Review Fiscal Year 2020 UM Five-year Plan &
Operating Budget Planning

The University's budget development is underway and the attached is intended to provide the Board with an update of the preliminary FY 20 five-year plan and budget development process as an information item. The five-year plan serves as the bridge between the strategic plan and the annual budget, which is the detailed financial plan for the current year. In June, the operating budget will be brought to the Board in summary form by campus and fund type for approval.

The University has engaged Kaufman Hall to help develop and implement the five-year financial plans that will underpin the financial accountability. Charles Kim with Kaufman Hall will be present with Vice President Rapp to present the initial baseline plans and financial performance targets to the Finance Committee. The baseline plans represent a forward-looking projection of the University's financial performance without strategic initiatives to manage environmental change. The presentation has been included in the mailing materials.

The Importance of Financial Accountability

At the System-level, the President and CFO have begun the work identifying and setting performance targets on key financial metrics. Each campus chancellor and CFO will be jointly accountable for meeting those campus-specific performance metrics, with significant incentives and consequences set by the President for exceeding or underperforming targets. Over the next two months, each university will also develop and incorporate their strategic plan and related capital investments into the baseline financial projections. To the extent that the strategic financial projections do not support the performance targets, campuses will need to identify other revenue generating initiatives or expense reduction efforts and as such, those initiatives will also be included in the strategic financial plan.

The Environment in Higher Education is Changing

As extensively discussed in the materials presented for the FY 19 Operating Budget, the environment for public higher education in Missouri and nationally is changing. Since 2001, the University of Missouri faced flat state support. Since 2016, University enrollments declined. For the first time since the formation of the System, the University is facing a confluence of three factors:

- Flat to declining state support
- Flat to declining enrollment
- Flat to declining tuition

As long as these factors exist together, the University will need to become more efficient and find new revenue growth. However, the factors faced by the University of Missouri are not significantly different from the rest of the marketplace, although individual trends may vary.

The environmental factors creating these challenges are not going away in the short run. Demographic trends towards an aging population will continue to strain state budgets, increasing spending on healthcare and other mandatory programs. High school graduates will remain flat to declining in the University's traditional catchment area, and increased pressure on revenues will increase competition for the traditional student base. These competitive factors will continue to place pressure on tuition rates as Universities compete on price for enrollments.

These environmental forces run counter to the mindset of public higher education for the past 50 years. In the past environment:

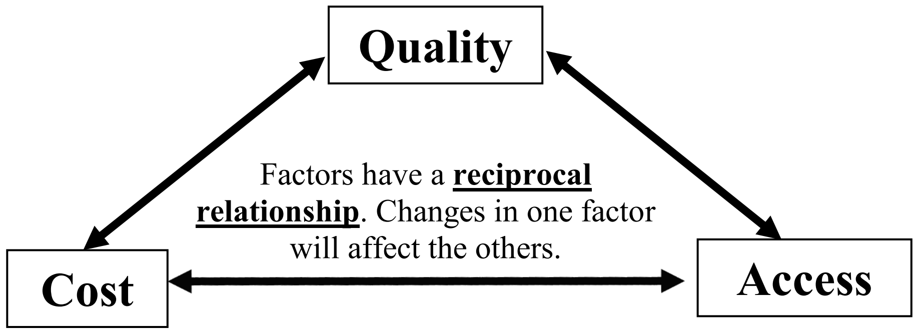
- Declines in state support were caused by economic recessions
- The University imposed hiring freezes and deferred raises to get by
- Key investments were delayed
- Enrollment growth was a reliable source of new revenue
- Declines turned around in a few years, and the new peak exceeded the previous peak
- Hunkering down and waiting it out was the "defacto" strategy

The strategies above were grounded in the assumption that downturns were temporary and a long-term positive trajectory would remain for state support and enrollment. The relatively stable and growing revenue environment over the long term would buffer any short-term challenges.. However, in the new environment, the long-term recovery in state support or traditional revenues is not coming. In the current reality:

- The percentage of revenues from state appropriations has fallen over the last two decades, not just due to an economic recession
- There is significant competition for student enrollments
- Investments in academic, research, and engagement programs are needed now more than ever
- Past practices of deferring challenges are ill-suited for this reality
- We need to take bold actions to become a different University

The status quo is not an option. We cannot "wait this out".

Public universities will struggle to maintain all aspects of their mission and balance the needs of their constituents in this environment. The Iron Triangle provides a good schematic of the countervailing forces that public universities seek to balance in the new environment.



Each of these factors is linked in an unbreakable reciprocal relationship, such that change in one will inevitably impact the others. To improve quality of a degree program, institutions must either invest in quality improvement or decrease the access to the program. Conversely, deep reductions in costs in higher education must eventually lead to downward adjustments in either quality or access or both. Under this argument or theory, there is no "free lunch."

Operating efficiencies and disruptive technology represent a way to break through the "triangle" by decreasing cost while maintaining quality and access. Public higher education continues to face revenue pressure from flat or declining state support per student and upward cost pressure from salary demands, eroding or delaying infrastructure and increased regulation. Disruptive innovation has the potential to break the triangle over time, but the formation of that innovation will require financial investment on the part of higher education.

Environmental Context of the Fiscal Year 2020 Budget

There is no single solution to the environmental changes and disruption facing public higher education across the nation. Rather, Universities need to respond with multiple changes. The University's plan includes:

Academic Excellence
- Degree program reviews and rationalization to meet market demands
- Academic productivity enhancements

Revenue Enhancements
- Price flexibility to match to the cost of delivering high cost, high demand degrees
- Long-term enrollment strategies that identify new sources for future students
- Rationalize auxiliary operations to further support core mission activities

- Giving increases and obtaining additional donor support for mission critical activities
- E-learning growth to reach additional students in non-traditional markets

Resource Utilization

- Data driven resource allocation models that align costs with revenues and related drivers
- Reserve practices and policies that incentivize investments and appropriate risk taking
- Five year financial plans that tie together strategic plans and capital investment plans and encourage a longer term focus

Operational Excellence

- Expansion of enterprise services to reduce administrative burdens on the enterprise
- Organizational consolidation to eliminate redundant structures
- Streamlining processes and reducing variation to improve the service delivery

These initiatives will drive resources towards the University's strategic plan to improve:

- Student Success
- Research & Creative Works
- Outreach & Engagement

University of Missouri System
Board of Curators
April 4, 2019
Finance Committee

Review Fiscal Year 2020 Five-year Plan

and

Operating Budget Update

UM

The Pace of Change will only Accelerate

- The environmental forces impacting our Universities are not going away

- Higher education like any industry has challenges/opportunities

- We must change to adapt – requires a different type of focus than in the past

In the past…

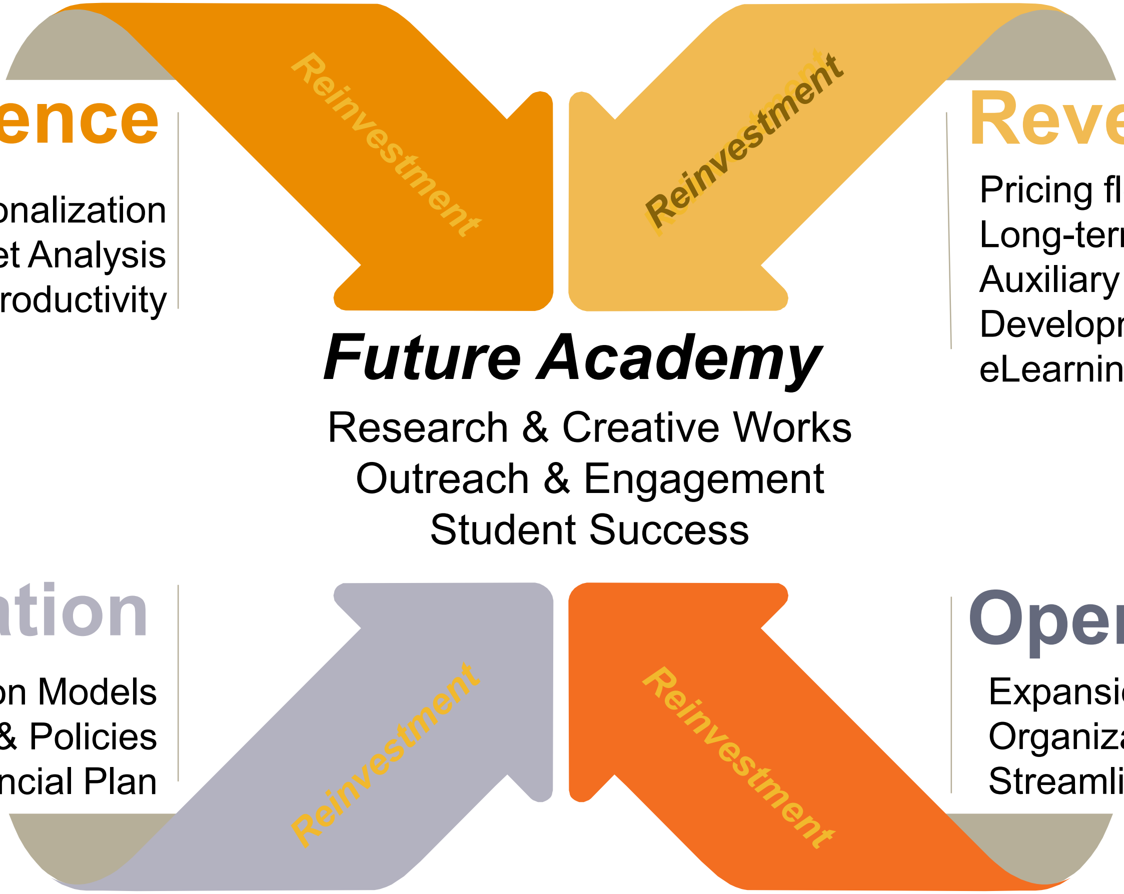
- Declines in state support were caused by economic recessions
- Imposed hiring freezes
- Key investments were not made
- Enrollment growth was the key new revenue source
- The decline eventually turned around after a few years
- Hunkering down to "wait it out" was the ***defacto*** strategy

In the current reality…

- % of state support for operations has dropped for 20 years, *but not due to just economic downturn*
- Significant competition for student enrollment
- Investments in academic, research & engagement programs are needed more than ever
- Past practices are ill-suited for current reality
- Need bold actions to become a more resilient university

We Cannot "Just Wait It Out"

Key Platforms to Achieve Sustainable Excellence



Academic Excellence

Program Review and Rationalization
Degree/Certificate Market Analysis
Academic Productivity

Revenue Enhancement

Pricing flexibility
Long-term Enrollment Strategy
Auxiliary Operation Rationalization
Development Opportunities
eLearning

Future Academy

Research & Creative Works
Outreach & Engagement
Student Success

Resource Utilization

Data Driven Allocation Models
Reserve Practices & Policies
Implement 5 Year Financial Plan

Operational Excellence

Expansion of Enterprise Services
Organizational Consolidation
Streamline Process through Functional Efficiency

Moving Forward

- Shared responsibility to move the institution forward and to make it better/stronger in spite of the challenges
- Success in the new environment means identifying change and adapting to it
- Relentless commitment shared by all to be the very best, to define excellence for Missouri and then achieve it
- That is the powerful message that we should all understand and reinforce

Why and how management of financial performance is changing

- Moving from appropriations approach to earnings approach
- Revenue is everybody's problem
- We all must understand the business model – focusing only on cost is not sustainable
- Moving from a spending approach to net revenue approach
    - Must understand revenue drivers and return on investment
    - Net revenue (margin) will generate needed investments in scholarships, research and other academic pursuits
- Managing to the net revenue ensures financial viability and support of the mission

University of Missouri System
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Financial Plan Development
Board of Curators Meeting

