies.
- D. Finance Committee - The Finance Committee may have referred to it matters relating to the fiscal, accounting and fundraising functions of the University and associated programs and policies.
- E. Health Affairs Committee - The Health Affairs Committee will assist the Board of Curators in overseeing the clinical health care operations of the University and in coordinating those operations in furtherance of the University's teaching, research, and clinical missions. The Health Affairs

June 23, 2022

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F. Duties

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2. Said Committees shall investigate the matters referred to them and make recommendations to the Board.
3. Each of said Committees shall meet as business requires and upon the call of the Chair of the Committee.
4. Each Committee shall review and, if necessary, revise its charter on an annual basis.
5. Committee charters shall be presented to the full Board for approval each year and published on the Board's website.

Naming Opportunity
Thompson Center for Autism and Neurodevelopmental Disorders
MU

Pursuant to CRR 110.080, naming of buildings and exterior areas requires Board approval. The University of Missouri – Columbia requests approval to rename the Thompson Center for Autism and Neurodevelopmental Disorders to the Thompson Center for Autism and Neurodevelopment.

The impetus for the change is to better reflect the broad work that occurs at the Thompson Center. It also removes the stigma associated with the word “disorder” to be sensitive to the reactions of patients and other stakeholders. This change also will help emphasize that the center has a broader focus than only autism; it is consistent with the research mission of the center, which should encompass research on broad mechanisms of neurodevelopment and may at times include work on typical development processes.

The initial change was proposed by the Executive Director of the Thompson Center and has the full support of the Thompson Foundation and lead donors. The Thompson Foundation also plans to update its own name in view of the same considerations.

University of Missouri President Mun Choi, Executive Vice Chancellor for Health Affairs Richard Barohn, Vice Chancellor of University Advancement Jacqueline Lewis, and Provost Latha Ramchand are all in support of this naming.

June 23, 2022

No. F

Recommended Action - Naming Opportunity, MU

It was recommended and endorsed by UM System President Mun Y. Choi, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

that the Thompson Center for Autism and Neurodevelopmental Disorders be renamed the Thompson Center for Autism and Neurodevelopment.

Roll call vote Finance Committee	YES	NO
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Curator Hoberock

Curator Graves

Curator Layman

Curator Williams

The motion _____.

Roll call vote:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

June 2022 Security Resolution

The Security Executive Committee, first formed by Curator resolution in 1999, has the authority and responsibility for the negotiation, execution, and administration of Department of Defense (DoD) and its User Agencies classified contracts. To perform their duties, these individuals are required, by the DoD's Defense Counterintelligence and Security Agency (DCSA), to obtain personnel security clearances for access to classified materials to the level of the University's facility security clearance (currently at the TOP SECRET level) and its subsidiary facility security clearances (University of Missouri-Kansas City). To date, there has been only one relatively minor policy decision decided by this committee.

The DoD's Defense Counterintelligence and Security Agency (DCSA) requires that personnel security clearance exemptions be by individual name and not by position. A new resolution is passed whenever there are changes in the personnel requirement clearances for the University of Missouri System's facility security clearance or its subsidiaries. Curators.

June 23, 2022

OPEN – CONSENT – G-1

Consent F

It was endorsed by President Choi, moved by Curator _____ and seconded by Curator _____, that the following resolution be approved:

Resolution

The Curators of the University of Missouri agree that the following individuals occupying the designated offices shall constitute a Security Executive Committee with full authority and responsibility for the negotiation, execution and administration of Department of Defense, or User Agency classified contracts as described in 32 CFR §117, National Industrial Security Program Operating Manual (NISPOM):

The members of this Security Executive Committee have been processed for a personnel security clearance for access to classified information up to the level of the facility security clearance granted to this institution, as provided for under the aforementioned security program.

- Mun Y. Choi, Ph.D., President, University of Missouri System, and Chancellor, University of Missouri-Columbia
- Todd P. Graves, Curator, University of Missouri System
- Latha Ramchand, Ph.D., Provost, University of Missouri-Columbia
- C. Mauli Agrawal, Ph.D., Chancellor, University of Missouri-Kansas City
- Jennifer Lundgren, Ph.D., Provost, University of Missouri-Kansas City
- Mohammad Dehghani, Ph.D., Chancellor, Missouri University of Science and Technology
- Thomas E. Spencer, Ph.D., Vice Chancellor for Research, University of Missouri

The Security Executive Committee is hereby delegated all of the Board's duties and responsibilities pertaining to the protection of classified information under classified contracts of the Department of Defense or User Agencies awarded to the Curators of the University of Missouri.

Furthermore, University of Missouri-Kansas City has established a subsidiary of the University of Missouri System facility security clearance. As such, the following members of the Security Executive Committee are delegated all of the Board's duties and responsibilities pertaining to the protection of classified information under classified contracts of the Department of Defense or User Agencies awarded to the University of Missouri-Kansas City.

- Mun Y. Choi, Ph.D., President, University of Missouri System, and Chancellor, University of Missouri-Columbia.
- C. Mauli Agrawal, Ph.D., Chancellor, University of Missouri-Kansas City.
- Jennifer Lundgren, Ph.D., Provost, University of Missouri-Kansas City.

June 23, 2022

The following officers and members of the University of Missouri Board of Curators shall not be required, shall not have, and can be effectively excluded from access to all classified information in the possession of the Curators of the University of Missouri and its subsidiaries, and do not occupy positions that would enable them to affect adversely the policies and practices of the Curators of the University of Missouri and its subsidiaries in the performance of classified contracts for the Department of Defense or User Agencies awarded to the Curators of the University of Missouri and/or its subsidiaries, and need not be processed for a personnel security clearance:

All members of the Board of Curators, except the designated member of the Security Executive Committee:

- Julia G. Brncic
- Darryl M. Chatman
- Todd P. Graves
- Greg E. Hoberock
- Keith A. Holloway
- Jeffrey L. Layman
- Robin R. Wenneker
- Michael A. Williams

Officers:

- Mark A. Menghini, J.D., General Counsel
- Michelle Piranio, Chief Audit and Compliance Officer
- Ryan Rapp, Executive Vice President, Finance and Operations & Chief Financial Officer
- Marsha Fischer, Vice President, Human Resources and Chief Human Resources Officer
- Beth Chancellor, Vice President, Information Technology
- Kamrhan Farwell, Chief Marketing and Communications Officer
- Kristin Sobolik, Ph.D., Chancellor, University of Missouri-St. Louis
- Steven Berberich, Ph.D., Provost, University of Missouri-St. Louis
- Colin Potts, Ph.D., Provost, Missouri University of Science and Technology

Roll Call Vote:

YES

NO

Curator Brncic
Curator Chatman
Curator Graves
Curator Hoberock
Curator Holloway

June 23, 2022

OPEN – CONSENT – G-3

Curator Layman
Curator Wenneker
Curator Williams

The motion _____.

FINANCE COMMITTEE

Greg E. Hoberock (Chair)

Todd P. Graves

Jeff L. Layman

Michael A. Williams

The Finance Committee ("Committee") oversees the fiscal stability and long-term economic health of the University. The Committee will review and recommend policies to enhance quality and effectiveness of the finance functions of the University.

I. Scope

In carrying out its responsibilities, the Committee monitors the University's financial operations, fundraising performance, debt level, capital priorities and investment performance; requires the maintenance of accurate and complete financial records; and maintains open lines of communication with the Board about the University's financial condition.

II. Executive Liaison

The Vice President for Finance of the University or some other person(s) designated by the President of the University, with the concurrence of the Board Chair and the Committee Chair, shall be the executive liaison to the Committee and responsible for transmitting committee recommendations.

III. Responsibilities

In addition to the overall responsibilities of the Committee described above and in carrying out its responsibilities, the charge of the Committee shall include

- A. Reviewing and making recommendations to the Board on the following matters:
 - 1. University operating budget and financial plan;
 - 2. University capital budget and master facility plans;
 - 3. capital projects;
 - 4. tuition, fees and housing rates;
 - 5. state appropriation requests;
 - 6. pursuant to applicable Collected Rules and Regulations, contracts and reports;
 - 7. insurance brokers and self-insurance programs;
 - 8. pursuant to applicable Collected Rules and Regulations, real estate sales, purchases, leases, easements and right-of-way agreements;
 - 9. the issuance of debt;
 - 10. asset allocation guidelines and other policies related to the University's investment management function; and
 - 11. additional matters customarily addressed by the finance committee of a governing board for an institution of higher education.
- B. Providing governance oversight to:
 - 1. long-range financial planning strategies;
 - 2. fundraising and development strategies;
 - 3. total indebtedness and debt capacity of the University;
 - 4. the investment portfolio performance; and
 - 5. the financial condition of the pension fund.
- C. Reviewing periodic reports including:
 - 1. quarterly and year-end financial reports that measure the University's fiscal condition;

2. annual purchasing reports on bids and equipment leases;
3. quarterly debt-management reports;
4. quarterly and year-end investment performance reports;
5. semi-annual reports on development and fundraising activities; and
6. other financial reports as requested by the Committee.

Fiscal Year 2023 Operating Budget UM

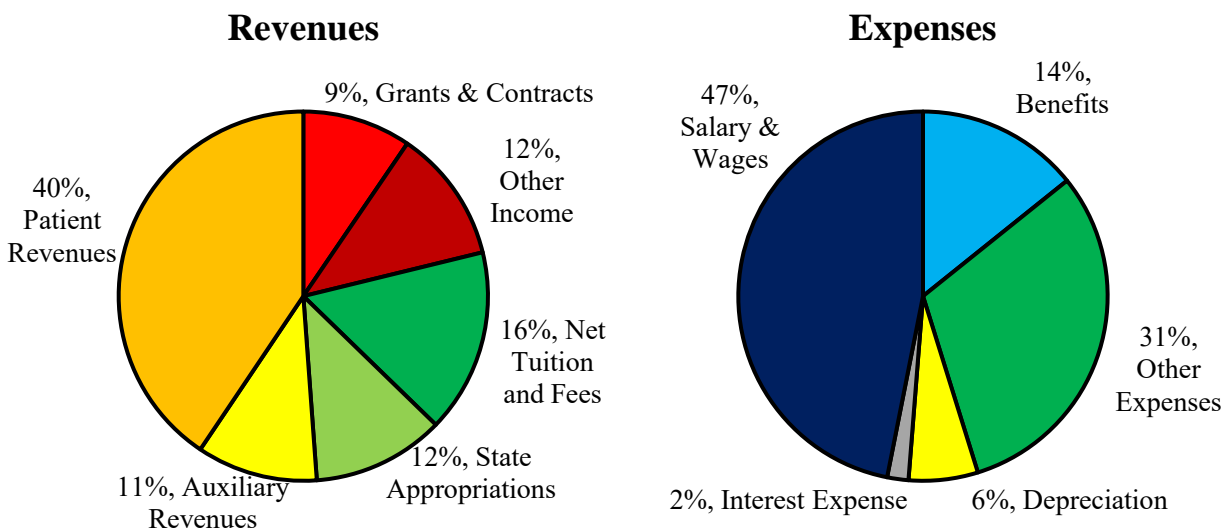
At the June 23, 2022, Board of Curators Meeting, Executive Vice President for Finance and Operations Ryan Rapp will present the FY 2023 budget. The FY 2023 budget reflects the culmination of planning efforts undertaken by each institution throughout the spring. The FY 2023 budget represents a return to normal operations in the wake of the pandemic, with all operating federal stimulus funding now expired.

The FY 2023 all funds revenue budget is \$3.9 billion. The following table shows the FY 2023 revenue budget by revenue source (\$'s presented in millions).

FY 2023 Revenue Budget	MU	MU Healthcare	UMKC	MO S&T	UMSL	UM System	University Wide Units	Total
Net Tuition and Fees	\$ 282.7	\$ -	\$ 143.5	\$ 54.7	\$ 72.9	\$ (0.0)	\$ -	\$ 553.8
Federal Pell Grants	24.7	-	12.6	6.3	13.5	-	-	57.1
Government Scholarships	17.0	-	4.0	5.0	3.7	-	-	29.7
State Appropriations	244.5	-	82.3	55.9	63.1	-	9.5	455.2
CARES Funding	-	-	-	-	-	-	-	-
Grants & Contracts	279.8	0.0	66.1	41.6	32.7	-	-	420.2
Auxiliary Revenues	313.6	22.9	43.1	22.9	15.2	22.9	-	440.6
Patient Revenues	294.1	1,350.8	40.5	-	0.1	-	-	1,685.5
Private Gift Revenues	38.0	0.7	11.3	22.4	11.9	0.1	-	84.4
Endowment & Investment	78.4	-	16.5	11.7	8.4	7.0	(9.5)	112.5
Other Income	55.0	-	20.5	2.1	2.2	4.1	9.5	93.5
Total Revenue	\$ 1,627.7	\$ 1,374.5	\$ 440.6	\$ 222.6	\$ 223.6	\$ 33.9	\$ 9.6	\$ 3,932.5

FY 2023 All Funds Budget

The pie chart on the left indicates major sources of revenues for the University of Missouri. The unrestricted portion of the academic enterprise represents 39% of available funds consisting of auxiliaries, tuition, and state support. Healthcare continues to grow and represents another 40% of revenues. The remaining 21% is spread largely across restricted sources, such as gifts, endowment distributions and grants. The Expenses chart shows 61% of the total budget is spent for compensation, 6% for depreciation, and 33% of all other types of expenditures. Compensation remains the largest expense for the University.



The FY 2023 budgets reflect a return to more normal operations but in the face of inflationary pressure. Expenses for the FY 2023 budget process will experience pressure if inflation remains in the 8% range instead of the 5% range that was more in line with trends when budget planning started in the early winter. The state budget continues to perform well on tax collections, but cost pressures will impact state programs as well and have the potential to adversely affect higher education. These inflationary forces will be an ongoing challenge, and the Universities will have to find both cost efficiencies and ways to increase prices in line with inflation to continue to support the mission and strategic investments. The recent underperformance of healthcare operations relative to expectations presents a risk for consolidated operating performance on a forward basis. Healthcare operations represent a large share of operating revenues and capital investment for the institution. The FY 2023 budget reflects a recovery in healthcare performance due to cost actions and growth initiatives.

Next Steps

After the FY 2023 budget process, each university will spend the fall updating their 2023 financial plans and financial performance targets to be presented at the February Board of Curators Meeting. The financial plan serves as the link between the strategic plan, capital plan, and operating budget and serves as the basis for setting financial performance targets as codified in Collected Rule 140.025. A key focus for the financial planning process next fall will be specifically identifying the match components and underwriting the significant

capital investments made by the state and the federal government over the last appropriation cycle.

Each University will continue transition work on the new tuition models approved by the Board at the Special May Meeting. Over the course of the next year, each University will provide an informational update on their tuition model transition. The Board will be presented the rates within the new model and any inflationary increases in the Spring of 2023 for approval.

Attached is the recommended action followed by supporting narrative and FY 2023 summary budgets by fund group by university.

No. 1

Recommended Action - UM Fiscal Year 2023 Operating Budget, UM

It was recommended by the respective Chancellors, endorsed by President Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following recommendations be approved:

- that the President of the University System be authorized to develop the FY 2023 budgets in accordance with the attached planning assumptions and financial summaries, which include the allocation of FY 2023 state appropriations less 3.0% statutory withholdings.
- that the President of the University System be authorized to: (a) make required changes to working capital and reserve funds and (b) make supplemental allocations within the funds available to several campuses and programs, such allocations to be made on the basis of priority and need. The President will report periodically to the Board of Curators any material changes in sources and uses of current funds;
- that the operating budget for FY 2023 and allocation as stated herein can be modified as necessary by the President to bring the same into harmony with the state appropriations as finally approved by the governor and any withholdings in excess of those shown above.

Roll call vote Finance Committee: YES NO

Curator Graves
Curator Hoberock
Curator Layman
Curator Williams

The motion _____.

Roll call vote: YES NO

Curator Brncic
Curator Chatman
Curator Graves
Curator Hoberock
Curator Holloway
Curator Layman
Curator Wenneker
Curator Williams

The motion _____

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The Purpose of a University's Budget

The Board approves the annual budget, monitors the university's financial condition, and sets policy guidelines affecting the use of assets. Leadership prepares the operating budget, provides the Board with quarterly updates on financial performance against the approved budget, and operates the institution within the Board's defined policy framework. A key component of the financial health of any institution is the commitment of the institution's leadership to sound fiscal management and the Board holding leadership accountable for maintaining the institution's financial health. The Board approved budget serves as the guide for the year, as the assumptions underlying the budget may change throughout the year causing management to adjust to maintain the financial health of the institution.

The key metric on each University's Statement of Revenues, Expenditures, and Changes in Net Position is the "operating margin" on line 23. The operating margin reflects management's ability to balance operating expenses within revenues each year. A positive operating margin indicates available revenues exceed annual operating expenses.

FY 2023 Planning Process

The FY 2023 planning process started in the fall with each institution developing a five-year financial plan to align long-term financial priorities with each unit's strategy. The financial plan served as the starting place for the FY 2023 budget, which represents the more detailed annual resource allocation process.

The financial planning process identified key themes necessary to underwrite the future success of the Universities. The financial plans were built on improving revenue growth prospects and controlling costs over the coming five years. A key focus for the universities is continuing the growth trajectory in research demonstrated over the past three years. Other key themes in the plan include:

1. Sustained revenue growth in tuition and state support is necessary to underwrite quality improvements at each institution. These resources need to keep up with inflation. At Universities looking to improve quality and research rankings, these revenue streams will need to grow slightly above inflation when adding both state support and tuition together to generate funds for investment.
2. Enrollment declines have affected the available revenue streams for the institutions, as net tuition now supports half of unrestricted academic operations. Getting the enrollment size right is a key factor in generating revenues in the financial plan and operating budget.
3. Capital plans for each institution included significant extramural funding sources, and the federal stimulus package and current state budget surpluses lead to the appropriation of significant funding from these extramural sources. Some of this funding requires a matching component, and each institution is in a different place in its ability to generate the funding to meet the match component within its current financial resources.
4. Academic operations have balance sheet capacity after FY 2021. The key struggle for each university will be generating revenue growth and improving operating performance over the next five years. MU Healthcare has a history of strong operating performance

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and revenue growth. The key limiting factor for healthcare will be setting priorities on balance sheet capacity and the ability to invest in capital and new initiatives. Significant underperformance on healthcare operating margin poses a financial risk for the institution.

5. The financial plans approved by the Board in February were built on a sustained inflation rate of 2% over the five-year period. When the plans were started in August, inflation rates were closer to 5% and considered more transitory, leading the finance team to assume a consistent low inflation environment for the financial plans. With recent inflation readings coming in at 7-8% and the possibility that inflation will remain more permanent, cost pressures are likely to continue through FY 2023. Sustained inflation will continue to put pressures on operating margins and will require the University to continue to find operating efficiencies. If inflation remains high, the University will need to increase prices at higher rates than the recent past unless state appropriations begin to outpace inflation.

The financial planning process set units' performance targets for the upcoming five-year period. For FY 2023, each university and MU Healthcare was expected to submit a budget with operating performance in line with performance submitted as a part of the financial planning process.

Table 1: Operating Margin by Unit

	UM	MU	UMKC	Missouri S&T	UMSL	MU Healthcare
Target	>2.5%	>2.0%	>1.0%	>2.0%	>1.0%	>7.0%
2022 Financial Plan	3.2%	1.6%	1.4%	1.6%	0.4%	6.6%
FY 2023 Budget	2.7%	1.0%	2.1%	1.8%	0.0%	5.0%

FY 2023 University of Missouri Budget

The FY 2023 budget plans reflect a return to normal operations with the end of temporary stimulus support measures enacted during the pandemic. For the second straight year, the University's FY 2023 operating budget reflects growth in net tuition and fees, state appropriations, and grants and contracts. The FY 2023 budgeting process was not without challenges and prioritization, as operating revenue growth of 3.1% falls well below published inflation of 8.3%.

Each University's budget reflects their specific circumstances. The FY 2023 budget is the more detailed implementation of each University's financial plan that was approved by the Board at the February Meeting. As a planning target, each University was required to submit a budget in line with the performance reflected in the financial plans approved in February. Financial performance targets represent required performance over a period of time, and all financial plans met the financial performance targets over the duration of the plan. The consolidated performance for the enterprise exceeds the target. The University set the consolidated operating margin target to maintain the financial profile of the University. For unit level targets the University first set the goal of maintaining the financial profile of the University but then considered differences in business environments, peer comparisons, and necessary strategic investments. Capital investments drove the need for a higher operating

margin at MU and MU Healthcare through the planning process. This results in the sum of individual unit targets operating margin exceeding the consolidated target for credit purposes, as units' future capital plans drove the need for higher operating margins to finance capital plans.

Budgeted revenue numbers reflect the best available information at the time of the budget, which is finalized in mid-May. Each institution's operating budget reflects stable enrollment or slight growth over the prior year. Universities will adjust operating expenditures as they monitor final enrollments and other key revenue drivers.

The performance of MU Health Care remains a critical component for the enterprise on a forward basis. The FY 2023 budget for MU Healthcare reflects improvement upon performance to close FY 2022. While the healthcare industry has been struggling with staffing and cost as the pandemic winds down, MU Healthcare has a significant capital investment plan requiring solid operating performance to underwrite the investment. The successful development and execution of a financial improvement plan for MU Healthcare is critical over the next several years.

The summaries that follow show both the revenue and expense plans for each university and the consolidated system. Financial results will be presented using the Moody's framework, in three columns:

- FY 2021 Actuals: actual performance for FY 2021.
- FY 2022 Projected: projected performance for FY 2022, which includes performance through April with a projection for the final two months to close.
- FY 2023 Budget: budgets completed for FY 2023.

Consolidated Summary

Schedule 1: University of Missouri System FY 2023 Budget (Dollars in Thousands) Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP – Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ 883,315	\$ 928,151	\$ 980,828	6%
2	Less Scholarship Allowances	374,650	411,935	427,050	4%
3	Net Tuition and Fees	508,665	516,216	553,778	7%
4	Federal Pell Grants	55,538	52,470	57,100	9%
5	Government Scholarship Funding	28,320	31,600	29,670	-6%
6	Institutional CARES Act Funding	116,872	50,012	-	-100%
7	Grants and Contracts	343,588	405,448	420,245	4%
8	Auxiliary Enterprises	411,511	410,753	440,562	7%
9	Patient Medical Services, Net	1,482,415	1,601,456	1,685,464	5%
10	Other Operating Revenues	61,238	56,260	65,226	16%
11	State Appropriations	419,691	424,953	455,235	7%
12	Federal Appropriations	27,964	28,409	28,320	0%
13	Private Gifts	83,933	74,335	84,375	14%
14	Spendable Investment Income	117,716	158,980	112,502	-29%
15	Total Operating Revenues	3,657,451	3,810,892	3,932,477	3%
Operating Expenses					
16	Salaries and Wages	1,565,021	1,697,088	1,800,019	6%
17	Benefits	471,475	483,006	546,194	13%
18	Supplies, Services and Other Operating Expenses	1,009,810	1,178,310	1,178,436	0%
19	Depreciation	214,253	231,526	231,891	0%
20	Interest Expense	68,972	72,894	71,167	-2%
21	Total Operating Expenses	3,329,531	3,662,824	3,827,707	5%
22	Net Operating Income	327,920	148,067	104,770	-29%
23	Net Operating Margin	9.0%	3.9%	2.7%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	764,308	186,967	214,075	14%
25	Spendable Investment Income	(117,716)	(158,980)	(112,502)	-29%
26	Other Nonoperating Revenues (Expenses)	25,975	2,469	568	-77%
27	State Capital Appropriations	-	3,202	22,000	587%
28	Capital Gifts and Grants	67,824	36,105	140,865	290%
29	Private Gifts for Endowment Purposes	61,030	49,840	35,230	-29%
30	Pension and OPEB Impact on Income Statement	115,006	55,658	71,845	29%
31	Mandatory Transfers	-	-	-	0%
32	Non-Mandatory Transfers	-	-	(183)	-100%
33	Net Nonoperating Revenues (Expenses)	916,427	175,261	371,898	112%
34	Increase in Net Position	1,244,347	323,329	476,668	
35	Net Position, Beginning of Year	4,852,418	6,096,765	6,420,093	
36	Cumulative Effect of Change in Accounting Principle	-	-	-	
37	Net Position, Beginning of Year, Adjusted	4,852,418	6,096,765	6,420,093	
38	Net Position, End of Period	\$ 6,096,765	\$ 6,420,093	\$ 6,896,761	

Note: Line 14 presents investment income based upon the University's investment spending distribution policies. Previously, this line was presented using the Moody's assumption for spendable investment income. The University's spending distribution policies are less than Moody's, and this is reflected in the lower consolidated operating margin target of 2.5% versus the previous 5.0%.

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The University's budget includes a revenue increase of 7.5% over FY 2021 and 3.1% over FY 2022:

- Net Tuition Revenues are projected to grow by 6.7% or \$40 million year over year. Budgeted amounts include the tuition rate increases approved by the Board in May 2022. Enrollments are budgeted to remain stable or increase slightly depending on the university. In addition, Federal Pell Grants (line 4) and Government Scholarship Funding (line 5) represent amounts provided to the University as additional aid to students. The long-term success of the academic enterprise is dependent on successful growth of these revenue streams. Increases in price ranged from 4.5% to 5.0%, while inflation as of April was over 8%. Additional discussion is provided in the appendix for each institution.
- Grants and Contracts are projected to grow by 3.6% or \$14.8 million year over year. MU continues to grow research grants and contracts with the Mizzou Forward initiative and investments in new faculty to grow research revenues. For FY 2022, MU is projected to grow research revenues by 14.4%. UMKC has also experienced significant growth in research grants and contracts.
- Auxiliary Enterprises are projected to grow by 5.6% or \$16.6 million over the prior year. Auxiliary enterprises are a diverse group of service units that offer goods and services to the University community that help maintain a fully functional research university, but don't contribute directly to the institution's core mission. It is expected those units operate sustainably, examples of auxiliary operations include student housing, student dining, athletics and bookstores. The growth in revenues reflect inflationary price increases and a full year of operations without pandemic restrictions.
- CARES Act Funding as presented on line 6 of the income statement represents federal stimulus funding awarded which allowed the University to recover increased expenses related to reopening the universities, supported infrastructure for remote learning, and recovered lost revenues stemming from the pandemic. The FY 2023 budget reflects no further stimulus, as the pandemic related stimulus measures to fund operations expired.
- State Appropriations are budgeted at the amount Truly Agreed and Finally Passed (TAFP) by the legislature for the 2021 legislative session. Appropriations for capital projects (HB19) are reported as "State Capital Appropriations" on line 27. The core increase of 5.4% was the largest in the last two decades.
- Spendable Investment Income reflects the earnings from investments that can be utilized towards current operating purposes. This amount includes the spending distribution from endowments, interest on cash balances from the general pool, and the strategic dividend from the general pool. The decline from FY 2022 to FY 2023 is driven by lower investment performance in the general pool on rising interest rates, leading to a smaller estimated dividend in the FY 2023 budget. Spendable investment income has been updated to reflect the University's actual spending distribution policies rather than utilizing the Moody's investment income adjustment. This change reflects actual university policy.
- Details on the remaining revenues can be found for each university in the appendix.

The University's operating expenses are projected to increase over FY 2021 by 14.9% and grow over the projection for FY 2022 by 4.5%:

- Salaries and Wages are projected to grow by \$102.9 million or 6.1%. The increased budget for salaries and wages largely reflects the impact of a 4 or 5 percent market and merit pool across the different business units. New investments in people have largely been funded through efficiency measures within individual units to prioritize resources towards each unit's strategic priorities.
- Benefits are projected to grow in line with the growth in Salaries and Wages. Benefits budgets will remain stable as a share of payroll with the changes enacted by the Board to the pension plan at the April Board of Curators meeting. The University's employer share medical costs remain flat emerging from the pandemic, and the budget reflects the continuation of this trend for another year.
- Supplies, Services and Other Operating Expenses are projected to be flat over prior year's growth. A significant amount of the increase from FY 2021 to FY 2022 was driven by the resumption of normal operations and the repopulation of campuses. The increase from FY 2022 to FY 2023 is largely driven by inflationary pressures on the acquisition of goods and services, with some efficiency built in. Supplies, Services and Other expense also includes other one-time expenses from the pandemic such as quarantine space leases and contract labor that is expected to drop in FY 2023.
- Depreciation and Interest expenses grow in line with the capital investments and completions of projected capital projects.

Detailed statements of Revenues, Expenses, and Changes in Net Position are provided with explanations in Appendix 1 for each operating unit.

Next Steps: Financial Plans and New Tuition Models

After the FY 2022 budget process, the University will spend the fall completing the five-year financial plans for each university and the health system. Financial plans for FY 2023 will focus on underwriting the specific sources of matching and specific capital projects to be used for the most recent state and federal capital appropriations. For universities with lower reserve levels and high matching requirements, operating margin performance above target or increased philanthropy may be necessary to fully leverage identified capital dollars.

Throughout the next year, each university will also work with their constituents to develop transition plans for the new proposed tuition models. Each University will provide a summary of the specifics of their model during the upcoming Board meeting located at their university. Final versions of the new tuition models will be presented to the Board of Curators in the Spring of 2023 for approval. The first semester of implementation for the new models will be Fall 2023.

APPENDIX 1: BUDGET DETAILS BY UNIT

The details that follow show the breakout of the consolidated budget by operating unit. The key drivers of consolidated performance remain MU and MU Healthcare, which in total encompass three quarters of the University's operating expenditures.

MU

MU launched Mizzou Forward with the goal of enhancing the university's research and education missions. Mizzou Forward will provide investments to achieve excellence as a public research, AAU institution guided by accountability and ambition. To achieve excellence, the following investments are included in the FY 2023 budget:

- Funding for additional faculty hires for the Mizzou Forward Initiative and promotions and raises for existing excellent faculty.
- Investments in infrastructure in both the Provost's Office and Office of Research to support academic growth.
- Capital investments in the Indoor Practice Facility, Veterinary Medicine Diagnostic Lab, Research Reactor, NextGen Precision Health, and the School of Nursing.

Schedule 2: MU FY 2022 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP - Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ 449,414	\$ 493,400	\$ 519,067	5%
2	Less Scholarship Allowances	200,455	226,152	236,360	5%
3	Net Tuition and Fees	248,959	267,248	282,707	6%
4	Federal Pell Grants	23,794	24,677	24,700	0%
5	Government Scholarship Funding	15,963	17,415	17,000	-2%
6	Institutional CARES Act Funding	57,044	21,600	-	-100%
7	Grants and Contracts	230,748	264,000	279,840	6%
8	Auxiliary Enterprises	296,614	297,000	313,616	6%
9	Patient Medical Services, Net	269,641	280,423	294,105	5%
10	Other Operating Revenues	32,254	30,763	36,359	18%
11	State Appropriations	219,719	225,461	244,462	8%
12	Federal Appropriations	18,075	18,542	18,555	0%
13	Private Gifts	37,238	38,000	38,000	0%
14	Spendable Investment Income	72,936	109,966	78,386	-29%
15	Total Operating Revenues	1,522,985	1,595,095	1,627,730	2%
Operating Expenses					
16	Salaries and Wages	801,930	850,466	908,186	7%
17	Benefits	232,867	241,472	266,967	11%
18	Supplies, Services and Other Operating Expenses	252,351	306,807	301,937	-2%
19	Depreciation	93,077	102,212	102,000	0%
20	Interest Expense	36,687	34,562	32,616	-6%
21	Total Operating Expenses	1,416,912	1,535,519	1,611,706	5%
22	Net Operating Income	106,073	59,575	16,024	-73%
23	Net Operating Margin	7.0%	3.7%	1.0%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	313,566	106,260	137,946	30%
25	Spendable Investment Income	(72,936)	(109,966)	(78,386)	-29%
26	Other Nonoperating Revenues (Expenses)	2,273	506	510	1%
27	State Capital Appropriations	-	500	15,500	3000%
28	Capital Gifts and Grants	28,941	16,216	27,788	71%
29	Private Gifts for Endowment Purposes	43,072	40,450	30,264	-25%
30	Mandatory Transfers	85	-	-	0%
31	Non-Mandatory Transfers	16,402	23,695	35,518	50%
32	Net Nonoperating Revenues (Expenses)	331,402	77,661	169,140	35%
33	Increase in Net Position	437,475	137,237	185,164	
34	Net Position, Beginning of Year	2,970,602	3,408,077	3,545,314	
35	Cumulative Effect of Change in Accounting Principle	-	-	-	
36	Net Position, Beginning of Year, Adjusted	2,970,602	3,408,077	3,545,314	
37	Net Position, End of Period	\$ 3,408,077	\$ 3,545,314	\$ 3,730,478	

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MU's FY 2023 budget reflects a 1.0% operating margin. Key drivers for revenue growth include tuition revenues and grants and contracts. Key drivers of expense growth include investments to improve the faculty and production of research, both key factors in academic excellence.

Operating Revenues:

The biggest driver of the University's overall revenues related to the academic enterprise is enrollment which drives both teaching revenues and the majority of auxiliary enterprises. Lines 1-5 of from Schedule 2 above are summarized in Schedule 3 below with the key drivers. Other key areas of revenue for MU include:

- Grants and Contracts are projected to increase by 6% over the prior year. MU is committed to improving research competitiveness and is projecting a 14% growth in grants and contract revenue from FY 2021 to FY 2022. The budgeted revenue growth aligns with trends in proposals and awards due to Mizzou Forward initiatives.
- Auxiliary Enterprises revenue is projected to increase by \$16.6 million over FY 2022 representing 5.6% growth. The growth in revenue is driven by inflationary price increases for auxiliary operations.
- Net Patient Medical Service revenues are projected to increase by 4.9% over FY 2022. The growth in revenues aligns with MU Healthcare's budgeted revenue growth of 5.4%. The revenues from University Physicians fund the clinical compensation for Medical School faculty appointments.
- State Appropriations are projected to increase by \$19 million over FY 2022. This increase represents the 5.4% core increase proposed by the governor and approved by the legislature during the 2022 legislative session. The increase also includes the \$5 million in additional one-time funding for agriculture extension service. The remaining increase is attributed to additional line items and program support approved by the legislature during the 2022 legislative session.

Schedule 3: MU Net Tuition Revenue Detail

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Enrollment - Full-time Equivalent			
Undergraduate			
<i>Resident</i>	17,038	17,144	17,380
<i>Non-Resident</i>	4,260	4,557	4,505
Total Undergraduate	21,298	21,702	21,885
Graduate/Professional	4,972	4,921	5,160
Gross Tuition and Fees \$'s in thousands			
Undergraduate Tuition			
<i>Resident</i>	\$ 160,683	\$ 170,943	\$ 181,162
<i>Non-Resident</i>	101,608	115,559	119,956
Total Undergraduate Tuition	262,291	286,502	301,118
Graduate/Professional Tuition	80,292	84,742	94,370
Undergraduate Supplemental Fees	44,938	54,695	59,174
Graduate/Professional Supplemental Fees	6,899	7,827	7,881
Activity and Facility Fees	17,856	19,551	20,841
Continuing Education Fees	33,242	36,473	31,893
Other Educational Fees	3,896	3,610	3,790
Total Tuition and Fees (Line 1)	\$ 449,414	\$ 493,400	\$ 519,067
Aid Awarded by Institution \$'s in thousands			
Unrestricted			
<i>Undergraduate</i>	\$ (99,563)	\$ (114,835)	\$ (119,487)
<i>Graduate/Professional</i>	(32,639)	(32,592)	(29,656)
<i>Miscellaneous Aid</i>	(3,278)	(3,875)	(3,853)
Total Unrestricted Aid	(135,480)	(151,302)	(152,996)
Restricted Donor Aid			
<i>Undergraduate</i>	(12,565)	(13,126)	(15,742)
<i>Graduate/Professional</i>	(2,898)	(4,776)	(5,466)
Total Restricted Donor Aid	(15,463)	(17,902)	(21,208)
Restricted Non-Gift Aid/Waivers	(9,754)	(14,856)	(20,456)
Federal Pell Grant Aid	(23,794)	(24,677)	(24,700)
Government Scholarships	(15,963)	(17,415)	(17,000)
Total Scholarship Allowances (Line 2)	\$ (200,455)	\$ (226,152)	\$ (236,360)
Net Tuition and Fees (Line 3)	\$ 248,959	\$ 267,248	\$ 282,707
Federal Pell Grants (Line 4)	\$ 23,794	\$ 24,677	\$ 24,700
Government Scholarship Funding (Line 5)	\$ 15,963	\$ 17,415	\$ 17,000

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- The enrollment numbers presented in the Schedule 3 represent projected fall census. MU is budgeting a fall undergraduate enrollment increase of 1% over prior year which remains in line with current new and existing enrollment trends. MU continues to see growth in graduate and professional degree programs.
- The gross tuition and fee budgeted amounts include rate increases approved by the Board in May 2022.
- Institutional aid is budgeted to remain flat over FY 2022 projection reflecting the shape of the current class in relation to the University's scholarship programs. Increases in donor aid reflect programming to improve the University's use of donor funded scholarships.

Operating Expenses

Overall, MU's operating expenses are projected to increase by 5%. Schedule 4 and 5 provides additional detail changes in Salaries and Wages and Supplies, Services and Other for the FY 2023 budget.

