

Strategic Plan Steering Committee Working Group: Institutional Resources

Final Report
November 2020

Committee Members: John Beck, Dan Bollman, Sanjay Gupta, Ron Hendrick, Thomas Jeitschko (Chair), Jennifer Johnson, Leo Kempel, Chris Long, Joan Rose, Kathy Wilbur, and Mike Zeig, with support and input from Dave Byelich, Richard Saouma and Arnold Weinfeld.

Executive Summary:

The committee viewed their task as one of assessing the resource landscape at MSU currently and into the foreseeable future; to discuss alternative budgeting models to effectively and efficiently grow and deploy our resources to bring to life our values in pursuit and delivery of our missions as a premier land-grant university. In addition, strategies for growing and protecting resources and containing and reducing expenditures were also considered with several recommendations made to this effect.

The committee concludes that the institution will be best served by adopting a hybrid budget model that harnesses the benefits of centralized and de-centralized budgeting models while minimizing the limitations of each. In particular, it would (1) balance the resources available for central investment with unit-level financial accountability; (2) incentivize strategically consistent decision making *within* units and collaboration *across* units; (3) align stakeholders to financial realities—enabling unit leadership to influence their unit’s destiny; (4) support mission-critical programs that may not be financially self-sustainable; (5) insulate units from fiscal shocks while rapidly rewarding strategically-aligned behaviors; (6) support the resourcing of institutional strategic priorities and innovations; (7) foster a culture of trust and transparency across the institution.

Because any specific budget model cannot be formulated absent a clear articulation of the mission and the strategic priorities (something which is being developed concurrently under the auspice of the Strategic Planning Steering Committee while engaging university leadership and the broader campus community), the Institutional Resources Committee provides a roadmap to determine critical questions that need to be addressed in the formulation of a budget model and then also addresses steps that need to be considered in its implementation.

Given the current uncertainties and budget challenges caused by the pandemic, as well as the recently commenced search for a CFO, the committee recommends thoughtful planning around the timing of implementing reforms to the budget model and other initiatives around revenues and expenditures. This process would ideally be overseen and led by higher administration (e.g., president, provost, CFO, select others) and would be inclusive of broader campus input (e.g., budget and finance staff, budget officers, faculty representation and representative deans).

Introduction:

In our charge letter, it was noted that: As we move into the next decade, with heightened competition for financial resources, declining federal and state support and concern about the cost of higher education, how should we make the most of our resources? What is the right model for MSU currently? How do we incentivize entrepreneurship to thrive in a competitive marketplace? How do we create a transparent process where colleges and units understand the sources and uses of funds, the allocation of space and the investment in new facilities?

The committee viewed their task in light of this as one of assessing the resource landscape at MSU currently and into the foreseeable future; and discuss alternative budgeting models to effectively and efficiently grow and deploy our resources to support the institution in bringing to life our values in pursuit and delivery of our mission.

The COVID-19 pandemic has clouded much of the data and analysis considerably as recent forecasts concerning revenues and costs are no longer operational as stated, and a return to a semblance of a pre-pandemic status is not expected, at least not in the near future. At the same time, the pandemic has also brought into a greater relief the need and utility for clear planning and budgeting around institutional resources.

MSU's FY 21 functional budget is found here:

https://opb.msu.edu/functions/budget/documents/FY21_Functional_Budget.pdf.

The group convened several times in the late summer and fall as a whole and in subcommittees. Four areas of inquiry were pursued.

1. Revenue Sources
2. Expenditures and Costs
3. Budget Models
4. Transition and Implementation

1. Revenue Sources

State appropriations had once been the main support for the university—two generations ago, more than three-quarters of our funding came from the state. This has been steadily declining. Currently less than 13 percent of our resources are state appropriations (see A.1). This downward trend is especially pronounced over the last twenty years, and also with respect to the appropriations per student (see A.2). MSU has very limited ability to affect either the scale or the trend of appropriations, while yet being constrained by certain expectations around our mission from the State, which also impact appropriations around our extension services from the State in support of our stakeholder communities.

Tuition revenue, and its component pieces across in-state, out-of-state, and international tuition is the largest contributor to revenues at roughly 30% (see A.1). Enrollment strategies (including tuition and scholarship strategies) are thus a critical component for MSU, offering some scope of control in terms of possible levers, while also being faced with demographic challenges in the State and region, as well as being faced with a changing international

landscape—both in terms of our domestic political circumstances as well as increased competition for international students in Canada, Europe, Australia and elsewhere. These strategies—around recruitment in fulfillment of our mission, while also providing resources to deliver on our mission in other areas, largely in the undergraduate education space—which include outreach/recruitment, scholarships, and targeted differential tuition pricing) are centrally directed, but can be supported and augmented through unit initiatives. Of particular consideration in this space are our current RBI and OCCI initiatives, which carry the bulk of our revenue passthrough programs (see A.2). These will be assessed as part of the strategic planning process of the university in terms of how they help manifest our values and support our mission.