Columbia, MO | April 11, 2019

Contents

1

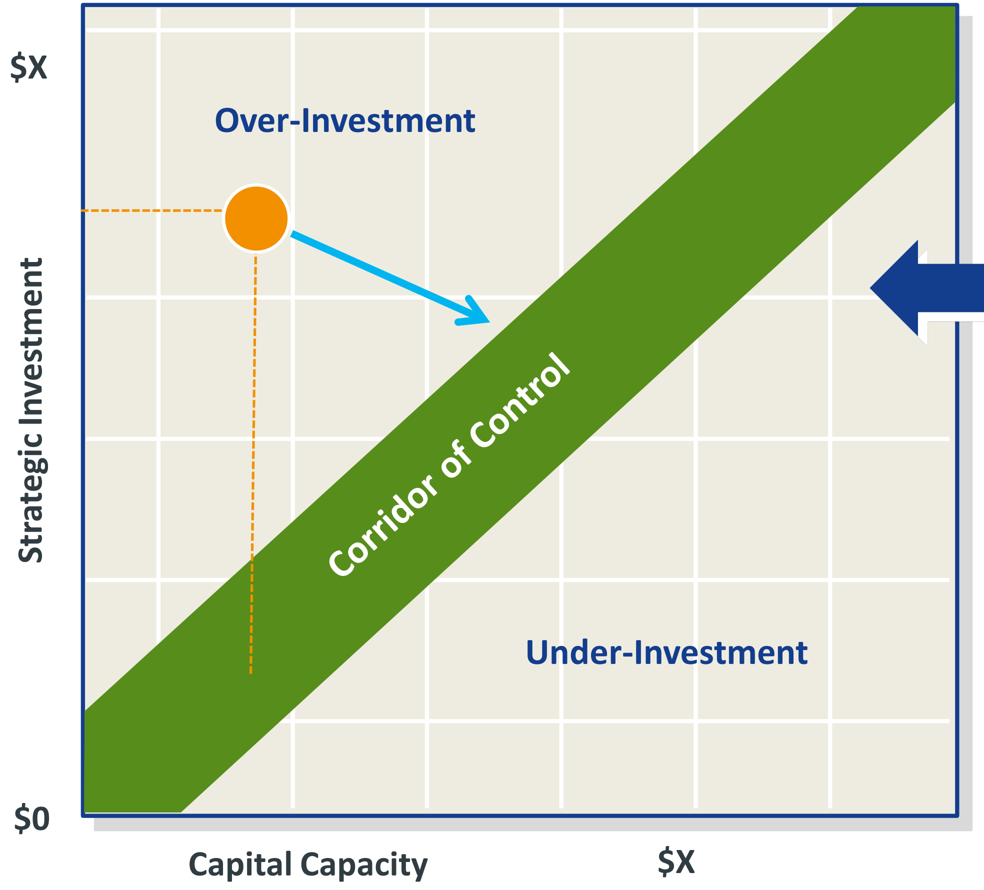
Financial Planning Project Goals

As part of the financial transformation initiative, the University of Missouri System has engaged Kaufman Hall to assist campuses with the development of a sustainable financial plan that

- Identifies the need to grow revenues through new programs as well as transformations to reduce expenses
- Establishes a standard framework to assess campus/system financial performance, condition and prospects
- Establishes a clear set of "executables:"
  - Financial performance targets
  - Set of strategic initiatives to pursue and related financial impacts (i.e., e-learning, President's strategic priorities, campus-specific strategic initiatives and other)
  - Required capital investments and financing transactions
  - Operating changes
- Identifies and quantifies potential resources, risks, and responses to such risks including what would happen if no new revenues are created
- Establishes a process for each campus and the system for pro-active resource management and selective strategic investment
- Establishes a process for campus/System resource management that can be conducted just-in-time throughout the year

1 Financial Planning Conceptual Framework

Integrated financial planning will enable each campus and the System to navigate the relationships among strategy, capital capacity, and risk.



The Corridor of Control is the balancing point between two opposing goals:

1. *Compete effectively through aggressive investment of capital and operating dollars, BUT*
2. *Respect the fiduciary role of management and the board to maintain the long-term financial integrity of a community asset*

1 Financial Planning Conceptual Framework

Planning is an iterative process that balances initiatives, resources and risk.

Strategies

Capital Investment Plans

Baseline Operations

Initial Financial Plan

- Can cash flows support the strategies?
- Is credit position maintained?
- Is ongoing access to capital optimized?

Sensitivity/Risk Analysis

- Capital requirements and start up investments
- Changes in payment levels and structure
- Operating changes (structure and cost)
- External funding sources

Final Plan

- Specific operating/credit targets
- Specific capital plan with project phasing

Strategic Initiatives

Financing Transactions

Operating Margin Targets

Investment Decisions

2 Performance Targets

- Selecting financial metrics and targets is a critical step for sound financial planning. Targeted metrics enable institutions to assess the capacity of resources to support strategy at an acceptable level of risk.
- Kaufman Hall recommends a capital markets approach that evaluates financial health largely as a function of a desired credit rating and peer benchmarks.
- First, metrics are selected and targeted for the System or "Consolidated" organization. Then targets for component units (i.e., Campuses and Health Care) are developed and aligned with targets for the Consolidated organization.

2 Proposed Targets for Consolidated, Campuses and MUHC

- Below are proposed management metrics and targets that would likely maintain the University of Missouri System (as a consolidated organization) credit rating with Moody's Investors Service at Aa1. The targets are comparable to consolidated actual results for FY18.
- Credit ratings depend also on several qualitative factors such as student demand, competitive position and organizational management.

	Moody's [A]				Consol-	Campus Targets [B]				
Ratio	**Aa1**	**Aa2**	**Aa3**	**A1**	**idated [C]**	**MU**	**UMKC**	**S&T**	**UMSL**	**MUHC [D]**
1) Annual Revenue Growth [E]	NA	NA	NA	NA	TBD	TBD	TBD	TBD	TBD	TBD
2) Operating Margin	3.2%	2.6%	1.0%	(1.1%)	>5.0%	>3.5%	>0.0%	>3.0%	>3.0%	>8.0%
Operating Cash Flow Margin	*12.6%*	*11.4%*	*10.7%*	*10.4%*	*>13.0%*	*>12.0%*	*>8.5%*	*>12.0%*	*>13.0%*	*>15.0%*
3) Spendable Cash & Invest. / Ops	0.86	0.68	0.69	0.63	>1.00	>0.80	>0.45	>0.80	>0.50	>200 DCOH
4) Avg. Debt Service Coverage	4.4	2.9	2.7	2.1	>4.0	>3.5	>2.5	>3.0	>3.5	>4.0
5) Spendable Cash & Invest. / Debt	2.2	1.2	1.2	1.1	>2.0	>1.6	>0.7	>1.3	>1.0	>1.5
6) Total Debt to Cash Flow	3.4	5.0	4.9	5.7	<4.0	<4.5	<7.0	<4.8	<4.5	NA

Note [A]: Medians for peers and Moody's are based on MFRA financial data for higher education.
Note [B]: Proposed targets are preliminary and may be adjusted as the System works with the campuses to develop strategic financial plans.
Note [C]: Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices.
Note [D]: Moody's methodology for calculating all healthcare metrics is different from higher education. DCOH = days cash on hand.
Note [E]: Targets for revenue growth will be set once operating expense, capital expenditure, initiative, and balance sheet objectives have been planned.

3

Major Assumptions

The Baseline

- Establishing a baseline projection is an important step for financial planning. The baseline isolates key drivers of performance and serves as a reference to plan and prioritize initiatives.
- Major operating and capital expenditure assumptions that support the System's baseline projection appear on the following slides and were compiled from the four campuses, MUHC and central units. Generally, the baseline assumes current environmental trends for tuition revenue, state support, and cost inflation persist.
- System and campuses will be held accountable to the strategic financial plan not the baseline.
- The campuses and MUHC are currently developing operating initiatives, to address any baseline underperformance, and strategic initiatives, to best advance the mission of the universities and hospital.