Schedule 4: MU Salaries and Wages Detail (Dollars in Thousands)

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Salaries and Wages			
<i>Teaching and Research</i>			
Unrestricted	\$338,633	\$ 357,196	\$380,880
Restricted (Gifts & Grants)	77,423	85,047	90,150
Total Teaching and Research Salaries	416,056	442,243	471,030
<i>Staff and Supporting Services</i>			
Operations and Service Operations	167,647	176,093	188,066
Auxiliary Enterprises	86,099	97,561	106,731
Patient Services	87,645	92,047	97,284
Restricted (Gifts & Grants)	44,483	42,522	45,075
Total Staff and Supporting Services Salaries	385,874	408,223	437,156
Total Salaries and Wages (Line 16)	\$801,930	\$ 850,466	\$908,186
Benefits (Line 17)	\$232,867	\$ 241,472	\$266,967

Salaries and Wages

- All wages for FY 2023 budget include the effect of a 5% performance-based merit and market raise pool.
- *Teaching and Research (Unrestricted)* represent faculty and teaching salaries funded from tuition and state appropriations and are budgeted to increase by \$23.7 million or 6.6% from FY 2022. The budgeted increase represents performance-based merit and market increases and new Mizzou Forward faculty hires.
- *Teaching and Research (Restricted)* represent faculty and researcher salaries funded from grants and gifts. Spending on these salaries is contingent upon available revenues and is anticipated to increase by 6% or \$5.1 million from FY 2022 projection.

- *Operations and Service Operations* are budgeted to increase from FY 2022 projection by \$12 million or 6.8%. \$8.8 million of the increase reflects of the 5% raise pool. The remaining increase represents staff support for Mizzou Forward initiatives.
- *Auxiliary Enterprises* wages are budgeted to increase by \$9.1 million over the prior year. The budget for FY 2023 addresses market compensation pressure and vacant positions needed to support revenue growth.
- *Patient Services* staff wages are budgeted to increase by \$5.2 million correlating with the growth in anticipated volumes.
- *Staff (Restricted)* funded from grants and gifts are anticipated to increase by \$2.5 million. This compensation and workforce size are dependent on the availability of the related revenues to fund research.

Schedule 5: MU Supplies, Services and Other Operating Expenses Detail (Dollars in Thousands)

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Supplies, Services and Other Operating Expenses			
Operations and Service Operations	\$ 58,528	\$ 85,170	\$ 81,101
Auxiliary Enterprises	110,348	131,927	136,710
Patient Services	(11,460)	(27,742)	(35,044)
Restricted (Gifts & Grants)	74,382	88,942	94,904
Plant	20,553	28,510	24,266
Total Supplies, Services and Other Operating Expenses (Line 18)	\$ 252,351	\$ 306,807	\$ 301,937

Supplies, Services and Other Operating Expenses

- *Operations and Service Operations* expenditures are budgeted to decrease \$4.1 million over FY 2022 projection. Nonrecurring non-capital investments in classroom facilities are included in the FY 2022 projections and will not be continued in FY 2023. The increase from FY 2021 to FY 2022 represents the resumption of on-campus activities and travel during FY 2022.
- *Auxiliary Enterprises* expenditures are budgeted to increase by \$4.8 million over FY 2022 projection. This budgeted amount reflects the projected inflationary cost increases in supplies and other for auxiliary operations.
- *Patient Services* expenditures are presented as a negative expense as a charge to the Hospital for clinical services provided by University Physicians, including anesthesia coverage, call coverage, and other purchased services common in healthcare operations. The larger negative represents a larger charge to the hospital for physician services, which have increased because of the pandemic.
- *Restricted* expenditures funded from grants and gifts are anticipated to increase \$5.9 million from FY 2022 projection, this increase correlates with the budgeted revenue growth in grants and contracts. These expenditures relate to the specific supplies and services needed by individual gift or grant agreements.
- *Plant* expenditures are projected to decrease by \$4.2 million over the prior year. The decrease reflects less maintenance spending on buildings as capital investment ramps up.

Capital investments over \$5 million included in MU's budget are as follows:

- *Athletics Indoor Practice Facility* budgeted project spend of \$15 million in FY 2023 funded by gifts.
- *School of Nursing Building* is anticipated to open in FY 2023, total budget project spend is \$6 million funded by gifts and capital reserves.
- Expansion of *MU Research Reactor* will be supported by capital reserves and America Rescue Plan Act funds from the State. The FY 2023 budget includes investments totaling \$4 million for this project.
- *NextGen Precision Health Building - 4th Floor Fit Out* will be supported by capital reserves and governmental appropriations. The FY 2023 budget includes investments totaling \$5 million for this project.
- *Vet Med Diagnostics Lab* will be supported by governmental appropriations and gifts. Total project cost included in FY 2023 is \$29 million.
- *Small Animal Vivarium Facility Expansion and School of Medicine Building Renovations* is anticipated to have \$10M in spending for FY 2023. The project sources include capital reserves and governmental appropriations.

UMKC

UMKC Forward's overall objective is to provide students with the best educational experience and faculty and staff with the best resources and support to continue world-class work. Academic realignment was a necessary process to fund this initiative and reallocate resources to provide financial stability to UMKC. Through the academic review process eleven schools/colleges will be scaled down to ten and several programs will be discontinued due to the lack of demand and affordability.

Investments in student success included in the FY 2023 budget are as follows:

- *Student Support Services* include expansion of counseling services, additional hires for academic recruiters, additional staffing to support KC Scholars program, and mentoring program for first generation students (First Gen Roo).
- *Professional Mobility Escalators* - a unique system of personalized support and services which will propel students from their academic studies to higher-paying careers. This system is intended to improve retention, graduation, and post-graduation outcomes for UMKC's students. MOExcels funding was awarded to UMKC in FY 2023 to support this initiative.
- *Scholarship Support* includes expanding the UMKC Advantage Grant to cover all student activity and course fees, in addition to tuition. Additional scholarships and stipends are included in the budget to retain and recruit top performing students.

UMKC Forward Faculty and Research Excellence, Career Expansion and Community Engagement investments include:

- *Center for Advancing Faculty Excellence (CAFE)* - which will feature a comprehensive program of mentoring, development opportunities and resources to support, attract and retain high quality and engaged faculty.
- Investments in increasing and improving research infrastructure.

Schedule 6: UMKC FY 2022 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP – Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ 195,267	\$205,251	\$ 220,014	7%
2	Less Scholarship Allowances	61,676	73,000	76,485	5%
3	Net Tuition and Fees	133,591	132,251	143,529	9%
4	Federal Pell Grants	12,996	12,000	12,600	5%
5	Government Scholarship Funding	3,917	4,655	4,000	-14%
6	Institutional CARES Act Funding	24,299	10,577	-	-100%
7	Grants and Contracts	48,278	63,423	66,117	4%
8	Auxiliary Enterprises	33,664	36,000	43,113	20%
9	Patient Medical Services, Net	38,261	39,000	40,511	4%
10	Other Operating Revenues	16,567	17,300	20,619	19%
11	State Appropriations	74,060	77,992	82,301	6%
12	Federal Appropriations	-	-	-	0%
13	Private Gifts	27,074	15,000	11,274	-25%
14	Spendable Investment Income	13,165	19,237	16,508	-14%
15	Total Operating Revenues	425,872	427,435	440,572	3%
Operating Expenses					
16	Salaries and Wages	187,092	201,136	211,021	5%
17	Benefits	57,400	61,027	65,549	7%
18	Supplies, Services and Other Operating Expenses	81,344	116,000	124,090	7%
19	Depreciation	23,887	25,900	23,462	-9%
20	Interest Expense	7,616	7,500	7,100	-5%
21	Total Operating Expenses	357,339	411,563	431,222	5%
22	Net Operating Income	68,533	15,872	9,350	-41%
23	Net Operating Margin	16.1%	3.7%	2.1%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	53,705	22,468	25,062	12%
25	Spendable Investment Income	(13,165)	(19,237)	(16,508)	-14%
26	Other Nonoperating Revenues (Expenses)	2,179	-	-	0%
27	State Capital Appropriations	-	2,702	1,500	-44%
28	Capital Gifts and Grants	18,191	11,200	46,500	315%
29	Private Gifts for Endowment Purposes	441	2,100	900	-57%
30	Mandatory Transfers	25	-	-	0%
31	Non-Mandatory Transfers	1,542	600	1,085	81%
32	Net Nonoperating Revenues (Expenses)	62,918	19,833	58,539	90%
33	Increase in Net Position	131,451	35,705	67,889	
34	Net Position, Beginning of Year	501,858	633,309	669,014	
35	Cumulative Effect of Change in Accounting Principle	-	-	-	
36	Net Position, Beginning of Year, Adjusted	501,858	633,309	669,014	
37	Net Position, End of Period	\$ 633,309	\$ 669,014	\$ 736,903	

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Overall, UMKC's operating margin is \$9.3 million, or 2.1%. UMKC's margin is above target of 1% and includes \$10 million of strategic investments for UMKC Forward.

Operating Revenues:

Enrollment is the primary driver of both teaching revenues and most auxiliary enterprises. Lines 1-5 of from Schedule 6 above are summarized in Schedule 7 below with the key drivers. Other key areas of revenue for UMKC include:

- Grants and Contracts are projected to increase by \$2.6 million over the prior year. UMKC experienced growth in grants and contracts during FY 2022 and is committed to continuing to improve research competitiveness.
- Auxiliary Enterprises revenues are budgeted to increase by \$7.1 million over FY 2022 projection. The bookstores, housing, dining, and other auxiliaries have experienced shortfalls in revenue during the pandemic. Budgeted revenue reflects pre-pandemic revenues. The \$7.1 million increase includes \$2 million for the approved athletic fee increase.
- Net Patient Medical Service revenues are budgeted to increase by \$1.5 million for FY 2023. These revenues are contract services provided to the School of Medicine's hospital affiliates through the graduate medical education programs.
- State Appropriations are projected to increase by \$4.3 million over FY 2022 projection. This increase represents the 5.4% core increase proposed by the governor and approved by the legislature during the 2022 legislative session.

Schedule 7: UMKC Net Tuition Revenue Detail

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Enrollment - Full-time Equivalent			
Undergraduate			
<i>Resident</i>	4,341	4,122	4,122
<i>Non-Resident</i>	3,384	3,305	3,305
Total Undergraduate	7,725	7,427	7,427
Graduate/Professional	3,619	3,954	4,073
Gross Tuition and Fees \$'s in thousands			
Undergraduate Tuition			
<i>Resident</i>	\$ 39,885	\$ 38,550	\$ 40,280
<i>Non-Resident</i>	29,036	29,000	30,467
Total Undergraduate Tuition	68,921	67,550	70,747
Graduate/Professional Tuition	101,016	111,301	121,439
Undergraduate Supplemental Fees	6,723	6,400	6,603
Graduate/Professional Supplemental Fees	4,966	6,700	6,137
Activity and Facility Fees	7,732	7,800	9,080
Continuing Education Fees	3,377	3,000	3,353
Other Educational Fees	2,532	2,500	2,655
Total Tuition and Fees (Line 1)	\$ 195,267	\$ 205,251	\$ 220,014
Aid Awarded by Institution \$'s in thousands			
Unrestricted			
<i>Undergraduate</i>	\$ (13,633)	\$ (14,700)	\$ (16,224)
<i>Graduate/Professional</i>	(19,741)	(26,000)	(29,720)
Total Unrestricted Aid	(33,374)	(40,700)	(45,944)
Restricted Donor Aid			
<i>Undergraduate</i>	(6,838)	(8,000)	(6,377)
<i>Graduate/Professional</i>	(3,016)	(4,000)	(4,347)
Total Restricted Donor Aid	(9,854)	(12,000)	(10,724)
Restricted Non-Gift Aid/Waivers	(1,535)	(3,645)	(3,217)
Federal Pell Grant Aid	(12,996)	(12,000)	(12,600)
Government Scholarships	(3,917)	(4,655)	(4,000)
Total Scholarship Allowances (Line 2)	\$ (61,676)	\$ (73,000)	\$ (76,485)
Net Tuition and Fees (Line 3)	\$ 133,591	\$ 132,251	\$ 143,529
Federal Pell Grants (Line 4)	\$ 12,996	\$ 12,000	\$ 12,600
Government Scholarship Funding (Line 5)	\$ 3,917	\$ 4,655	\$ 4,000

- The enrollment numbers above represent budgeted enrollment as of fall census. UMKC's budget plans for a flat undergraduate enrollment over prior year.
- The gross tuition and fee budgeted amounts include the Board approved rates from May 2022. UMKC's budget anticipates student's course consumption remain at experienced spring 2022 level.
- UMKC's primary revenue driver remains graduate and professional programs, with the professional programs driving nearly 60% of the tuition program. Professional program enrollments remain stable with solid demand.

Operating Expenses

Overall, UMKC's operating expenses are projected to increase by 5%. Schedule 8 and 9 provide additional detailed changes in Salaries and Wages and Supplies, Services and Other for the FY 2023 budget.

Schedule 8: UMKC Salaries and Wages Detail (Dollars in Thousands)

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Salaries and Wages			
<i>Teaching and Research</i>			
Unrestricted	\$ 96,149	\$ 99,000	\$ 104,337
Restricted (Gifts & Grants)	13,515	15,836	15,388
Total Teaching and Research Salaries	109,664	114,836	119,725
<i>Staff and Supporting Services</i>			
Operations and Service Operations	54,629	58,500	62,928
Auxiliary Enterprises	9,969	12,000	12,781
Restricted (Gifts & Grants)	12,830	15,800	15,587
Total Staff and Supporting Services Salaries	77,428	86,300	91,296
Total Salaries and Wages (Line 16)	\$ 187,092	\$ 201,136	\$ 211,021
Benefits (Line 17)	\$ 57,400	\$ 61,027	\$ 65,549

Salaries and Wages

- All wages for FY 2023 budget include the effect of a 4% performance-based merit and market raise pool.
- *Teaching and Research (Unrestricted)* funded from tuition and state appropriations is budgeted to increase by \$5.3 million from FY 2022 projection.
- *Teaching and Research (Restricted)* funded from grants and gifts are anticipated to remain flat from FY 2022 projection as spending is contingent upon available revenues.
- *Operations and Service Operations* are budgeted to increase by \$4.4 million from FY 2022 projection; this increase is attributed to the UMKC Forward investments in student advising and career preparation.
- *Auxiliary Enterprises* are budgeted flat over FY 2022 projections.
- *Staff (Restricted)* funded from grants and gifts budgeted to remain flat over prior projected year. This compensation will only be realized if there is related gift and grant revenues to fund the compensation.

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Schedule 9: UMKC Supplies Service and Other Operating Expenses Detail (Dollars in Thousands)

	Actuals	Projected	Budget
	FY 2021	FY 2022	FY 2023
Supplies, Services and Other Operating Expenses			
Operations and Service Operations	\$ 40,027	\$ 57,000	\$ 63,904
Auxiliary Enterprises	8,884	12,934	13,534
Patient Services	3,382	4,260	2,989
Restricted (Gifts & Grants)	23,600	35,353	38,763
Plant	5,451	6,453	4,900
Total Supplies, Services and Other Operating Expenses (Line 18)	\$ 81,344	\$ 116,000	\$ 124,090

Supplies, Services and Other Operating Expenses

- *Operations and Service Operations* expenditures are budgeted to increase \$6.9 million over FY 2022 projection. This increase reflects one-time funding for UMKC Forward initiatives.
- *Auxiliary Enterprises* expenditures are budgeted to increase by \$600,000 from FY 2022 projection due to inflationary pressures.
- *Patient Services* expenditures are budgeted to decrease by \$1.3 million over prior projected year. This decrease in expenditures is due to UMKC suspending a dental clinic.
- *Restricted (Gifts & Grants)* expenditures funded from grants increase by \$3.4 million from FY 2022. With supply chain issues the ability to complete projects has been a challenge, the FY 2023 budget reflects project spend shifting between fiscal years on restricted funds with more spending occurring in FY 2023.
- *Plant* expenditures are budgeted to decline by \$1.5 million over FY 2022 projection related to the classroom improvement projects also funded from Operations.

Capital investments over \$5 million included in UMKC's budget are as follows:

- *UMKC Health Sciences District Development* – a new health professions teaching facility which will provide interprofessional training for future doctors, nurses, pharmacist, and dentists. Funding for this project will be supported by gifts and capital appropriations from the State. The FY 2023 budget includes investments totaling \$4 million for this project.
- *St. Joseph Health Center* – state and federal funding will be utilized for the expansion of classroom and laboratory space at the UMKC School of Medicine campus in St. Joseph, Missouri. The FY 2023 budget includes investments totaling \$11 million for this project which will primarily be funded from state and federal appropriations.
- *Steamline Improvements* on the UMKC campus included in the FY 2023 budget total \$5 million.

Missouri S&T

Missouri S&T's budget is built upon the re-emergence of growth after declining enrollments prior to the pandemic. After receiving the largest gift at a Missouri public institution in FY 2021, Missouri S&T seeks to become one of the top public STEM focused research institutions in the country. The following investments are included in the budget to support this vision:

- Student Success and Quality – scholarships and fellowships will be provided for highly qualified students through the continuation of the Kummer Vanguard Scholars program for undergraduates and the Kummer Innovation and Entrepreneurship Fellows program for doctoral students. Additional investments will be made in initiatives targeted at retention and student success.
- Faculty and Staff - to be a leader in innovation and entrepreneurial education recruitment of highly qualified faculty and staff are needed.
 - To enhance and expand Missouri S&T's research mission, FY 2023 budget includes 2 new professorships, 3 new research center directors, and investments in additional research staff.
 - The establishment of the Kummer College will include a new dean, associate dean, and filling two vacant department chair positions.
 - Corporate and professional development will add staff and faculty to revitalize in-person programs offered at the Global-St Louis location.

Schedule 10: S&T FY 2023 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP - Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ 119,678	\$ 119,300	\$ 124,421	4%
2	Less Scholarship Allowances	61,046	64,500	69,713	8%
3	Net Tuition and Fees	58,632	54,800	54,708	0%
4	Federal Pell Grants	6,032	5,350	6,300	18%
5	Government Scholarship Funding	4,865	5,800	5,000	-14%
6	Institutional CARES Act Funding	15,809	7,168	-	-100%
7	Grants and Contracts	37,656	41,000	41,575	1%
8	Auxiliary Enterprises	21,094	21,600	22,866	6%
9	Patient Medical Services, Net	-	-	-	0%
10	Other Operating Revenues	3,611	2,200	2,193	0%
11	State Appropriations	50,375	53,026	55,942	5%
12	Federal Appropriations	-	-	-	0%
13	Private Gifts	6,815	7,445	22,355	200%
14	Spendable Investment Income	11,337	17,235	11,674	-32%
15	Total Operating Revenues	216,226	215,624	222,613	3%
Operating Expenses					
16	Salaries and Wages	95,663	98,100	108,076	10%
17	Benefits	29,368	31,246	34,674	11%
18	Supplies, Services and Other Operating Expenses	44,193	46,500	46,241	-1%
19	Depreciation	19,789	22,900	24,337	6%
20	Interest Expense	5,072	5,184	5,296	2%
21	Total Operating Expenses	194,085	203,930	218,624	7%
22	Net Operating Income	22,141	11,694	3,989	-66%
23	Net Operating Margin	10.2%	5.4%	1.8%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	52,741	14,943	13,988	-6%
25	Spendable Investment Income	(11,337)	(17,235)	(11,674)	-32%
26	Other Nonoperating Revenues (Expenses)	9,069	(7,000)	31	-100%
27	State Capital Appropriations	-	-	5,000	100%
28	Capital Gifts and Grants	10,805	7,000	53,646	666%
29	Private Gifts for Endowment Purposes	13,255	3,250	2,250	-31%
30	Mandatory Transfers	27,616	-	-	0%
31	Non-Mandatory Transfers	(1,816)	1,885	1,854	-2%
32	Net Nonoperating Revenues (Expenses)	100,333	2,843	65,095	375%
33	Increase in Net Position	122,474	14,537	69,084	
34	Net Position, Beginning of Year	526,586	649,058	663,595	
35	Cumulative Effect of Change in Accounting Principle	-	-	-	
36	Net Position, Beginning of Year, Adjusted	526,586	649,058	663,595	
37	Net Position, End of Period	\$ 649,058	\$ 663,595	\$ 732,679	

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Overall, S&T's operating margin is \$3.9 million, or 1.8%. Missouri S&T's margin is below the set target of 2% but is in line with financial plan presented to the Board in February.

Operating Revenues:

The biggest driver of the University's overall revenues is enrollment which drives both teaching revenues and auxiliary enterprises. Lines 1-5 of from Schedule 10 on the previous page are summarized in Schedule 11 below with the key drivers. Other key areas of revenue for S&T include:

- Grants and Contracts are budgeted to increase by 1% over FY2022 projection. Missouri S&T is committed to improving research competitiveness and has planned to make investments in increasing and improving research infrastructure, including those from the Kummer Institute. The smaller growth over prior year growth rates reflects start-up time to recruit the new faculty.
- State Appropriations are projected to increase by \$2.9 million over FY 2022 projection. This increase represents the 5.4% core increase proposed by the governor and approved by the legislature during the 2022 legislative session.
- Auxiliary Enterprise revenues are budgeted to increase by \$1.3 million over FY 2022 projection. The increase revenues are reflective of the Board approved housing and dining rate increase of 3.3% and projected increase in first time college students.
- Private Gifts are projected to increase by \$14.9 million, largely driven by the increase in gift funding received by the Kummer Institute for new programming.

Schedule 11 S&T Net Tuition Revenue Detail

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Enrollment - Full-time Equivalent			
Undergraduate			
<i>Resident</i>	4,690	4,260	4,165
<i>Non-Resident</i>	781	818	855
Total Undergraduate	5,471	5,078	5,020
Graduate/Professional	874	867	905
Gross Tuition and Fees \$'s in thousands			
Undergraduate Tuition			
<i>Resident</i>	\$ 41,676	\$ 39,500	\$ 40,052
<i>Non-Resident</i>	22,051	22,500	24,605
Total Undergraduate Tuition	63,727	62,000	64,657
Graduate/Professional Tuition	13,907	16,300	16,948
Undergraduate Supplemental Fees	23,132	22,100	22,810
Graduate/Professional Supplemental Fees	2,615	2,900	3,352
Activity and Facility Fees	6,823	7,000	7,537
Continuing Education Fees	8,233	7,900	8,272
Other Educational Fees	1,241	1,100	845
Total Tuition and Fees (Line 1)	\$ 119,678	\$ 119,300	\$ 124,421
Aid Awarded by Institution \$'s in thousands			
Unrestricted			
<i>Undergraduate</i>	\$ (26,804)	\$ (29,100)	\$ (32,123)
<i>Graduate/Professional</i>	(9,942)	(8,900)	(9,182)
Total Unrestricted Aid	(36,746)	(38,000)	(41,305)
Restricted Donor Aid			
<i>Undergraduate</i>	(7,851)	(7,900)	(9,567)
<i>Graduate/Professional</i>	(999)	(1,300)	(2,787)
Total Restricted Donor Aid	(8,850)	(9,200)	(12,354)
Restricted Non-Gift Aid/Waivers	(4,553)	(6,150)	(4,754)
Federal Pell Grant Aid	(6,032)	(5,350)	(6,300)
Government Scholarships	(4,865)	(5,800)	(5,000)
Total Scholarship Allowances (Line 2)	\$ (61,046)	\$ (64,500)	\$ (69,713)
Net Tuition and Fees (Line 3)	\$ 58,632	\$ 54,800	\$ 54,708
Federal Pell Grants (Line 4)	\$ 6,032	\$ 5,350	\$ 6,300
Government Scholarship Funding (Line 5)	\$ 4,865	\$ 5,800	\$ 5,000

- The enrollment numbers presented in Schedule 11 reflect budgeted enrollment for fall census. Missouri S&T is anticipating first-time college students will be up from prior year. Overall, enrollment will fall as the graduating senior class is larger than the projected incoming freshman class.
- The gross tuition and fee budgeted amounts include the Board approved rate increases.

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- The increase in undergraduate restricted donor aid is a result of the Kummer gift and Missouri S&T leadership managing and utilizing gift and endowment balances to recruit and retain exceptional students.

Operating Expenses

Overall, Missouri S&T's operating expenses are projected to increase by 7% reflecting increase compensation cost driven by market inflation. Schedules 12 and 13 provide additional detail on changes in Salaries and Wages and Supplies Services and Other for the FY 2023 budget.

Schedule 12 S&T Salaries and Wages Detail (Dollars in Thousands)

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Salaries and Wages			
<i>Teaching and Research</i>			
Unrestricted	\$ 43,066	\$ 41,300	\$ 41,691
Restricted (Gifts & Grants)	11,202	12,500	13,914
Total Teaching and Research Salaries	54,268	53,800	55,605
<i>Staff and Supporting Services</i>			
Operations and Service Operations	36,299	37,200	43,847
Auxiliary Enterprises	2,202	2,600	2,974
Restricted (Gifts & Grants)	2,894	4,500	5,650
Total Staff and Supporting Services Salaries	41,395	44,300	52,471
Total Salaries and Wages (Line 16)	\$ 95,663	\$ 98,100	\$ 108,076
Benefits (Line 17)	\$ 29,368	\$ 31,246	\$ 34,674

Salaries and Wages

- All wages for FY 2023 budget include the effect of a 5% performance-based merit and market raise pool. Missouri S&T has experienced high turnover rates and extended fill rates for many staff positions and will utilize the raise pool to address market concerns.
- *Teaching and Research (Unrestricted)* funded from tuition and state appropriations is budgeted to increase by 1% or \$391,000 from FY 2022 projection. This funding represents compensation increases for faculty.
- *Teaching and Research (Restricted)* funded from grants and gifts are anticipated to increase by 11% or \$1.4 million from FY 2022 projection, this increase is supported by the faculty investment from the Kummer Institute.
- *Operations and Supporting Services* are budgeted to increase by \$6.6 million from FY 2022 projection this increase is to provide staff with market and equity adjustments and to fill essential vacant positions within the university.
- *Auxiliary Enterprises* wages are budgeted to increase by \$374,000 to fund market compensation pressure.
- *Staff (Restricted)* funded from grants and gifts are budgeted to increase by \$1.1 million to representing new staff hired on support for the Kummer Centers.

Schedule 13 S&T Supplies Services and Other Operating Expense Detail (Dollars in Thousands)

	Actuals	Projected	Budget
	FY 2021	FY 2022	FY 2023
Supplies, Services and Other Operating Expenses			
Operations and Service Operations	\$ 24,892	\$ 24,600	\$ 22,797
Auxiliary Enterprises	9,194	9,200	8,244
Restricted (Gifts & Grants)	6,982	11,000	13,725
Plant	3,125	1,700	1,475
Total Supplies, Services and Other Operating Expenses (Line 18)	\$ 44,193	\$ 46,500	\$ 46,241

Supplies, Services and Other Operating Expenses

- *Operations and Supporting Services* expenditures are budgeted to decrease \$1.8 million over FY 2022 projection. \$4 million of the decline is the result of shifting cost to support the activities of the Kummer Institute for FY 2023. This decrease is offset by an increase in utility cost and travel and training expenditures.
- *Auxiliary Enterprises* expenditures are budgeted to decrease from FY 2022 projection by \$956,000. Missouri S&T has two significant auxiliaries which drive the revenues and expenditures, Housing and Dining and University Centers. These two auxiliaries have budgeted to drop contract labor from FY 2022 with the replacement cost in salaries and benefits.
- *Restricted expenditures* funded from grants and gifts are anticipated to increase by \$2.7 million from the FY 2022 projection. The increase is supported by the Kummer gift.
- *Plant* expenditures are budgeted to decrease by \$225,000 over FY 2022 projections due to a decrease in planned non-capital M&R plant projects.

Capital investments over \$5 million included in Missouri S&T's budget are as follows:

- *Missouri Protoplex Building* is a hub for connecting industry, state and federal agencies, and colleges and universities throughout Missouri to develop new manufacturing processes and new products. Funding for this project will be supported by gifts, state appropriations, and America Rescue Plan Act funds from the State. The FY 2023 budget includes investments totaling \$20.7 million for this project.
- *Student Experience Center* will be funded from capital reserves and gifts, the FY 2023 budget includes \$25.9 million for project cost.
- The *Arrival District* will provide Missouri S&T a front door fitting of its academic reputation and is funded through gifts, total project budget for FY 2023 is \$13.9 million.
- *Substation Relocation* total budgeted project cost for FY 2023 is \$7.2 million. State M&R funding received in the prior fiscal year will be utilized to support this investment.
- Welcome Center will be funded from capital reserves and gifts. Total capital investment included in the FY 2023 budget is \$3.8 million.

UMSL

UMSL's FY 2023 budget is built upon recapturing lost enrollments to regain revenues to match the institution's current cost base. Stabilizing enrollment is UMSL's highest priority. The FY 2023 budget includes funding to improve enrollment including enhanced recruiting and advising, marketing, a branding revision, investment in eLearning, and revised financial aid initiatives. To respond to the new expense base from falling enrollments, UMSL has expanded shared services and is implementing a space consolidation plan to reduce its capital footprint.

Schedule 17 UMSL FY 2023 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP - Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ 118,956	\$ 110,200	\$ 117,326	6%
2	Less Scholarship Allowances	51,269	48,200	44,415	-8%
3	Net Tuition and Fees	67,687	62,000	72,911	18%
4	Federal Pell Grants	12,716	10,443	13,500	29%
5	Government Scholarship Funding	3,575	3,730	3,670	-2%
6	Institutional CARES Act Funding	18,835	10,667	-	-100%
7	Grants and Contracts	26,676	34,600	32,687	-6%
8	Auxiliary Enterprises	13,400	13,400	15,182	13%
9	Patient Medical Services, Net	19	25	51	104%
10	Other Operating Revenues	2,124	1,650	2,209	34%
11	State Appropriations	55,940	59,007	63,063	7%
12	Federal Appropriations	-	-	-	0%
13	Private Gifts	11,428	12,500	11,913	-5%
14	Spendable Investment Income	6,814	11,289	8,377	-26%
15	Total Operating Revenues	219,214	219,311	223,563	2%
Operating Expenses					
16	Salaries and Wages	97,852	98,400	104,414	6%
17	Benefits	32,238	32,600	34,613	6%
18	Supplies, Services and Other Operating Expenses	46,384	55,600	61,208	10%
19	Depreciation	17,917	18,550	18,200	-2%
20	Interest Expense	5,557	5,350	5,086	-5%
21	Total Operating Expenses	199,948	210,500	223,521	6%
22	Net Operating Income	19,266	8,811	42	-100%
23	Net Operating Margin	8.8%	4.0%	0.0%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	27,080	11,000	9,777	-11%
25	Spendable Investment Income	(6,814)	(11,289)	(8,377)	-26%
26	Other Nonoperating Revenues (Expenses)	(70)	840	25	-97%
27	State Capital Appropriations	-	-	-	0%
28	Capital Gifts and Grants	348	1,500	12,925	762%
29	Private Gifts for Endowment Purposes	4,248	3,800	1,800	-53%
30	Mandatory Transfers	(1,888)	-	-	0%
31	Non-Mandatory Transfers	1,286	1,350	1,090	-19%
32	Net Nonoperating Revenues (Expenses)	24,190	7,201	17,240	8%
33	Increase in Net Position	43,456	16,012	17,282	
34	Net Position, Beginning of Year	356,526	399,982	415,994	
35	Cumulative Effect of Change in Accounting Principle	-	-	-	
36	Net Position, Beginning of Year, Adjusted	356,526	399,982	415,994	
37	Net Position, End of Period	\$ 399,982	\$ 415,994	\$ 433,276	

June 23, 2022

Overall, UMSL's operating margin of \$42,000 or 0%. The FY 2023 budget represents the loss of the institutional CARES funding, growth in enrollment, and an expense basis constrained by inflationary pressures.

Operating Revenues:

The primary driver of the University's overall revenues is enrollment which drives both teaching revenues and the majority of auxiliary enterprises. Lines 1-5 of from Schedule 17 on the prior page are summarized in Schedule 18 on the next page with the key drivers. Other key areas of revenue for UMSL include:

- Grants and Contracts are projected to decrease by \$1.9 million over the prior year. UMSL experienced strong growth in grants and contracts during FY 2022 but expects grants and contracts to decrease for FY 2023 budget.
- State Appropriations are projected to increase by \$4 million over FY 2022 projection. This increase represents the 5.4% core increase, or \$3.2 million, proposed by the governor and approved by the legislature during the 2022 legislative session. The remaining increase is attributed to additional line items and program support approved by the legislature during the 2022 legislative session.
- Auxiliary Enterprise revenues are budgeted to increase by \$1.8 million over FY 2022 projection. The increase revenues are reflective of operations returning to pre-pandemic levels.

Schedule 18 UMSL Net Tuition Revenue Detail

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Enrollment - Full-time Equivalent			
Undergraduate			
<i>Resident</i>	5,709	5,101	5,294
<i>Non-Resident</i>	778	630	722
Total Undergraduate	6,487	5,731	6,016
Graduate/Professional	1,549	1,504	1,579
Gross Tuition and Fees \$'s in thousands			
Undergraduate Tuition			
<i>Resident</i>	\$ 48,058	\$ 47,946	\$ 51,918
<i>Non-Resident</i>	11,408	11,122	13,247
Total Undergraduate Tuition	59,466	59,068	65,165
Graduate/Professional Tuition	32,131	28,971	31,846
Undergraduate Supplemental Fees	16,696	11,541	8,455
Graduate/Professional Supplemental Fees	4,896	4,293	4,481
Continuing Education Fees	3,968	4,363	4,981
Other Educational Fees	1,799	1,964	2,398
Total Tuition and Fees (Line 1)	\$ 118,956	\$ 110,200	\$ 117,326
Aid Awarded by Institution \$'s in thousands			
Unrestricted			
<i>Undergraduate</i>	\$ (24,254)	\$ (20,319)	\$ (14,559)
<i>Graduate/Professional</i>	(7,153)	(8,627)	(8,217)
<i>Miscellaneous Aid</i>	(135)	(113)	(112)
Total Unrestricted Aid	(31,542)	(29,059)	(22,888)
Restricted Donor Aid			
<i>Undergraduate</i>	(2,428)	(2,166)	(2,950)
<i>Graduate/Professional</i>	(253)	(360)	(621)
Total Restricted Donor Aid	(2,681)	(2,526)	(3,571)
Restricted Non-Gift Aid/Waivers	(755)	(2,442)	(786)
Federal Pell Grant Aid	(12,716)	(10,443)	(13,500)
Government Scholarships	(3,575)	(3,730)	(3,670)
Total Scholarship Allowances (Line 2)	\$ (51,269)	\$ (48,200)	\$ (44,415)
Net Tuition and Fees (Line 3)	\$ 67,687	\$ 62,000	\$ 72,911
Federal Pell Grants (Line 4)	\$ 12,716	\$ 10,443	\$ 13,500
Government Scholarship Funding (Line 5)	\$ 3,575	\$ 3,730	\$ 3,670

- The enrollment numbers presented in the schedule represent budgeted fall census. UMSL's student population differs from the other three institutions. Over half of UMSL undergraduate population is part-time and 70% of the graduate students are also part-time. These students' consumption patterns are more sensitive to economic shifts and are more difficult to predict.
- The gross tuition and fee budgeted amounts include the rates approved by the Board in May 2021. Undergraduate students at UMSL take on average 11 credit hours per semester. Graduate students take 6 student credit hours on average per semester. These student credit hour trends were utilized when budget gross tuition.
- The decrease in supplemental fees is driven by on-line course fees charged to students. When nearly all instruction went on-line during the pandemic and through FY 2022 the students enrolled in those courses were charged a fee, UMSL provided aid to all of the students to cover this on-line course fee.
- The increase in undergraduate unrestricted aid starting in FY 2021 is driven by the aid to cover the on-line course fee charged when the university switched to fully virtual learning. UMSL will discontinue to offer this aid in FY 2023 as the campus will be back to normal operations.

Operating Expenses

Overall, UMSL's operating expenses are projected to increase by 6% reflecting increase compensation cost driven by market inflation. Schedules 19 and 20 provide additional detail on changes in Salaries and Wages and Supplies Services and Other for the FY 2023 budget.

Schedule 19: UMSL Salaries and Wages Detail (Dollars in Thousands)

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Salaries and Wages			
<i>Teaching and Research</i>			
Unrestricted	\$ 42,220	\$ 41,157	\$ 42,742
Restricted (Gifts & Grants)	5,040	5,055	4,881
Total Teaching and Research Salaries	47,260	46,212	47,623
<i>Staff and Supporting Services</i>			
Operations and Service Operations	37,609	36,476	41,646
Auxiliary Enterprises	1,732	1,890	1,523
Restricted (Gifts & Grants)	11,251	13,822	13,622
Total Staff and Supporting Services Salaries	50,592	52,188	56,791
Total Salaries and Wages (Line 16)	\$ 97,852	\$ 98,400	\$ 104,414
Benefits (Line 17)	\$ 32,238	\$ 32,600	\$ 34,613

Salaries and Wages

- Full-time wages for FY 2023 budget include the effect of a 4.5% performance-based merit and market raise pool. UMSL has experienced high turnover rates and extended fill rates for many staff positions and currently has \$3 million vacancy in FY 2022.