The second largest source of revenue, making up about 18% of our revenues, comes from **sponsored programs** (see A.1); the vast majority of which comes from federal grants (A.4). Indeed, the research enterprise is highly valued at MSU. Producing impactful outcomes in science and engineering as well as in the humanities remains a shared value tied to our land-grant mission. High quality, innovative, and diverse programs support faculty development, graduate programs and the undergraduate learning experience. Diversity can produce resilience in a changing grant awards environment. Strong research programs are generally symbiotic with strong graduate programs and international student recruitment and student success. Strategies formulated around attracting awards will depend on and also be augmented by us committing to leading the way in key scientific areas building on our strengths and assets as identified in the strategic planning process.

While research dollars over the past five years have increased, key Colleges have seen negative growth (A.4). Understanding these trends will be important to laying out strategies moving forward. The committee identified some opportunities and challenges in growing revenue in this area. These are found in A.4.

Auxiliary Operations account for another 15 percent of our revenue, of which the vast majority flows into auxiliary activities. In the short-run these revenues are under substantial pressure due to the pandemic, and some long-term structural changes may arise from this experience. There are ongoing efforts to evaluate partnerships and revenue opportunities in this space—efforts that also must align with the broader institutional mission and goals as these are more clearly articulated in the planning process—which may also then uncover additional areas of cross-institutional collaborations.

With **private gifts and grants** generating only about 7% of our revenue base, it is smaller than many other sources, and—for historical reasons—also smaller than at many peer institutions. Short and mid-range goals for annual fundraising have been adjusted, due to the significant impact the COVID-19 pandemic has had on donor willingness to give, as well as MSU’s ability to effectively cultivate new donors and prospects. University Advancement is now conservatively forecasting between \$175-\$225 million in annual gift production for the next two fiscal years.

Fundraising is likely prone to more growth and scope tied to our mission and strategic goals as an institution. A recently completed capacity analysis conducted by Marts & Lundy identified prospective households with an untapped potential in excess of \$50,000/household

(assuming a 5-year pledge period). With an additional investment in Advancement-related efforts including an expansion of staff, Michigan State would see a return in increased annual fundraising results well worth the investment.

Capital campaigns begin with a silent phase that lasts 18-36 months and are typically 8 years in total length. During the silent phase, lead campaign gifts are solicited with a goal of quietly raising 35%-45% of the anticipated campaign total, prior to going public with a final goal. The silent phase is followed by a public kickoff and a public phase that lasts an additional 4-5 years. Although campaign planning is still currently underway, the COVID-19 pandemic has shifted the preliminary campaign silent phase a few years out.

MSU Extension – a defining part of our institution – also is a recipient of grants and appropriation from the state. Per the table and chart in A.6, MSUE annual grants and contracts currently exceed \$31M; although they have declined nearly 8% over the last five years and over 4% since last year. Opportunities for growth are primarily envisioned the areas of federal and foundation grants.

Per the table in A.6, approximately \$11M of MSUE’s current funding comes from special millage funds in 15 counties, used to support county-specific activities, including 4-H. Approximately \$2M worth of millage funds are set to expire in 2021. These millages have been passed primarily in response to decreased state allocation to local governments, so are largely offsets to lost state funds, and not net increases in revenue or potential sources thereof.

The **MSU Foundation** is a critical supporter of university initiatives contributing approximately \$10M per year to support strategic investments (see. A.7).

2. Expenditures and Costs

The major source of expenditures as recorded by the university is tied to instruction and departmental research (i.e., general research, scholarly activities that are not specifically budgeted for and are more general in nature (e.g. startups, research allowances, etc.)), accounting for nearly 30 percent of expenditures, followed by over 15 percent for separately budgeted and separately funded research activity (e.g., all research grants, institutes/centers, AgBioResearch, etc.). Public service expenditures and institutional and academic support account for an additional 25 percent (see A.8).¹

Our general revenue debt was affected by the Nasser settlement costs in FY 18, while having ongoing long-term repercussions on general revenue debt (A.8). General revenue debt is further dramatically impacted by the ongoing adverse implications of the pandemic, especially in the auxiliary spaces, but by no means limited to those areas.

The subcommittee on expenditures and costs considered **general principles around costs reduction and expenditure management**, as well as tactical measures that should be explored.