3

Major Baseline Assumptions
Operating

	FY18 Actual ($Ms)	AACGR [(A)] FY19-FY23
Operating Revenue [(B)]		
Tuition and Fees		
Credit Hours	--	(0.4%)
Tuition Rate	--	2.1%
Gross Revenue	$861	1.8%
Institutional Scholarship and Expense	($197)	3.4%
Restricted Scholarship and Expense	($97)	1.2%
Tuition and Fee Revenue, net	**$567**	**1.4%**
Patient Care	$1,216	2.2%
Grants and Contracts	$292	0.9%
Auxiliary Enterprises	$442	1.5%
Operating Expense		
Salaries and Wages	$1,498	2.3%
Employee Benefits	$466	3.1%
Non-Compensation	$923	2.3%
Depreciation	$199	1.7%

Note [(A)]: Average annual compound growth rate.
Note [(B)]: State appropriation assumes historical trend.

Major Baseline Assumptions:
Capital

3

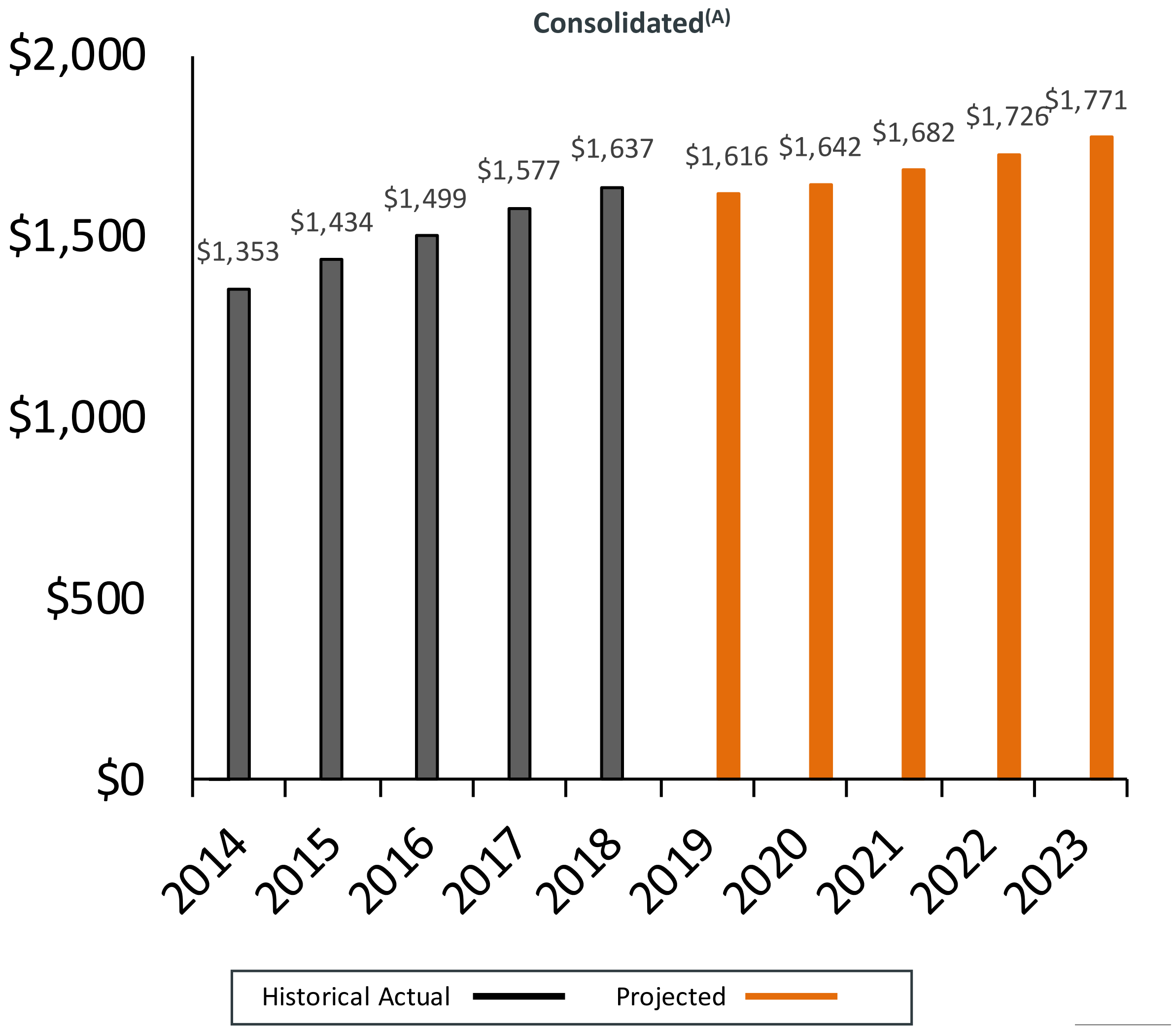
- Capital Projects [A]
  - Campus Facilities FY19-FY23 @ $625 million (including $223 million of projects underway)
  - Campus Equipment FY19-FY23 @ $116 million
  - MUHC total capital FY19-FY23 @ $316 million
- Debt
  - No new issues beyond $57 million advances in FY19 for Memorial Stadium and refinancing of Series 2012A
  - Debt service per schedules for debt outstanding on June 30, 2018
- Investments
  - $2.0 billion endowment earns 7.0% annually and distributes 4.0% annually
  - $2.1 billion general pool earns 4.0% annually and distributes 4.0%, primarily as funding for Strategic Initiatives
- Fundraising
  - Capital Projects FY19 – FY23 @ $86 million (primarily for MU's Memorial Stadium, School of Music, and School of Nursing)
  - State Capital Appropriations - none
  - Endowment FY19 – FY23 @ $179 million (assumes annual receipts equal trailing 3-yr average)

Note [A]: Excludes strategic capital projects including Translational Precision Medicine Complex (TPMC).