- *Teaching and Research (Unrestricted)* funded from tuition and state appropriations is budgeted to increase by 4% or \$1.6 million from FY 2022 projection. This increase is attributed to raise pool.
- *Teaching and Research (Restricted)* funded from grants and gifts are anticipated to remain flat from FY 2022 projections based on flat restricted funding growth.
- *Operations and Service Operations* are budgeted to increase by \$5.2 million from FY 2022 projection. This increase includes \$1.6 million for a performance-based merit and market raise pool. The remaining \$3.6 million represents current vacancies which are included in the FY 2023 budget to support for enrollment recruitment and retention initiatives.
- *Staff (Restricted)* funded from grants and gifts are budgeted to remain flat from FY 2022 projections.

Schedule 20: UMSL Supplies Services and Other Operating Expenses Detail (Dollars in Thousands)

	Actuals FY 2021	Projected FY 2022	Budget FY 2023
Supplies, Services and Other Operating Expenses			
Operations and Service Operations	\$ 25,435	\$ 30,647	\$ 36,142
Auxiliary Enterprises	5,286	7,493	7,283
Restricted (Gifts & Grants)	12,269	16,758	16,180
Plant	3,394	702	1,603
Total Supplies, Services and Other Operating Expenses (Line 18)	\$ 46,384	\$ 55,600	\$ 61,208

Supplies, Services and Other Operating Expenses

- *Operations and Service Operations* expenditures are budgeted to increase \$5.5 million over FY 2022 projection. The increase in expenditures reflects the return to normal operations as the UMSL campus remained partially remote through FY 2022.
- *Auxiliary Enterprises* expenditures are budgeted to remain flat from FY 2022 projection.
- *Restricted* expenditures funded from grants and gifts are anticipated flat from FY 2022 projection, this contingent upon restricted revenue resources.
- *Plant* expenditures are budgeted to increase by \$901,000 over FY 2022 projections due to planned M&R projects and space consolidation plans.

Capital investments over \$5 million included in UMSL's budget are as follows:

- *Space Consolidation* - will consolidate the university's academic core to its North campus while renovating classroom, laboratory and community spaces. Funding for this project will be supported by capital reserves, gifts, and state capital appropriations. The FY 2023 budget includes investments totaling \$12.9 million for this project.

MUHC

Schedule 22: MU Healthcare FY 2023 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP - Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ -	\$ -	\$ -	0%
2	Less Scholarship Allowances	-	-	-	0%
3	Net Tuition and Fees	-	-	-	0%
4	Federal Pell Grants	-	-	-	0%
5	Government Scholarship Funding	-	-	-	0%
6	Institutional CARES Act Funding	-	-	-	0%
7	Grants and Contracts	124	613	26	-96%
8	Auxiliary Enterprises	22,750	22,673	22,930	1%
9	Patient Medical Services, Net	1,174,494	1,282,008	1,350,797	5%
10	Other Operating Revenues	(21)	(34)	(5)	-85%
11	State Appropriations	-	-	-	0%
12	Federal Appropriations	-	-	-	0%
13	Private Gifts	1,152	1,242	705	-43%
14	Spendable Investment Income	-	-	-	0%
15	Total Operating Revenues	1,198,499	1,306,502	1,374,453	5%
Operating Expenses					
16	Salaries and Wages	347,591	408,843	425,038	4%
17	Benefits	116,641	122,661	134,677	10%
18	Supplies, Services and Other Operating Expenses	588,861	658,698	670,261	2%
19	Depreciation	53,668	59,436	61,400	3%
20	Interest Expense	10,782	10,509	14,220	35%
21	Total Operating Expenses	1,117,543	1,260,147	1,305,596	4%
22	Net Operating Income	80,956	46,355	68,857	49%
23	Net Operating Margin	6.8%	3.5%	5.0%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	37,399	14,451	8,614	-40%
25	Spendable Investment Income	-	-	-	0%
26	Other Nonoperating Revenues (Expenses)	22,068	8,121	-	-100%
27	State Capital Appropriations	-	-	-	0%
28	Capital Gifts and Grants	4,519	189	6	-97%
29	Private Gifts for Endowment Purposes	11	239	15	-94%
30	Mandatory Transfers	-	-	-	0%
31	Non-Mandatory Transfers	(24,199)	(26,142)	(33,638)	29%
32	Net Nonoperating Revenues (Expenses)	39,798	(3,142)	(25,003)	1%
33	Increase in Net Position	120,754	43,213	43,854	
34	Net Position, Beginning of Year	894,820	1,015,574	1,058,787	
35	Cumulative Effect of Change in Accounting Principle	-	-	-	
36	Net Position, Beginning of Year, Adjusted	894,820	1,015,574	1,058,787	
37	Net Position, End of Period	\$ 1,015,574	\$ 1,058,787	\$ 1,102,641	

This presentation format matches the higher education presentation of revenues and expenses. The health system follows the healthcare convention in their presentations to the Health Affairs Committee. The main difference is the classification of gift revenues (line 13) and interest expense (line 20) which is an operating revenue in higher education and a non-operating item in healthcare.

In FY 2022, MU Health Care experienced a decline in operating margin from cost increases outpacing available revenue. Much of the cost increase reflected significant labor challenges in clinical staffing, as nursing agency contract rates during the pandemic increased dramatically. Additionally, drug cost increases from changes to the 340b program further reduced operating income. Both of these changes will take time to adapt to, and MU Healthcare is focused on improving financial performance, but must do so within a challenging marketplace to recruit staff and consistent shortages of needed supplies and drugs. The FY 2023 budget reflects a performance improvement over FY 2022, but does not go all the way to meeting the financial performance target and the performance in the five-year plan. MU Health Care is currently developing a three year plan to respond to the operational and financial pressures created by the pandemic. This plan will be incorporated into the fall financial planning process.

Leadership from MU Health Care, MU School of Medicine and University Physicians have collaborated in developing core patient volumes for the plan, based upon historical performance, market assessments and internal growth plans. The overall budget includes 3% volume growth year over year, tied to recruitment plans for new physicians. MU Health Care continues to keep an eye towards the mid-Missouri market and is currently evaluating new growth opportunities to maintain its status in the current market while growing into new markets to reflect its position as an academic medical center. Reimbursement for services will remain under pressure especially if inflation continues, as many contractual increases are tied to fixed percentage increases in reimbursement developed during the previous period of historically low inflation.

To manage expenditures within available revenues, MU Health Care has significant stewardship initiatives built into the budget. A key success factor remains replacing external agency labor with employed clinical care staff and reducing the agency hourly rate, both of which have been incorporated into the budget. The budget also includes a 5% market and merit pool to maintain competitive salaries, supply efficiencies, including a reduction in medical supplies previously used to respond to the pandemic, and reducing in external staffing costs post revenue cycle conversion. The budget also incorporates supply efficiencies, including a reduction in medical supplies previously used to respond to the pandemic.

UM System Administration

The UM System Business Unit includes the administrative and support functions including service centers that provide unduplicated support to the four universities and health system. As described in the Report to the Board on Administrative Efficiencies from the November 2020 Board Meeting:

“Instead of funding administration with state appropriations and investment income, these services will be funded via a cost allocation to the Universities based upon their share of total operating expenses or other cost drivers. The cost allocation for services will also force administrative units to justify the scale and cost of their function to the Universities they support.”

FY 2022 projection and FY 2023 budget reflect the funding structure change, with the universities and hospital now paying the cost of system administration. The funding structure moved state appropriations and investment income out to the Universities, then charged a related amount to have each University pay system administration for the services provided. UM System Administration’s budget growth lags the university’s growth to ensure that administration continues to be a smaller part of the organization.

Schedule 23: UM System Administration FY 2023 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP - Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ -	\$ -	\$ -	0%
2	Less Scholarship Allowances	168	50	44	-12%
3	Net Tuition and Fees	(168)	(50)	(44)	-12%
4	Federal Pell Grants	-	-	-	0%
5	Government Scholarship Funding	-	-	-	0%
6	Institutional CARES Act Funding	885	-	-	0%
7	Grants and Contracts	106	1,812	-	-100%
8	Auxiliary Enterprises	23,989	20,080	22,855	14%
9	Patient Medical Services, Net	-	-	-	0%
10	Other Operating Revenues	4,244	4,478	3,979	-11%
11	State Appropriations	10,130	-	-	0%
12	Federal Appropriations	-	-	-	0%
13	Private Gifts	223	146	126	-14%
14	Spendable Investment Income	22,931	10,720	7,024	-34%
15	Total Operating Revenues	62,340	37,186	33,940	-9%
Operating Expenses					
16	Salaries and Wages	33,173	40,143	43,284	8%
17	Benefits	11,270	14,000	15,096	8%
18	Supplies, Services and Other Operating Expenses	8,788	(19,485)	(27,039)	39%
19	Depreciation	3,503	2,528	2,492	-1%
20	Interest Expense	-	-	-	0%
21	Total Operating Expenses	56,734	37,186	33,833	-9%
22	Net Operating Income	5,606	-	107	100%
23	Net Operating Margin	9.0%	0.0%	0.3%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	45,053	12,640	9,888	-22%
25	Spendable Investment Income	(22,931)	(10,720)	(7,024)	-34%
26	Other Nonoperating Revenues (Expenses)	(1)	2	2	0%
27	State Capital Appropriations	-	-	-	0%
28	Capital Gifts and Grants	-	-	-	0%
29	Private Gifts for Endowment Purposes	-	-	-	0%
30	Mandatory Transfers	-	-	-	0%
31	Non-Mandatory Transfers	(1,586)	(1,388)	(3,977)	187%
32	Net Nonoperating Revenues (Expenses)	20,535	534	(1,111)	-288%
33	Increase in Net Position	26,141	534	(1,004)	
34	Net Position, Beginning of Year	211,269	237,410	237,944	
35	Cumulative Effect of Change in Accounting Principle	-	-	-	
36	Net Position, Beginning of Year, Adjusted	211,269	237,410	237,944	
37	Net Position, End of Period	\$ 237,410	\$ 237,944	\$ 236,940	

June 23, 2022

The primary remaining revenue at UM System is MOREnet which supplies high speed internet service to schools, higher education, and libraries across the state. MOREnet submitted a balanced budget in FY 2023. In total, the rest System Administration's budget expenses grew in line with overall revenue growth and includes a 5% performance-based market and merit raise pool. The negative \$27 million in Supplies, Services, and Other reflects the collections from the other Universities and Hospital on charges for services. UM System Administration's spending increased by 5.7%, largely driven by the implementation of a 5% merit and market raise pool.

University-wide Units

University-wide Business Units are used to hold resources and deliver programs that are utilized by the entire institution. These include self-insurance funds related to benefits and risk management programs, activities of the central bank, and the endowed chair programs that were established with a recurring state appropriation to match endowment distributions. Most of the activity in the University-wide units relates to consolidating entries for non-operating items that are not spread to the other Universities, primarily related to the benefit plans, insurance and investments.

Activity reflected in the unit's operating margin relates to benefits and insurance. The impact on the margin will fluctuate due to the actual cost of medical and insurance claims. The non-operating revenues (expenses) reflect the impact on benefit liabilities, which will continue to raise contributions and benefit charges to the operating units on a forward basis.

Schedule 24: University-wide Units FY 2023 Budget (Dollars in Thousands)

Simplified View Statement of Revenues, Expenses, and Changes in Net Position - non-GAAP - Unaudited

Line No.		Actuals FY 2021	Projected FY 2022	Budget FY 2023	% Change FY 2022 - 23
Operating Revenues					
1	Tuition and Fees	\$ -	-	-	0%
2	Less Scholarship Allowances	36	33	33	0%
3	Net Tuition and Fees	(36)	(33)	(33)	0%
4	Federal Pell Grants	-	-	-	0%
5	Government Scholarship Funding	-	-	-	0%
6	Institutional CARES Act Funding	-	-	-	0%
7	Grants and Contracts	-	-	-	0%
8	Auxiliary Enterprises	-	-	-	0%
9	Patient Medical Services, Net	-	-	-	0%
10	Other Operating Revenues	2,459	(97)	(128)	32%
11	State Appropriations	9,467	9,467	9,467	0%
12	Federal Appropriations	9,889	9,867	9,765	0%
13	Private Gifts	3	2	2	0%
14	Spendable Investment Income	(9,467)	(9,467)	(9,467)	0%
15	Total Operating Revenues	12,315	9,739	9,606	-1%
Operating Expenses					
16	Salaries and Wages	1,720	-	-	0%
17	Benefits	(8,309)	(20,000)	(5,382)	-73%
18	Supplies, Services and Other Operating Expenses	(11,410)	14,190	1,738	-88%
19	Depreciation	2,412	-	-	0%
20	Interest Expense	3,258	9,789	6,849	-30%
21	Total Operating Expenses	(12,329)	3,979	3,205	-19%
22	Net Operating Income	24,644	5,760	6,401	11%
23	Net Operating Margin	200.1%	59.1%	66.6%	
Nonoperating Revenues (Expenses)					
24	Investment Income (Losses), Net of Fees	234,764	5,205	8,800	69%
25	Spendable Investment Income	9,467	9,467	9,467	0%
26	Other Nonoperating Revenues (Expenses)	(9,543)	-	-	0%
27	State Capital Appropriations	-	-	-	0%
28	Capital Gifts and Grants	5,020	-	-	0%
29	Private Gifts for Endowment Purposes	3	1	1	0%
30	Pension and OPEB Impact on Income Statement	115,006	55,658	71,845	29%
31	Mandatory Transfers	(25,838)	-	-	0%
32	Non-Mandatory Transfers	9,073	-	(2,115)	-100%
33	Net Nonoperating Revenues (Expenses)	337,952	70,331	87,998	24%
34	Increase in Net Position	362,596	76,091	94,399	
35	Net Position, Beginning of Year	(609,238)	(246,642)	(170,551)	
36	Cumulative Effect of Change in Accounting Principle	-	-	-	
37	Net Position, Beginning of Year, Adjusted	(609,238)	(246,642)	(170,551)	
38	Net Position, End of Period	\$ (246,642)	\$ (170,551)	\$ (76,152)	

June 23, 2022

FY 2023 Operating Budget

University of Missouri Board of Curators
Finance Committee
June 23, 2022

FY 2023 Budget Process

- Impacts of inflation and expiring federal stimulus funding return margins to lower levels
- Expense growth managed within available revenues
- Includes continued growth in appropriations, tuition and grants and contracts
- Market and performance salary pool included across universities
- Five-year financial plans will be refreshed this fall with a focus on capital investment plans

What is the Purpose of the Budget?

- Serves as the guide for institutions for the year and assess current financial health.
- Management uses the budget as a guide, but can adjust actual operations to meet strategy and preserve financial health
- Board approves the budget and monitors actual performance against the budget
- Key metric of budget performance for the University is operating margin.

Prior Year, Current Year, and FY 2023 Budget Operating Margin

Unit	Target	2022 Projection ¹	2023 Budget
Consolidated	2.5%	3.9%	2.7%
MU	2.0%	3.7%	1.0%
UMKC	1.0%	3.7%	2.1%
S&T	2.0%	5.4%	1.8%
UMSL	1.0%	4.0%	0.0%
MUHC	7.0%	3.5%	5.0%

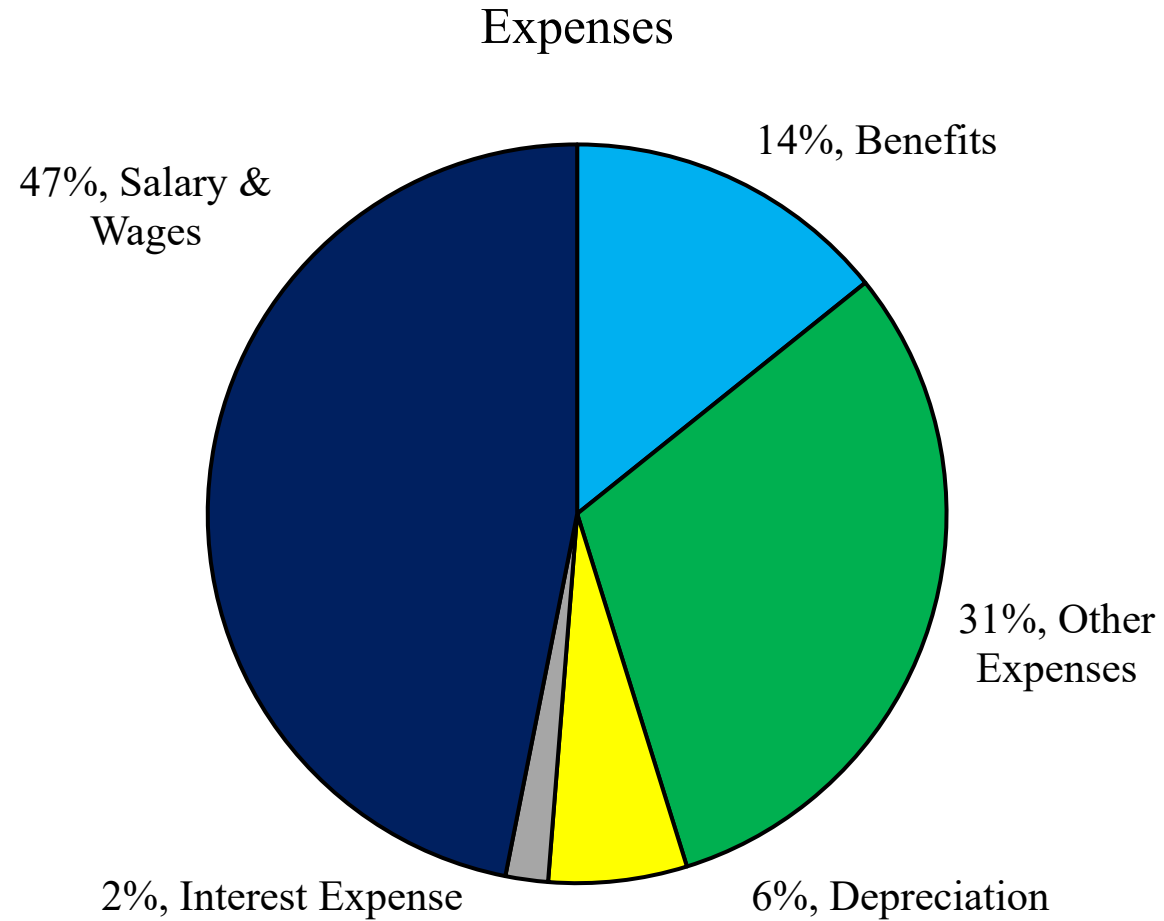
1) Investment income spending distribution calculated using university's spending policy, not Moody's as provided in 3Q projection

MU and MU Health Account for Over 70% of the Total Budget

	MU			MO		UM	University	
FY 2023 Revenue Budget	MU	Healthcare	UMKC	S&T	UMSL	System	Wide Units	Total
Net Tuition and Fees	\$ 282.7	\$ -	\$ 143.5	\$ 54.7	\$ 72.9	\$ (0.0)	\$ -	\$ 553.8
Federal Pell Grants	24.7	-	12.6	6.3	13.5	-	-	57.1
Government Scholarships	17.0	-	4.0	5.0	3.7	-	-	29.7
State Appropriations	244.5	-	82.3	55.9	63.1	-	9.5	455.2
CARES Funding	-	-	-	-	-	-	-	-
Grants & Contracts	279.8	0.0	66.1	41.6	32.7	-	-	420.2
Auxiliary Revenues	313.6	22.9	43.1	22.9	15.2	22.9	-	440.6
Patient Revenues	294.1	1,350.8	40.5	-	0.1	-	-	1,685.5
Private Gift Revenues	38.0	0.7	11.3	22.4	11.9	0.1	-	84.4
Endowment & Investment	78.4	-	16.5	11.7	8.4	7.0	(9.5)	112.5
Other Income	55.0	-	20.5	2.1	2.2	4.1	9.5	93.5
Total Revenue	\$ 1,627.7	\$ 1,374.5	\$ 440.6	\$ 222.6	\$ 223.6	\$ 33.9	\$ 9.6	\$ 3,932.5

Compensation Drives the Majority of Spending

FY 2023 All
Funds Budget
\$3.8 Billion



Next Steps

- Financial plans will be completed in the Fall and presented to the Board in February
 - Quantify investments and balance against financial performance and capital needs
 - Financial performance targets reviewed
 - Plans will serve as basis for FY 2024 budget process
- Work will continue on new tuition models
 - Each university will present plans at upcoming Board meeting located on their respective campus
 - Rate schedules will be approved by the Board in Spring 2023

Questions

Fiscal Year 2024 State Appropriations Request for Operations
UM

The University's FY 2024 operations appropriation request is due to the Missouri Department of Higher Education and Workforce Development (MDHEWD) each year by August 1. The Board of Curators will review the initial version of the request at the June 23, 2022 Board meeting and authorize the President to work with MDHEWD and state government leaders on securing appropriations for FY 2024.

The University's request details are discussed in the body of this paper with the priority of securing continuing operational funding to support the University's future.

No. 2

Recommended Action - Fiscal Year 2024 State Appropriations Request for Operations, UM

It was recommended by Executive Vice President Ryan Rapp, endorsed by President Mun Y. Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following recommendations be approved:

The President is authorized to file a request for state appropriations for operations as follows:

- (1) Increased funding for Core Operations
- (2) Submit new requests for any higher education directives that might be identified prior to submission;
- (3) Submit Other Curator Programs Requests which includes core funding continuing at the same amounts and new requests for State Historical Society; and
- (4) Submit requests in Accordance with Legislative Requirements.

Any material deviations from estimates in the paper will be reviewed with the Board.

Roll call vote Finance Committee YES NO

Curator Graves
Curator Hoberock
Curator Layman
Curator Williams

The motion _____.

Roll call vote Full Board: YES NO

Curator Brncic
Curator Chatman
Curator Graves
Curator Hoberock
Curator Holloway
Curator Layman
Curator Wenneker
Curator Williams

The motion _____.

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Fiscal Year 2024 State Appropriations Request for Operations UM

State Appropriations represent a significant contribution to the University's overall budget, representing over \$450 million in funding for the University of Missouri. Higher Education remains the largest funding element of the State's non-mandatory budget. In FY 2022, Missouri's budget picture improved with the availability federal stimulus funding and increased tax revenues. The enacted FY 2023 state budget contained increases for higher education. The key questions looking forward to the FY 2024 budget facing the state include the impact of inflation on state spending and the durability of income and sales tax revenue increases realized through FY 2022 and FY 2023.

For the FY 2024 Appropriations Request, the University will employ a flexibly strategy to try and maximize the amount of funding from the state. The budget picture with remaining federal stimulus likely means there will be some level of one-time funding available for the University capital needs, but at lower levels than the funding received as a part of the FY 2023 process. For operating appropriations, the University will seek to first protect the recurring funding, increase recurring funding to fund inflationary cost pressures, continue to delineate the increased cost of the university's research, extension, and professional education programs and also participate in any other increases or changes proposed by the Missouri Department of Higher Education and Workforce Development.

The priorities listed within this request have been decided on by the Council of Chancellors and proposed for the Board for approval. The outline of the appropriations request also follows the format and requests proposed by the Coordinating Board for Higher Education as the order of priority for the requests for the Governor for the FY 2024 state budget.

Summary of FY 2023 Appropriations

For FY 2023, the University of Missouri received 5.4% core increase over FY 2022. In addition to the core increase, the Legislature separated the university's core appropriations by mission component to reflect the state's share of cost for the Agriculture Extension Service, Professional Doctoral Degrees (MD, DDS, PharmD, etc.), and Research and Development. The University will continue to seek this separation to show the relative cost and investment in these areas of mission differentiation.

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Table 1: Summary of TAFP Appropriations for FY 2023

Item	Amount
UM Core Operations	
Core for Educational Mission	\$239.66
Agricultural Extension Services	22.50
First Professional Doctorate Degrees	94.70
Research and Development Operations	74.80
Core Increase	23.30
FY 2023 Total Core	\$454.96
Other Programs	
Increase for Agriculture Extension Service (one-time)	\$5.00
MU Law Veterans Clinic	0.33
MU Family Violence Clinic (one-time)	0.40
MU Fischer Delta Research Center	1.00
MU Greenley Research Center	0.27
MU Fischer Delta Research Center Rice Breeders Association	0.12
Graves-Chapple Extension and Education Center (one-time)	0.40
S&T Project Lead the Way	0.25
UMSL International Collaboration	0.55
UMSL Defense Medicine Technologies	0.60
UMSL Infectious Disease	0.25
Missouri Kidney Program Core	1.75
Missouri Telehealth Network Core	0.44
Show-Me Extension for Community Healthcare Outcomes	1.50
State Historical Society of Missouri Core	3.90
Total Other Programs	\$16.76
Legislative Requirements	
Debt Offset Tax Authority	\$1.40
Spinal Cord Injury Research	1.50
Seminary Fund	0.28
Alzheimer's Research (One-time)	0.00
Missouri Returning Heroes (One-time)	0.00
Total Legislative Requirements	\$3.18
Total FY 2023 Operating Appropriations	\$474.90

Dollars in Millions

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In addition to the \$23.3M core increase, the FY 2023 appropriations:

- Maintained funding for MU Greenley Research Center and S&T Project Lead the Way.
- New one-time funding for MU Family Violence Clinic, Graves-Chapple Extension and Education Center, an increase for Agriculture Extension Services and State Historical Society.
- Requested funding was not provided for Alzheimer's Research and Missouri Returning Heroes. However, the University is mandated by statute to request these funds each year.

FY2024 Priorities

The funding priorities for FY 2024 will cover the following areas:

- 1) Core appropriations (with an inflationary increase)
- 2) Capital funding included in House Bill 20
- 3) Maintenance of line items
- 4) Participation in MDHEWD funding requests

1) Core Appropriations Inflationary Increase – participate in the requested inflationary increase with CBHE, with any increase split based on share of current core budget. Inflationary core increases will be requested for each mission area. Table 2 shows the inflationary request calculation at 8.5% inflation, the amount of CPI-U through the first quarter of 2022.

Table 2: Inflationary Request Calculation

	MU	UMKC	Missouri S&T	UMSL	U-Wide Mission Support	3% Withhold	Total
Agricultural Extension Service First	\$21.82					\$0.68	\$22.50
Professional Doctorate Degrees	55.22	33.00		3.63		2.85	94.70
Research and Development Operations	58.10	5.00	7.23	2.22		2.25	74.80
Core Educational Mission	97.00	44.30	48.47	55.85	9.47	7.87	262.96
FY 2023 Total	232.14	82.30	55.70	61.70	9.47	13.65	454.96
March Inflation	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
Inflationary Increase	\$19.73	\$7.00	\$4.73	\$5.24	\$0.80	\$1.16	\$38.67

Dollars in Millions

Beyond the inflationary request, the University plans to participate in any core appropriations increase requested by DHEWD. For FY 2024 forward, the University will continue to advocate for funding across the different areas of mission that are unique to public research universities.

2) *Capital Funding included in House Bill 20* – the universities will continue to work with the other institutions to ensure matching requirements are equitable across higher education institutions. As the universities enter a more detailed planning phase, it may be necessary to ask for the matching funding to be spent first due to project timelines and the timelines on spending the federal funds. The universities will also seek to participate in any additional capital funding allocation for FY 2024.

3) *Maintenance of Other Programs*– the universities request that line items continue at current amounts. Additionally, if successful with the core increase request, the University will seek to make the \$5 million one-time increase for the Agricultural Extension Service into a permanent increase and rolled into the core. The University will also seek to make the other one-time line items permanent for future years where recurring costs remain.

4) *Participation in MDHEWD Funding Requests* – the universities will participate in any funding requests through the CBHE and seek an equitable share of any funding for new programming. In addition to the request for appropriation, each University will submit MoExcels grant proposals through this year’s process. MoExcels proposals will line up with each University’s priorities and seek to maximize one-time operating investments from the state and the universities’ share of these resources.

Request for Core Operations

The FY 2024 operating appropriations request will largely depend on available resources at the state level. The state’s tax incomes continue to grow with both growth in income and sales taxes. The durability and amount of this growth remains a question for FY2024. Continued inflation will place expense pressure on other areas of the state’s budget, potentially consuming a larger share of tax revenue growth. The amount of available core increases will be dependent on how these revenue and expense factors play out at the state level. For FY 2024, the University will focus on securing a core increase to offset the effects of inflation as the first priority:

Table 3: New Core Request - FY 2024

FY 2023 UM Core Operations	
Core for Educational Mission	\$262.96
Agricultural Extension Services	22.50
First Professional Doctorate Degrees	94.70
Research and Development Operations	74.80
Core Increase March Inflation 8.5%	38.67
FY 2024 Core Request	\$493.63

Dollars in Millions

Request for Other Programs

The University also submits appropriation requests for other programs as identified in Priority Item 3. As with the other operating appropriations, the first goal in the FY 2024 appropriations request is to maintain FY 2023 core appropriations funded from General Revenue if state revenue is sufficient.

Because the State Historical Society of Missouri (SHSMO) funding is derived almost entirely from state General Revenue, appropriation increases must be requested to cover employee salary and benefit cost increases. SHSMO requests recurring funds increase of \$402,276 to provide: a 3% performance salary increases with associated benefits, 5 additional archivist, one each for St. Louis, Kansas City, Rolla, Cape Girardeau, and Springfield. This will allow Cape Girardeau and Springfield to have the research centers open for 32 hours a week instead of 20. Additionally, the added staff will make it possible for archivists at those two locations to more aggressively collect manuscript materials held by private individuals and organizations; and provide more workshops, presentations, and advice on the care of records to individuals and organizations in their respective regions.

Adding additional positions in St. Louis, Kansas City and Rolla will allow for archivists to begin processing the backlog of records held by these research centers, thereby making them available to researchers. Additionally, the additional archivists' positions will make it possible for staff at those locations to collect manuscript materials more aggressively as well as provide more workshops, presentations, and advice on the care of records to individuals and organizations in their respective regions.

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Table 4: FY 2024 Other Program Request

Increase for Agriculture Extension Service (one-time)	\$5.00
MU Law Veterans Clinic	0.33
MU Family Violence Clinic (one-time)	0.40
MU Fischer Delta Research Center	1.00
MU Greenley Research Center	0.27
MU Fischer Delta Research Center Rice Breeders Association	0.12
Graves-Chapple Extension and Education Center (one-time)	0.40
S&T Project Lead the Way	0.25
UMSL International Collaboration	0.55
UMSL Defense Medicine Technologies	0.60
UMSL Infectious Disease	0.25
Missouri Kidney Program Core	1.75
Missouri Telehealth Network Core	0.44
Show-Me Extension for Community Healthcare Outcomes	1.50
State Historical Society of Missouri Core	3.90
State Historical Society of Missouri Increase	0.40
Total Other Programs	\$17.16

Dollars in Millions

Request for Legislative Requirements

The University has certain appropriation requests made annually as one-time or recurring requests in accordance with legislative authority. The University will request these appropriations continue in FY 2024, as summarized in Table 5. The first three rows have special fund sources that cannot be used for any other purpose and have been annually appropriated. The Spinal Cord Injury Fund balance is decreasing so the full \$1.5 million may not be available for research grants. The University requests more spending authority than necessary in case the fund collections increase.

Missouri statutory language requires the University request annually the last two shown, Alzheimer's Research and Missouri Returning Heroes from General Revenue. Neither of these have been appropriated in recent years. The Returning Heroes request is higher than in past years due to legislation that expands the returning heroes' opportunities to those pursuing master's and non-professional doctoral degrees.

Table 5: FY 2024 Legislative Requirements

Debt Offset Tax Authority	\$1.40
Spinal Cord Injury Research	1.50
Seminary Fund	3.30
Alzheimer's Research (One-time)	0.60
Missouri Returning Heroes (One-time)	1.00
Total Legislative Requirements	\$7.80

Dollars in Millions

Appendix A

This appendix provides background information on each appropriation line item.

UM Core Operations

The \$454.96 million **Core Operating Appropriation** contributes 13% of the University's total operating revenues used for student instruction, research, public service, and supporting activities. Continued core funding is required to provide high quality student instruction, improvement in academic productivity, expansion of research and creative works, outreach and engagement with the citizens of Missouri, and continued focus on student access and success.

Other Programs

The **MU Veteran's Law Clinic** supports veterans in their claims requests with the Department of Veteran's Affairs (VA). The clinic provides law students with experiential learning opportunities to represent clients in their claims. This additional funding supports an expansion of the clinic's services to ensure it does not turn away veterans who need help in filing and adjudicating their claims with the VA.

The **MU Family Violence Clinic** provides Law students with the opportunity to achieve legal remedies for impoverished and domestic and/or sexually assaulted adults, children, and elders. The clinic was discontinued in 2020 due to budget cuts. The clinic averages 70 cases per year and the new funding will go to staffing support, with the hope of continuing the clinic with permanent state funding or donor support.

The **MU Delta Research Center** is a longstanding agricultural research enterprise with five sites encompassing over 1,100 acres in the Missouri bootheel. This direct funding will be utilized by the center to expand research initiatives to meet the needs of Missouri farmers in southeast Missouri. For 2023, the center received additional funding for the **Rice Breeders Association** to support rice variety research.

The **MU Lee Greenly Jr Memorial Research Center** evaluates efficient and profitable crop production while emphasizing soil conservation, water quality and energy efficiency. It is involved in developing a systems approach for irrigation and drainage using drain tile and studying paired watersheds to evaluate the impact of agroforestry practices on water quality.

The **Graves-Chapple Extension and Education Center** is a research and education site in southwest Atchison County. The funding provided in FY 2023 will be used to construct a new facility at the extension education center.

The **Missouri S&T Project Lead the Way** appropriation permits S&T to partner with Southern Ozarks Alliance for Rural Development (SOAR) to increase the number of school districts utilizing Project Lead the Way (PLTW). The goal of PLTW is to help students

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understand STEM education is relevant in their lives and see potential for future careers. This appropriation helps school districts offset costs of STEM programs and to provide state match for potential federal grant money. This funding provides grants to school districts within the targeted 10 county area for their needs in teaching STEM curriculums.

The purpose of the **UMSL International Collaboration** appropriation is to increase international collaboration and promote economic opportunity that helps attract and retain new economic activity to the St. Louis region. University of Missouri-St. Louis works with BioSTL, a regional nonprofit dedicated to advancing prosperity in St. Louis through the growth of biosciences and other targeted innovation clusters. The centerpiece of the program is the GlobalSTL program, which connects the economies of St. Louis and targeted international locations (including Israel, Ireland, and other countries) with a robust pipeline that engages and links experienced professionals to identify international companies who are likely to be attracted by St. Louis' convergence of corporate, university, and entrepreneurial strengths. Specific business strategies will partner prospective international companies with St. Louis and Missouri resources that might lead to recruitment of a presence in St. Louis. BioSTL provides matching funds. **UMSL Defense Medicine Technologies** and **UMSL Infectious Disease** were added as similar programs in the 2022 legislative session.

The **Missouri Kidney Program** (MoKP) is a state funded program, administered by the University of Missouri School of Medicine. MoKP provides financial assistance with transportation to and from dialysis, medication assistance, and insurance premium assistance to eligible Missourians who have kidney failure and are on dialysis, or have received a kidney transplant. The program supports education and research, partners with dialysis centers and transplant centers statewide, and has longstanding expertise in health insurance coverage for kidney disease, including MO HealthNet (Medicaid) and Medicare. All participants must meet residency, citizenship, financial eligibility and medical conditions.

The **Missouri Telehealth Network** (MTN) gives patients in underserved areas access to University of Missouri Health Care specialists without leaving their communities. The network saves patients transportation, discomfort and emotional costs. While all states have at least one telehealth network, Missouri has one of the most developed telehealth networks in the country.

Show-Me Extension for Community Healthcare Outcomes (ECHO) provides comprehensive, best-practice care to patients with complex health conditions, in their local community. Show-Me ECHO facilitates collaboration between specialty and primary care that expands access to best-practice medical care across Missouri. It links expert specialist teams at an academic 'hub' with primary care clinicians in local communities – the 'spokes' of the model. Together, they participate in regularly scheduled Show-Me ECHO clinics, which are virtual grand rounds, combined with mentoring and patient case presentations and discussions. The state provides this general revenue funding for creating and implementing programs in Asthma, Autism, Community Health Work, Child Psychology, Chronic Pain Management, Dermatology, Healthcare Ethics, Hepatitis C, and Opioid Use Disorder and the topics are increasing.

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The **State Historical Society of Missouri** (SHSMO) is the premier research center for the study of Missouri state and local history. Founded in May 1898 by the Missouri Press Association and established as a trustee of the state by the legislature a year later, SHSMO collects, preserves, and publishes materials that enhance research and support learning opportunities in the study of Missouri and the Midwest. The general revenue core appropriation supports the operations for the SHSMO and the University is a fiscal agent for the SHSMO. The total SHSMO new request is \$402,276 recurring funding for raises, benefits, and new positions.

Requests in Accordance with Legislative Requirements

The University annually makes certain requests, one-time or recurring, in accordance with legislative authority.

The **Debt Offset Tax Authority** appropriation is to cover unpaid debts owed to the institution by state taxpayers. This reduces bad debt expense to the institution by capturing state income tax refunds to pay overdue accounts owed to the University. The appropriation request is for \$1.4 million, from the Debt Offset Escrow Fund.