¹ The overview of the FY21 Functional Budget is found here:
https://opb.msu.edu/functions/budget/documents/FY21_Functional_Budget.pdf

The sub-committee's full report is in Appendix B. The overarching recommendation is that the university espouse a continuous improvement framework intentionally aligned with core institutional values through which to make strategic decisions concerning academic programs, support infrastructure, and capital assets. Specific requirements were identified in support of a continuous improvement framework. These are the identification of shared values that provide guidance and a framework to align unit-level goals across the institution, the need for transparency around measuring and allocating costs and resources used across units and initiatives, and creating a system that incentivizes pursuit of our mission by also providing some measure of insurance against potential failure and idiosyncratic shocks. Thus, rather than an overly narrow managing by numeric scores and metrics, such an approach culminates in an ethic of evaluation and reflection. In particular, the following are offered as (non-exhaustive) guiding principles for consideration:

- A commitment to include all stakeholders associated with our decisions so they have a hand in designing and deciding future direction.
- A fair accounting of the risks and benefits of suggested courses of action, including such issues as amendment and reconsideration of these actions.
- Fair bidding, notice, and disclosure on all third-party financial arrangements.
- The University's commitment to diversity, equity and inclusion should be reflected and strengthened in and through all our actions.

Several **tactics around cost reductions and expenditure management** were suggested for consideration.

MSU does not have an extensive history of **Public-Private-Partnerships (P3s)**, however, the Grand Rapids Research Park and the 12MW solar carports are two such examples that leverage third-party funds with MSU resources and needs. Other Big10 institutions have gone farther by pursuing **asset monetization**, notable examples include the P3 around energy generation and distribution as well as the long-term leasing of parking facilities to an outside firm at Ohio State. These examples provide possible case studies on what and how to pursue or avoid such options. A related tactic concerns the **outsourcing** of services that heretofore were provided in-house. Typical areas of outsourcing are given in the report, including some auxiliary services, and the report specifically recounts an example from Texas A&M University.

An entirely internal tactic aims to achieve savings by realizing scale economies through **shared services** across several units, or across the entire institution. Similarly, economies may also be realized through a **consolidation** of units or programs. As noted above, the entire report of the subcommittee is found in Appendix B.

3. Budget Models

MSU operates largely under a traditional Incremental Budget Model under which units' previous year's budgets are used as a baseline (in MSU's case, while allowing for limited carry-forward and after a 1% PERF cut). There are some areas outside of this structure, e.g., auxiliary enterprises and certain units, and also within the colleges, there are elements that do not follow the incremental model, for instance, Indirect Cost Recovery from grants that are

proportioned to units to reward and incentivize grant-seeking activities; or OCCI and RBI tied to teaching activities in colleges.

A subcommittee was charged with assembling an overview of common university budget models in order to compare and contrast these in our current context—noting pros and cons of the different approaches. The subcommittee report contains two parts. The first is a focus on the key features of RCM models—as there has been a strong movement of adopting such models among public institutions of higher learning in the last few decades. However, in recognition of the broad experiences that institutions have made with this model, specific issues are discussed that – when properly addressed – may result in a realization of a more hybrid model of budgeting. After raising these issues, the first part of the subcommittee report concludes with pros and cons around the current MSU budget model. A further inspection of a side-by-side comparison of pros and cons between (hybrid) RCM and MSU’s current model highlights potential specific issues concerning RCM modeling in the context of a public land-grant university with high international engagements.

The Second part of the report—drawing upon a 2016 EAB White Paper on budget models—sketches a roadmap that charts the path from articulating values and identifying strategic priorities for the institution to translating these into an operational budget model. Specifically, it notes the decision points around financial accountability tied to mission and visions and the strategic goals; areas of responsibility (and associated costs) that fall to central administration or decentralized units; how and when fees can be used to allocate and distribute costs; and identification of structures that support the operations of the budget model. The report concludes with a recommendation of a process led by higher administration (especially the president, provost, CFO) and is inclusive of broader campus input (e.g., budget and finance staff, budget officers, faculty representation and representative Deans).