Baseline Financial Projection

4

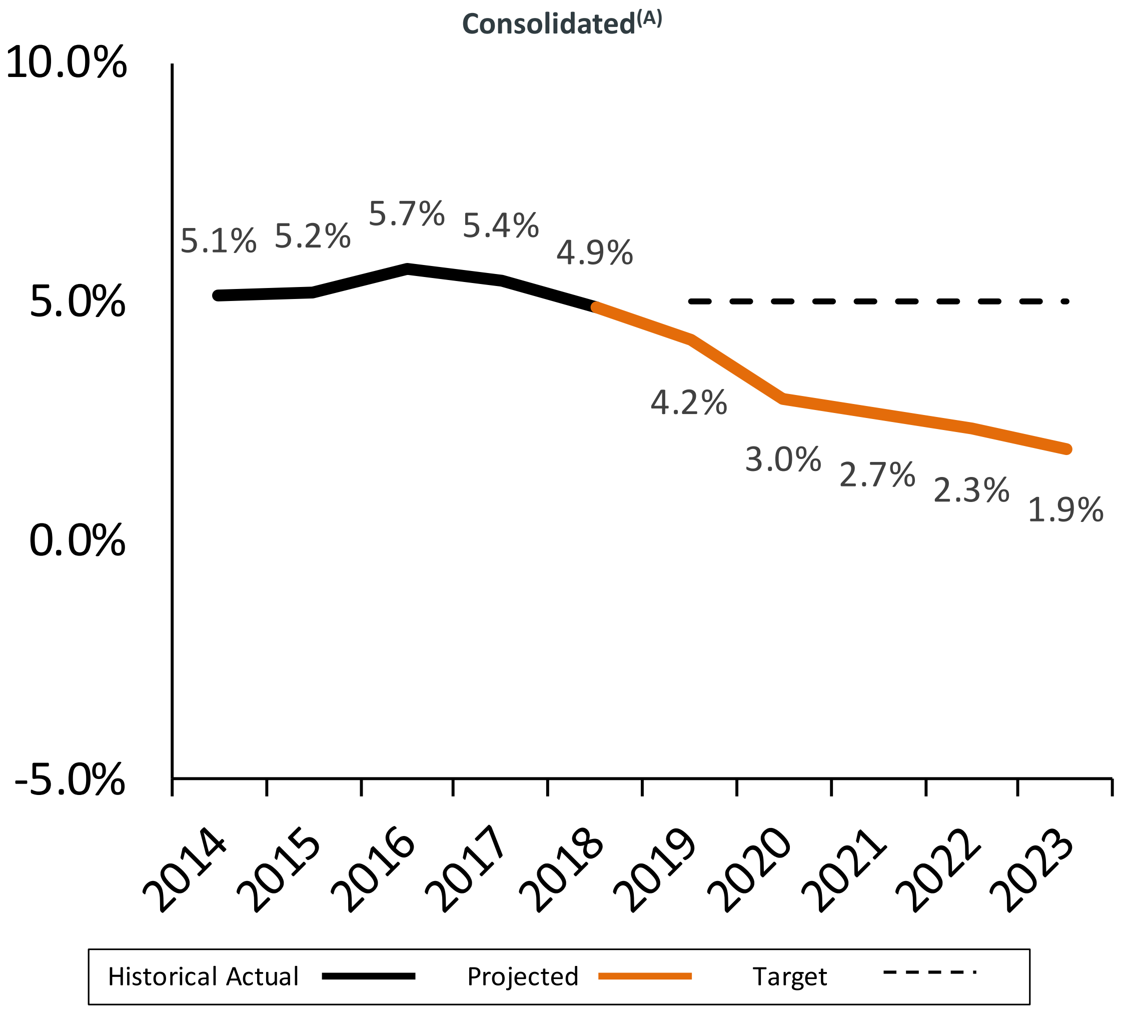
Tuition and Patient Care Revenue ($Ms)



Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices; Consolidated reflects sum of components units shown

4 Baseline Financial Projection

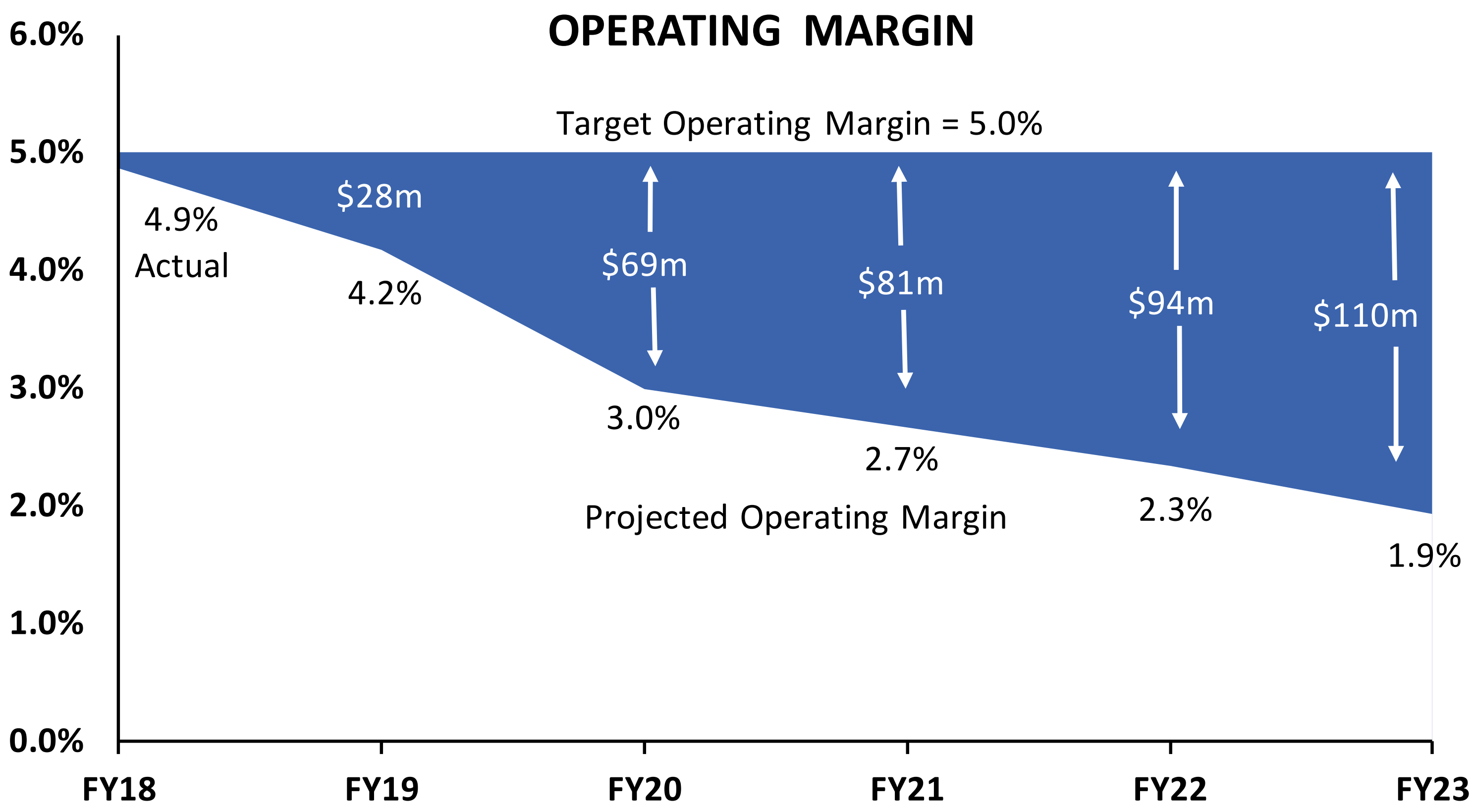
Operating Margin ↑ *Favorable*



Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

4 Baseline Financial Projection
Operating Gap

In the baseline projection, the Missouri System's operating gap is projected to widen. The System will need to generate approximately $110m in new revenue and/or expense reductions to achieve its operating margin target in fiscal year 2023.