The **Spinal Cord Injury Fund** supports research in Missouri in the area of spinal cord injuries and congenital or acquired disease processes. The Spinal Cord Injury Fund was established by legislature in 2001 and is funded from a two-dollar surcharge on all county ordinance, criminal and traffic violation cases. State statute stipulates the Board of Curators shall request annually an appropriation for research awards and award administration from the Spinal Cord Injury Fund. Research awards are a maximum of \$250,000 per award. An appropriation of \$1.5 million is needed to ensure the new and existing awards can be funded. The University continues to request \$1.5 million in spending authority, but the current appropriation is limited by available fund balance. As of May 2022, the fund balance is \$650,000.

The state **Seminary Fund** provides income for the general operation of University of Missouri – Columbia’s College of Agriculture and Missouri Science and Technology’s School of Mines and Metallurgy. This fund consists primarily from the sale of land grant property and other moneys donated on behalf of the University to the State of Missouri. Per state statute, the Seminary monies belong to the University but the state must hold the securities. A request must be made to the state annually for earnings, estimated at \$275,000, from the monies to be distributed to the University.

State statute (section 172.801, RSMo) requires the Board of Curators to annually request an appropriation to fund **Alzheimer’s Research**. The statute indicates the amount of the request be computed annually and be not less than \$200,000 adjusted for inflation. In addition, the request is to include administrative costs not to exceed ten percent of the appropriation for research. The estimated amount in FY 2024 is \$600,000. No appropriations have been provided for this program since FY 2005.

The **Missouri Returning Heroes Act** limits the amount of tuition charged to combat veterans who meet certain criteria but allows institutions to request the tuition waived in the following year's appropriation request. MDHEWD requests this item annually for all institutions and includes the amount in the budget request provided to the Governor. The University is requesting an appropriation equivalent to tuition waived in FY 2021 estimated at \$1 million. This request has not been funded in previous years, FY 2009 through FY 2020, but has benefited over 2,400 unduplicated students at an estimated \$6.6 million. The legislation has been expanded from undergraduate degrees to allow returning heroes opportunities to pursue master's and non-professional doctoral degrees. The impact for the FY 2024 request is estimated to be \$1 million.

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University of Missouri System Board of Curators June 23, 2022 Finance Committee

Fiscal Year 2024 State Appropriations Request for Operations
UM



FY 2024 Operating Appropriation Request - \$494 M

Appropriation Core	\$454.96
FY2024 Equity Increase	38.67
Pursue State Higher Ed Directives	<u>TBD</u>
Total Core Funding Requests	\$493.63
Other Programs	17.16
Legislative Requirements	<u>7.80</u>
Total Requests for Other Programs & Legislative Req	\$ 24.96
Total FY 2023 Request for Operations	\$ 518.59
\$ in Millions	

Questions



Fiscal Year 2024 State Capital Appropriation Request
UM

Included herein is the Fiscal Year 2024 State Capital Appropriations Request. The Capital Plans for each University were approved at the April Board of Curators meeting. The projects included in the State Capital Appropriations Request are: Facilities Needs and Operations Reduction Project at MU, Spencer Chemistry & Biological Science Renovation - Phase II at UMKC, Schrenk Hall Addition and Renovation - Phase III (Biosciences Building) at Missouri S&T, and Stadler Hall Renovation at UMSL.

University of Missouri Appropriations Request for Capital Items							
	<i>Capital Improvement Summary</i>				<i>Economic Impact Factors</i>		
Facility Name	Campus	State Request	University Amount	Total	Impact on Overall Economy	Earnings Generated	Jobs Generated
<i>State Appropriations Projects</i>							
Facilities Needs and Operations Reduction Project	MU	\$56,000,000	\$0	\$56,000,000	\$124,320,000	\$44,800,000	879
Spencer Chemistry & Biological Science Renovation - Phase II	UMKC	\$40,000,000	\$0	\$40,000,000	\$88,800,000	\$32,000,000	628
Schrenk Hall Addition and Renovation - Phase III (Biosciences Building)	S&T	\$52,040,100	\$0	\$52,040,100	\$115,529,000	\$41,632,000	817
Stadler Hall Renovation	UMSL	\$38,500,000	\$0	\$38,500,000	\$85,470,000	\$30,800,000	604
Total State Appropriations Projects		\$186,540,100	\$0	\$186,540,100	\$414,119,000	\$149,232,000	2,929

Facilities Needs and Operations Reduction Project
University of Missouri – Columbia

This project will provide critical exterior repairs to Jesse Hall, Hill Hall, and Tucker Hall; critical mechanical systems replacements for Hill Hall, Tucker Hall, and Medical Science Building; and will demolish ten buildings (Columbia Professional Building, Loeb Hall, London Hall, Mizzou North, Neff Annex, Noyes Hall, Old Student Health Building, Parker Hall, Pickard Hall, and Read Hall) that are in very poor condition. The project will eliminate over \$100 million of facilities needs and allow the University to reinvest approximately \$2.5 million annual operating cost savings.

Jesse Hall has stood as a heart of the iconic campus fabric for more than a century. The building has a FCNI of 0.26 with facility needs over \$13 million. The project will repair the exterior deteriorating brick and stone masonry and ornamental and structural painted metal and replace the original wood windows which are in various stages of deterioration.

Hill Hall is a core campus building, located near Jesse Hall, has a FCNI of 0.40 and nearly \$5 million in facility needs. The project will replace the antiquated mechanical system with a new code compliant system; replace the roof and windows; and provide selective masonry tuckpointing.

Tucker Hall is a core campus laboratory building, located near Life Sciences Building, has an FCNI of 0.26 and over \$11 million in facility needs. The project will replace the mechanical system, including laboratory exhaust system, waterproof the foundation and provide selective masonry tuckpointing.

The Medical Science Building is strategically located adjacent to the University Hospital and provides space for research laboratories related to the Health Sciences, particularly the School of Medicine. The building has a FCNI of 0.46 with facility needs of over \$47 million. This project would replace ten air handling units that are 50+ years old, add two new air handling units to eliminate window air conditioning units, replace ten aged fume hoods, replace steam radiators with a modern mechanical system, and extend the fire suppression system throughout the building.

The project cost of \$56,000,000 will be funded from the State.

Spencer Chemistry and Biological Sciences Renovation - Phase II
University of Missouri - Kansas City

This project would continue the renovation of the 153,827 gross square feet (gsf) Biological Sciences Building and Spencer Chemistry Building. The second phase will renovate approximately 75,000 gsf in both Spencer Chemistry and the Biological Sciences Building and will complete the renovation of these facilities. This project will build upon the first phase, which renovated about 79,000 gsf and was completed in 2018 and funded by the State

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with the Board of Public Buildings Bond as the primary funding source. The Phase II renovation will address additional deferred maintenance, research spaces, teaching spaces, and other facility deficiencies that were beyond reach of the Phase I budget. The renovation will provide state of the art teaching laboratories and support spaces, while providing improved laboratory systems to support research activities, support student retention, meet current laboratory standards, and encourage student collaborative learning. The project is consistent with the Campus Master Plan.

The Spencer Chemistry and Biological Sciences Buildings were originally constructed in 1968 and had not been renovated or updated since the 1980's prior to the Phase One renovation which was completed in 2018. These buildings serve Chemistry and Biology undergraduate and graduate majors, as well as those who go into professional schools or graduate studies in medical and dental. They also serve as part of the teaching mission for UMKC's Pharmacy, Medicine, and Nursing Programs. The facility is outdated, provides inadequate space for teaching, and does not meet current safety codes and standards. The chemistry department was recently merged into the School of Biological Sciences to create a larger School of Biological and Chemical Sciences

The project will eliminate \$26.4 million of facilities needs.

Funding for the \$40,000,000 project will be provided by the State.

Schrenk Hall Addition and Renovation - Phase III ***Missouri University of Science and Technology***

The Schrenk Hall Addition and Renovation – Phase III will renovate Schrenk Hall (1938 & 1973) to accommodate the Chemistry and Biological Sciences departments. This will be the final phase with the renovation of 17,600 gross square feet (gsf) of the west wing and the replacement of the east wing with a new 90,400 gsf facility and atrium. This project will provide new teaching laboratories, research laboratories, and support space. The project also takes into consideration growth and consolidation of department entities that are spread over multiple buildings on campus.

This project is the final phase of an interdisciplinary complex dedicated to providing world-class education and research in biological sciences, chemistry, and chemical and biochemical engineering. Equipped with expanded research space, open-concept research labs and improved accessibility, this facility will leverage Missouri S&T's strengths in computational science, environmental engineering, and materials science and engineering to advance medical, environmental, and biomedical research. The building will also be home to an interdisciplinary Center for Research in Biomaterials, where students and faculty will conduct research in bio-active, bio-inspired, and bio-mimetic materials for a variety of applications. The facility will be an integral component of the student experience at Missouri S&T, since almost every student will take at least one course in one or more important foundational area of biological sciences or chemistry.

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The existing 1938 Schrenk Hall East should be demolished due to its very poor condition, and the structural system is not conducive to modern building systems. The Facilities Condition Needs Index (FCNI) is 0.57 with over \$19 million in facilities needs. Missouri S&T has been committed to moving this challenging project forward in a phased approach and investing, when possible, to address immediate campus needs. The campus constructed general classrooms, which were planned for this facility, but were built as an addition to the Computer Science Building Student Classroom Learning Center. Since 2016, demand for larger classrooms has increased due to growth. These investment results in more efficient instruction serving more students that will allow them to complete their degrees faster. Both investments have reduced the project budget and overall scope of this project by \$9 million.

This project will eliminate \$19.1 million in facilities needs and will increase annual operating cost by \$187,772.

Funding for the \$52,040,100 project will be from the State.

Stadler Hall Renovation
University of Missouri - St. Louis

Renovation of Stadler Hall will include renovating existing research laboratories, offices, classrooms, restrooms, and common core areas. The project provides new infrastructure (HVAC, electrical switchgear, building envelope, etc.), and the associated technology required to teach and learn in today's modern-day world. The project will also include extensive renovation to common use areas to allow students to study and collaborate and will address life safety and ADA deficiencies. Exterior improvements include building envelope items, replacement/upgrade of signage, sidewalks, accessible routes, doors, and steps.

This project is aligned with UMSL's ten-year Master Plan, Space Survey, and ISES Report by addressing technology, life-safety, building code and accessibility deficiencies. UMSL's research department has been operating in a facility that is 50+ years old with infrastructure that is failing and out of date. In addition, technology in the building does not operate as designed, and research is being compromised as a result. This project updates the interior of the research complex with state-of-the-art research and technology that will align with survivability of UMSL's long term plans.

This project will eliminate \$30 million in facilities needs.

Funding for the \$38,500,000 project will be provided by the State.

No. 3

Recommended Action - Fiscal Year 2024 State Capital Appropriations Request, UM

It was recommended by President Choi, Chancellor Agrawal, Chancellor Dehghani, and Chancellor Sobolik, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

That President Choi be authorized to submit to the appropriate state offices the University's Fiscal Year 2024 State Capital Appropriations Request as shown on the accompanying schedules.

Roll call vote Finance Committee	YES	NO
Curator Hoberock		
Curator Graves		
Curator Layman		
Curator Williams		

The motion _____.

Roll call vote Full Board:	YES	NO
Curator Brncic		
Curator Chatman		
Curator Graves		
Curator Hoberock		
Curator Holloway		
Curator Layman		
Curator Wenneker		
Curator Williams		

The motion _____.

Project Approval
Lottes Health Sciences Library – Renovation for Consolidation
MU

The University of Missouri – Columbia requests Project Approval for the Lottes Health Sciences Library – Renovation for Consolidation project. The total project budget of \$8,500,000, will be funded equally from MU Health Care and School of Medicine.

This project supports activities of the Strategic Space Reduction and new MUHC Children's Hospital Facility. The Lottes Health Sciences Library (Lottes HSL) was constructed in mid-1980s and is the primary library for the University of Missouri School of Medicine, Sinclair School of Nursing, and School of Health Professions, which are located within the MU Medical Science Complex adjacent to Lottes. Its services and resources are critical to advancing teaching and research within these schools and enhance the student experience. Since its construction, library use and technology has changed considerably. By consolidating and renovating library space, users will have access to a modernized Health Sciences Library and additional space will be made available within the building for other departmental needs.

The Department of Child Health trains superior physicians, fosters innovation through discovery and application, and provides high-quality health care, including more than 30 pediatric subspecialties, to patients throughout Missouri and beyond. Child Health faculty offices are currently located on Keene Street to support the nearby Women's and Children's Hospital. As the new Children's Hospital facility becomes operational in 2024, it will be necessary to provide on-campus office space for the Department of Child Health faculty. The direct interior connection to School of Medicine and University Hospital space from Lottes HSL makes it an ideal location for this office relocation.

The scope of work includes renovation of 35,000-40,000 gross square feet of existing space on all three floors of the Lottes HSL to accommodate library and office uses as well as to address code deficiencies and deferred maintenance needs. This project will consolidate, centralize, and modernize the library on a single floor adjacent to the main lobby space on the second floor, connecting the academic and research areas of the Medical Science Complex. A portion of the first floor and all the third floor will be renovated to accommodate the aforementioned Department of Child Health faculty that will relocate from their current off-campus building when the new Children's Hospital Facility becomes operational in 2024.

Simon Oswald Associates, Inc. (SOA)(WBE), Columbia, Missouri is the recommended architect for this project. SOA presented a well-balanced team of experts with in-depth knowledge of university academic and faculty office environments and provided many examples of relevant project experience. The design team includes Ross & Baruzzini, Inc., St. Louis, Missouri for mechanical, plumbing, and electrical engineering, and Crockett Engineering Consultants, Inc., Columbia, Missouri for structural engineering.

June 23, 2022

The selection committee also interviewed International Architects Atelier, Inc, Kansas City, Missouri, and Peckham Guyton Albers and Viets, Inc., St. Louis, Missouri.

The fee for basic architectural and engineering services has been determined by referencing the University of Missouri's "Architectural and Engineering Basic Services Fee Estimating Guidelines." The project is considered a Type III – Renovation (average complexity), and the calculated basic services fee is \$460,000 based upon 8% of the estimated \$5,750,000 construction cost. Additional services to the basic design fee include measured drawings of existing facilities, accelerated Design Development phase, and documents and design prepared for early procurement of mechanical units. A total of \$40,000 in pre-approved additional services was added to the basic services fee amount for a total maximum fee of \$500,000.

The project is expected to be complete by Spring 2024. The project will be delivered as a traditional Design-Bid-Build project.

No. 4

Recommended Action - Project Approval, Lottes Health Sciences Library - Renovation for Consolidation, MU

It was recommended by President Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

the project approval for the Lottes Health Sciences Library - Renovation for Consolidation, MU

Funding of the project budget is from:

MU Health Care	\$4,250,000
School of Medicine	<u>\$4,250,000</u>
Total Funding	\$8,500,000

Roll call vote Finance Committee	YES	NO
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Curator Hoberock

Curator Graves

Curator Layman

Curator Williams

The motion _____.

Roll call vote Full Board:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

Project Approval
Pershing Commons – Renovation for Student Health Center
and School of Medicine/MU Health Care Offices
MU

The University of Missouri – Columbia requests Project Approval for the Pershing Commons – Renovation for Student Health Center and School of Medicine/MU Health Care Offices project. The total project budget of \$10,860,000, will be funded by a \$8,779,050 MU Health Care Contribution and \$2,080,950 in School of Medicine Reserves.

Pershing Commons was constructed in 1956 as a part of the Pershing Student Housing and Dining Group and served as the central dining facility for that group. It consists of a two-story masonry building of approximately 39,500 gross square feet (gsf), plus a 1,700 gsf mechanical penthouse. During the 1980's/1990's Campus Dining Services integrated several of these campus dining facilities into more efficient and flexible operations on campus, eliminating the need for several locations. As a result, the Pershing second floor was renovated to serve as a regional campus convenience store, incorporating a franchised Subway sandwich component, along with a shared computer lab and study area for use by Residential Life (RL) students, and the first floor renovated as RL program support offices and activity spaces. In subsequent years, there have been a variety of small modifications, and most recently in 2015 with modifications to enhance the North and South Entrances including the addition of an elevator.

As the result of several evolving strategic and operational initiatives across a number of campus entities and departments, Pershing Commons has been identified to undertake a comprehensive renovation to accommodate the Student Health Center on the second floor in an area of approximately 18,340 gsf, and faculty/staff offices on the first floor in an area of approximately 13,830 gsf.

This project serves as a critical enabling component to the MU Health Care Clinical Campus Integration initiative in allowing the re-assignment of space in the University Physician's Medical Building (UPMB) to accommodate both child and women's health related clinics as the new Children's Hospital Facility is scheduled to open in June 2024 and provides for improved visibility and access for the MU Student Health Center.

The project has been defined as a single design and construction project effort for efficiency, schedule, coordination, and cost advantages but contains two independent and unshared components. Both floors of Pershing Commons will undergo complete interior reconfiguration and renovation utilizing program and scope information developed in the Program Planning Study completed in March 2022.

bcDesign Group, LLC, Kansas City, Missouri is the recommended architect for this project. The bcDesign Group presented a well-balanced team of experts with in-depth knowledge of health care and clinical project work, higher education, office, and adaptive reuse

June 23, 2022

project work; and provided several examples of relevant project experience. The design team includes Ross & Baruzzini, Inc., St. Louis, Missouri for mechanical, plumbing, electrical, and fire protection engineering; Bob D. Campbell Company, Inc., Kansas City, Missouri for structural engineering; Spellman Brady & Company, St. Louis, Missouri (WBE) for interior design consulting; H2Ltg, St. Louis, Missouri (WBE) for lighting design consulting; and Construction Management Resources, LLC, Kansas City, Missouri for cost estimating.

The selection committee also interviewed Health Facilities Group (HFG), LLC, Kansas City, Missouri; and Ottolino Winters Huebner (OWH), Inc., St. Louis, Missouri.

The fee for basic architectural and engineering services has been determined by referencing the University of Missouri's "Architectural and Engineering Basic Services Fee Estimating Guidelines." The project is considered a Type III - Renovation (average complexity), and the calculated basic services fee is \$483,600 based upon 8.0% of the estimated \$6,045,000 construction cost. Additional services to the basic design fee include multi-client user-group meetings, an accelerated design schedule, an Early Procurement Package for specifically identified long-lead items to ensure they are available on-site when needed (HVAC & electrical equipment items, door hardware, prefinished wood doors, welded door frames, steel fabrications, etc.), audio/visual planning and equipment lists for conference rooms and clinic waiting area. A total of \$51,800 in pre-approved additional services was added to the basic services fee amount to arrive at a total maximum fee of \$535,400.

The project is expected to be complete by April 2024. The project will be delivered as a traditional Design-Bid-Build project.

No. 5

Recommended Action - Project Approval, Pershing Commons – Renovation for Student Health Center and School of Medicine/MU Health Care Offices, MU

It was recommended by President Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

the project approval for the Pershing Commons – Renovation for Student Health Center and School of Medicine/MU Health Care Offices, MU

Funding of the project budget is from:

MU Health Care	\$8,779,050
School of Medicine	<u>\$2,080,950</u>
Total Funding	\$10,860,000

Roll call vote Finance Committee YES NO

Curator Hoberock

Curator Graves

Curator Layman

Curator Williams

The motion _____.

Roll call vote Full Board: YES NO

Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

Project Approval
MU Research Reactor (MURR) West Addition
MU

The University of Missouri – Columbia requests Project Approval for the MU Research Reactor West Addition project. The total project budget of \$20,00,000, will be funded by State Appropriation.

For more than 50 years, faculty and staff of the MU Research Reactor (MURR) have promoted groundbreaking research and developed life-saving radiopharmaceuticals. The MURR expansion will allow for growth in space for research and development industry partners and researchers, scientists, engineers, and students at MU. Of note, MURR recently executed an exclusive multi-year agreement (worth over \$300M) with Advanced Accelerator Applications International, SA (AAA), a Novartis company, to provide a key ingredient in a targeted therapy for certain types of cancerous tumors.

This project will expand the existing MURR North Building to accommodate multidisciplinary research and testing laboratories, office space, and student researcher hoteling space. The project will consist of a 40,000-45,000 gross square feet (gsf) three-story building addition with offices on the second floor to accommodate staff growth and eliminate the need for four existing modular office trailers in the complex. The ground floor will house shell space to allow for the future fit out for 15,000 gsf of hot cells, research laboratories, and space for Current Good Manufacturing Practices (CGMP) drug production. The third floor will consist of mechanical equipment space and storage space for quarantine and release from drug manufacturing.

Clark & Enersen, Inc., Kansas City, Missouri, is the recommended architect for this project. Clark & Enersen presented a well-balanced team of experts with in-depth knowledge of university laboratory and office environments and provided many examples of relevant project experience. The project team will include Clark & Enersen for architecture, mechanical, plumbing, electrical, and structural engineering; SK Design Group, Inc., Shawnee Mission, Kansas, (MBE) for civil engineering; and FSC, Inc., Overland Park, Kansas (MBE) for code and fire suppression consulting.

The selection committee also interviewed Cannon Design, Inc., St. Louis, Missouri and TreanorHL, Inc., Kansas City, Missouri.

The fee for basic architectural and engineering services has been determined by referencing the University of Missouri's "Architectural and Engineering Basic Services Fee Estimating Guidelines." The project is considered a Type III – New Construction (average complexity), and the calculated basic services fee is \$781,000 based upon 6.2% of the estimated \$12,600,000 construction cost. Additional services to the basic design fee include laboratory planning, and life safety planning and fire alarm assessment planning for the entire MURR facility. A total of \$60,000 in additional services was added to the basic services fee amount to arrive at a total maximum fee of \$841,000.

The project is expected to be complete by Fall 2024. The project will be delivered as a traditional Design-Bid-Build project.

June 23, 2022

No. 6

Recommended Action - Project Approval, MU Research Reactor (MURR) West Addition, MU

It was recommended by President Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

the project approval for the MU Research Reactor (MURR) West Addition, MU

Funding of the project budget is from:

State Appropriation	<u>\$20,000,000</u>
Total Funding	\$20,000,000

Roll call vote Finance Committee	YES	NO
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Curator Hoberock

Curator Graves

Curator Layman

Curator Williams

The motion _____.

Roll call vote Full Board:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

Project Approval
NextGen Precision Health 4th Floor Fit Out
MU

The University of Missouri – Columbia requests Project Approval for the new NextGen Precision Health 4th Floor Fit Out project. The total project budget of \$16,500,000 will be funded by State Appropriation.

The Roy Blunt NextGen Precision Health 4th Floor Fit-Out project is a component of the Mizzou Forward initiative and will provide research laboratory space to support additional researchers. During the original NextGen project, the design team completed construction documents to fit-out the lab bar and prime investigator offices on the fourth floor in the same configuration as the second and third floors. To protect the overall budget, leadership elected to leave the fourth floor as shell space.

This project will add wet laboratory and office space in the NextGen Precision Health Building on the fourth floor and incorporates changes to the original design informed by the current occupants of the second and third floor. The proposed design will build out additional private office space and the new laboratory area will have fewer small conference rooms and additional laboratory modifications to maximize benching workstations to make laboratory areas more flexible for a variety of uses.

Burns & McDonnell Engineering Co., Inc., Kansas City, Missouri was selected to continue design services for the NextGen Precision Health Facility, since the fourth-floor laboratory portion of the building was designed as part of the original project. The program for the fourth floor has been revisited and updated, based on the current use of the facility.

The original selection committee also interviewed Flad Architects, Inc., Madison, Wisconsin and BSA Life Structures, Inc., St. Louis, Missouri.

The fee for basic architectural and engineering services has been determined by referencing the University of Missouri's "Architectural and Engineering Basic Services Fee Estimating Guidelines." The project is considered a Type V – New Construction (considerably more than average complexity), and the calculated basic services fee is \$688,185 based upon 7.4% of the estimated \$12,412,691 construction cost and adjusted for elimination of Schematic Design and reduction of Design Development services, based on work previously completed.

The project is expected to be complete by Fall 2024. The project will be delivered as a traditional Design-Bid-Build project.

June 23, 2022

No. 7

Recommended Action - Project Approval, NextGen Precision Health 4th Floor Fit-Out, MU

It was recommended by President Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

the project approval for the NextGen Precision Health 4th Floor Fit-Out, MU,

Funding of the project budget is from:

State Appropriation	<u>\$16,500,000</u>
Total Funding	\$16,500,000

Roll call vote Finance Committee	YES	NO
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Curator Hoberock

Curator Graves

Curator Layman

Curator Williams

The motion _____.

Roll call vote Full Board:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

Project Approval
Welcome Center
Missouri S&T

Missouri University of Science and Technology requests Project Approval for the Welcome Center project. The total project budget of \$25,750,000 and will be funded by \$12,875,000 from gifts and \$12,875,000 from campus reserves.

Analysis of recruitment success rates suggests a need to improve the student and parent experience during campus visits. Providing a new “front door” for visitors and potential new students, the Welcome Center will allow for multiple types of events within a highly branded environment and will enhance the public perception of the University. The proposed location is key to the newly defined Arrival District and strengthens the goals of the campus master plan to create a clear and structured wayfinding experience for prospective students and visitors.

The Welcome Center will be a two story, 30,499 gross square feet building located east of the Havener Center and Innovation Lab. The main spaces for this building will include an open lobby, exhibit space, large event space; theater space utilized for small tour group kick-offs; and interactive and engaging galleries highlighting accomplishments of Missouri S&T. Enrollment Management, Graduate and International Admissions, and most of the Undergraduate Admissions departments will be located in the Welcome Center.

Hastings & Chivetta Architects, Inc., St. Louis, Missouri is the recommended architect for this project. They have completed multiple welcome and visitor center projects. The design team includes David Mason & Associates, Inc., St. Louis Missouri (MBE) for civil engineering; The McClure Corporation, St. Louis, Missouri for mechanical, plumbing, and fire protection engineering; SWT Design, Inc., St. Louis, Missouri for landscaping; Antella Consulting Engineers, Inc., Kansas City, Missouri (MBE/WBE) for electrical engineering; and Alper Audi, Inc., St. Louis, Missouri for structural engineering.

The selection committee also interviewed Gould Evans Architects, P.A., Kansas City, Missouri; Dake Wells Architecture, Inc., Springfield, Missouri; Helix Architecture & Design, Inc., Kansas City, Missouri.

The fee was determined by using the University of Missouri’s “Architectural and Engineering Basic Services fee Estimating Guidelines.” The project is considered a Type IV (more than average complexity) project, and the calculated basic services fee is \$1,090,852 based upon 6.6% of the estimated \$16,528,604 construction cost. Additional services to the basic design fee include enhanced landscaping, interpretive/exhibits, specialty lighting, acoustical design, and LEED documentation. A total of \$397,960 in pre-approved additional services and \$37,000 in reimbursable expenses were added to the basic services fee amount for a total maximum fee of \$1,525,812.

The project is expected to be completed by December of 2024. The project will be delivered as a traditional Design-Bid-Build project.

June 23, 2022

No. 8

Recommended Action - Project Approval, Welcome Center, Missouri S&T

It was recommended by Chancellor Dehghani, endorsed President Choi, recommended by the Finance Committee, moved by Curator _____ and seconded by Curator _____, that the following action be approved:

the project approval for the Welcome Center, Missouri S&T

Funding of the project budget is from:

Campus Reserves	\$12,875,000
Gifts	<u>\$12,875,000</u>
Total Funding	\$25,750,000

Roll call vote Finance Committee	YES	NO
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Curator Hoberock

Curator Graves

Curator Layman

Curator Williams

The motion _____.

Roll call vote Full Board:	YES	NO
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Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

curator Wenneker

Curator Williams

The motion _____.

June 23, 2022

GOVERNANCE, COMPENSATION AND HUMAN RESOURCES COMMITTEE

Michael Williams (Chair)

Julia Brncic

Keith Holloway

Robin Wenneker

I. Governance, Compensation and Human Resources Committee

The Governance, Compensation and Human Resources Committee ("Committee") will review and recommend policies to enhance quality and effectiveness of the Board as well as compensation, benefits and human resources functions of the University.

II. Governance

1. Scope

In carrying out its responsibilities regarding governance, the Committee has the central authority of ensuring that board members are prepared to exercise their fiduciary duties and assisting the Board to function effectively, efficiently and with integrity.

2. Executive Liaison

The General Counsel of the University, or some other person(s) designated by the President of the University with the concurrence of the Board Chair and the Committee Chair, shall serve as executive liaison to the Committee on governance matters and be responsible for transmitting Committee recommendations related to governance.

3. Responsibilities

In addition to the overall responsibilities of the Committee described above, and in carrying out its responsibilities regarding governance, the Committee shall review and make recommendations on the following matters:

1. ensuring that Board members are prepared to carry out their fiduciary duties to the University;
2. providing and monitoring a substantive orientation process for all new Board members and a continuous board education program for existing Board members;
3. overseeing, or determining with the Board Chair and President, the timing and process of periodic Board self-assessment;
4. establishing expectations and monitoring compliance of individual Board members;
5. ensuring that the Board adheres to its rules of conduct, including conflict-of-interest and disclosure policies, and that it otherwise maintains the highest levels of integrity in everything it does;
6. periodically reviewing the adequacy of the Board's bylaws and other Collected Rules and Regulations adopted by the Board that pertain to its internal operations (all recommendations for bylaws amendment shall first be considered by this Committee);
7. identifying best practices in institutional and Board governance;
8. monitoring and assessing external influences and relationships with affiliated entities;
9. assessing areas of expertise needed in future Board members; and
10. those additional matters customarily addressed by the governance committee of a governing board for an institution of higher education.

III. Compensation and Human Resources

1. **Scope**

In carrying out its responsibilities regarding compensation and human resources, the Committee reviews and makes recommendations to the Board of Curators on strategies and policies relating to compensation, benefits and other human resources functions and associated programs.

2. **Executive Liaison**

The Vice President and Chief Human Resources Officer of the University, or some other person(s) designated by the President of the University, with the concurrence of the Board Chair and the Committee Chair, shall serve as executive liaison to the Committee on human resources and compensation matters and be responsible for transmitting committee recommendations related to human resources and compensation.

3. **Responsibilities**

In addition to the overall responsibilities of the Committee described above and in carrying out its responsibilities regarding human resources and compensation, the charge of the Committee shall include reviewing and making recommendations to the Board on the following matters:

1. Performance and compensation of individuals reporting directly to the Board:
 1. President
 2. General Counsel
 3. Secretary of the Board of Curators
 4. Chief Audit and Compliance Officer, in conjunction with the Audit, Compliance and Ethics Committee
2. Pursuant to Section 320.020 of the Collected Rules and Regulations, appointment or change of appointment of the following shall be reported to and approved by the Board before the effective date:
 1. Vice Presidents
 2. Chancellors
 3. Curators Professors
3. Intercollegiate Athletics
Pursuant to Section 270.060 of the Collected Rules and Regulations, contracts for Directors of Intercollegiate Athletics and Head Coaches may not exceed five (5) years and shall not include buyout clauses calling for the individual to receive more than the balance of the annual base salary the individual would have earned under the remaining terms of the contract, unless approved by the UM Board of Curators upon the recommendation of the President.
4. Benefit, retirement and post retirement plans, including an annual benefits report, as further defined in Section 520.010, Benefit Programs, of the Collected Rules and Regulations.
5. Additional employee benefits including the Education Assistance Program for University Employees, CRR 230.070, and Layoff and Transition Assistance, CRR 350.051.
6. Labor Union Recognition and matters as further defined in Section 350.020, Labor Union Recognition, of the Collected Rules and Regulations.
7. Employment related policies including those related to employee absences, conduct and grievances.
8. Provide oversight over the University of Missouri System's diversity, equity and inclusion programs.
9. Additional matters customarily addressed by the compensation and human resources committee of a governing board for an institution of higher education.

University of Missouri System Modernizing Leave Plan Programs Considerations and Recommendations

A University of Missouri HR Whitepaper

Contents

- I. Guiding Principles
- II. Recommended Design Solutions
 - A. Paid Time Off (PTO)
 - B. Ancillary Plans – short term disability, parental leave, caregiver leave
- III. Delivering on Guiding Principles
 - A. Modernization and market competitive
 - B. Improve effectiveness of leave programs
 - C. Realize cost savings
 - D. Design leave programs that promote work-life balance
 - E. Explore differentiating leave by staff and industry
- IV. Review process overview
 - A. Aon Consulting
 - B. Stakeholder groups
- V. Next Steps
- VI. Appendix

Executive summary

Over the past decade, views on work-life balance and the value of time away from work have shifted, with younger generations placing a higher level of importance on time off. This is a highly valued benefit for the University's workforce, and it is therefore important to ensure the University is maximizing the value of the benefit to match the needs and desires of the workforce. Based on data analysis and feedback from constituents, the key gaps in the University's leave policies include:

1. Short-term disability, especially for employees with less than five years of service
2. Ineffective design for vacation and sick leave
3. Paid family leave



I. Guiding Principles

The Guiding Principles lay the foundation for the initiative's goals and objectives. They are the agreed upon blueprint for creating the leave design recommendations.

- A. Modernize leave programs to make them more market competitive
- B. Improve effectiveness of leave programs
- C. Realize cost savings
- D. Design leave programs that promote work-life balance
- E. Explore differentiating leave by staff type or industry

Note: In June 2021, the principle changed from 'cost neutral' to 'cost savings' based on Curator feedback.

II. Recommended Design Solutions

A. Paid Time Off (PTO)

- 1. PTO summary - One leave bucket which addresses vacation, personal, and incidental illnesses. Holidays and winter break are not included in PTO bucket
 - a. Recommended days at hire (non-exempt)
 - Campus PTO plan: 31 days (18 PTO, 9 Holidays, 4 Winter Break)
 - Health Care PTO plan: TBD
 - b. PTO days increase based on years of service at 3 and 10 years and exempt versus non-exempt
- 2. Benefits
 - a. PTO structure will fundamentally shift the way the University and employees manage time off:
 - Incentivizes appropriate use of time off
 - Encourages planned absences which support leaders to focus on the strategic goals of the organization
 - Gives employees the flexibility to plan their absences for rest and recharge, and use paid time off as needed for incidental unplanned absences
 - b. Market Competitiveness - Market comparator data summary (See Appendix A)

B. Ancillary Plans – short term disability, parental leave, caregiver leave

- 1. Short-term disability
 - a. Provides paid time off for approved serious health conditions
 - b. 60% replacement salary for a maximum duration of 21 weeks
 - c. Concurrent with FMLA (non-paid employment protection)



1. Parental Leave
 - a. Provides paid time off for bonding with a new child including birth, adoption, and foster care
 - b. Must be used in whole week increments
 - c. Maximum 4 weeks paid time within a rolling 12-month period
 - d. Concurrent with FMLA
2. Caregiver Leave
 - a. Provides paid time off to care for an immediate family member with a serious health condition
 - b. Must be used in whole week increments
 - c. Maximum 4 weeks paid time within a rolling 12-month period
 - d. Concurrent with FMLA

III. Delivering on Guiding Principles

A. Modernization and market competitive

1. Aligns with the market while remaining competitive
2. Increases flexibility and perceived value
3. Provides an equitable safety net compared to the current sick bank that disproportionately benefits longer service employees

B. Improve effectiveness of leave programs

1. Provides equitable time off, reduces abuse of sick time, and promotes scheduling time off in advance
2. Increases employee retention by accelerating the service break points in the PTO bank, and aligns with the retirement DC plan vesting

C. Realize cost savings

1. Delivers annual cash savings and liability reduction
2. Reinvests a portion of savings in benefits that complement the PTO structure with desired safety nets at a low cost

D. Design leave programs that promote work-life balance

1. PTO programs are more inclusive of the diverse needs of employees, empowers employees to take time off, and promotes trust between the University, managers, and staff
2. Ancillary programs like parental and caregiver leave recognize key life stages and promotes work-life balance, productivity, and engagement

E. Explore differentiating leave by staff and industry

1. Proposal includes separate programs for Campus and MUHC to support market competitiveness
2. Campus: keeping holidays and winter break separate from PTO bank is aligned with Higher Education industry



3. Health Care: consolidating all days into PTO is consistent with the health care industry. Certain features like keeping a rich maximum accrual are more common in the health care industry

IV. Review process overview

The following outlines the process used to research, evaluate, and propose the recommendations.

A. Aon Consulting

Aon Consulting was engaged in all steps of the leave program evaluation and recommendation process. With their direct experience in leave plan evaluations, Aon had resources/data to complete a formal benchmark analysis, financial cost modeling that incorporated leave usage behaviors of current employees, provided education and expertise to administration and the committees, and conducted other analysis regarding this project.

B. Stakeholder groups

1. 2020 Benchmark Team (Sept 2020-Jan 2021)
A committee of faculty, staff, and subject-matter experts explored all current leave programs and policies, as well as what is offered in the market that may not be offered by UM but could be of value to the organization. In partnership with Aon, their charge was to:
 - a. Define the University's comparator group(s) and conduct benchmarking of the UM leave programs and policies
 - b. Develop a recommendation for a strategic approach to leave management, considering the current workforce, future workforce, and any lasting impact that the COVID-19 experience may have created.
 - c. Provide strategic recommendations which result in market competitive leave programs that are cost neutral to the University relative to the current programs in place.
2. 2021 Leave Strategy Work Team (Sept 2021-Present)
Continuing the work of the 2020 Benchmark Team, a working group of HR, Finance, campus, and health care leaders were charged with developing a multi-year plan to address the competitiveness of leave programs and provide recommendations to accomplish the primary objectives from the Guiding Principles.
3. Governance group input and updates
Key internal stakeholder groups were engaged and provided updates regularly. Groups include, but not limited to, Chancellors, HR Leaders, CFO leaders, etc.
 - a. Total Rewards Advisory Committee (TRAC) - This group of faculty, staff, and retirees from each campus and MU Health Care have been informed and consulted.