5

Project Plan
Next Steps

- Campuses continue to cost, prioritize and plan for operating <u>and</u> strategic initiatives
- May 17th – Campuses submit strategic financial plans to System
- System develops strategic financial plan in concert with campuses, MUHC and central units
- June 20th and 21st – System Strategic Financial Plan presented to Board of Curators

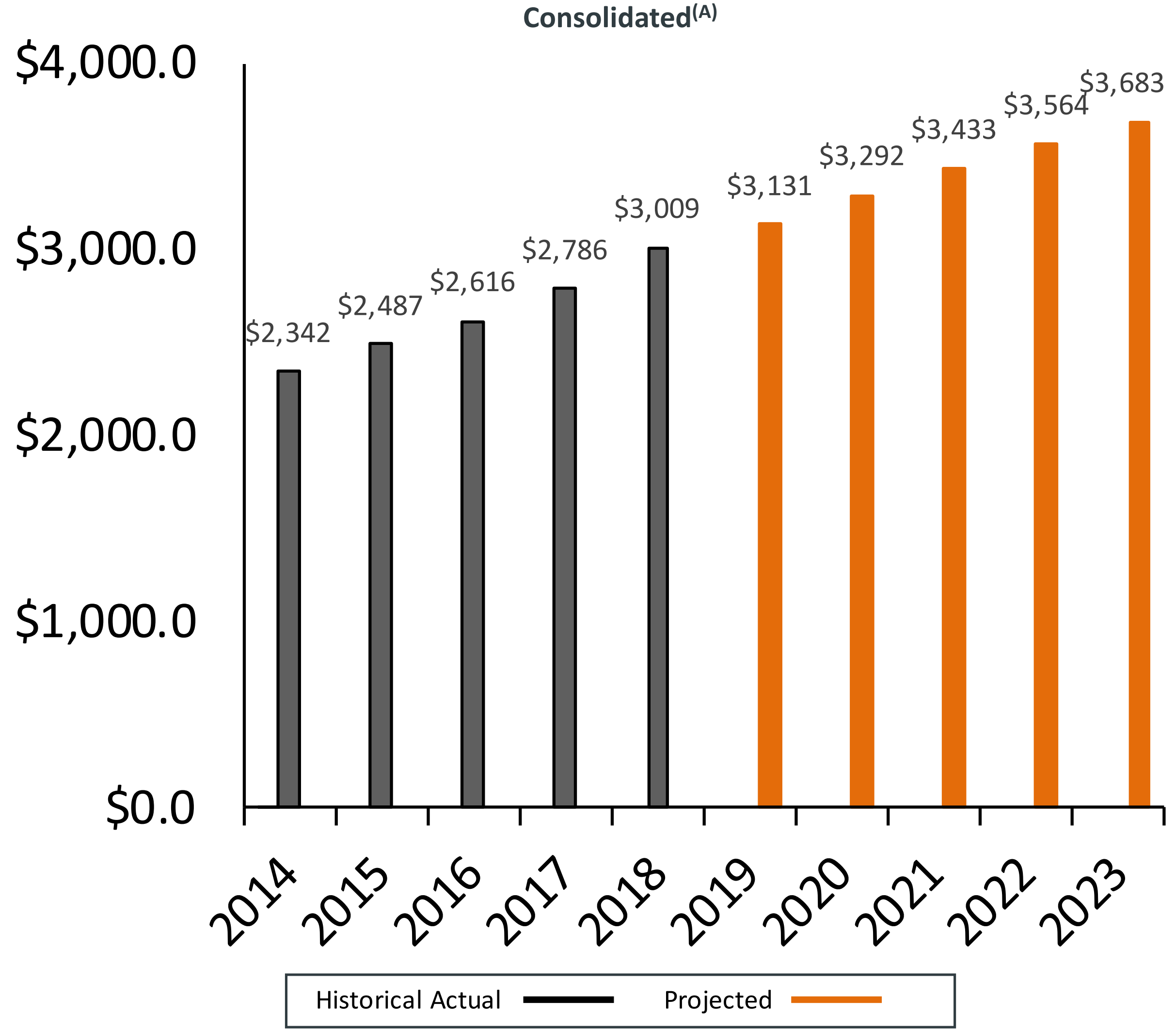
Appendix – Key Metric Projections

Financial Projections Key Metrics
Operating Surplus (Deficit) ($Ms)

Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

Financial Projections Key Metrics

Spendable Cash & Investments ($Ms)



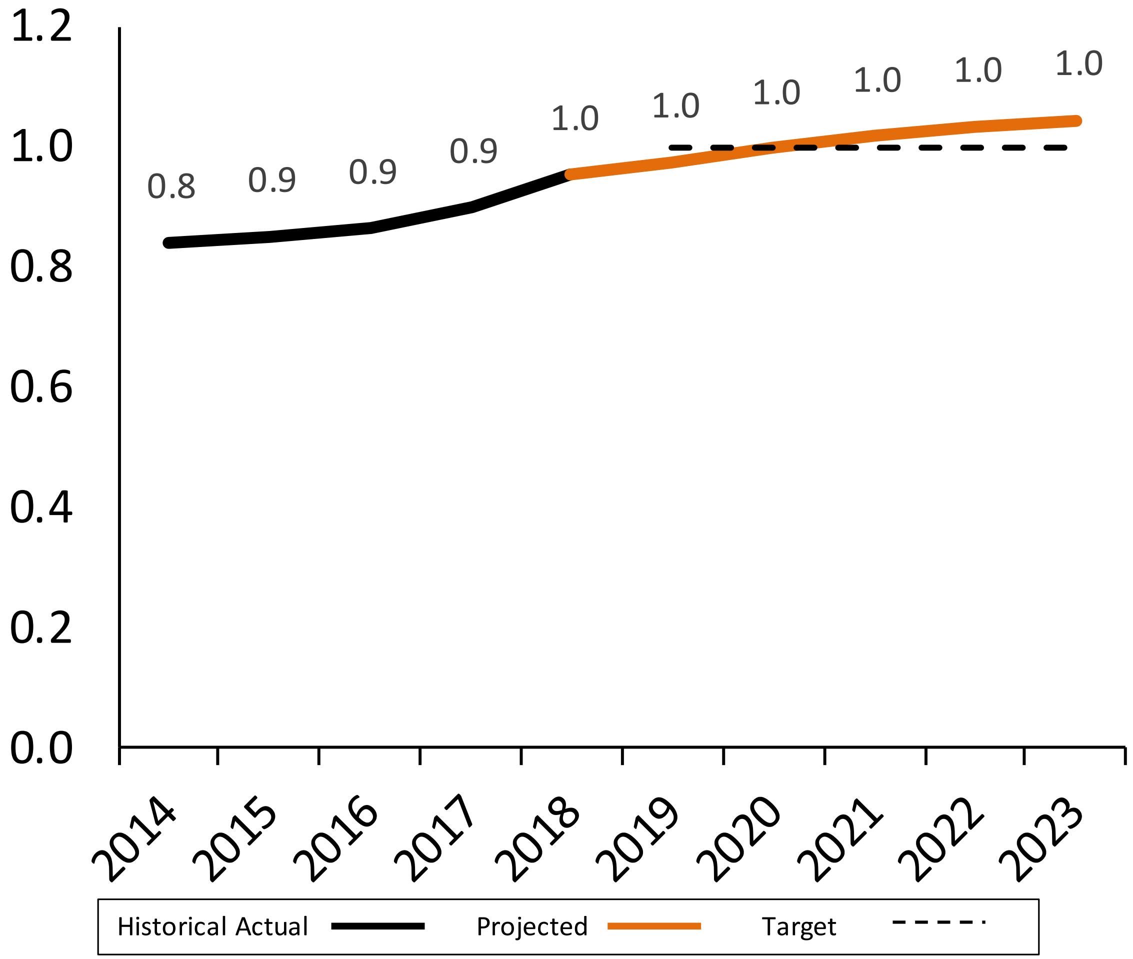
Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

Baseline Financial Projection

Spendable Cash & Investments to Operations

Favorable

Consolidated(A)

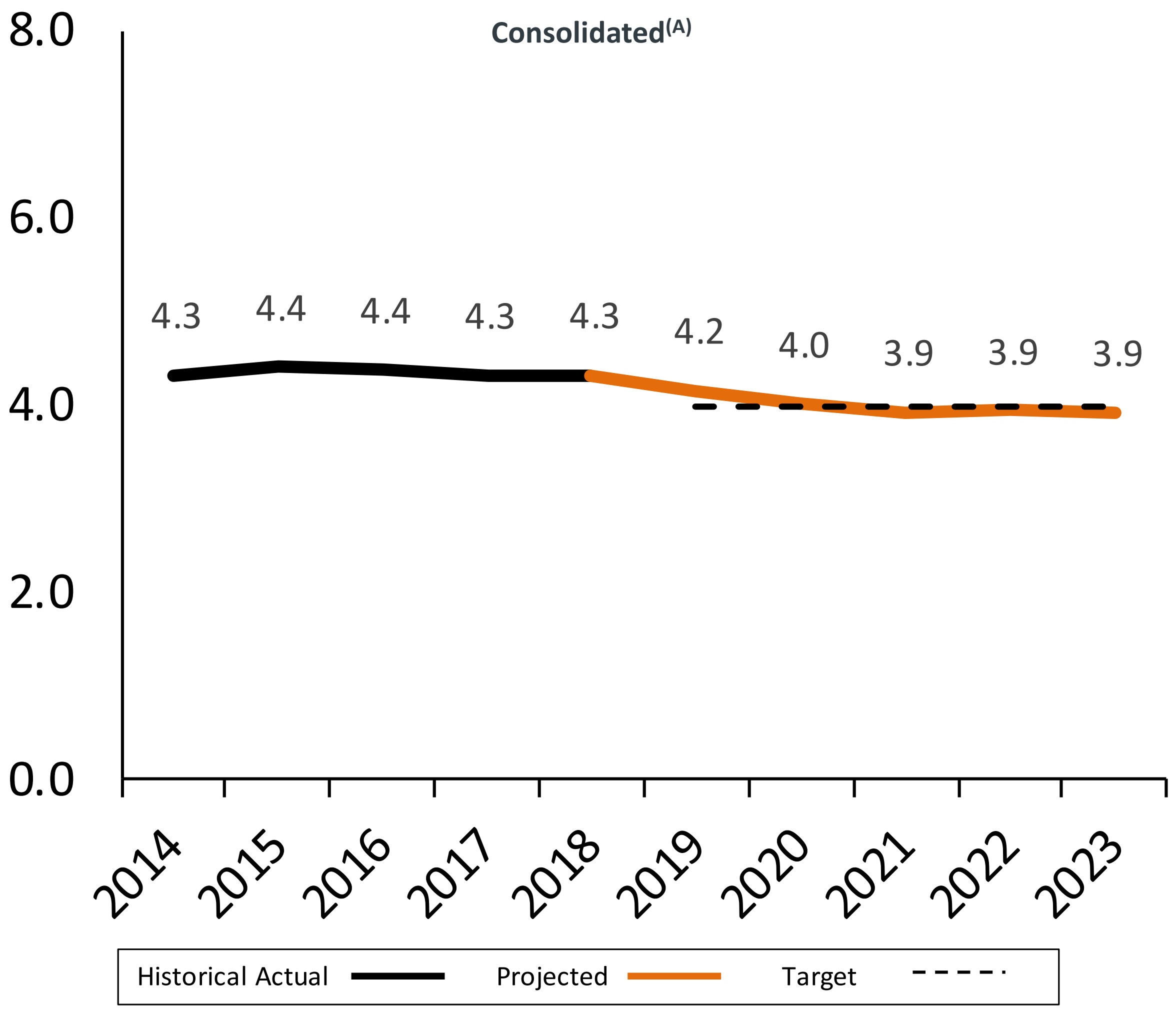


Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

Baseline Financial Projection

Average Debt Service Coverage

Favorable

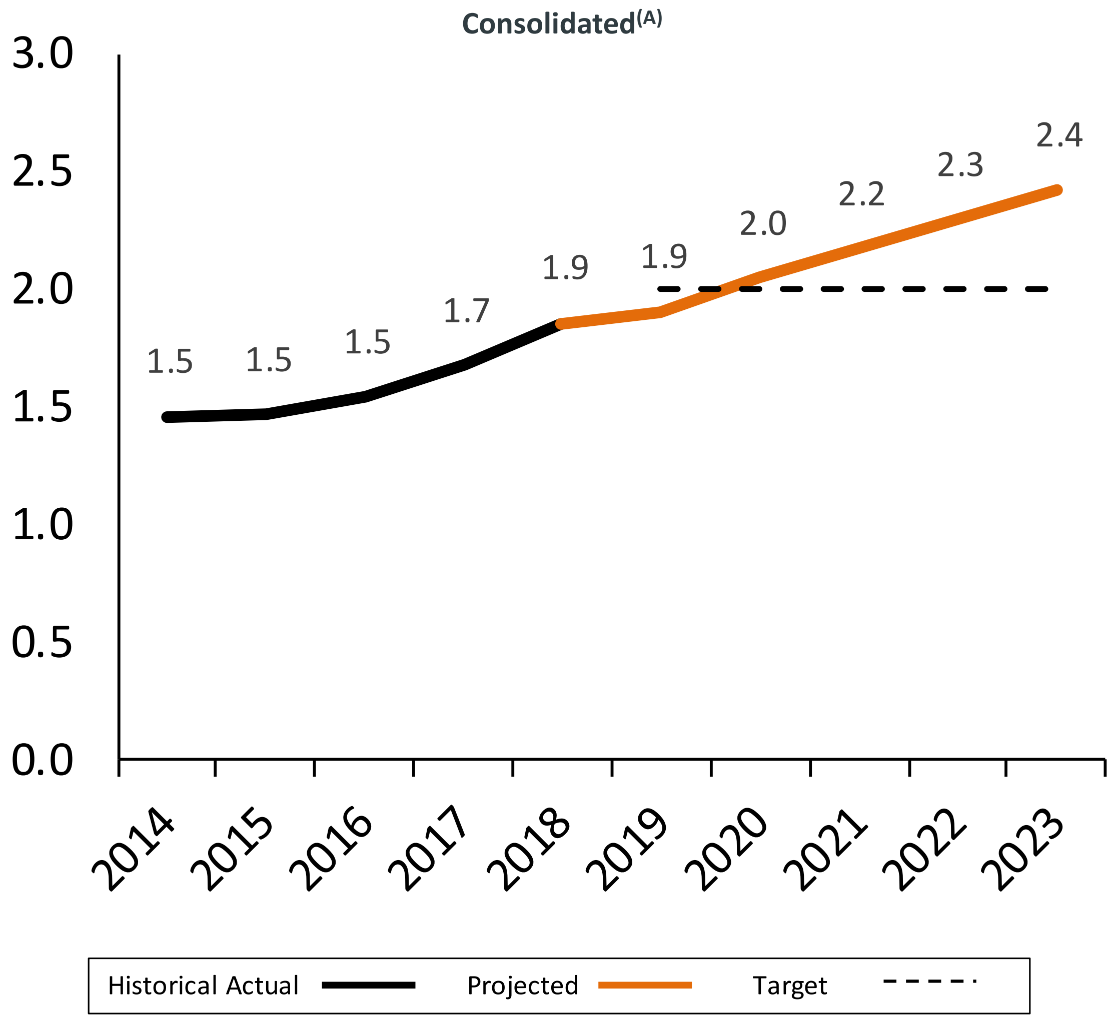


Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