- b. MU Healthcare Leaders – Given the recommendation to differentiate healthcare from campus, a group of healthcare leaders and administration discussed plan design recommendations and the unique needs of this area of the organization.
- 4. Board updates
 - a. June 24, 2021 – Informational Item
 - b. November 18, 2021 – Information Item
 - c. December-April 2022 – Individual Curator discussions
- 5. Transition for current employees

Administration is currently evaluating methods to transition current employees to the new PTO plan. Some areas of evaluation include a one-time award of additional days at the time of transition, and/or paying a lump sum of vacation accrued under the current plan at the time of transition (which is required to be paid out to employees).

V. Next Steps

- 1. Finalize new PTO plan design
 - a. June 23-24, 2022 –Informational Item (Plan Design Specifics)
 - b. July-August 2022 - Further vetting among constituent groups
 - c. September 7, 2022 – Tentative Action/Vote Item (Approval of plan design and implementation timeline)
- 2. Implementation Strategy
 - a. RFP for vendor selection
 - b. Communication strategy for current employee socialization
 - c. Technical system enhancements
- 3. January 1, 2024 PTO effective date

VI. Appendix

Total Days Comparison

	National				Local			UM Proposed	
	SEC Univ (hourly)	AAU-P Univ (hourly)	General Industry (salaried)	Healthcare (salaried)	Gov't/ Univ (hourly)	Private (hourly)	Healthcare (salaried)	Campus (hourly)	Health Care (hourly)
2020 Average*	29	29	28	27	Data not pulled in 2020			31	TBD
2022 Average*	34	31	28	27	34	29	27		
2022 Average**	41	39	30	27	43	30	27		
2022 Median**	40	40	30	27	42	30	27		

*Represents the total number of days at hire: PTO or vacation., **reduced to 4 days of incidental sick**, Personal, Winter break or shutdown period, and Holidays.

Represents the total number of days at hire: PTO or vacation, **total number of sick days, Personal, Winter break or shutdown period, and Holidays.

SEC & AAU-P Breakdown Comparison

The following charts represent SEC & AAU-P Breakdown Comparison. Includes total number of days for hourly (non-exempt) & salaried (exempt) at hire: PTO or vacation, **4 days of incidental sick**, Personal, Winter break or shutdown period, and Holidays.

Hourly (at hire)	National		UM Campus Proposed
	SEC Universities	AAU-P Universities	
Average Holidays*	14	13	13
Average Days of PTO	20	18	18
Average Total Days	34	31	31

*Average holidays also include paid shut down periods.

Salaried (at hire)	National		UM Campus Proposed
	SEC Universities	AAU-P Universities	
Average Holidays*	14	12	13
Average Days of PTO	22	23	23
Average Total Days	37	36	36

*Average holidays also include paid shut down periods.



National SEC

	Vacation			Sick			Holidays			Other (i.e. Winter Break)			At Hire Total Days (NonEx)*	Total Days (Non-Ex)** 4 Incidental Sick Only	STD?		Parental Leave?		Holidays include Juneteenth?		Category	Expanded Category
	12	12	12	12	12	12	9	9	9	8	8	8			No	No	No	No	Yes	Yes		
UM Current***	12	12	12	12	12	12	9	9	9	11	11	11	41	41	No	No	No	No	Yes	Yes	Public University	Govt/Higher Ed
University of Alabama	12	12	12	12	12	12	9	9	9	11	11	11	44	44	36	Voluntary	Yes	Yes	Yes	Yes	Public University	Govt/Higher Ed
University of Arkansas	12	12	12	12	12	12	12	12	12	0	0	0	36	36	28	No	No	No	No	No	Public University	Govt/Higher Ed
Auburn University	20	12	12	12	12	12	11	11	10	10	10	10	53	53	45	Yes	Yes	Yes	Yes	Yes	Public University	Govt/Higher Ed
University of Florida (PTO + Holidays)	33	12	12	12	12	12	10	10	10	0	0	0	43	43	43	Yes	Yes	Yes	No	No	Public University	Govt/Higher Ed
University of Georgia	15	12	12	12	12	12	13	13	13	0	0	0	40	40	32	Voluntary	Yes	Yes	Yes	Yes	Public University	Govt/Higher Ed
University of Kentucky	10	12	12	12	12	12	10	10	10	4	4	4	36	36	28	Voluntary	Yes	Yes	Yes	Yes	Public University	Govt/Higher Ed
Louisiana State University	12	12	12	12	12	12	14	14	14	0	0	0	38	38	30	No	No	No	No	No	Public University	Govt/Higher Ed
University of Mississippi	18	5	12	12	12	12	15	15	15	0	0	0	38	38	37	No	No	No	No	No	Public University	Govt/Higher Ed
Mississippi State University	18	12	12	12	12	12	15	15	15	0	0	0	45	45	37	Voluntary	No	No	No	No	Public University	Govt/Higher Ed
University of South Carolina	15	15	12	12	12	12	13	13	13	0	0	0	43	43	32	Voluntary	No	No	No	No	Public University	Govt/Higher Ed
University of Tennessee	12	12	12	12	12	12	10	10	10	5	5	5	39	39	31	Voluntary	Yes	Yes	No	No	Public University	Govt/Higher Ed
Texas A&M University	12	12	12	12	12	12	8	8	8	4	4	4	36	36	28	No	Yes	Yes	No	No	Public University	Govt/Higher Ed
Vanderbilt University (PTO + Holidays)	20	12	12	12	12	12	7	7	7	6	6	6	33	33	33	Yes	Yes	Yes	No	No	Private University	Govt/Higher Ed
AVERAGE													41	34								
MEDIAN													40	32								

*Includes total days regardless of plan type - traditional vs PTO

**For plans with a traditional sick leave bucket, only used 4 incidental days of sick.

***Excluded from Average/Median calculations



National AAU-P

National AAU-P

UM Current***	Vacation		Sick		Holidays		Winter Break		Other (i.e. Winter Break)	At Hire Total Days (Non-Ex)**		At Hire Total Days (Non-Ex)** 4 Incidental Sick Only		STD?	Parental Leave?		Holidays include Juneteenth?	Category		Expanded Category
	12	12	12	12	9	9	8	8		41	41	No	No		Yes	Yes		Public University	Govt/Higher Ed	
Georgia Institute of Technology	15	12			9	9	4	4		40	40	32	No	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
Iowa State University	10	18			9	9	2	2		39	39	25	No	No	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
Purdue University	10	10			10	10	0	0		30	30	24	Voluntary	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
State University of New York at Stony Brook	15	18			13	13	0	0		46	46	32	Voluntary	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
Texas A&M University	12	12			8	8	4	4		36	36	28	No	Yes	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
The University of Arizona (Tucson, AZ)	11	12			9	9	5	5		37	37	29	No	Yes	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University At Buffalo - State University of New York	13	13			12	12	5	5		43	43	34	Voluntary	No	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of California System	15	12			13	13	0	0		40	40	32	Voluntary	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Colorado Boulder	12	10			10	10	0	0		32	32	26	Voluntary	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Florida (PTO + Holidays)	33				10	10	0	0		43	43	43	Yes	Yes	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Iowa	12	18			9	9	2	2		41	41	27	Voluntary	No	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Kansas Main Campus	22	12			9	1	1	1		44	44	36	No	Yes	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Oregon	23	12			10	10	0	0		45	45	37	Voluntary	No	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Pittsburgh	10	12			11	11	2	2		35	35	27	Yes	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Texas at Austin	12	12			9	9	4	4		37	37	29	Voluntary	No	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Virginia	12	12			12	12	4	4		40	40	32	Yes	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
Indiana University Bloomington (Bloomington, IN)	14	12			10	10	0	0		36	36	28	No	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
Michigan State University (East Lansing, MI)	12	13			9	9	3	3		37	37	28	Yes	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
Pennsylvania State University (University Park, PA)	18	12			7	7	5	5		42	42	34	No	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
Rutgers the State University of New Jersey System Summary (New Brunswick, NJ)	15	12			8	8	2	2		37	37	29	No	No	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
The Ohio State University Main Campus (Columbus, OH)	10	15			11	11	0	0		36	36	25	Voluntary	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Illinois at Urbana-Champaign (Champaign, IL)	12	12			15	15	2	2		41	41	33	No	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Maryland College Park (College Park, MD)	11	12			15	15	6	6		44	44	36	No	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Michigan-Ann Arbor (Ann Arbor, MI)	12	15			11	11	0	0		38	38	27	No	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of North Carolina at Chapel Hill (Chapel Hill, NC)	14	12			10	10	4	4		40	40	32	Yes	Yes	Yes	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Washington (Seattle, WA)	16	12			11	11	1	1		40	40	32	No	Yes	Yes	Yes	Public University	Govt/Higher Ed	Govt/Higher Ed	
University of Wisconsin-Madison (Madison, WI)	13	16			9	9	5	5		43	43	31	No	No	No	No	Public University	Govt/Higher Ed	Govt/Higher Ed	
AVERAGE										39	39	31								
MEDIAN										40	40	29								

*Includes total days regardless of plan type - traditional vs PTO

**For plans with a traditional sick leave bucket, only used 4 incidental days of sick.

***Excluded from Average/Median calculations

Incomplete

University of Minnesota-Twin Cities

Public University Govt/Higher Ed

24

1

10

13 ?



Local Govt/Higher Ed

UM Current**	Vacation	Sick	Holidays	Other (i.e. Winter Break)	At Hire Total Days (Non-Ex)**		At Hire Total Days (Non-Ex)**		STL?	Parental Leave?	Holidays include Juneteenth?	Category	Expanded Category
					41	42	43	44					
State of Missouri	15	15	15	14	0	44	33	No	No	No	Yes	Private Employer	Govt/Higher Ed
City of Columbia	10	18	18	9	4	41	27	No	No	No	Unknown	Private Employer	Govt/Higher Ed
Boone County Government	10	12	14	14	0	36	28	No	No	No	Unknown	Private Employer	Govt/Higher Ed
Missouri State University (Public)	10	12	20	20	0	42	34	Voluntary	No	Yes	Yes	Public University	Govt/Higher Ed
Kansas State	22	12	7	7	0	41	33	No	Yes	No	No	Public University	Govt/Higher Ed
University of Kansas	22	12	10	10	0	44	36	No	Yes	Yes	No	Public University	Govt/Higher Ed
Truman State (Public)	10	12	14	14	0	36	28	Voluntary	No	No	No	Public University	Govt/Higher Ed
Washington University (Private)	20	12	10	10	0	42	34	Yes	Yes	Yes	No	Private University	Govt/Higher Ed
Maryville University (Private)	10	13	16	16	2	40	32	Voluntary	Yes	Yes	Yes	Private University	Govt/Higher Ed
Saint Louis University (Private)	10	13	13	13	0	36	27	No	Unknown	Yes	Yes	Private University	Govt/Higher Ed
Westminster College (Private)	12	12	16	16	0	40	32	Unknown	Yes	Unknown	Yes	Private University	Govt/Higher Ed
Northwest Missouri State (Public)	24	15	10	10	6	55	44	voluntary	no	no	yes	Public University	Govt/Higher Ed
University of Central Missouri (Public)	16	15	13	13	4	48	37	Yes	No	No	No	Public University	Govt/Higher Ed
Southeast Missouri State University (Public)	21	20	11	11	3	55	39	Yes	Yes	Yes	No	Public University	Govt/Higher Ed
Drury University (Private)	12	12	12	12	20	56	48	Yes	No	No	No	Private University	Govt/Higher Ed
Missouri Western State (Public)	12	13	15	15	2	42	33	Unknown	Yes	Yes	Yes	Public University	Govt/Higher Ed
Missouri Southern State (Public)	15	10	14	14	4	43	37	Voluntary	Yes	Yes	No	Public University	Govt/Higher Ed
Harris-Stowe State	10	12	11	11	2	35	27	Unknown	Unknown	Unknown	No	Public University	Govt/Higher Ed
Lincoln University	15	13	10	10	11	49	40	no	no	no	No	Public University	Govt/Higher Ed
Columbia College (Private)	10	12	12	12	1	35	27	Voluntary	No	No	Yes	Private University	Govt/Higher Ed
AVERAGE					43	34							
MEDIAN					42	33							

*Includes total days regardless of plan type - traditional vs PTO

**For plans with a traditional sick leave bucket, only used 4 incidental days of sick.

***Excluded from Average/Median calculations

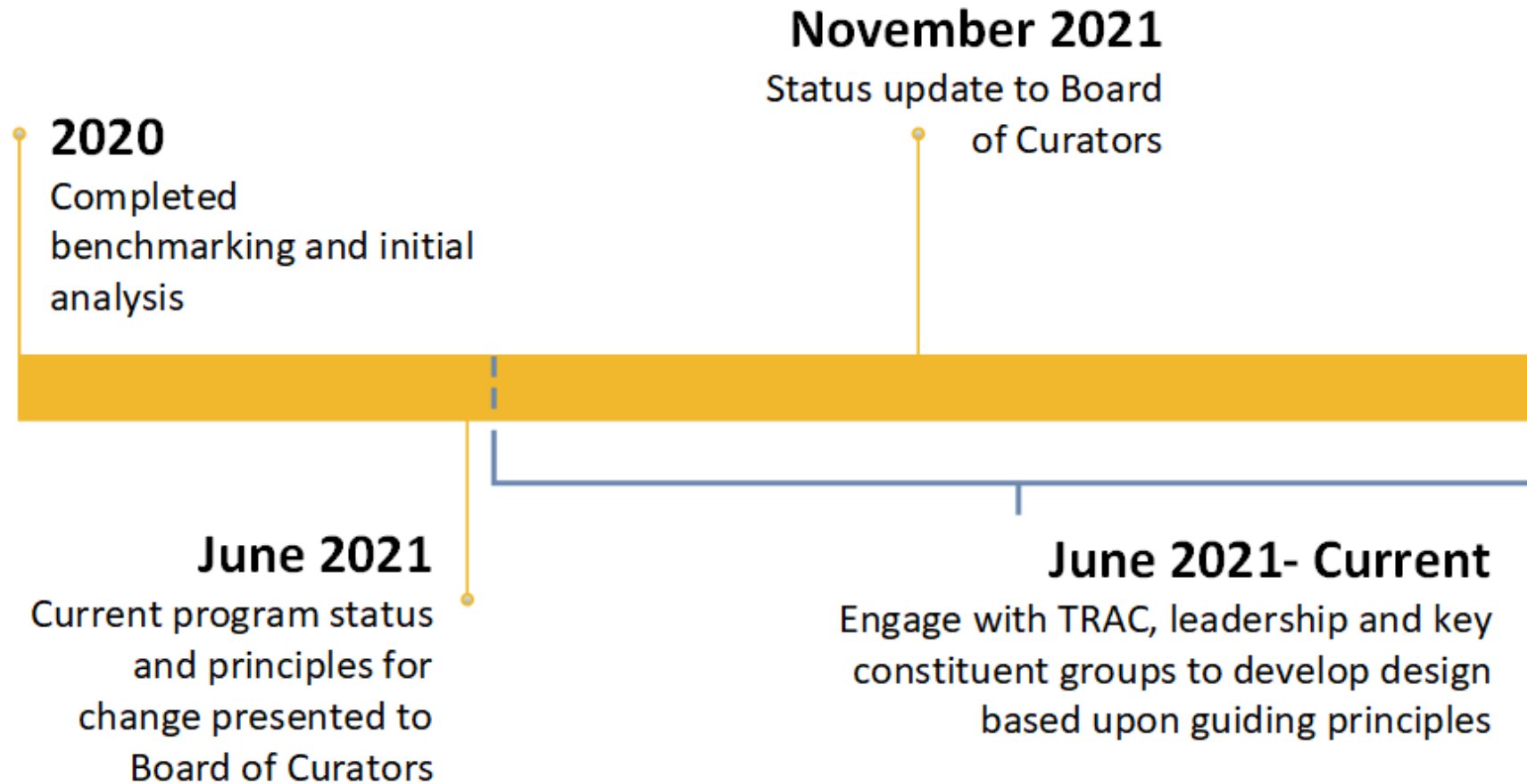
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Webster University (Private)	?	10	8	5	23	Voluntary	?	Yes	Private University	Govt/Higher Ed
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Staff Leave Design Update



Leave Programs Evaluation



Guiding Principles

- **Modernize** leave programs to make them more market competitive.
- **Improve** effectiveness of leave programs.
- **Realize** cost savings.
- **Design** leave programs that promote work-life balance.
- **Explore** differentiating leave by staff type and industry.



Importance of Leave



**Encourages
work/life
balance**



**Supports
optimal employee
productivity**



**Desired benefit
in a competitive
job market**



**Facilitates retention, which
reduces turnover costs**

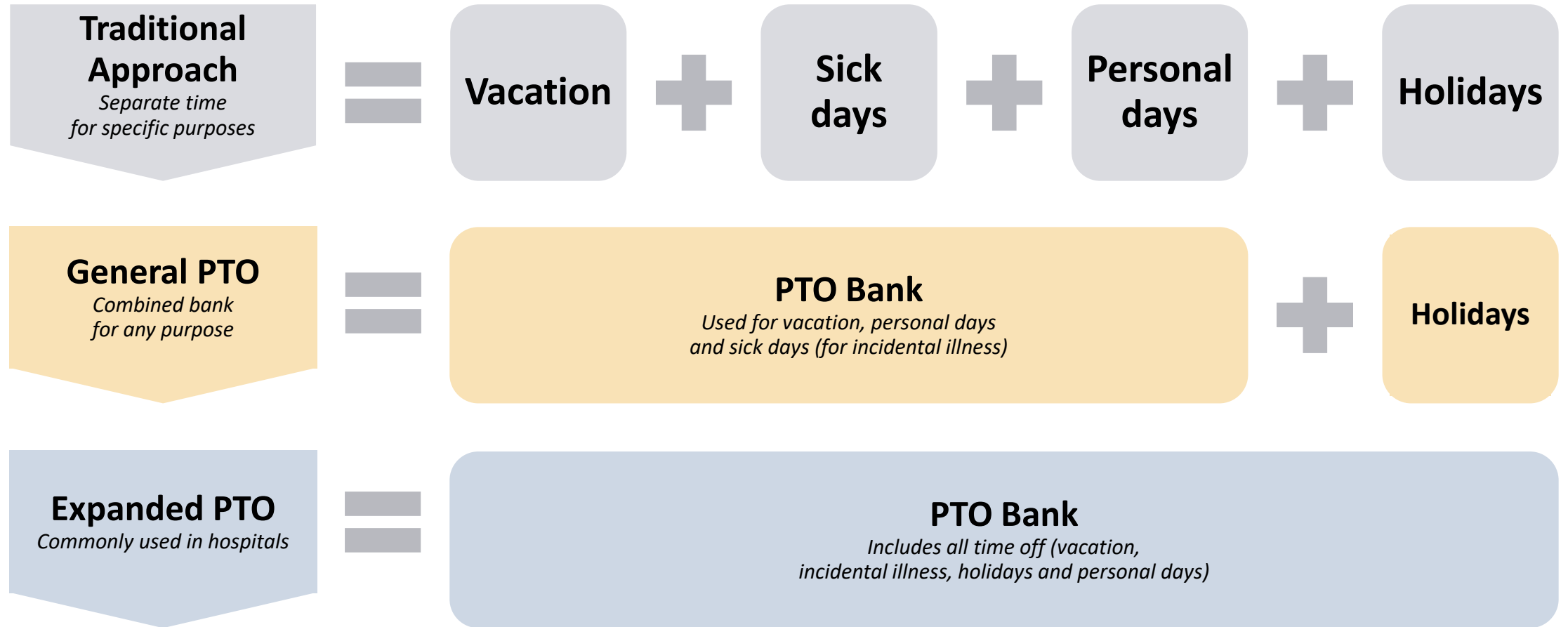


Complex Organization

- No job family has more than 10% of the workforce
- The workforce is spread across 1,124 different departments
- The University has 1,336 job titles in the compensation system eligible for leave
- Separations are highest in the expert level individual contributor to mid-level management



Types of Time-off Programs



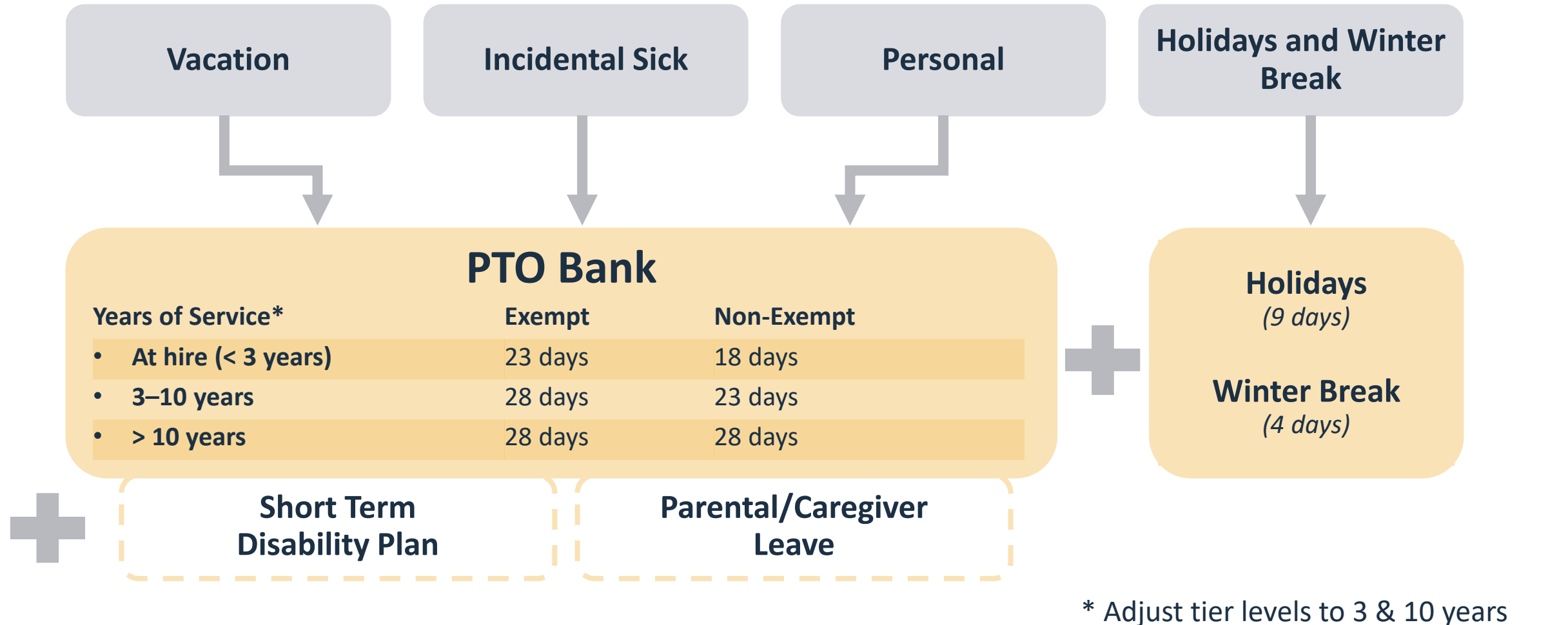
Current UM Time-off Programs (in days)

Plan	Years of Service	Exempt	Non-Exempt
VACATION	< 5 yrs	17	12
	5-15 yrs	22	17
	>15 yrs	22	22
	Max Accrual	2x annual rate	
SICK	All Employees	12	
	Max Accrual	No Maximum	
PERSONAL		4	
WINTER BREAK		4	
HOLIDAYS		9	

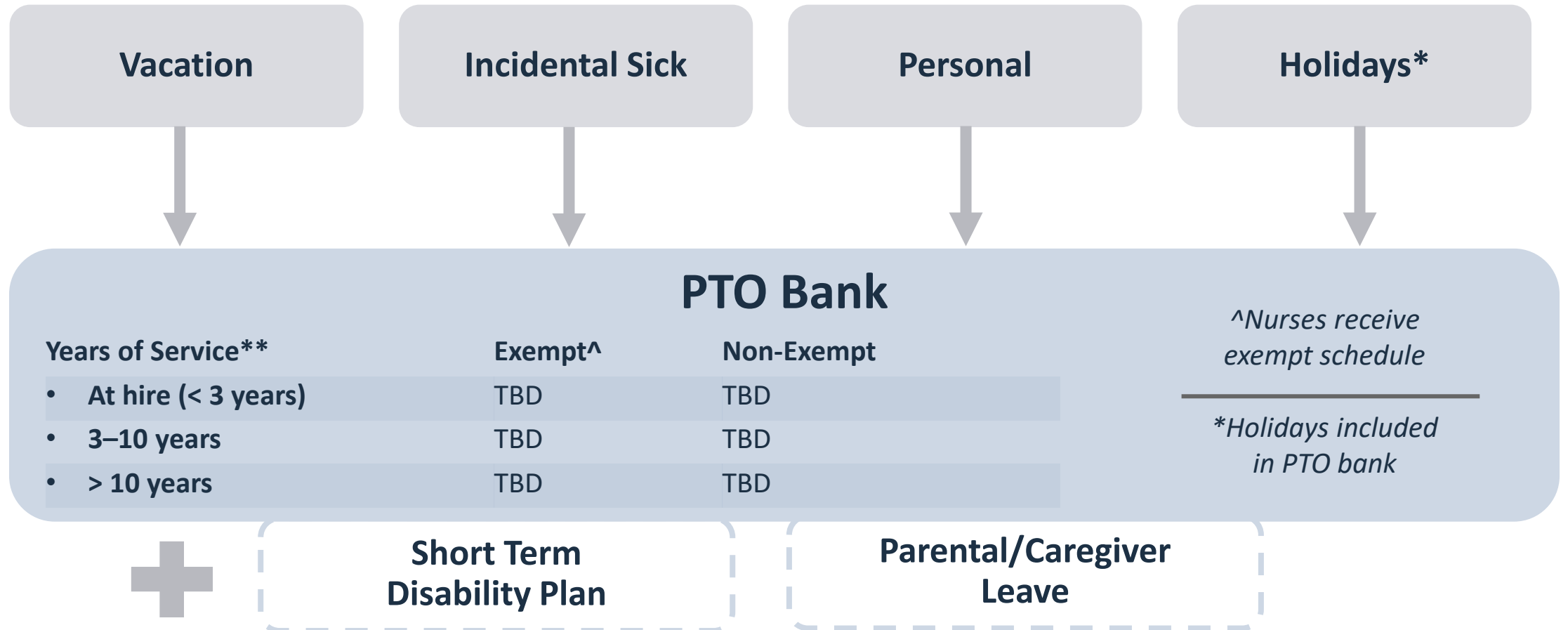
Use or lose



Campus Recommended Design



Health Care Recommended Design



** Adjust tier levels to 3 & 10 years



Total Days Analysis

	National				Local			UM Proposed	
	SEC Universities (hourly)	AAU-P Universities (hourly)	General Industry (salaried)	Health Care (salaried)	Government & Higher Ed (hourly)	Private (hourly)	Health Care (salaried)	Campus (hourly)	Health Care (hourly)
2020 Average Days At Hire (reduced to 4 incidental sick days)*	29	29	28	27	Data not pulled in 2020			31	TBD
2022 Average Days At Hire (reduced to 4 incidental sick days)*	34	31	28	27	34	29	27		
2022 Average Days At Hire (all sick)**	41	39	30	27	43	30	27		
2022 Median Days At Hire (all sick)**	40	40	30	27	42	30	27		

- Benefit design outside of accrual of days to use:
 - **Short-term Disability** provides a percentage of pay for qualifying medical absences.
 - **Parental and Caregiver Leave** provides eligible staff members with paid leave for qualifying absences.

SEC & AAU-P Breakdown Comparison

Non-exempt (at hire)	<i>National</i>		UM Campus Proposed
	SEC Universities	AAU-P Universities	
Average Holidays/ Paid Shutdown Periods*	14	13	13
Average PTO Days**	20	18	18
Average Total Days	34	31	31

Exempt (at hire)	<i>National</i>		UM Campus Proposed
	SEC Universities	AAU-P Universities	
Average Holidays/ Paid Shutdown Periods*	14	12	13
Average PTO Days**	22	23	23
Average Total Days	37	36	36

* Includes personal days and winter break as applicable.

**For traditional plans, reduced to 4 sick days for PTO “average.”



Key Considerations

- PTO programs tend to:
 - Have a higher perceived value.
 - Be easier to understand.
 - Improve the ability to recruit and retain.
- Parental leave, caregiver leave, and short-term disability are:
 - Valued by employees.
 - Short-term disability is a common benefit the university does not currently provide.
 - Paid parental leave outside of accrual balance is becoming more common.
 - Relatively low cost to the employer.

Next Phase: Further evaluate transition plan for current employees.



Importance of Shifting Current Staff to the PTO design

- Separate plan designs (PTO vs traditional) would create inequities among employee populations.
- PTO provides flexibility and accountability for use of leave.
- One plan for all means more direct, consistent messaging.
 - Helps employees to understand and value the benefit they receive.
- Understanding some employees may initially prefer the current (traditional) plan.
 - Perceived higher overall number of days.
 - Current sick accrual is very generous.
 - Lack of familiarity with short-term disability, parental, and caregiver plans
 - Change can be difficult.

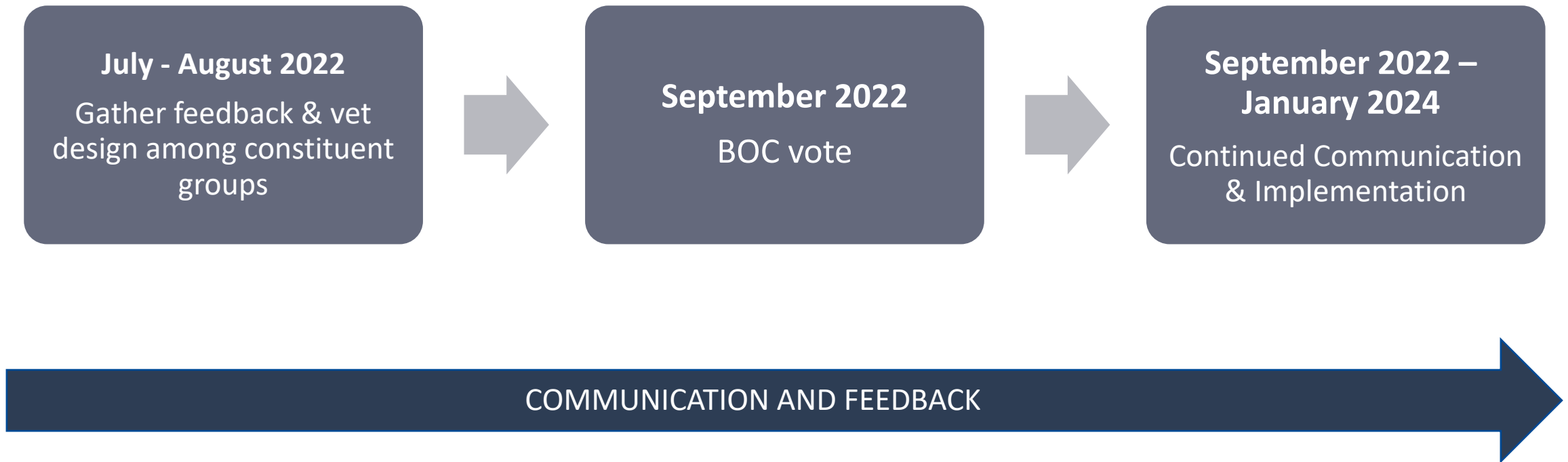


Communication Strategy

- Gather input from current employee groups to help with smooth transition.
- Develop dedicated webpage with transparent information and resources.
- Create key messaging for multiple populations (e.g., campus; health care).
- Hold educational sessions to ensure information is continuously shared with current employees.
- Provide training, resources and support to managers, supervisors and administrative staff.



Next Steps



Delivering on Guiding Principles

Modernize leave programs to make them **more market competitive**

- Proposed programs increase flexibility and perceived value.
- Proposed programs align with the market while still remaining competitive.
- Short-term disability, parental and caregiver leave provide a more equitable safety net compared to the current sick bank that disproportionately benefits longer service employees.

Improve effectiveness of leave programs

- Provides more equitable time off, reduces abuse of sick time, and promotes scheduling time off in advance.
- Accelerating the service break points in the PTO bank helps with retention, complements the DC vesting and adaptive to the nimble workforce of the future.

Realize **cost savings**

- Proposed design expected to deliver annual cash savings and liability reduction.

Design leave programs that **promote work-life balance**

- PTO program is more inclusive to the diverse needs of employees, empowers employees to take time off and promotes trust between the university, managers and staff.
- Ancillary programs like parental and caregiver leave recognize key life stages and promote work-life balance.

Explore differentiating leave **by staff type and industry**

- Proposal includes separate programs for Campus and MUHC.
- For Campus, certain features such as reducing carryover days and keeping Winter Break are more aligned with Higher Ed.
- For MUHC, consolidating all the days into a PTO bank is consistent with the hospital industry. Certain features like keeping a rich maximum accrual are more suitable for employees in the health care industry with a less flexible work schedule.





University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

Appendix



Analysis of Adjusting Tier Levels

Cost of moving to 3- & 10-year tiers: \$2.2M
(5 to 3 years=\$1.7M, 15 to 10 years=\$0.5M)

Drivers to recommend the move:

- Align with DC Plan Vesting (3 Years) to retain employer contributions
- Drive longer retention, reducing turnover cost

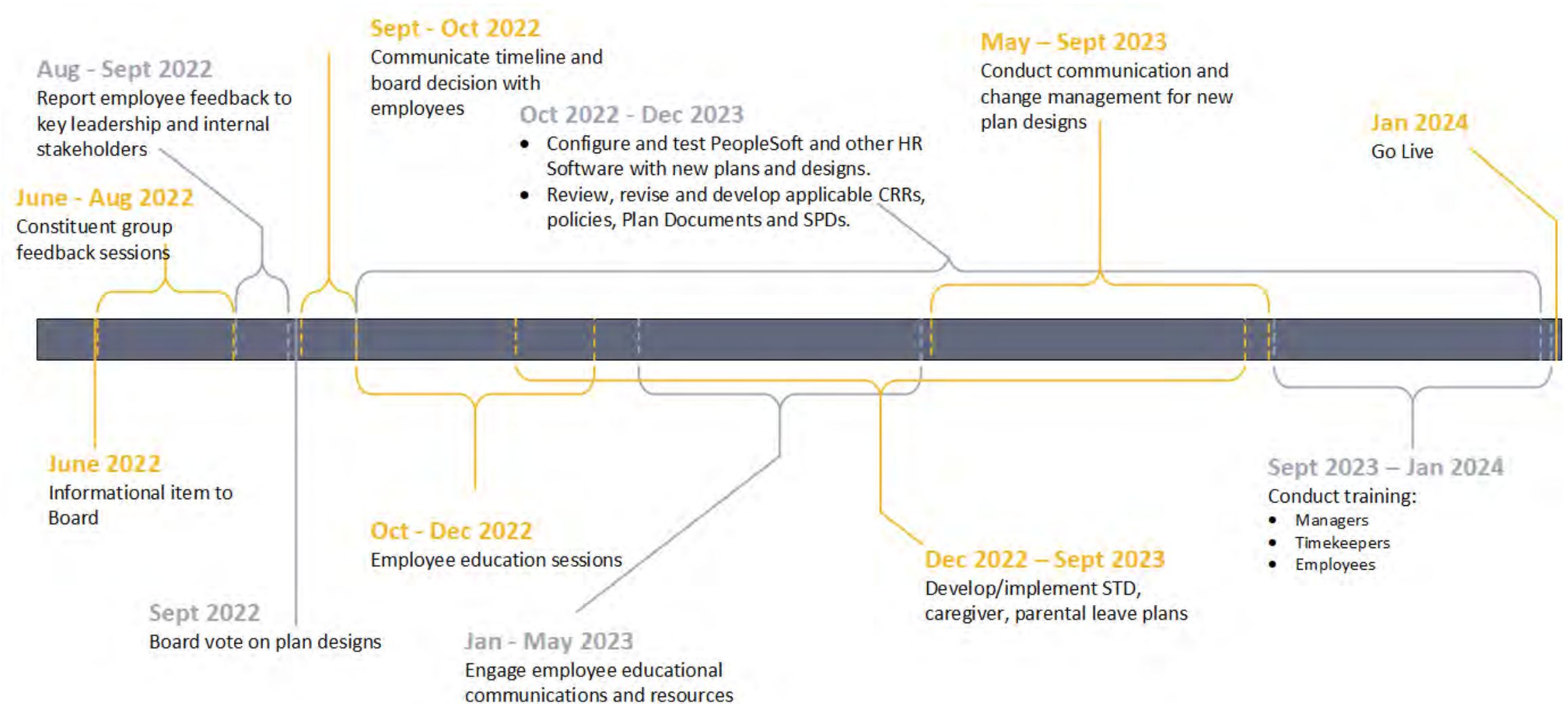
Voluntary Separation Data

Years of Service	2018 # of Terms	2021 # of Terms	Turnover Rate Change
0-2	858	1,042	21%
3-4	276	380	38%
5-9	226	375	66%
10-14	83	98	18%
15-19	25	30	20%
20+	22	24	9%
Totals	1,490	1,949	31%

- Separation indicators:
 - Voluntary separations occur heavily in the first 2 years of employment
 - 50% of all non-retirement terminations occur in the first two years
 - Separations have increased the most in the 3-4 and 5-9 years of service ranges
 - By 10 years of service, voluntary separations decrease



Timeline – Implementation/Transition



No. 1

Recommended Action – Resolution for Executive Session of the Board of Curators
Governance, Compensation and Human Resources
Committee Meeting, June 23, 2022

It was moved by Curator _____ and seconded by Curator _____, that
there shall be an executive session with a closed record and closed vote of the Board of
Curators Governance, Compensation and Human Resources Committee meeting June 23,
2022 for consideration of:

- **Section 610.021(1), RSMo**, relating to matters identified in that provision,
which include legal actions, causes of action or litigation, and confidential or
privileged communications with counsel; and
- **Section 610.021(3), RSMo**, relating to matters identified in that provision,
which include hiring, firing, disciplining, or promoting of particular
employees; and
- **Section 610.021(12), RSMo**, relating to matters identified in that provision,
which include sealed bids and related documents and sealed proposals and
related documents or documents related to a negotiated contract; and
- **Section 610.021 (13), RSMo**, relating to matters identified in that provision,
which include individually identifiable personnel records, performance
ratings, or records pertaining to employees or applicants for employment; and
- **Section 610.021(17), RSMo**, relating to matters identified in that provision,
which include confidential or privileged communications between a public
governmental body and its auditor.

Roll call vote of the Committee:	YES	NO
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Curator Brncic
Curator Holloway
Curator Wenneker
Curator Williams

The motion _____.

June 23, 2022

ACADEMIC, STUDENT AFFAIRS, RESEARCH AND ECONOMIC DEVELOPMENT COMMITTEE

Todd P. Graves (Chair)
Greg E. Hoberock
Jeff L. Layman
Robin R. Wenneker

The Academic, Student Affairs, Research and Economic Development Committee (“Committee”) will review and recommend policies to enhance quality and effectiveness of academic, student affairs, research and economic development and align the available resources with the University’s academic mission.

I. Scope

In carrying out its responsibilities, the Committee reviews and makes recommendations to the Board of Curators on strategies and policies relating to student and faculty welfare, academic standards, educational and instructional quality, intercollegiate athletics, degree programs, economic development, research initiatives, and associated programs.

II. Executive Liaison

The Senior Associate Vice President for Academic Affairs of the University, or some other person(s) designated by the President of the University, with the concurrence of the Board Chair and the Committee Chair, shall be the executive liaison to the committee and responsible for transmitting committee recommendations.

III. Ex Officio Member

The Student Representative to the Board of Curators shall be an ex officio member of the Committee.

IV. Responsibilities

In addition to the overall responsibilities of the Committee described above and in carrying out its responsibilities, the charge of the Committee shall include reviewing and making recommendations to the Board on the following matters:

- A. Selection of Curators’ Distinguished Professors;
- B. Approval and review of new degree programs;
- C. Intercollegiate athletics, as specifically outlined in Section 270.060 of the Collected Rules and Regulations with a commitment to the academic success, and physical and social development of student-athletes;
- D. Changes to university-level admissions requirements, academic standards, student services, and graduation requirements;
- E. Quarterly and annual reports providing information on academic programs that have been added, deactivated, or deleted;
- F. Provide oversight over the University of Missouri System’s diversity, equity and inclusion programs;
- G. Highlight successful research and economic development efforts and partnerships; linking research and commercialization from the University with business and industry across the state and around the world.
- H. Additional matters customarily addressed by the academic, student affairs, research & economic development committee of a governing board for an institution of higher education.

Executive Summary

New Degree Program, Master of Science in Financial Technology, UMSL

In today's data-driven market, the field of finance is experiencing transformative changes due to advances in financial technology (fintech) – a broad term for technology that aims to automate, improve, and structurally shift financial services. Fintech competes with traditional financial methods to produce and deliver financial services faster, cheaper, and with greater security and is also providing new high-paying career options for those with advanced knowledge of fintech.

To capitalize on these opportunities, we propose a new **Master of Science in Financial Technology** degree at the University of Missouri-St. Louis (UMSL). This program will build a highly trained workforce with knowledge of both traditional finance and data-driven financial modeling and fintech tools like blockchain, artificial intelligence (AI), and machine learning (ML). This will provide graduates with unique skills and a fast-track entry to an emerging industry.

Because this program is built around current faculty and courses, it will be financially viable in its early years. Strategic hiring has brought substantial fintech expertise to UMSL, and courses have been developed over the last few years to meet emerging financial market demand. A graduate certificate program in fintech was previously created, with the program intended to provide an overview of fintech to existing MBA. In contrast, the MS in Fintech program is a complete course of study with eight required courses (seven in fintech) and only two electives.

For this degree, location also matters. Schools close to financial and technology hubs provide easier access to corporations for recruitment, which is an important factor for student success. The St. Louis region is both an emerging national tech hub and a financial hub for the Midwest. According to the Economist, St. Louis is the largest center of financial services firms outside of Manhattan. Home to several financial regulatory agencies, the region has a significant business presence in finance and insurance. Many large employers from Boeing and Anheuser-Busch InBev to Enterprise Holdings, actively seek UMSL business students. The key motivation for building this program is to prepare students for the new opportunities in this field. Thus, it is critical for students to access an affordable but reputable fintech program that develops the job skills that are in such high demand.

This degree program will have both a direct and indirect economic impact on the St. Louis community. Financial data analytics jobs are highly paid and in high demand. Increasing the supply of financial data analytics talent will help retain financial services companies in the region and attract potential employers to relocate to the area.

No. 1

Recommended Action – New Degree Program Proposal, Master of Science in Financial Technology,
University of Missouri – St. Louis

It was recommended by the University of Missouri System Office of Academic Affairs,
endorsed by President of the University of Missouri Mun Choi, recommended by the Academic,
Student Affairs and Research & Economic Development Committee, moved by Curator_____,
seconded by Curator_____that the following action be approved:

that the University of Missouri – St. Louis be authorized to submit the attached proposal
for a Master of Science in Financial Technology to the Coordinating Board for Higher
Education for approval.

Roll call vote of the Committee: YES NO

Curator Graves

Curator Hoberock

Curator Layman

Curator Wenneker

The motion _____.

Roll call vote of Board: YES NO

Curator Brncic

Curator Chatman

Curator Graves

Curator Hoberock

Curator Holloway

Curator Layman

Curator Wenneker

Curator Williams

The motion_____.

New Degree Program Proposal

Master of Science in Financial Technology

University of Missouri – St. Louis
June 2022 Board of Curators Meeting

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Executive Summary

In today's data-driven market, the field of finance is experiencing transformative changes due to advances in financial technology (fintech) – a broad term for technology that aims to automate, improve, and structurally shift financial services. Fintech competes with traditional financial methods to produce and deliver financial services faster, cheaper, and with greater security and is also providing new high-paying career options for those with advanced knowledge of fintech.

To capitalize on these opportunities, we propose a new **Master of Science in Financial Technology** degree at the University of Missouri-St. Louis (UMSL). This program will build a highly trained workforce with knowledge of both traditional finance and data-driven financial modeling and fintech tools like blockchain, artificial intelligence (AI), and machine learning (ML). This will provide graduates with unique skills and a fast-track entry to an emerging industry.

Because this program is built around current faculty and courses, it will be financially viable in its early years. Strategic hiring has brought substantial fintech expertise to UMSL, and courses have been developed over the last few years to meet emerging financial market demand. A graduate certificate program in fintech was previously created, with the program intended to provide an overview of fintech to existing MBA. In contrast, the MS in Fintech program is a complete course of study with eight required courses (seven in fintech) and only two electives.

For this degree, location also matters. Schools close to financial and technology hubs provide easier access to corporations for recruitment, which is an important factor for student success. The St. Louis region is both an emerging national tech hub and a financial hub for the Midwest. According to the Economist, St. Louis is the largest center of financial services firms outside of Manhattan. Home to several financial regulatory agencies, the region has a significant business presence in finance and insurance. Many large employers from Boeing and Anheuser-Busch InBev to Enterprise Holdings, actively seek UMSL business students. The key motivation for building this program is to prepare students for the new opportunities in this field. Thus, it is critical for students to access an affordable but reputable fintech program that develops the job skills that are in such high demand.

This degree program will have both a direct and indirect economic impact on the St. Louis community. Financial data analytics jobs are highly paid and in high demand. Increasing the supply of financial data analytics talent will help retain financial services companies in the region and attract potential employers to relocate to the area.

1. Introduction

In recent years, financial institutions have invested heavily to modernize their infrastructure, empowering their operations with big data analytics, artificial intelligence (AI)/machine learning (ML), and other high-tech tools known as “fintech.” The quantity, and the use, of such technologies, is growing fast as an increasing number of startup companies enter the field. For example, according to a PricewaterhouseCoopers report, 2018 venture capital investments in artificial intelligence startup companies in the United States reached \$9.3 billion (a 72% increase over the previous year).

This new Master of Science in Fintech at the University of Missouri–St. Louis (UMSL) is designed to provide both finance professionals and others interested in seeking fintech knowledge with an understanding of both traditional financial models and specialized fintech tools.

While tech startups gave rise to the fintech disruptions, more traditional financial firms (e.g., banks, brokerage houses, hedge funds, trading exchanges) are rethinking the ways they conduct business. Fintech tools are being used throughout the financial services industry and affect decisions in investments, portfolio management, trust services, and securities trading. Highly trained fintech professionals are in high demand.

Furthermore, fintech talent is also needed in other information-rich environments such as insurance, medical, regulatory, and big-tech firms, along with the fintech startup community.

With its rapid and unwavering growth, fintech offers many career-path opportunities for students, and this degree would provide UMSL MS in Finance graduates with fast-track entry to this exciting industry.

Fintech is a disruptive technology. The world of finance is changing rapidly, requiring advanced knowledge of new and emerging technologies such as AI/ML, blockchain, robo-advisors, and others. The legacy finance programs have not been modified for decades, and the financial services market is ripe for a new approach as they rethink how they do business. Universities must adapt educational programs to better prepare business students for careers in fintech firms or in existing financial services companies that are being redefined by new technology.

Accordingly, UMSL has designed this master’s program to address a huge new market need and to provide students with the necessary training to take advantage of the resulting opportunities.

To determine the mix of required and elective classes that would most effectively prepare students for careers in fintech, thereby helping to address the significant market demand for a highly trained workforce, department faculty analyzed external input and curriculum options for more than two years.

The proposed master's degree program is built around big-data-driven finance that incorporates modern finance (fintech courses such as blockchain, data analytics, machine learning, and artificial intelligence), into the curriculum. Electives allow students to explore their own interests, such as security analysis, financial institutions, venture capital, real estate, and others. The 30-credit-hour master's degree provides a comprehensive skill set demanded by industry with a necessary balance of foundational finance/traditional financial mechanisms and modern finance (fintech) courses.

Career Paths:

Graduates of the MS in Fintech program will have many career-path options:

- One example is working for financial services firms. Banks are addressing the fintech disruption head-on – billions of dollars are being poured into innovation, development, and even acquisitions of tech firms. Banks require their employees to have in-depth knowledge of modern finance and usually offer good compensation.
- Another example is working for a Big Tech firm or any large company with a global consumer base and active development in the financial arena.
- A graduate might instead work for a fintech startup that focuses on aspects of financial services functions, including robo-advising in wealth management, payment systems, among others. There has been a tremendous increase in fintech startups in recent years.
- Also, fintech knowledge can help a graduate advance into higher levels at a company in a host of other industries. Employees with education and experience in high-demand skills like AI development are especially valuable.

The fintech industry offers a breadth of roles for graduates including, trust officer, financial planner, strategist, consultant, entrepreneur, and programmer. Fintech careers include financial analyst, cybersecurity expert/analyst, blockchain expert/developer, risk and compliance reviewer, quantitative analyst, app developer, and artificial intelligence expert, among others.

Program Success:

The individuals responsible for the success of this program are the college dean and department chair.

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2. Fit with University Mission and Other Academic Programs

2.A. Alignment with University Mission & Goals

The MS in Fintech program's mission is to train students to become experts in a newly developed field in finance. This will enable the department, college, and campus to address a significant workforce need in the financial services industry, leading to economic development in the region and the state. The proposed program is consistent with the campus goals of educating students to become successful citizens in the community and assisting in the region's economic development, as described in the UMSL Strategic Plan. It also speaks directly to Pillar 4 of the University's Strategic Enrollment Plan regarding developing and launching market-responsive programming in workforce development. This master's degree program will help train students for work in a rapidly growing industry with high market demand and a large workforce deficit.

The proposed program is also consistent with the stated mission of the UMSL College of Business Administration (CoBA). Specifically, the program aims to prepare students for professional success in technically sophisticated local and global organizations, expand online offerings, and meet the workforce needs of the St. Louis business community.

UMSL currently offers a graduate certificate in fintech. However, it provides only a basic introduction and requires only two fintech courses. It is designed for current MBA students interested in an introduction to the concept. The certificate does not meet the needs of the industry for a more in-depth, comprehensive fintech knowledge that is provided in the proposed MS in Fintech degree program.

This master's program aligns with the goals and priorities of the department, college, and University, and the College of Business Administration supports it. During the degree's early design and development, the college's former dean provided strong support; and the current CoBA dean enthusiastically supports the program (see appendices 6. A.1. and 6. A.2.)

And, according to UMSL's provost, "we will better serve our students with a master's degree in this area." He noted that the new program "will result in a broader spectrum of job opportunities for our students" and according to the chancellor, "[f]intech is an important element of the [STL Job 2030](#) initiative" (see Appendix 6. J.).

UMSL's chancellor, in support of this proposed "transformative degree for workforce development in the St. Louis area," said that "this program represents an area of growth and excellence for UMSL" and that graduates will be "well-poised to take on high-demand jobs in the region" with their education in both traditional finance and fintech tools (see Appendix 6. J.2.).

The full degree program proposal, including the curriculum and the narrative, was prepared by department faculty; it was then reviewed and voted on affirmatively by

the college's Graduate Studies Committee and the college's entire faculty. Subsequently, campus Graduate Council and the Faculty Senate approved the proposal.

Furthermore, the proposed program received strong support from both the college's Department of Information Systems and Technology (IST) and its Finance Advisory Board (see appendices 6. B. and 6. C.). For example, the chair of IST department noted that fintech is "a critical new area of study with a high projected demand for graduates as artificial intelligence, crypto assets, and other information technologies are becoming widely adopted throughout the financial services industry." He also stated that with the proposed master's degree program, UMSL will be positioned to become a premier center of fintech learning and research in the country.

Feedback from the UMSL Finance Advisory Board was very positive including comments such as "[h]eavier emphasis on analysis would benefit most companies," and "[t]here is a strong overlap between the fundamental research my investment team does and also needing an understanding from an IT perspective that would allow us to utilize best the Research systems we have to build macros or reports that would provide the data on the companies we own, the companies we are watching, as well as the market in general."

The proposed master's degree program addresses identified needs of employers.

2.B. Duplication & Collaboration within Campus and Across System

With more than two years invested in developing this degree program, we were able to identify the foundational classes and the new technology-based fintech courses to create a robust curriculum.

To expand the impact of UMSL's proposed MS in Fintech, we are engaged in ongoing conversations about making the underlying courses available to students enrolled on our sister campuses. The University of Missouri-Kansas City (UMKC) is considering offering our fintech courses to its students. Missouri University of Science and Technology (S&T) has utilized our courses in spring 2022 and plans to do so again in fall 2022. MU supports this program and is in conversation with us to use our fintech courses in combination with their courses to create a stackable certificate program. (See the support letter from UMKC in Appendix 6. D.1., and emails from Missouri S&T leadership in Appendix 6. D.2., and from the dean at MU in Appendix 6. D.3).

Across the University of Missouri System, the University of Missouri-Columbia (MU) and UMKC offer excellent, but very traditional, Master of Science in Finance degrees as detailed below. They do not cover fintech beyond the minimal overlap of the one fundamentals-of-fintech course at UMKC.

MU's Master of Science, Finance degree is a 30-credit-hour program available 100% online. Courses include Financial Statement Analysis, Financial Database Analysis &

Financial Modeling, Equity & Fixed-Income Securities Analysis, Derivative Securities, Investment Policy and Portfolio Management, and International Financial Markets. However, the MU program currently does not include fintech courses covering cryptocurrencies, blockchain, AI/ML, fintech credit, robo-advisors, algorithmic trading, and big data analytics using Python and R, all of which are covered in this new degree program.

UMKC's MS in Finance is a 30-hour, STEM-designated program that includes core classes (15 hours), quantitative classes that provide subject matter depth (9 hours), and electives (6 hours). Like the MU program, the coursework covers traditional finance topics, including Global Financial Markets and Institutions, Investment Analysis, Valuation and Mergers and Acquisitions, Financial Modeling, and Financial Statement Analysis. The only course in their program related to fintech is FIN 5576: Fundamentals of Fintech.

Considering universities in the St. Louis region, prospective students face the same problem – while there are master's degree programs in finance (discussed below), none focus on the emerging field of fintech.

The **Webster University** MS in Finance degree not only doesn't involve fintech, it also is not AACSB-accredited.

Saint Louis University offers a Master of Science in applied financial economics focused on analyzing and forecasting economic variables such as interest rates and stock returns with financial market implications. However, it does not involve fintech.

Washington University in St. Louis offers an MS in Finance with a quantitative track, but it also is not focused on fintech.

The chart below summarizes the differences between the proposed program and finance-related master's degrees offered by the other UM System campuses and other institutions across the St. Louis region. UMSL's proposed MS in Fintech will be a standout degree program in the region.

Table 1: Master's in Finance Programs, UM System and St. Louis Region

IHE	Program	Traditional Finance Covered	Fintech Focus	Affordability Relative to UMSL	AACSB Accredited
MU	MS in Finance	YES	NO	Similar	YES
UMKC	MS in Finance	YES	NO	Similar	YES
Webster University	MS in Finance	YES	NO	1.2x more costly (MO residents)	NO
Saint Louis University	MS in Applied Financial Economics	YES	NO	1.9x more costly (MO residents)	YES
Washington University	MS in Finance (Quant. Track)	YES	NO	4.7x more costly (MO residents)	YES
UMSL	MS in Fintech	YES	YES	-	YES

Additionally, UMSL has a high percentage (72%+) of graduates who stay in the region, work at local companies, and serve the regional economy.

In sum, the proposed master's in fintech has minimal overlap with existing programs in the region and the UM System, which do not focus specifically on fintech beyond one fundamentals-of-fintech course at UMKC.

Looking nationally, the following universities offer MS in Fintech programs. Their conferral rates are listed. Out of the nine programs, four are online (noted in bold), and the other five are on-campus. At this point, no master's in fintech or similar program is offered in Missouri or surrounding states.

Table 2: Nationwide Programs Relevant to an MS in Fintech

Provider	Program Name	Conferral Data
Boston University	<u>MS in Mathematical Finance and Financial Technology</u>	<ul style="list-style-type: none"> 113 conferrals reported to Financial Mathematics in 2019 90 conferrals reported to Management Sciences and Quantitative Methods, Other in 2019
Brandeis University	<u>Master of Science in Digital Innovation for Fintech</u>	<ul style="list-style-type: none"> 112 conferrals reported to Financial Mathematics in 2019
Duke University	<u>Master of Engineering in Financial Technology</u>	<ul style="list-style-type: none"> 136 conferrals reported to Financial Mathematics in 2019
New Jersey City University	<u>Master of Science in Financial Technology</u>	<ul style="list-style-type: none"> 5 conferrals reported to Finance, General in 2019
New Jersey Institute of Technology	<u>Master of Management in Fintech</u>	<ul style="list-style-type: none"> Unclear - did not report to any relevant CIP codes in 2019
Santa Clara University	<u>Master's in Finance and Analytics</u>	<ul style="list-style-type: none"> 19 conferrals reported to Finance, General in 2019
Stevens Institute of Technology	<u>Financial Analytics Master's Degree</u>	<ul style="list-style-type: none"> 107 conferrals reported to Financial Mathematics in 2019
University of Connecticut	<u>MS in Financial Technology</u>	<ul style="list-style-type: none"> 147 conferrals reported to Financial Mathematics in 2019
The University of Texas at Dallas	<u>Master of Science in Financial Technology and Analytics</u>	<ul style="list-style-type: none"> 37 conferrals reported to Management Sciences and Quantitative Methods, Other

The following table compares five master's in fintech programs available across the country, including the required number of credit hours, cost per credit hour, and total cost as compared to UMSL's proposed program.

Table 3: Nationwide Master's in Fintech Degree Programs Compared to UMSL (online programs noted in bold)

Institution	Credits	Cost Per Credit	Total Cost
Boston University	39	\$1,502	\$58,578
Duke University	30	\$2,909	\$87,270
Santa Clara University	36	\$1,318	\$47,448
Stevens Institute of Technology	33	\$1,716	\$56,628
University of Connecticut	36	\$1,500	\$54,000
UMSL (for MO residents)	30	\$646	\$19,380

UMSL's MS in Fintech will offer both the quality and the focus required to address a growing workforce and market demand. Additionally, UMSL will offer this at a more affordable cost than other MS in Fintech degree programs (shown in the table above). And, because the degree will be offered online, it will be accessible to students from across the country.

3. Business-Related Criteria & Justification

3.A. Market Analysis

3.A.1. Rationale & Workforce Demand for the Program

According to the U.S. Bureau of Labor Statistics, the job growth for financial analysts, an exemplary fintech position, is projected from 2016 to 2026 to be 11% higher than the average rate with an estimated increase of 32,200 positions. By 2024, the demand could outpace supply by 250,000 jobs, with more than one in five jobs in the field of finance and insurance.

In conducting our due diligence for the proposed degree program, we pulled Burning Glass labor-market data on "financial mathematics" degree programs for Missouri and its eight contiguous states. The data shows that the number of jobs in this area is expected to grow over the next 10 years and that the median salary in our region for graduates is \$59,000 above the average living wage for the region. This data also shows the alignment of key competencies needed in this field and the proposed specialized fintech curriculum (e.g., machine learning and programming skills such as Python and R). For example, Python programming skills, taught in the Financial Data Analytics class, were found in the second-highest number of job postings (25%) for positions included under "financial mathematics" between 11/01/2020 and 10/31/2021, just after SQL. Python had a 48% projected growth while SQL only 8.5%.

Unfortunately, the Burning Glass data parameters cannot be made specific enough to specifically represent a fintech-focused degree. Therefore, we also considered a market analysis report specific to fintech degree programs that was recently commissioned by the University of Missouri System from Eduventures – a leading research firm focused on higher education.

The Eduventures report, issued in July 2021, provides a detailed analysis considering programs across the country, in Missouri, and in nearby states (Arkansas, Illinois, Iowa, Kansas, Kentucky, Nebraska, Oklahoma, and Tennessee) regarding demand, competitive landscape, labor market, competitive analysis, and prospective adult students.

The report's key findings include the following:

- While fintech presents a market that, based on program and market indicators, shows promise, there are few degree programs available and even

fewer that use online delivery (the preferred option for prospects). The proposed program is offered online.

- The regional markets (i.e., the St. Louis region, the state of Missouri, and eight states contiguous to Missouri) offer no fintech master's degree program. UMSL would be the first in the region to offer this program and would stand out by doing so.
- Few programs were identified nationwide.
- All occupations relevant to a master's in fintech are projected to grow at an above-average rate.
- Career advancement is a key consideration to fintech degree program prospects. Fintech offers outstanding career advancement potential, and UMSL's location in a tech and financial hub increases the opportunities for graduates.

The following table presents the national labor market demand with average projected growth. We included areas such as statistics and operations research analysis as our fintech program includes data analytics and artificial intelligence, which cover significant amounts of materials from those fields. The growth rates for these fields are above the all-occupations average (6%), ranging from 8% to 30% growth.

Table 4: National Fintech Labor Market Demand

SOC	Description	2021 Jobs	2031 Jobs	2031-2021 Change	2031-2021 % Change
All SOC Codes	All Occupations	151,433,197	160,600,748	9,167,551	6%
11-3031	Financial Managers	699,508	804,494	104,986	15%
13-1111	Management Analysts	782,314	887,470	105,156	13%
13-2051	Financial and Investment Analysts	491,392	528,410	37,018	8%
15-2031	Operations Research Analysts	102,205	124,581	22,376	22%
15-2041	Statisticians	43,329	56,381	13,052	30%

A similar set of data for the regional market is presented below. The average growth rates for financial managers, management analysts, financial and investment analysts, operations research analysts, and statisticians show a growth rate between 5% and 27%. These projected growth rates are above the average for all occupations (3%), ranging from 5% to 27% growth.

Table 5: Regional Fintech Labor Market Demand

SOC	Description	2021 Jobs	2031 Jobs	2031-2021 Change	2031-2021 % Change
All SOC Codes	All Occupations	21,078,091	21,812,602	734,511	3%
11-3031	Financial Managers	106,405	118,915	12,510	12%
13-1111	Management Analysts	96,038	106,629	10,591	11%
13-2051	Financial and Investment Analysts	57,219	60,329	3,110	5%
15-2031	Operations Research Analysts	11,341	13,552	2,211	20%
15-2041	Statisticians	5,260	6,682	1,422	27%

During the June 2020 – June 2021 period, there were 7,180 job postings in the region for “financial technology” skills, with 28 days median posting duration. Monthly postings have increased significantly since 2016.

The proposed fintech program addresses the market demand in two distinct ways. First, it responds to the financial services industry demand for a streamlined finance degree focused on modern big-data-driven finance. Second, it incorporates fintech, including blockchain, big data analytics, machine learning, and artificial intelligence, into the curriculum. In the process, students will be exposed to the cutting-edge technologies deployed to overcome the challenges of big data collection, analytics, and modeling using AI/ML.

Industry strongly supports this program as well. As shown in the support letters from companies (see Appendix 6. E.), the wealth-management firm Moneta states that “This program is in great need, from AI/machine learning that helps in portfolio management to blockchain that explains smart contracts.” A vice president at Enterprise Bank & Trust notes that “The MS in Fintech program at UMSL provides an excellent and timely opportunity for financial practitioners to elevate their skill set in serving their clients. This is a strong program, and based on a review of available jobs, it appears that the fintech/analytics space is highly sought after.” A senior vice president at Commerce Trust Company states that the proposed program curriculum blends the courses needed to address the field’s “increasing demands for cross-functional knowledge in the finance industry,” and Commerce Brokerage Service’s president notes that he strongly supports this program because it is timely and distinctive in meeting the challenges presented by the “transformative technological changes” in the finance industry.

3.A.2. Student Demand for the Program

The proposed fintech degree program focuses on training students for advanced technical positions in the financial sector. Student prospects for this degree include, but aren’t limited to:

- Professionals in the financial services sector in the St. Louis metropolitan area, across the region and the nation who want to stay current and enhance their competitiveness in the job market.

- Current UMSL undergraduate finance students aspiring to pursue study in fintech to expand their job prospects.

A snapshot of demand for fintech courses in the existing MBA and BSBA programs suggests a healthy market. While these courses were not advertised and are only taken as electives, they have growing enrollment. For example, the blockchain course offered in spring 2022 had 24 students; with four fintech-related courses averaging enrollment of 13.

The tables below (6a and 6b) show the projected student enrollment over the first six years. We arrived at these numbers based on UMSL's other specialized master's degree programs in their initial years; and these are conservative projections. For example, the UMSL master's degree in supply chain management had 10 students enroll in the first year, while the cybersecurity degree program had at least twice as many.

Table 6a. Student Enrollment Projections (anticipated total number of students enrolled in the program during each of the first six fall semesters following implementation). These projections represent the middle-of-the-road estimates (i.e., the most likely). These projections assume a 10% attrition rate.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Full-time	9	19	21	23	24	25
Part-time	1	2	4	6	8	8
Total	10	21	25	29	32	33

Table 6b. New Student Enrollment Projections (anticipated number of **new** students entering the program during each of the first six fall semesters following implementation that are new to the University.)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Full-time	9	11	12	13	14	15
Part-time	1	1	2	3	3	3
Total	10	12	14	16	17	18

Table 6c. Projected Number of Degrees Awarded (10% attrition)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
# of Degrees Awarded	-	8	11	12	14	16	17	17	19	20

Student demand for a certain degree program over others is affected by various factors. According to the "2021 Trends in Higher Education" report published by Hanover Research, the main consideration when building a new degree program is that, more than ever, "students are seeking programs that feel relevant and offer a clear path to a career." A master's degree in fintech is not only relevant in today's

financial and business worlds, but fintech also offers many clear career paths and high-paying opportunities for graduates. In fact, in 2021, the average fintech salary in the United States was \$124,500 per year. The MS in Fintech at UMSL aligns very well with what students are seeking.

Also, student demand for an MS in Fintech program mirrors marketplace demand for the underlying skills and the job opportunities available for graduates. The information on market demand in the previous section showed that between 2021 and 2031, there were above-average growth rates for relevant positions with several significantly higher. With such a fast-growing market with few master's programs available nationwide, market demand is critical for determining student demand.

Location is another key consideration of students when choosing a master's in a fintech degree program. A university located in a financial hub with a thriving technology ecosystem offers students access to companies that are recruiting in fintech.

St. Louis is such a location. It has a significant finance and insurance business presence with companies such as Bank of America, National City, Regions Bank, U.S. Bancorp, Commerce Bank, UMB Bank, Wells Fargo, Thomas Reuters, Citi Mortgage, MasterCard, Reinsurance Group of America, Edward Jones, Stifel, Moneta Group, and Cushman and Wakefield. In addition, St. Louis is home to several financial regulatory agencies including the Federal Reserve Bank of St. Louis and the Office of the Comptroller of Currency.

Furthermore, St. Louis has the third highest location quotient for Securities and Commodity Contracts Intermediation and Brokerage of any region in the nation (New York City is first, and Boston is second). Other employers actively seeking UMSL business students include Boeing, Bayer, Centene, Emerson Electric, Express Scripts, Anheuser-Busch InBev, AT&T, Enterprise Holdings, Ameren, and BJC Healthcare. Also, St. Louis is the headquarters for 17 companies on the Fortune 1000 list (see Appendix 6. F.). The financial and professional services fields in the St. Louis region continue to grow.

Testimonials and letters of support from industry leaders indicate the significance of the proposed degree program for addressing the significant workforce needs in fintech (see appendices 6. C.2. and 6. E.).

3.B. Financial Projections

Table 7 (see following page) provides pro forma financial projections for the middle-of-the-road, most likely scenario. The projections were developed with the guidance of the college's financial manager and both a business manager and the director of budget services in UMSL's Finance and Administration Division. The projections were approved by the Vice Chancellor of Finance and Administration.

Table 7. Financial Projections for Proposed Program for Years 1 Through 5.

	Year 1	Year 2	Year 3	Year 4	Year 5
1. Expenses per year					
A. One-time					
<i>New/Renovated Space</i>					
<i>Equipment</i>					
<i>Library</i>					
<i>Consultants</i>					
<i>Other</i>					
Total one-time					
B. Recurring					
<i>Faculty</i>					
<i>Staff</i>					
<i>Benefits</i>					
<i>Equipment</i>					
<i>Library</i>					
<i>Other</i>	\$10,000	\$10,500	\$11,025	\$11,576	\$12,155
Total recurring	\$10,000	\$10,500	\$11,025	\$11,576	\$12,155
Total expenses (A+B)	\$10,000	\$10,500	\$11,025	\$11,576	\$12,155
2. Revenue per year					
<i>Tuition/Fees</i>	\$102,871	\$203,803	\$246,986	\$279,217	\$310,498
<i>Institutional Resources</i>					
<i>State Aid -- CBHE</i>					
<i>State Aid -- Other</i>					
Total revenue	\$102,871	\$203,803	\$246,986	\$279,217	\$310,498
3. Net revenue (loss) per year	\$92,871	\$193,303	\$235,961	\$267,641	\$298,343
4. Cumulative revenue (loss)	\$92,871	\$286,175	\$522,135	\$789,776	\$1,088,199

3.B.1. Additional Resources Needed

The proposed degree program is designed to leverage existing resources to launch and grow.

Existing College of Business Administration full-time faculty and staff will be sufficient to successfully launch this program in Year 1; therefore, no additional hires will be required. Should additional faculty be needed, which is expected once enrollment surpasses 50 students, we will rely on industry experts in specialty areas to serve as part-time faculty. We do the same for all of our specialty master's programs, and this is expected and supported by our accrediting body (AACSB).

The graduate programs office will provide advising and other student services, as they do for the college's other master's degree programs (MBA, MAcc, MSSCA, MSIST, MSCST).

Also, resources needed for marketing the new degree program will be covered by the UMSL Marketing and Communications office (MarCom). MarCom will also produce the program website while the department will be responsible for upkeep of the site.

3.B.2. Revenues

In the most likely scenario, a student would complete the program in 16 months. A part-time student may finish the program in two years: fall (6 credit hours), spring (6 credit hours), and summer (3 credit hours); second-year fall (6 credit hours), spring (6 credit hours), and summer (3 credit hours). (See Appendix 6. G. for a sample academic map.) For the most likely scenario, the cumulative net margin to the campus over a six-year period will amount to \$1,186,226 (see Table 7 above).

3.B.3. Net Revenue

Table 7 (above) shows the cumulative margin after the cumulative campus overhead: $\$1,186,226 - \$176,170 = \$1,010,056$.

3.B.4. Academic and Financial Viability

As noted above, the current faculty resources in the College of Business Administration and its Department of Finance and Legal Studies are sufficient to launch and maintain the MS in Fintech while also meeting AACSB Faculty Qualifications and Resource sufficiency standards. Student support and advising needs are determined by overall graduate enrollment as graduate advisors support students across programs. Our student enrollment projections (shown in tables 6a and 6b) are sufficient to make the program academically viable.

The classes that comprise the proposed degree program are existing classes that are currently available to MBA and other master's program students in the college. Because students from outside the fintech master's program enroll in these courses, the larger classes create an even more vibrant learning environment.

Table 8. Enrollment for Academic and Financial Viability

Viability	Minimum Enrollment
Academic	6
Financial	6
Overall	6

Missouri Department of Higher Education (MDHE) has a stated policy that if a master's program has, on average, fewer than five graduates over three years prior, it will be flagged for additional review. Since we expect no more than 10% of students to leave the program before graduation, we have stated our estimates of enrollment at six students, with five students graduating.

The program is estimated to generate positive cash flows beginning in Year 1. Over six years, we expect to generate more than \$1,010,056 in the net cumulative margin after campus overhead.

3.C. Business Plan

3.C.1. Marketing Plan

Marketing is critical to successfully launch a new degree program, and the keys are to correctly identify those who would benefit and to determine how to reach them.

The primary target student population for the Master of Science in Fintech includes students with undergraduate degrees in business, particularly finance. We will also direct marketing efforts to working professionals in the various financial and other related sectors (e.g. companies with large, global consumer bases) who want to leverage the explosive growth in fintech through career-enhancing educational opportunities.

Geographically, we will focus heavily on the St. Louis MSA while promoting the program across the state and the Midwest. Because the program is online, we can also reach students from across the country. Once the program is approved, we will work with UMSL marketing and communications professionals to further refine our target audiences and marketing tools to ensure connections are made and meaningful messaging is delivered.

UMSL MarCom will create a welcoming, informational website with an intuitive user interface and provide additional marketing support. For example, they will work the new degree program into advertising messaging that promotes different types of degrees; announce the program via UMSL Daily, social media, and other news outlets; provide creative services for marketing materials and branding, and incorporate the program into the UMSL View Book and appropriate UMSL web pages for easy access to information about the degree.

The College of Business Administration and the degree department will incorporate the new program into the departmental website and add it to the UMSL Bulletin, which provides easily accessible, comprehensive information on all of UMSL's academic programs (<https://bulletin.umsu.edu/>).

Also, a recruiter in the college's graduate programs office will market the program through social media and through the CoBA alumni lists. The graduate program team will also hold virtual recruiting sessions to drive enrollment.

We will collaborate with other units to ensure the program is highly visible; for example, Information Technology Services (ITS) will add the degree program to the all appropriate inquiry forms and letters along with the application form. Also, we will work with [Missouri Online](#), the "gateway to online degrees, certificates and courses" offered across the UM System, to make sure the degree appears in searches and to explore whether the new program can be featured on their site when launched.

Moreover, we intend to widely distribute information and website access to the financial services industry employees in the region directly or via our Finance Advisory Board, Finance Career Conference, and private connections with faculty and staff.

3.C.2. Student Success Plan

As with all graduate business students, MS in FinTech students will be advised by the college's team of professional advisors. In addition to seeking advice from the College of Business Administration Graduate Programs Office, students can seek assistance from the faculty and department chair.

Several factors are important for good student retention, including the number of career opportunities available and the ability for students to connect with industry provided by the degree program and institution.

As previously described, a master's in fintech offers a wealth of career paths for graduates. Also, students in the UMSL MS in Fintech program will have multiple points of contact with the industry for job opportunities and mentoring. UMSL's industry-based Finance Advisory board members can connect students with job opportunities.