Baseline Financial Projection

Spendable Cash & Investments to Debt

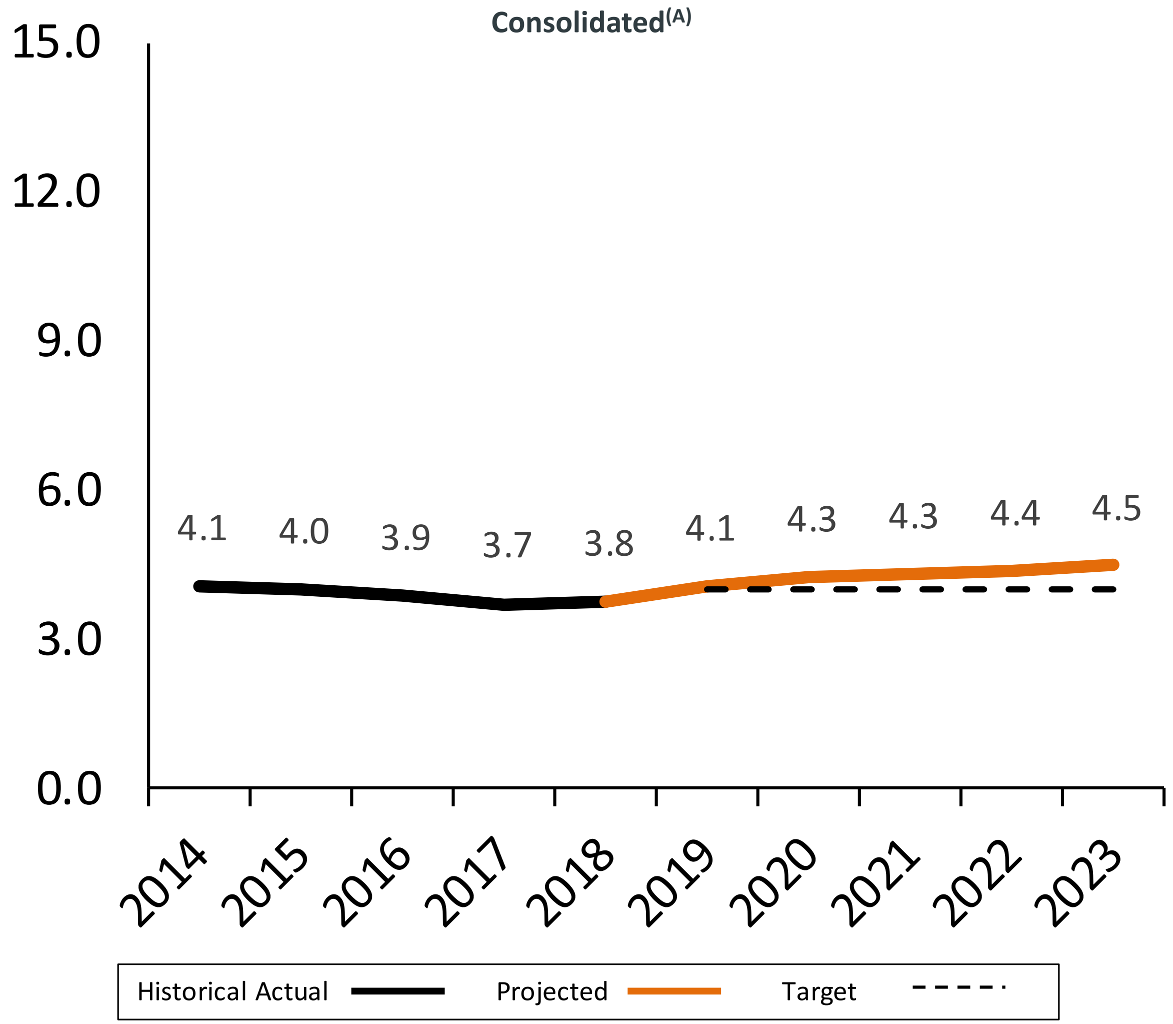
Favorable



Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

Baseline Financial Projection

Debt to Cash Flow ↓ *Favorable*



Note(A): Consolidated represents Columbia, KC, S&T, UMSL, Hospital, and System Administrative Offices

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