Further, depending on their interests, a student might leverage the [Research Enabled](#) portal for opportunities to participate in industry-sponsored research. Or, an entrepreneurial student might engage with industry through CoBA's [UMSU Accelerate](#) programs. Students will also have an expanded network with the industry with the launch of the Handshake online recruiting platform on campus.

These, and other opportunities on campus, will help graduate students, who are often working students, grow and enhance their own industry networks.

3.C.3. Transition Plan

The MS in Fintech would be part of a portfolio of graduate business programs – its success depends on an experienced operational team.

The department chair will serve as the program's academic director overseeing the curriculum, faculty, and assurance of learning. However, the college's governance policies stipulate that this is done through collaboration with department faculty, associate deans, directors, the dean, and the College of Business Administration's standing committees (e.g., Graduate Studies Committee and Assurance of Learning Committee).

In addition, the associate dean of graduate programs and the college's graduate programs office oversee student recruiting, student support services, and degree audits.

The dean is ultimately responsible for the success of all CoBA programs and their compliance with AACSB accreditation standards.

3.C.4. Exit Strategy

Should enrollment not meet estimates for two consecutive years beginning in Year 2, the department chair and dean will re-evaluate the program, considering external variables that might be affecting enrollment, to determine whether program re-tooling is needed.

Also beginning in Year 2, if the program does not meet the minimum enrollment estimates for three consecutive years after any reconfigurations from a previous review are implemented, it will be placed on hiatus and the department will cease accepting new students to the program and help the remaining students complete their degrees.

4. Institutional Capacity

In addition to the website, advertising, and marketing managed by MarCom, we budgeted \$10,000 a year, adjusted for a 5% inflation in the following years, toward marketing and miscellaneous expenses in delivering the program. If there is a significant increase in enrollment in later years, a coordinator may be needed, requiring a faculty course release. The need for graduate advisors depends on enrollment across all graduate business programs.

The MS in Fintech program will be offered entirely online. All faculty are already certified to teach online through Missouri Online. All courses in the MS in Fintech degree programs will be reviewed through the Quality Review Process prior to the start of the MS in Fintech program.

5. Program Characteristics

5.A. Program Learning Outcomes (PLOs)

Graduates of the MS in Fintech program will be able to apply skills necessary for careers in fintech as identified in our market research:

- Develop a working knowledge of fintech, including cryptocurrencies, blockchain, machine learning, big data, fintech credit, robo-advisors, and algorithmic trading in fostering challenges and opportunities in the financial services industry and markets at home and abroad. A cryptocurrency investment trust will be established to help students see the mechanics of crypto trading and price fluctuations. (The initial seed funding for this program will come from an existing Student Investment Trust.)
- Build financial models and solve practical financial problems such as financial statement analysis, capital budgeting, and project valuation.
- Use programming languages such as Python and R to analyze structured (tabular data) and unstructured data (text data such as social media).
- Understand and implement AI/ML applications in portfolio management, algorithmic trading, fraud analytics, and credit scoring.
- Apply fintech principles and blockchain technology to use-cases in distributed finance (Defi), investment vehicles as alternatives to venture capital paradigms, non-fungible tokens (NFTs), and the Metaverse.

5.B. Program Design & Content

The department faculty discussed the curriculum for more than two years before finalizing the current list of courses. We also sought input from the UMSL chair of the Department of Information Systems and Technology, and the chair of the Department of Finance at the University of Missouri–Kansas City. Both chairs provided input, which is incorporated in the proposal, and supplied support letters included in the appendices (see Appendix 6. B. for IST and Appendix 6. D.1. for UMKC).

The curriculum includes required courses in modern finance topics to prepare students for today's overly complex and data-centric financial services industry. Examples include an introduction to Fintech, data analytics, artificial intelligence, and blockchain. The elective courses offer an array of choices for students to pursue their areas of interest in finance.

The MS in Fintech program is a compact 30-credit hour course of study with classes offered in the fall, spring, and summer semesters. All classes are offered online, and students can pursue the degree full-time or part-time.

The following required courses comprise 24 credit hours, each with three credit hours:

- Finance 6500 Financial Management¹
- Finance 6503 Financial Modeling and Computer Applications
- Finance 6521 Financial Forensics: The Science of Derivatives
- Finance 6570 Introduction to Fintech
- Finance 6572 Financial Data Analytics
- Finance 6574 Artificial Intelligence and Machine Learning in Finance
- Finance 6576 Blockchain
- Finance 6590 Seminar in Finance

In addition, students must select two elective courses (six credit hours) from the following list:

- Finance 6520 Security Analysis
- Finance 6540 Financial Institutions and Markets
- Finance 6542 Real Estate
- Finance 6545 Venture Capital and Private Equity
- Finance 6580 International Financial Management

A sample academic map is included, as previously noted, in Appendix 6. G.

¹ FIN 6500 course may be waived depending on the candidate's previous educational experience. If so, the candidate will need to take an extra course from the elective course list. In total, a student is required to take a minimum of 30 credit hours. The 30-credit-hour program is tailored for students with an undergraduate degree in business or other degree that satisfies the FIN 6500 pre-requisites; otherwise, they need to take additional courses to meet the requirements for the FIN 6500 class.

5.C. Program Structure

This MS in Fintech program includes 30 graduate credit hours.

5.C.1. Program Structure Form

1. Total credits required for graduation: 30
2. Residence requirements, if any: N/A
3. General education
 - a. Total general education credits: 0
4. Major Requirements
 - a. Total credits specific to a degree: 30

Table 9: Courses (specific course or distribution area and credit hours):

	Specific Course	Hrs	Total Hrs
Foundations Course (Required or Waived)	Finance 6500: Financial Management	3	3
First Course List (Required)	Finance 6503: Financial Modeling and Computer Applications	3	21
	Finance 6521: Financial Forensics: The Science of Derivatives	3	
	Finance 6570: Introduction to Fintech	3	
	Finance 6572: Financial Data Analytics	3	
	Finance 6574: Artificial Intelligence and Machine Learning in Finance	3	
	Finance 6576: Blockchain	3	
	Finance 6590: Seminar in Finance	3	
Second Course List (6 Hours Required, 9 if FIN6500 is waived)	Finance 6520: Security Analysis	3	6
	Finance 6540: Financial Institutions and Markets	3	
	Finance 6542: Real Estate	3	
	Finance 6545: Venture Capital and Private Equity	3	
	Finance 6580: International Financial Management	3	
			30

5. Free elective credits
 - a. The “Second Course List” electives must be selected from their respective lists in Section 5.B. (also shown in the chart above).
6. Requirement for thesis, internship, or another capstone experience: N/A
7. Unique features such as interdepartmental cooperation: N/A

5.D. Program Goals and Assessment

Program Learning Outcomes (PLOs) were discussed in Section 5. A. and include the following, shown here in abbreviated form:

- Develop a working knowledge of fintech, including cryptocurrencies, blockchain, machine learning, big data, fintech credit, robo-advisors, and algorithmic trading.
- Build financial models and solve practical financial problems.
- Use programming languages such as Python and R to analyze structured (tabular data) and unstructured data (text data such as social media).
- Understand and implement AI/ML applications in portfolio management, algorithmic trading, fraud analytics, and credit scoring.
- Apply fintech principles and blockchain technology to use-cases in distributed finance (Defi), investment vehicles as alternatives to venture capital paradigms, non-fungible tokens (NFTs), and the Metaverse.

The tables below show how these outcomes will be assessed. The department chair will be responsible for coordinating the plan's implementation on an annual basis in concert with department faculty. The assessment information collected will be used to form recommendations that will be shared with faculty, and, after getting consensus, deployed in future implementation plans. Program PLOs will be shared with the advisory board annually for their feedback.

Table 10a: Direct Assessment

Assessment Plan (how)	PL O #1	PL O #2	PL O #3	PL O #4	PLO #5	Timetable for Data Collection
Use case project in the Capstone Seminar in Finance Course	x	x	x	x	x	Each spring
Meet with Interdisciplinary Colleagues to Discuss Student Knowledge Gaps, Inform Program Improvement Based on Assessments Above	x	x	x	x	x	Annually

Table 10b: Indirect Assessment:

Assessment Plan (how)	PL O #1	PL O #2	PL O #3	PL O #4	PL O #5	Timetable for Data Collection
Student Exit Survey	x	x	x	x	x	Semester of graduation
Student Course Evaluations	x	x	x	x	x	Each semester
Alumni Survey	x	x	x	x	x	Every 5 th year (starting the program's 3 rd year)

In addition, we will implement an Assurance of Learning (AOL) process to ensure quality program delivery and student experience through ongoing review and faculty mentoring in the following ways.

- Each course will have exams, quizzes, and other evaluation schemes to assess students' knowledge and comprehension of the fintech topics.
- Case studies will assess students' abilities to identify the real-world application and implementation layers.
- In the capstone seminar course, students will complete a paper on a real-world fintech case. Examples include real estate, insurance, payment system, brokerage, derivatives, securities markets trading and settlement, venture capital, and wealth management.

5.D.1. Program Success Metrics and Goals

We expect a retention rate of 90%, a graduation rate of 95%, and a placement rate of 100%. These will be achieved through knowledgeable and dedicated faculty and assistance from our advisory board members if needed. We expect most of our students to be full-time employees in the industry while attending the program.

Although the primary focus is on the financial services industry, we expect other non-finance industries to begin utilizing the foundational infrastructure technology in fintech (i.e., blockchain) to improve operational efficiencies. As such, in the next decade, we envision an increase in demand by at least 10% for our graduates in such fields as supply chain, auditing, and energy.

Additional program success measures will include participation and engagement in college activities by serving on department and college advisory boards. The college has had significant success with alumni engagement, and we expect similarly with this program.

5.E. Student Preparation

Admission to the program requires an undergraduate business degree or another discipline that satisfies the pre-requisites for the introductory Financial Management course (FIN 6500). Program applicants who do not meet the requirements need to take additional courses.²

² Prerequisites for Finance 6500 include ACCTNG 5400 or ACCTNG 2400, SCMA 5300 or SCMA 3300, and BUS AD 5000 or ECON 1001 and ECON 1002.

5.F. Faculty and Administration

The UMSL finance faculty members hold PhDs from major U.S. universities and have extensive research and industrial experience to share in the classroom. As active researchers, they are on the cutting edge of new developments in the field, which are carefully integrated into coursework. The UMSL finance department's research was recently ranked in the top 16 nationwide (90.3 percentile) in the Academic Analytics Scholarly Research Index (SRI).³ Our Certified Financial Planner (CFP) program was recently ranked in the top 17 nationwide.⁴ We expect courses in this program to be taught by full-time faculty. If the program expands beyond our current expectations, and we need extra faculty in order to provide more sections of the courses, we may hire professionals in fintech to teach in the program.

The faculty teaching the courses in this program will help students with coursework and career advice. The percentage of faculty time dedicated to each class is similar to the time in their other courses, mainly because the courses are currently offered.

The Department of Finance and Legal Studies chair oversees the program development. The Graduate Business Programs director handles student admission and administration processes.

The MS in Fintech program does not require additional faculty as the underlying courses are currently offered and can accommodate the additional students that this program brings in.

5.G. Alumni and Employer Survey

We sought feedback from the Finance Advisory Board throughout the development of the program. Board members noted that the world is becoming more data-driven and that there is an increasing need for cross-functional knowledge of finance, IT applications and data analysis. Such feedback was critical in designing the program structure, with the resulting proposed degree program built around an industry-supported mix of courses that provide the necessary fintech, foundational finance, data analysis for work in this field. (See additional Finance Advisory Board feedback in Appendix 6. C.2.)

After the program begins, we will survey graduating classes one month after degree completion for program satisfaction and one year later for ways to improve the program in concert with industry requirements. A sample graduate survey can be viewed [here](#).

³ Source: Academic Analytics (Release: AAD2017.09.01269)

⁴ <https://www.wealthmanagement.com/careers/top-ranked-colleges-financial-planning?full=1>

5.H. Program Accreditation

The proposed program requires no accreditation from a professional association beyond the Association to Advance Collegiate Schools of Business (AACSB) for all college degree programs. The UMSL College of Business Administration is accredited by the AACSB.

6. Appendices

6.A. College Support Letters

6.A.1. College Support Letters: Former Dean, College of Business Administration

January 31, 2022

Re: Letter in Support of Master of Science in Financial Technology (Fintech) Degree

During the seven years in which I served as dean of the college of business administration at UMSL, I increasingly heard from our department of Finance and Legal Studies, its advisory board, the college's leadership council, and alumni about the growing need for enhanced financial technology preparation for our students. St. Louis has an exceptionally strong financial services industry and we have many of our graduates in leadership positions at firms such as Edward Jones, Moneta Group, Stifel, Wells Fargo Advisors, Merrill Lynch, etc.

As we began to develop the program, we were able to strengthen our already strong Finance and Legal Studies department with new faculty and committed department chairs. As a first mover in this area, and with years of emphasis on on-line delivery excellence, we also received interest from other UM System campuses.

I believe that student interest is strong, and that the college will be able to duplicate the success we have had with other new graduate programs in supply chain analytics and cybersecurity. As can be read in the proposal, the program will enjoy a competitive advantage with other business schools in the region.

I highly recommend approval of this innovative program.

Charles Hoffman

Retired dean, 2013-2021

Executive in Residence at UMSL, working with Chancellor Sobolik

Member, Chancellor's Council and co-chair Marketing and Messaging Committee

6.A.2. College Support Letters: Dean, College of Business Administration



15 October 2021

Re: Letter of support for proposed MS in Financial Technology (Fintech)

I fully support the launch of the proposed MS in Financial Technology as the next innovative program in UMSL's College of Business Administration. As with past successful CoBA programs, the MS in Fintech fulfills UMSL's and CoBA's missions to serve the emerging needs of the St. Louis region and beyond. Indeed, this online MS Fintech program would have a "first mover advantage" in Missouri (and its contiguous states) and would serve an emerging need in—particularly among the many UMSL alumni who work in St. Louis's strong financial services industry. As outlined in the *Eduventures Research Report*, this new program "shows promise based on aligned program and labor market indicators." In addition, UMSL's expertise in offering online programs (e.g., Missouri Online) enable us to help our students meet their career advancement goals with a graduate degree in fintech via their preferred virtual elearning modality. Finally, even with modest initial enrollment estimates we anticipate a positive net margin in its first year.

I endorse this proposal with great enthusiasm.

Sincerely,

A handwritten signature in black ink, appearing to read "Joan M. Phillips, PhD".

Joan M. Phillips, PhD
Dean and Professor
College of Business Administration
University of Missouri-St. Louis
jphillips@umsl.edu

6.B. UMSL's Department of Information Systems & Technology Letter



INFORMATION SYSTEMS AND TECHNOLOGY

COLLEGE OF BUSINESS
ADMINISTRATION UNIVERSITY OF
MISSOURI - ST. LOUIS
211 ESH – MC 22
One University Boulevard
St. Louis, MO 63121-4400
U.S.A. voice: +1
314-516-6267
fax: +1 314-516-6827

June 1, 2021

Re: Letter of support for UMSL's MS degree in Financial Technology (Fintech)

I am very pleased to support the MS degree in Financial Technology (Fintech) proposed by UMSL's Department of Finance and Legal Studies. The department is one of the strongest and most productive units at UMSL with renowned expertise in corporate finance, investments, financial institutions and markets, personal financial planning, and financial technology. It's active and committed advisory board helps provide numerous opportunities for students such as internships, mentorships, and career advice.

Fintech is a very critical new area of study with a high projected demand for graduates as artificial intelligence, crypto assets, and other information technologies are becoming widely adopted throughout the financial services industry. With the new AACSB accredited MS degree, UMSL's Department of Finance and Legal Studies will be positioned to become one of the premier centers of Fintech learning and research in the country which will provide enormous benefit to the St. Louis region, particularly its significant base of banks, brokerage houses, venture capital firms, and insurance businesses.

Fintech clearly represents a significant and disruptive transformation in Business education. I am happy that the Department of Finance and Legal Studies is at the forefront of this new wave, helping establish UMSL as a thought leader in the space. I therefore enthusiastically endorse the department's proposal.

I will be very happy to provide any more information, if needed, and can be contacted by telephone at 314-516-7354 or by e-mail at mirchandani@umsl.edu.

Sincerely,

D. A. Mirchandani

6.C. Finance Department Advisory Board

6.C.1. Finance Advisory Board Members

Bill Dickens, Chair
Family CFO Services
Moneta Group
Email: bdickens@monetagroup.com

Alex Banthongsack
Swiss CNC Machinist
SIM Surgical
Email: alex.banthongsack@gmail.com

Stan Freerks
Insurance Executive (retired)
Risk Placement Services St. Louis
Email: stanfreerks@gmail.com

Lorenzo Hester
Attorney
The Hester Group
Email: thehestergroup@att.net

Morgan L. Koenig, CFA, CAIA
Portfolio Manager and Research Analyst
Wedgewood Partners, Inc.
Email: mkoenig@enterprisebank.com

Tom Lucas
Treasurer and Senior Vice President of Finance
and Corporate Development
Caleres Inc. (retired)
Email: lucastho@gmail.com

Michael Mohr
Founder
MOHR Advantage, LLC
Email: mike@mohradvantage.com

Gary M. Mudd
Chief Financial Officer
Doorways
Email: gmudd@doorwayshousing.org

Don Mueth
Chief Operating Officer
Asset Consulting Group, LLC
Email: don.mueth@acgnet.com

Don Pratt
Executive Vice President & Chief Credit Officer

CSI Leasing, Inc.
Email: Don.Pratt@csileasing.com

Dennis Stoll
Branch Team Trainer
Edward Jones
Email: Dennis.Stoll@edwardjones.com

John H. Russell
Senior Vice President/Investments
Stifel | Russell Wealth Management Group
Email: John.Russell@stifel.com

Brian R. Salmo
Business Unit Leader & General Counsel
LMI Aerospace
Email: bsalmo@lmiaerospace.com

Emilie Schaffer, CFP, CRPC
Wealth Advisor
Buckingham Strategic Wealth
Email: eschaffer@bamadvisor.com

Michael B. Sullivan
Senior VP and General Counsel
Cortex Innovation Community
Email: msullivan@cortexstl.com

Laura Wollenberg, CPA
International Contracts Specialist
Boeing Defense, Space & Security – Contract Operation
Services
The Boeing Company
Email: laura.s.wollenberg@boeing.com

Jeff Zornes
Founder
Cowboy Ribeyes
Email: jzornes@cowboyribeyes.com

Joan Phillips, PhD (Ex-Officio)
Dean
UMSL, College of Business Administration
Email: joan.phillips@umsl.edu

Nasser Arshadi, PhD (Ex-Officio)
Professor of Finance and Department Chair
UMSL, College of Business Administration
Email: arshadi@umsl.edu

6.C.2. Quotes from a Survey of Finance Advisory Board Members⁵

- “The cross-functional knowledge of Finance, IT applications, and Data analysis are very useful.”
- “The world is more data-driven, so data analytics skills are becoming increasingly more in demand.”
- “The program outline seems to be well balanced and has a nice blend of Financial Management, Programming, and Data Analytics.”
- “Data analytic skills are very much acquired within a work environment – but a solid background in the fundamentals and a degree with this expertise will be a good step one to open job entry doors.”
- “Heavier emphasis on analysis would benefit most companies.”
- “There is a strong overlap between the fundamental research my investment team does and also needing an understanding from an IT perspective that would allow us to utilize best the Research systems we have to build macros or reports that would provide the data on the companies we own, the companies we are watching, as well as the market in general.”
- “There is an increasing need for cross-functional knowledge. Especially as it pertains to all aspects of Finance, Supply Chain Management, Data Management, and Protection and IT. Employees who are able to identify savings opportunities/efficiencies and strategies to get there from data and present it well to company executives will ascend more rapidly in their careers.”

See Appendix 6.C.1. for a list of Advisory Board members.

⁵ The survey was distributed to Finance Advisory Board members of UMSL at the board meeting on Jan. 31, 2019. The comments were compiled and collected on the board meeting on April 16, 2019.

6.D. External Support Letters

6.D.1. UMKC Department of Finance Support Letter



November 15, 2021

Dear Nassar,

At your request, I am writing to support your proposal for a fintech-based MSF program. This is a growing area and certainly there is a need for more people with this background. It looks like a well-designed curriculum that meets the needs of both students and employers.

Given the growth in the fintech space as well as the data analytics side of finance, I think this program positions the University of Missouri System well to meet the demands of current and future employers. As the interest in cryptocurrencies grows, it is likely that the Federal Reserve system will increase their interest in this area. As the only state with two Federal Reserve Banks that both have active research departments focused on this area, it seems likely that future regulatory jobs in this space will be located in the state.

By establishing a curriculum that is heavy in fintech, you have created a program that is unique in our state. I also think this program will appeal to students outside of St. Louis, due to the favorable pricing discussed in your proposal.

I am excited about this program and look forward to partnering with you to expand the electives we can offer our students in both programs. Given the new combined Canvas set-up, we have new opportunities for sharing online and hybrid/synchronous online courses that should give our students several new course options once we get some kinks worked out on the financing front.

Sincerely,

A handwritten signature in blue ink, appearing to read "John M. Clark".

John M. Clark, Ph.D., CFA, CFP®
Chair, Dept. of Finance
Associate Professor of Finance

6.D.2. Messages from the Missouri S&T Provost and Interim Vice Provost & Dean, College of Arts, Sciences, and Business

From: Potts, Colin <colin.potts@mst.edu>
Sent: Wednesday, January 26, 2022 8:30 AM
To: Arshadi, Nasser <arshadi@umsl.edu>; Drowne, Kate <kdrowne@mst.edu>
Cc: Elrod, Cassie <cassa@mst.edu>; Phillips, Joan <joan.phillips@umsl.edu>
Subject: Re: My sincerest thanks!

Dear Dr. Ashadi,

Let me add my thanks to Kate's. As you probably know, we are creating a new college for innovation, entrepreneurship, and economic development: the Kummer College at S&T. I hope your assistance with our BIT students will be the harbinger of future collaborations.

Colin

From: Drowne, Kate <kdrowne@mst.edu>
Sent: Tuesday, January 25, 2022 4:04 PM
To: Arshadi, Nasser <arshadi@umsl.edu>
Cc: Elrod, Cassie <cassa@mst.edu>; Potts, Colin <colin.potts@mst.edu>
Subject: My sincerest thanks!

Dear Dr. Arshadi,

Dr. Cassie Elrod, acting chair of Business and Information Technology here at S&T, has made me aware of your tremendous responsiveness and collegiality during what has been a really unfortunate situation in our college. I am so grateful for your willingness to work with Cassie and others to help our S&T students find their way into your online finance classes this semester, after their class was unavoidably canceled due to faculty illness. I'm even more humbled by your willingness to pivot two of your fall 2023 classes to an online modality to accommodate our finance students who will still lack local options next semester. Your efforts will help many of our students complete necessary coursework in FinTech and Financial Data Analytics and thus stay on track for timely graduation. I appreciate your generosity more than I can say, and I hope that if our BIT department can ever do your students a good turn, then you will not hesitate to reach out.

With warmest wishes and sincerest thanks,
Kate Drowne

Dr. Kate Drowne
Interim Vice Provost and Dean
College of Arts, Sciences, and Business
Missouri University of Science and Technology
118 Fulton Hall
Rolla, MO 65409
Ph. (573) 341-6699

6.D.3. MU Support Email

From: Robert, Chris A. <RobertC@missouri.edu>

Sent: Friday, March 11, 2022 10:35 AM

To: Phillips, Joan <joan.phillips@umsl.edu>

Subject: UMSL MS in Fin Tech and possible collaboration with MU

Dear Dean Phillips,

Congratulations on putting together a great proposal for the MS in Fintech. This program should be extremely helpful in supporting development in the high tech service industry in St. Louis, and I wish you all the best.

I'd like us to continue to discuss possible ways of collaborating. In particular, let's continue to explore whether a Fintech graduate certificate developed from some of your course offerings, or perhaps some of your key fintech courses (e.g., Essentials of Fintech and Application of Blockchain in Financial Services Industry) in combination with ours, might be packaged for delivery within our MS in Business (aka "stackable certificates") program. As you know, that program allows for relatively easy collaboration in the use of curriculum across the UM System, and this seems like a nice opportunity to do that, and to build value for our students.

Best,

Chris

Christopher Robert, PhD

Interim Dean

Robert J. Trulaske, Sr. College of Business
407 Cornell Hall | Columbia, MO 65211

O: 573-882-6688 | **E:** RobertC@missouri.edu

W: business.missouri.edu



Robert J. Trulaske, Sr.
College of Business

University of Missouri

6.E. Industry Support Letters

[Letters on Following 4 Pages]



June 1, 2021

Nasser Arshadi
Professor and Chair
Department of Finance and Legal Studies
233 ABH
University of Missouri – St. Louis
St. Louis, MO 63121

I am writing in support of your MS in Fintech program proposal. As a partner in Moneta – an independent registered investment advisor (RIA), my colleagues and I help clients, including individuals and businesses, achieve their financial goals. I help business owners, executives, and many physicians navigate their pursuit of financial independence.

The world of finance is changing rapidly, and the MS in Fintech program at UMSL responds to these changes. This program is in great need, from AI/machine learning that helps in portfolio management to blockchain that explains smart contracts and new enterprise infrastructures. As such, I am a strong supporter of this program.

Sincerely,

A handwritten signature in black ink, appearing to be "B. Dickens III", with a large, stylized flourish extending to the right.

Billy D. Dickens III, CFP®
Partner

Office (main)
1 North Brentwood Blvd
Suite 500
St. Louis, MO 63105

North Office
1 North Brentwood Blvd
Suite 500
St. Louis, MO 63105

Main (314) 726-2300
Learn More at monetagroup.com



June 4, 2021

Nasser Arshadi
Professor and Chair
Department of Finance and Legal Studies
College of Business Administration
University of Missouri – St. Louis
St. Louis, MO 63121

I am writing in support of your MS in Fintech program proposal. As a Portfolio Manager at Enterprise Bank & Trust, I am aware of the vast changes in the finance discipline that affect our work in wealth management.

At Enterprise Bank, we offer a range of business and personal banking services. These lines of business include:

- Wealth Management services offering Financial Planning, Estate Planning, and Investment Management
- Trust Services for businesses, individuals, institutions, and nonprofit organizations
- Specialty Banking such as Third-Party Escrow, Property Management, and SBA Lending

All these functions are affected by the advent of Fintech and the advanced technologies it brings forth.

The MS in Fintech program at UMSL provides an excellent and timely opportunity for financial practitioners to elevate their skill set in serving their clients. This is a strong program, and based on a review of available jobs, it appears that the fintech/analytics space is highly sought after. As such, I fully support this program.

Sincerely,

A handwritten signature in cursive script that reads "Morgan L. Koenig".

Morgan Koenig, CFA
VP, Portfolio Manager | Enterprise Bank & Trust
314-889-2020



Commerce Trust Company

Wealth | Investments | Planning

June 8, 2021

Nasser Arshadi, PhD
Professor of Finance
College of Business Administration
233 Anheuser-Busch Hall
University of Missouri – St. Louis
St. Louis, MO 63121

Professor Arshadi:

There have been transformative technological changes and increasing demands for cross-functional knowledge in the finance industry. UMSL's proposed MS in Fintech and Data Analytics is timely and distinctive in meeting such challenges and demands. The program is well-balanced and has a nice blend of Financial Management, Programming, and Data Analytics. As described in the proposal, the program covers a wide range of new technologies such as artificial intelligence, machine learning, blockchain, robo advisors, algorithmic trading, and big data analytics.

I strongly support this program.

Sincerely,

Brent Schowe
Senior Vice President
Director of Fixed Income Research & Trading
(314) 746-3966
brent.schowe@commercebank.com



Commerce Trust Company

Wealth | Investments | Planning

June 8, 2021

Nasser Arshadi, PhD
Professor of Finance
College of Business Administration
233 Anheuser-Busch Hall
University of Missouri – St. Louis
St. Louis, MO 63121

Professor Arshadi:

The transformative technological changes of recent years require revisiting the curriculum previously taught in university finance programs. Financial Technology (Fintech) and data analytics are new technologies for the financial services industry. The significance of such programs is highlighted by a recently planned dialogue at the Federal Reserve Bank of St. Louis entitled "How Fintech is Transforming Banking."

UMSL's proposed MS in Fintech and Data Analytics is timely and important. As described in the proposal, the program covers artificial intelligence, machine learning, blockchain, financial modeling, robo advisors, algorithmic trading, and data analytics.

I support this program and look forward to its implementation.

Sincerely,

Jeff Burgess
President
Commerce Brokerage Services, Inc.
(314) 746-6751
jeff.burgess@commercebank.com

8000 Forsyth Boulevard • St. Louis, MO 63105-1797 • commercetrustcompany.com

6.F. St. Louis Fortune 1000 Headquarters⁶

	Company	Rank	Revenues (\$ billions)
1	Express Scripts Holding	22	\$100.288
2	Centene	66	\$40.721
3	Emerson Electric	139	\$20.268
4	Monsanto	204	\$13.502
5	Reinsurance Group of America	246	\$11.522
6	Jones Financial (Edward Jones)	403	\$6.632
7	Graybar Electric	420	\$6.385
8	Ameren	431	\$6.076
9	Olin	467	\$5.551
10	Post Holdings	508	\$5.027
11	Peabody	533	\$4.715
12	Panera Bread	760	\$2.795
13	Stifel Financial	785	\$2.642
14	Caleres	790	\$2.579
15	Edgewell Personal Care	845	\$2.362
16	Belden	846	\$2.357
17	Arch Coal	946	\$1.974

⁶ <http://www.stlregionalchamber.com/blog-post/chamber-blog/2017/06/13/st.-louis-is-home-to-nine-fortune-500-headquarters>

6.G. Sample Academic Map

All courses carry 3 credit hours.

Fall 2022	Finance 6500 Financial Management Finance 6503 Financial Modeling and Computer Applications Finance 6570 Introduction to Fintech
Spring 2023	Finance 6576 Blockchain: Applications in Finance Finance 6572 Financial Data Analytics Finance 6521 Financial Forensics: The Science of Derivatives
Summer 2023	Finance 6540 Financial Institutions and Financial Markets Finance 6520 Security Analysis
Fall 2023 Finance	Finance 6574 Artificial Intelligence and Machine Learning in Finance Finance 6590 Seminar in Finance

6.H. Financial and Professional Services Companies in St. Louis

Financial Services Firms

- Edward Jones
- Wells Fargo Advisors
- Stifel Financial
- Commerce Bank
- Bank of America
- UMB
- US Bank
- TD Ameritrade
- MasterCard
- CitiMortgage
- Cushman and Wakefield

Insurance

- Reinsurance Group of America
- Shelter Insurance
- Centene
- State Farm
- Liberty Mutual

Engineering/Architectural Firms

- Burns & McDonnell
- HOK

6.I. UMSL Leadership Support Letters: Provost & the Chancellor

UMSL Academic Affairs University of Missouri–St. Louis

March 2, 2022

Dean Joan Phillips
College of Business Administration
University of Missouri – St. Louis
St. Louis, MO 63121

Re: Proposed M.S. in Financial Technology

Dear Dean Phillips,

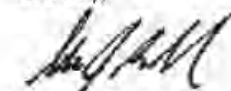
I am writing to offer my enthusiastic support for the proposed M.S. in Financial Technology (Fintech) to be offered out of the College of Business Administration here at the University of Missouri – St. Louis. This degree program builds on the strength of courses professors in the finance area have been building for two years in response to the field changing, and I believe it will be an important area of growth for your college in the years to come.

Given the rapidly changing field of financial technology, I fully agree that we will better serve our students with a Master's degree in this area. I am impressed at the breadth and depth of courses the faculty are offering in this program, such as Financial Modeling and Computer Applications, Artificial Intelligence and Machine Learning in Finance, and a course dedicated to Blockchain. These offerings will result in a broader spectrum of job opportunities for our students after graduation and help meet the needs of the employers in the financial hub surrounding us.

With the research of faculty in this department being ranked in the top 16 nationwide, students will receive instruction from experts in the field and be fully immersed in the latest topics and trends. Also, by offering this program as a fully online program, you will be able to not only meet the needs of those in the St. Louis region, but also those across St. Louis and in more rural areas where Fintech expertise is needed but not yet widely available.

Given the prudent use of existing courses in a high-need area locally and nationwide, I fully support this M.S. in Financial Technology here at the University of Missouri – St. Louis.

Sincerely,



Steven J. Berberich
Provost and Interim Executive Vice Chancellor



University of Missouri–St. Louis

401 Woods Hall
One University Boulevard
St. Louis, MO 63121, USA
1-314-516-5252
chancellor@umsl.edu

March 2, 2022

Dean Joan Phillips
College of Business Administration
University of Missouri – St. Louis
St. Louis, MO 63121

Re: Proposed MS in Financial Technology

Dear Dean Phillips,

I am writing to offer my support for the proposed M.S. in Financial Technology (Fintech) to be offered out of the College of Business Administration here at the University of Missouri – St. Louis. No other campus in our system is currently offering an graduate degree in this specialized area and since this is a growth area for both the St. Louis region and state of Missouri it is the perfect time for our university to offer this type of degree program.

This program represents an area of growth and excellence for UMSL and is anticipated to be profitable in year 1. Employment trends show that more and more companies need workers who have knowledge not only in traditional finance, but also in fintech tools such blockchain, artificial intelligence (AI), machine learning (ML), mobile payment systems, and robo-advising to keep up with the current trends. FinTech is an important [STL Job 2030](#) initiative as there are plans for a FinTech innovation district in downtown STL. Our graduates will be well-poised to take on high-demand jobs in the region from employers like Square Inc., Boeing, Bank of America, National City, Regions Bank, Wells Fargo, Thomas Reuters, Citi Mortgage, MasterCard, Reinsurance Group of America, and Edward Jones and this program will help fill a talent shortage need in our area.

I support this proposed M.S. in Financial Technology and believe it will be a transformative degree for workforce development in the St. Louis area.

Sincerely,

A handwritten signature in black ink that reads "Kristin Sobolik". The signature is fluid and cursive, with the first name "Kristin" and last name "Sobolik" clearly distinguishable.

Kristin Sobolik, Ph.D.
Chancellor

No. 2

Recommended Action – Resolution for Executive Session of the Board of Curators Academic, Student Affairs, Research and Economic Development Committee Meeting, June 23, 2022

It was moved by Curator _____ and seconded by Curator _____, that there shall be an executive session with a closed record and closed vote of the Board of Curators Academic, Student Affairs, Research and Economic Development Committee Meeting, June 23, 2022 for consideration of:

- **Section 610.021(1), RSMo**, relating to matters identified in that provision, which include legal actions, causes of action or litigation, and confidential or privileged communications with counsel; and
- **Section 610.021(3), RSMo**, relating to matters identified in that provision, which include hiring, firing, disciplining, or promoting of particular employees; and
- **Section 610.021 (13), RSMo**, relating to matters identified in that provision, which include individually identifiable personnel records, performance ratings, or records pertaining to employees or applicants for employment.

Roll call vote of the Committee: YES NO

Curator Graves

Curator Hoberock

Curator Layman

Curator Wenneker

The motion _____.

AUDIT, COMPLIANCE AND ETHICS COMMITTEE

Keith A. Holloway (Chair)

Julia G. Brncic

Jeff L. Layman

The Audit, Compliance and Ethics Committee (“Committee”) will review and recommend policies to enhance the quality and effectiveness of the University’s financial reporting, internal control structure and compliance and ethics programs.

I. Scope

In carrying out its responsibilities, the Committee monitors and assesses the University’s financial reporting systems and controls, internal and external audit functions, and compliance and ethics programs.

II. Executive Liaison

The Chief Audit and Compliance Officer of the University or some other person(s) designated by the President of the University, with the concurrence of the Board Chair and the Committee Chair, shall be the executive liaison to the committee and responsible for transmitting committee recommendations.

III. Responsibilities

In addition to the overall responsibilities of the Committee described above and in carrying out its responsibilities, the charge of the Committee shall include:

- A. Reviewing and making recommendations to the Board in the following matters:
 - 1. the University risk assessment, audit plan and compliance plan;
 - 2. in conjunction with the Governance, Compensation and Human Resources Committee, the appointment, compensation, annual performance evaluation and termination of the University’s Chief Audit and Compliance Officer;
 - 3. the appointment, compensation, and termination of the university’s external auditors.
- B. Providing governance oversight regarding:
 - 1. development and monitoring a University code of conduct;
 - 2. effectiveness of the internal control framework;
 - 3. ensuring that the significant findings and recommendations are received, discussed and appropriately resolved;
 - 4. procedures for reporting misconduct without the fear of retaliation;
 - 5. university compliance with applicable laws, regulations, and policies that govern all aspects of University operations including but not limited to the following:
 - 1. Administrative compliance risks
 - 2. Healthcare compliance risks
 - 3. Research compliance risks
 - 4. Information security compliance risks
 - 5. Privacy compliance risks
 - 6. those additional matters customarily addressed by the audit, compliance and ethics committee of a governing board for an institution of higher education.
- C. Reviewing periodic reports regarding:

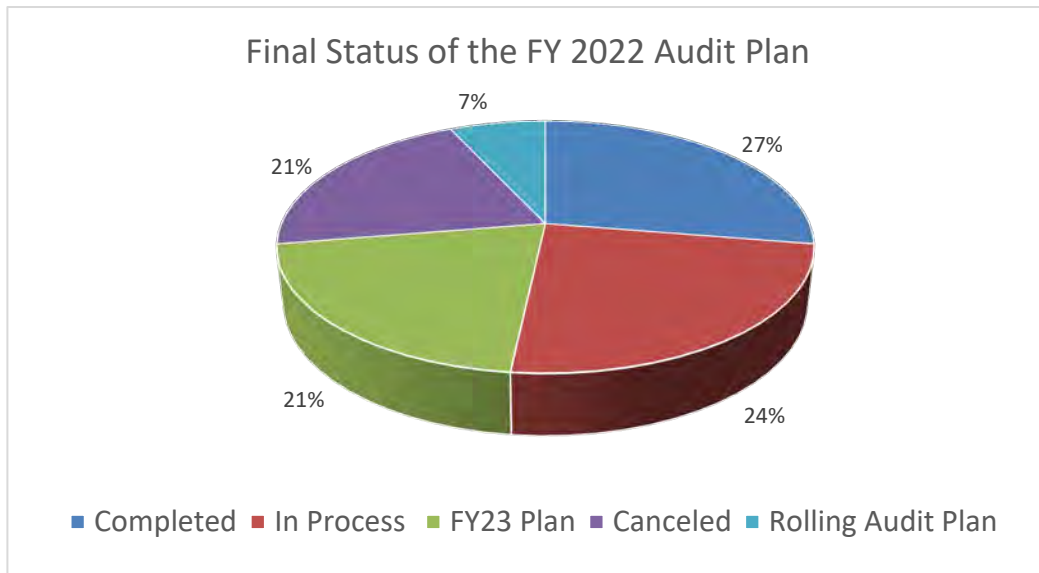
1. the independence, performance, resources and structure of the internal audit, compliance and ethics functions;
2. audit reports and open audit issue status updates;
3. management's written responses to significant findings and recommendations by the auditors;
4. the adequacy of the University's information technology methodology with regards to security, internal controls and data integrity assurance;
5. annual external audit reports, including audited financial statements, single audit and required procedures; and
6. the effectiveness of the compliance and ethics program ensuring it has appropriate standing and visibility across the system.

Internal Audit, Compliance and Ethics Annual Report UM

Final Status of the FY 2022 Annual Audit Plan

The Office of Ethics, Compliance and Audit Services completed 8 projects from the fiscal year 2022 Internal Audit Plan with another 7 in process. A total of 27 projects were originally approved with two additions throughout the year. The FY 2022 Internal Audit Plan was adjusted as resources, events, emerging issues, or management concerns changed.

- Eight projects completed
- Seven in process
- Six included on FY2023 Audit Plan
- Two added to the Rolling Audit Plan
- Six canceled



The table below details the completed and in process internal audit projects and investigations by unit.


Unit	Assurance Projects	Consulting Projects	Investigations	Total
UM System	3	1	0	4
MU	1	0	11	12
MU Health	5	0	2	7
UMKC	2	0	0	2
Missouri S&T	2	0	1	3
UMSL	2	0	0	2
Total	15	1	14	30

Note: Partner/Vendor Management Program consulting engagement is for UM System and MU Health; the Scholarship Awards audit will cover all four universities.

Audit and consulting engagements continue to identify opportunities to improve outcomes and manage risk by clarifying guidance roles and responsibilities; evaluating control activities to improve achievement of desired outcomes; and connecting processes across functions and departments.

Completed and In Process Audit & Consulting Engagements by Risk Area (Investigations excluded)

Area	Audit Engagement	Finance	Compliance	Operations
MUHC	Insurance Payer Websites		X	X
MUHC	Organized Healthcare Arrangement		X	X
UMKC	Lab Safety		X	X
MS&T	Conflict of Interest		X	
UMS	GLBA Gap Analysis		X	
UMS	Update of HIPAA Hybrid Covered Entity Designations		X	
UMS	Follow Up of management actions for previous audits			
UMS	Risk Assessment			
UMS/MUHC	Partner/Vendor Management Program		X	X
MUHC	Missouri Telehealth Network		X	X
MUHC	Research Equipment Inventory			X
UMSL	College of Business Administration	X		
All Universities	Scholarship Awards		X	
UMS	Logging/Monitoring		X	X

 Indicates in process

In addition, fourteen investigations were completed in FY2022, and we are currently working nine investigations.

System Compliance Program FY22 Progress

Implementation of the system-wide compliance program progressed at a quicker pace since hiring two compliance resources in April 2021. The focus for compliance were in the areas of information security, research compliance, and data security. Engaging the professionals at the UM System Universities in working towards control activities that improve prevention and early detection is resulting in a collaborative network and identification of needed education/training and policies/procedures revisions or development. This will continue to be an iterative process working through the areas impacted by laws, regulations, and policies. Compliance staff, professionals across the organization, and Office of General Counsel continue responding to detected errors and factoring in lessons learned for ongoing improvements.

Progress in Establishing the Foundational Elements

High-level oversight. The Code of Conduct was introduced to all the campuses early in the Fall semester. The first annual education with an attestation will be part of the compliance education rolled out for Fall semester 2022.

Policy and Procedure Integration – The need for a fraud awareness and non-retaliation policies/procedures was identified through the compliance work this year. Currently non-retaliation is addressed in multiple policies. System compliance is collaborating with the General Counsel and other applicable leaders to deploy these policies/procedures.

System Compliance did work collaboratively with the Director of Research Security and Compliance to draft a sanctions policy that addresses compliance with the Office of Foreign Assets and Controls regulation.

Training and Education – Training and education needs are identified as we continue our work assessing the strengths and weaknesses in compliance areas. Our approach is to develop short and targeted learnings (micro-learnings) that address why the regulation is important and its impact to operations, how to know when to ask for help, and who to contact. Four of these micro-learnings are in process, with rollout scheduled in FY23. In addition, an in-depth fraud awareness training will be deployed for all personnel with financial responsibilities.

Open Communications – Engaging compliance professionals in a collaborative network has been a successful strategy for driving change in the compliance space to strengthen compliance with applicable laws, regulations, and policies and create an open communication channel with the universities.

Collaborations continue with the Director of Security and Compliance to develop guidance for all UM System universities on requirements for addressing undue foreign influence.

June 23, 2022

Monitoring and Auditing – Monitoring has been developed for:

- Youth Protection Programs to ensure compliance with policy
- Research grant management to identify any concerning trends for follow-up
- IP addresses hitting UM System networks from sanctioned countries for follow-up and resolution
- Implementation of management actions related to the Information Security Risk Assessment to gauge maturity of our program.

A Gramm-Leach-Bliley Act Gap Analysis was completed by Internal Audit and was used to make structural and process changes to this program.

University of Missouri System Board of Curators

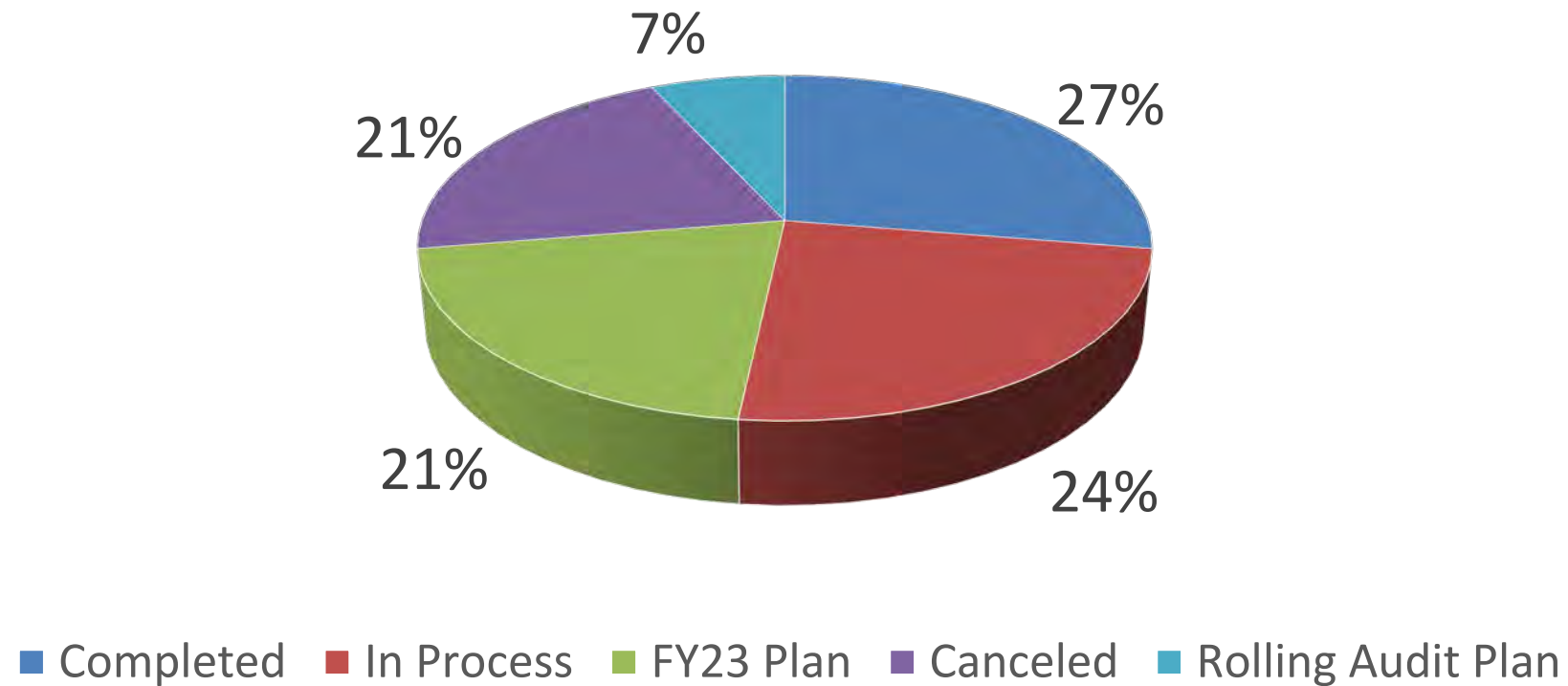
June 23, 2022

Audit, Compliance and Ethics Committee

Audit, Compliance and Ethics Annual Report
UM



Final Status of the FY2022 Plan



Summary by Engagement Type

Unit	Assurance Projects	Consulting Projects	Investigations	Total
UM System	3	1	0	4
MU	1	0	11	12
MU Health	5	0	2	7
UMKC	2	0	0	2
Missouri S&T	2	0	1	3
UMSL	2	0	0	2
Total	15	1	14	30

Summary of Audit and Investigation Activity

Since the April 2022 Audit Committee Meeting

- Completed risk assessment, and assisted the Office of General Counsel in the HIPAA Hybrid Covered Entity Designations
- Finalizing the report and management actions for four audits
- Completing fieldwork for one audit
- Planning in process for one audit
- Completed seven investigations and actively working nine investigations

System Compliance Program Progress

Cybersecurity	Data Regulations	Research Compliance
Ongoing monitoring of completed tasks and maturity of Information Security Program	Completed GLBA Gap Analysis	Developing a micro-learning for researchers about available export control resources and how to access
Collaborating with chief information security officer and research compliance to meet coming regulations for secured space	System compliance designated as responsible for central organization	Collaborated with Finance to implement controls to stop payments to embargoed countries
	Privacy program will be established to cover all regulations	Developing guidance on requirements for addressing undue foreign influence
		Drafting a sanctions policy

Training and Education

- Code of Conduct annual training and attestation
- Export controls for principal investigators
- Gramm, Leach Bliley Act for education units responsible to secure information
- Importance of a speak-up culture – everyone
- Fraud awareness – everyone
- In-depth module on fraud – all personnel with financial responsibilities

Monitoring & Auditing

- Youth Protection Program
- Research grants
- IP addresses hitting UM System networks from sanctioned countries
- Improvements related to higher education information security program



University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

No. 1

Recommended Action – Fiscal Year 2023 Risk Assessment and Proposed Internal Audit and Compliance Plans, UM

It was recommended by Executive Vice President Rapp, endorsed by President Choi, recommended by the Audit, Compliance and Ethics Committee, moved by Curator _____, seconded by Curator _____, that the attached Fiscal Year 2023 Risk Assessment and Proposed Internal Audit and Compliance Plans be approved.

Roll call vote of Committee:	YES	NO
------------------------------	-----	----

Curator Brncic
Curator Holloway
Curator Layman

Roll call vote:	YES	NO
-----------------	-----	----

Curator Brncic
Curator Chatman
Curator Graves
Curator Hoberock
Curator Holloway
Curator Layman
Curator Wenneker
Curator Williams

The motion _____.



Ethics, Compliance and Audit Services

FY23 Risk Assessment and Proposed Internal Audit and Compliance Plans

June 2022

June 23, 2022

OPEN – ACE – 1-2

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Introduction

This report provides the results of the annual risk assessment for the UM System, its four universities and MU Health and includes the proposed fiscal year 2023 Internal Audit and Compliance Plans. The objective of this risk assessment is to align internal audit resources to the areas of most importance. Risk assessment is a continuous and iterative process.

Risk Assessment and Internal Audit Plan Development

The most important leadership responsibilities are the continuous decisions needed about allocation of financial capital and human resources in a manner that achieves the mission, capitalizes on opportunity, and reasonably mitigates risk. This continues to be a challenge in an environment of increasing risks and limited resources, yet opportunities cannot be realized without taking risks. As the UM System entities continue adjusting to changing market dynamics and positioning to ensure their missions into the future, approaching decisions requires a flexible mind set for making the opportunity/risk decisions. Business as usual cannot be the guide in these decisions. Identifying current policies, structures and practices that inadvertently inhibit the ability to drive change without multiple obstacles is an ongoing opportunity to reduce resistance and align practices with strategic direction and vision for the ongoing realization of the mission.

Four areas impacting higher education and healthcare were considered as part of the development of the FY23 proposed internal audit and compliance plans.

The Changing Work Landscape

Impacting both financial capital and human resources is the changing work landscape. According to the Bureau of Labor and Statistics, 47.8 million workers voluntarily quit their jobs in 2021, without having another job lined up. The confidence of workers in a strong job market, the need for talent, and opportunities for higher pay, reduces the personal risk of an extended period of unemployment. Workers have expressed various reasons for quitting, including low pay, lack of respect in the workplace, issues with childcare, and work overload.

Challenges for the UM System:

- Fluctuating staffing levels
- Talent acquisition/retention
- Changes to current workplace practices
- Rising labor costs impacting profitability targets

Cybersecurity and Privacy

Hybrid work, remote work, online learning, safeguarding highly-sensitive research, expansion of medical record information to health information exchanges, increasing use of mobile devices and end-user medical devices – increases the potential entry points for hackers, and naturally increases the risk of breaches. Higher education and healthcare institutions possess substantial amounts of personally identifiable information and protected health information. Equally important to safeguarding information through technical controls (information security) is the need to safeguard information through behavioral controls (Privacy). Privacy focuses on the laws, practices, and norms about how information is collected, used, and disclosed, as well as surveillance and observation standards. More states are establishing privacy rights for their residents and the federal government keeps expanding the focus on privacy requirements. Information security and privacy requirements will continue increasing in complexity.

Challenges for the UM System:

- Aligning current structures for information security and IT governance to meet the changing business dynamics for healthcare and higher education.
- Continue maturing the information security programs for the universities and MU Health.
- Establish a formal privacy program for the universities.
- Improve monitoring capability for the healthcare privacy program to keep pace with additional environments created through Organizational Health Care Arrangements and Health Information Exchanges.

Traditional and Translational Research

Research is a strategic priority for the UM System as it establishes itself as a leading research university. Investments will continue in recruiting and retaining researchers, increasing grant awards and expenditures, solidifying the clinical trials program, and focusing on translational research that will impact the communities we serve and beyond.

Challenges for the UM System:

- Recruiting and retaining top researchers in areas selected for excellence.
- Continue building out the research infrastructure to support researchers in securing funding, reducing administrative tasks, and meeting research compliance obligations.
- Continue investing in the secure research spaces needed to meet federal requirements for highly classified research.

Virtual Services and Remote Learning

The Covid-19 Pandemic accelerated the use of virtual services in healthcare and on-line learning in higher education. Both trends will continue post-pandemic. Both virtual services and remote learning are opportunities the UM System is leveraging to keep pace with changing market dynamics.

Challenges for the UM System:

- Stay current with telehealth government and payer requirements for billing and security of the network and communications supporting telehealth.
- Continue growing the online program with attention to security and controls for preventing academic misconduct.

Criteria for Plan Development

With the increasing importance of smart and targeted use of financial and human resources to achieve business objectives and financial performance goals, the FY23 Proposed Internal Audit Plan is focused on areas critical to good financial stewardship and providing information to leadership for optimizing research compliance structures between MU Health and the MU campus. The plan also includes work to inform the continuing efforts to build the system-wide compliance program. By understanding current practices for selected compliance areas against compliance frameworks, effective plans can be developed to address the gaps in practices, and identify education/training, policy, and communication needs.

Four critical areas are incorporated in the FY23 internal audit plan:

1. Higher Education - Focus on financial accountability in the colleges and schools across all four universities by conducting a standard audit for colleges/schools/divisions that cover:
 - a. Purchasing practices (vouchers and P-cards)
 - b. Budget management
 - c. Grant management
 - d. Scholarship management
 - e. Gift management
 - f. Inventory practices

Internal Audit will work towards the use of data analytics for selecting which areas to review based on fraud red flags and other criteria that would indicate concerns. Internal Audit will look for the flow of money in and out of funds that could indicate covering up poor financial performance, potential fraud, or compliance issues with restricted

June 23, 2022

funds. The audit team will document variability/standardization in processes, controls (in place, and/or missing), test controls for effectiveness of the process, and document the effort staff expend to complete the processes.

2. MU Healthcare – Internal Audit will work with leadership to address two important areas, research compliance and information technology. With changing market dynamics and the strategic goal to establish a leading translational research program, research compliance structures between MU Health and the campus need to be seamless and effective, with optimal service to principal investigators and physician researchers. This will be the focus of a proposed consulting engagement shaped by leadership. Closely aligned is understanding if current IT governance practices are resulting in leadership driving decisions related to opportunities and risks from the use of IT services and products.
3. Overall Compliance - Two compliance areas will be the focus of internal audits in FY23. The Conflict of Interest/Commitment audits will be completed for UMKC, UMSL and MU Health. These audits have already been completed for MU and MS&T. An Export Controls Gap Analysis will be completed for each university and the health system. Internal Audit is collaborating with the Director of Research Security and Compliance to develop the audit program based on regulatory frameworks. System compliance resources will work with the compliance professionals accountable to address any gaps for improving compliance to regulations.
4. Information technology - Audits will focus on areas important for maturing the information security program.

Evaluation of processes that span horizontally across schools/colleges are not part of the FY23 proposed internal audit plan. Focusing on the financial accountability in schools/colleges/divisions will provide an opportunity for the Audit, Compliance and Ethics Committee of the Board, Leadership, and Internal Audit to discuss the value of each approach which will inform the make-up of the FY24 Internal Audit Plan.

FY2023 Proposed Internal Audit Plan

Area	Proposed Audit/Project	Entity
Finance	Standard audit for selected schools/colleges/divisions. Focus on processes impacting financial performance. - Assurance	Highest priority schools/colleges across the four universities
Strategy	Research Compliance – With MU and MU Health leaders, facilitate a process to identify structural changes that would increase efficiencies and reduce administrative tasks for principal investigators and physician scientists. Identify any gaps and develop a forward-looking plan to make any necessary changes. – Consulting Engagement	MU, MUHC
Strategy	IT Governance – Assessment of current IT Governance practices to understand if leadership decisions related to opportunities and risk are an outcome of current practices. - Assurance	MU Health
Compliance	Conflicts of Interest/Commitment – Complete effectiveness assessments of the conflict of interest and commitment process against established criteria. - Assurance	UMKC, UMSL, MUHC
Compliance	Export Controls – Assessment of export control processes and controls against regulatory requirements. - Assurance	UMKC, S&T, UMSL, MU (including SOM)
Operations	MoreNet – Evaluation of the business model. - Outsource	System
Information Technology	Ransomware Preparedness and Response – Determine how, and to what extent, the organization is susceptible to ransomware and evaluate preparedness and response. - Assurance	MUHC

June 23, 2022

Area	Proposed Audit/Project	Entity
Information Technology	Logging & Monitoring – Assessment of logging and monitoring practices of selected critical systems. -Assurance	UMS
Information Technology	Incident Response Practices – Assessment of IT incident response practices. -Assurance	TBD
Information Technology	Remote Work Support – Assessment of practices for supporting remote work. -Assurance	TBD
Fraud Procedures	Grant/Research Using continuous auditing, identify any areas of concern for review and assessment. -Assurance	MU, UMKC, UMSL, MS&T
Ongoing Activities	Monitoring of Management Action Plan Implementation - Review the status of prior audit agreed to management action plans.	System
Ongoing Activities	Risk Assessment and Audit Plan Development - Continue to review key and emerging risks to adjust the current audit and compliance plan and to use as the basis for the FY 2024 audit plan.	System

Rolling Audit Plan

The internal audit engagements listed below comprise the rolling audit plan. As risks emerge, or internal audit resources allow, these engagements will move up in priority for completion as part of the FY2023 Internal Audit Plan. These areas will also be evaluated as part of the FY2024 risk assessment process.

Area	Proposed Audit/Project
Human Resources	Hiring process consistency – Assess HR practices against policy. - Assurance
Human Resources	Front-end Payroll Process – Review of the front-end payroll processes that feed into payroll processing. – Assurance
Human Resources	Disciplinary practices – Review to assess consistency in disciplinary practices. - Assurance
Human Resources	ePAF Processes – Evaluation of the electronic personnel action form processes. - Assurance
Finance	Inventory/Asset Management – Assess the acquisition of assets through life and disposition. This will include the Surplus process. – Assurance or Consulting Engagement
Finance	AP Shared Services – Assess accounts payable shared services process. - Assurance
Research	Invoicing and Collections – Assessment of the research grants and contracts invoicing and collections process. - Assurance
Information Technology	IT Procurement Process and Inventory – Assess the process from securing IT equipment, tracking through inventory and disposal. - Assurance
Academic Enterprise	Academic Integrity in a Remote Learning Environment – Assessment of the evolving academic integrity risks and the program controls to prevent/detect integrity issues in a remote learning environment. - Assurance

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FY2023 Ethics and Compliance Plan

We are completing the second full year of work to establish the system-wide compliance program. The FY23 compliance plan will continue focusing on the risk areas of cybersecurity, data regulations and research compliance. Environmental Health and Safety will be added as an additional focus area. For each risk area we compare current state to regulations (gap analysis). The result not only allows us to implement necessary changes to structure and process, but informs the education/training plan, policy/procedure integration, and how to establish effective monitoring and auditing, three of the Seven Effective Elements for an effective compliance program.

The UM System, ***Compliance Plan Focus Areas*** table, beginning on page 11 provides a high-level summary of work completed and planned from FY21 through FY24. In addition to the work related to the ***Compliance Plan Focus Areas***, additional efforts scheduled to be completed are detailed below by the Seven Elements for an Effective Compliance Program.

High-Level Oversight

Work collaboratively with the General Counsel to determine and implement:

- A compliance program policy as a CRR
- Any additional oversight structures that would contribute to an effective compliance program.

Policy and Procedure Integration

Draft and finalize policy/procedures addressing the following:

- Fraud Awareness
- Non-retaliation – currently addressed in multiple policies
- Any other policy/procedure gaps or revisions required because of the gap analysis work and/or work with the general counsel in establishing a compliance policy framework.

Open Communication

- Continue developing the network of compliance professionals across the system to leverage knowledge, establish regulatory change management and continuously understand changes to risk
- Implement an ongoing communications strategy to keep the importance of “speaking-up” and reporting concerns front and center for all faculty and staff

Training and Education

- Code of Conduct Annual training and attestation will be deployed through the learning management system at the beginning of the Fall semester

- Micro-learnings (short and targeted learnings) will be developed and deployed in the following areas:
 - Export controls – for principal investigators
 - Gramm, Leach, Bliley Act education – units responsible to protect and secure information.
 - The Importance of a Speak-up Culture – everyone
 - Fraud Awareness - everyone
- An in-depth module on fraud – all personnel with financial responsibilities
- Any other educational opportunities for increasing awareness identified through the gap analysis work

Monitoring and Auditing

- Youth Protection Program monitoring has been established and will be operational for summer camps in 2022.
- Active monitoring of research grant management to identify any concerning trends for follow-up will be in place by summer 2022.
- Monitoring of IP addresses hitting UM System networks from sanctioned countries is ongoing.
- Monitoring continues related to improvements to the Higher Education Information Security Program and the impact on maturing the program.
- Internal audits of export control processes for each university will be completed in FY23 in collaboration with the Director of Research Security and Compliance.
- Internal Audits of Conflict of Interest/Commitment will be conducted for the remaining entities not yet completed.

Responses to Detected Errors

- As errors are detected, compliance will continue working collaboratively with other subject matter experts to investigate, address, conduct a root cause analysis, and determine how best to reduce the possibility of future occurrences.

Review and Refine

- As issues occur, new regulations are established, or current regulations change, System Compliance is committed to working with those involved to continuously adapt structures, processes and procedures and be able to demonstrate an effective compliance program.

UM System Compliance Plan Focus Areas

Compliance Activity	FY2021	FY2022	FY2023	FY2024
Code of Conduct	Development of one code branded to four universities	Roll out of Code to all universities	Annual training with attestation (ongoing)	Faculty and staff survey to engage effectiveness of education/training and awareness/living the Code.
Cybersecurity	Risk assessment completed	Ongoing monitoring of completed tasks and maturity of Information Security Program.	Ongoing monitoring of completed tasks and maturity of Information Security Program.	Ongoing monitoring of completed tasks and maturity of Information Security Program.
Data Regulations		GLBA Gap Analysis completed. System Compliance responsible for central organization of GLBA.	<ul style="list-style-type: none"> • Complete Gap Analysis for GDPR and Clery Act compliance. Determine necessary changes. • Begin work to establish monitoring tools to gauge compliance with data regulations. 	<ul style="list-style-type: none"> • Complete Gap Analysis for HIPAA and FERPA at the universities. Determine necessary changes.
Research Compliance		<p>Focus on understanding opportunities to mitigate research compliance risks.</p> <ul style="list-style-type: none"> • In collaboration with Export Controls, a 10-minute education piece is under development for researchers about the importance of export controls and available resources. • Finance controls to stop any payments to embargoed countries. 	<ul style="list-style-type: none"> • Deployment of the education and training for researchers about when and how to engage Export Controls. • Provide resources to the universities to facilitate a campus-wide approach for mitigating risks created by doing business internationally. • Begin work to establish monitoring tools to gauge 	<ul style="list-style-type: none"> • Begin development of dashboards to illustrate issues identified, resolved, education completion rates and other key compliance metrics as one way to demonstrate an effective compliance program.

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Compliance Activity	FY2021	FY2022	FY2023	FY2024
		<ul style="list-style-type: none"> • Collaborating with Research Compliance and Information Security to ensure UM System meets coming regulations governing a range of necessary secured research space. • Developing guidance for all UM System universities on requirements for addressing undue foreign influence and meeting regulations related to the Presidential Directive requiring all federal research agencies to strengthen and standardize disclosure requirements for federally funded awards. • Collaborating with the Director of Research Security and Compliance to draft a sanctions policy to ensure compliance with the Office of Foreign Assets Controls regulations. 	compliance with regulations.	

Compliance Activity	FY2021	FY2022	FY2023	FY2024
Environmental Health and Safety			<ul style="list-style-type: none"> • Complete Gap Analysis for Environmental Health and Safety at the universities. • Determine necessary changes to structure, processes and/or procedures. • Identify any targeted training opportunities and integrate into the education and training plan. 	<ul style="list-style-type: none"> • Deploy any needed targeted trainings. • Begin work to establish monitoring tools to gauge compliance with regulations.

University of Missouri System Board of Curators

June 23, 2022

Audit, Compliance and Ethics Committee

FY2023 Risk Assessment, and Proposed Internal Audit
and Compliance Plans

UM



The Changing Work Landscape

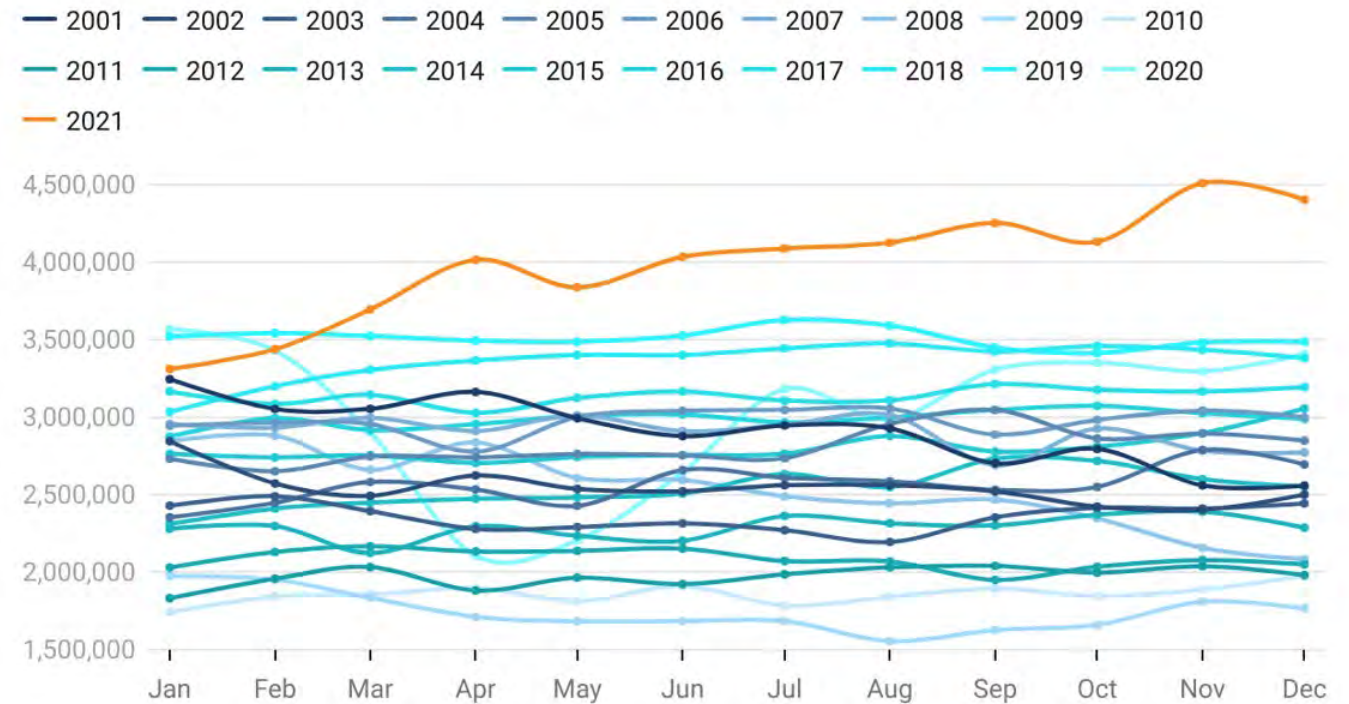


Chart: Mauro Whiteman • Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey. • Created with Datawrapper

Cybersecurity and Privacy

NIST
mobile devices
sensitive research
remote work HIEs
hybrid work
remote learning
FERPA HIPAA PHIGLBA
CMMC

Research



Highlights of the Proposed Internal Audit Plan

Internal audits focused on financial accountability in the colleges and schools across all four universities

Consulting engagement shaped by leadership to assess research compliance structures shared by MU Health and MU

Assessment of the MU Health IT governance

Export controls gap analysis

Information technology audits focused on information security



Highlights of the Proposed Compliance Plan – Foundational Elements

Highlights of Proposed Compliance Plan – Focus Areas

Cybersecurity and privacy

Ongoing monitoring of completed tasks and maturity of InfoSec program

Data regulations

Gap analysis for General Data Protection Regulation and Clery Act

Research compliance

Deployment of the export controls training for researchers

Provide a guide to universities to facilitate a campus-wide approach for undue foreign influence

Environmental Health and Safety

Gap analysis

June 23, 2022

Key Takeaways

- Internal Audit plan focused in the areas of financial stewardship, cybersecurity, and research compliance
- Compliance plan focused on continuing to establish the foundational elements, building partnerships with compliance professionals, reinforcing a speak-up culture, and the areas of cybersecurity, data regulations, research compliance, and environmental health and safety



University of Missouri System

COLUMBIA | KANSAS CITY | ROLLA | ST. LOUIS

HEALTH AFFAIRS COMMITTEE

Robin R. Wenneker (Chair)
Keith A. Holloway
Jeff L. Layman
Michael A. Williams
Ronald G. Ashworth (non-curator)
Jim Whitaker (non-curator)

The Health Affairs Committee (“Committee”) assists the Board of Curators in overseeing the clinical health care operations of the University and in coordinating those operations in furtherance of the University’s teaching, research, and clinical missions.

I. Scope

The Committee provides oversight for the University’s clinical health care operations in the areas of:

- Mission, vision, and strategy;
- Governance and operational oversight;
- Quality of care and patient safety;
- Regulatory compliance;
- Financial planning and performance; and
- Coordination of the clinical, teaching, and research missions.
- Specific projects that enable meaningful collaboration among UM universities.

II. Executive Liaison

The Executive Vice Chancellor for Health Affairs of the University of Missouri-Columbia or some other person(s) designated by the President of the University, with the concurrence of the Board Chair and the Committee Chair, shall be the executive liaison to the Committee and responsible for transmitting Committee recommendations.

III. Responsibilities

In addition to the overall responsibilities of the Committee described above and in carrying out its responsibilities regarding clinical health care operations, the charge of the Committee shall include:

- A. Reviewing and making recommendations to the Board regarding:
 1. actions that are appropriate or necessary to assist the Board in overseeing clinical health care operations or coordinating the teaching, research, and clinical missions;
 2. significant actions related to health care which should require advance notice or approval by the Committee or Board; and
 3. other matters referred to it by the Board and University officers.
- B. Requesting, receiving, and reviewing reports and other information from University officers and advisors regarding health care operations, coordination of the teaching, research, and clinical missions, and related matters, including meeting at least quarterly and receiving regular reports from appropriate officers of University of Missouri Health Care, the MU School of Medicine, and the MU Health Chief Compliance Officer.
- C. Additional matters customarily addressed by the health affairs committee of a governing board for an institution of higher education.

IV. Committee Membership and Quorum Requirements

The Committee's membership may include non-Curator members in addition to Curator members. Subject to approval of the Board, the Board Chair shall determine the number of Curator and non-Curator members to appoint to the Committee and shall select individuals to serve as members of the Committee; provided that, the number of non-Curator members on the Committee shall not exceed the number of Curator members on the Committee, unless the Committee temporarily has more non-Curator members than Curator members because a Curator member of the Committee has resigned from the Board or the Committee. Non-Curator members may resign their Committee membership by providing written notice to the Board Chair. Non-Curator members of the Committee serve at the pleasure of the Board and may be removed by the Board Chair at any time, subject to approval of the Board.

A quorum for the transaction of any and all business of the Committee shall exist when:

1. Both a majority of all Curator members of the Committee and a majority of all members of the Committee are participating for Committee meetings which are held in conjunction with meetings of the Board; or
2. Both all Curator members of the Committee and a majority of all members of the Committee are participating for Committee meetings which are not held in conjunction with meetings of the Board; or
3. Both a majority of all Curator members of the Committee and a majority of all members of the Committee are participating for Committee meetings which are held solely for the purpose of reviewing and overseeing compliance matters.

EXECUTIVE VICE CHANCELLOR REPORT

There are no materials for this information item.

CRITICAL WORKFORCE NEEDS AND DEVELOPMENT IN MISSOURI

There are no materials for this information item.

GOOD AND WELFARE
OF THE BOARD

There are no materials for this information item.

No. 1

Recommended Action – Resolution for Executive Session of the Board of Curators
Meeting June 23, 2022

It was moved by Curator _____ and seconded by Curator _____, that
there shall be an executive session with a closed record and closed vote of the Board of
Curators meeting June 23, 2022 for consideration of:

- **Section 610.021(1), RSMo**, relating to matters identified in that provision, which include legal actions, causes of action or litigation, and confidential or privileged communications with counsel; and
- **Section 610.021(2), RSMo**, relating to matters identified in that provision, which include leasing, purchase, or sale of real estate; and
- **Section 610.021(3), RSMo**, relating to matters identified in that provision, which include hiring, firing, disciplining, or promoting of particular employees; and
- **Section 610.021(12), RSMo**, relating to matters identified in that provision, which include sealed bids and related documents and sealed proposals and related documents or documents related to a negotiated contract; and
- **Section 610.021 (13), RSMo**, relating to matters identified in that provision, which include individually identifiable personnel records, performance ratings, or records pertaining to employees or applicants for employment.

Roll call vote of the Board: YES NO

Curator Brncic
Curator Chatman
Curator Graves
Curator Hoberock
Curator Holloway
Curator Layman
Curator Wenneker
Curator Williams

The motion _____.

June 23, 2022