4. Transition and Implementation

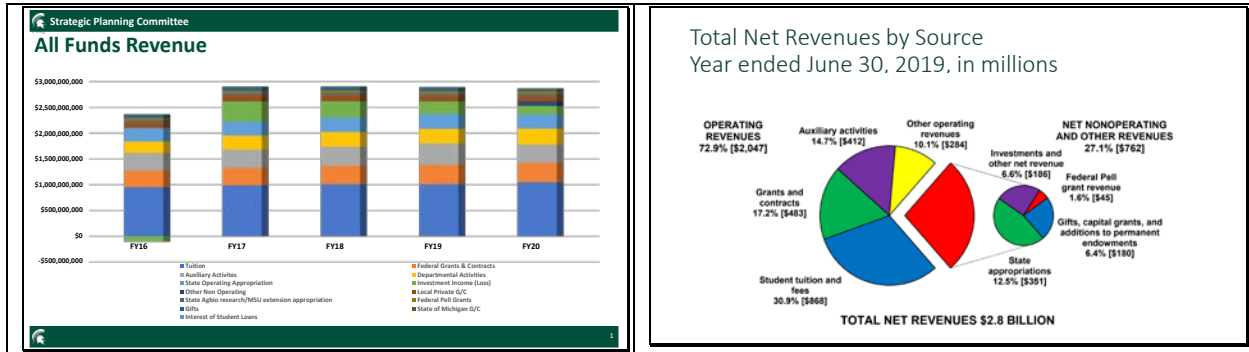
Given the current uncertainties and budgetary uncertainties caused by the pandemic, as well as the recently commenced search for a CFO, the committee recommends a thoughtful planning around the timing of implementing reforms to the budget model. However, the subcommittee noted some tradeoffs concerning the adoption time, as well as the speed of adoption and whether a uniform or staggered adoption is pursued. An alternative in that framework is also to carry a shadow budgeting system while still operating under the initial model.

Furthermore, the subcommittee on transition and implementation makes a suggestion concerning the implementation team and gives an example timeline for the implementation of a hybrid model. The full slate of considerations of the subcommittee is in Appendix D.

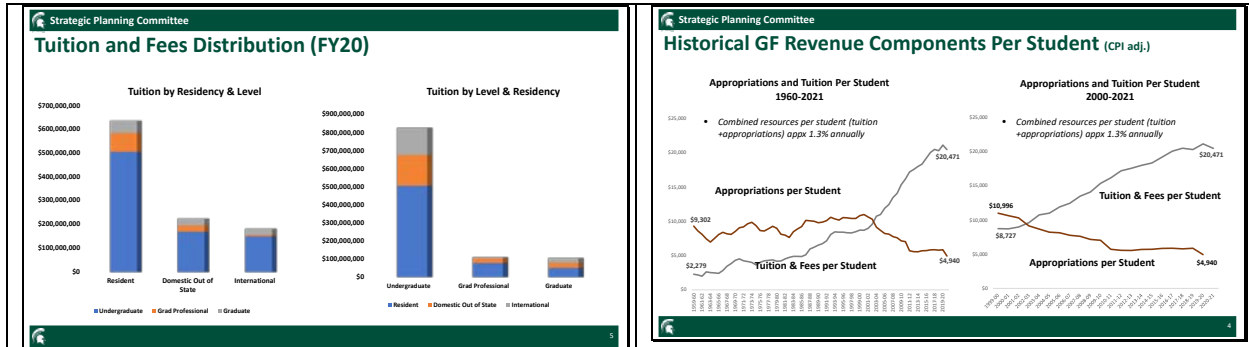
Appendix A

Resources and Expenditures Data

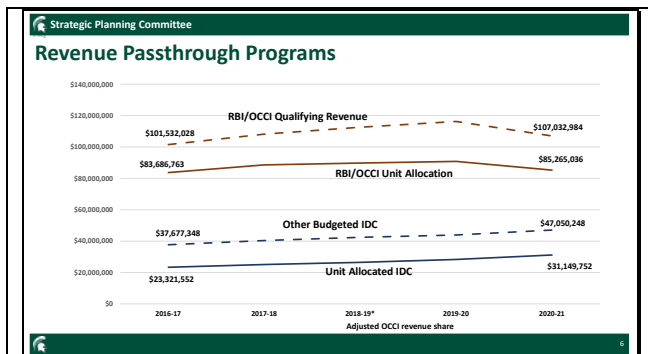
A.1 Revenue:



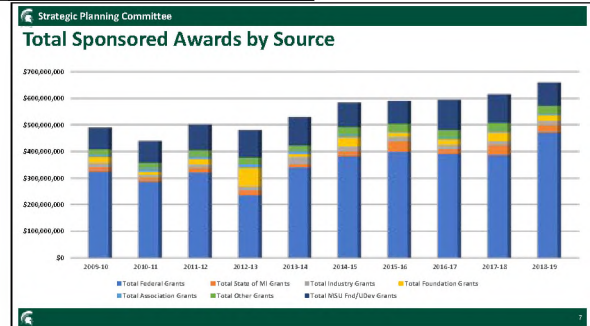
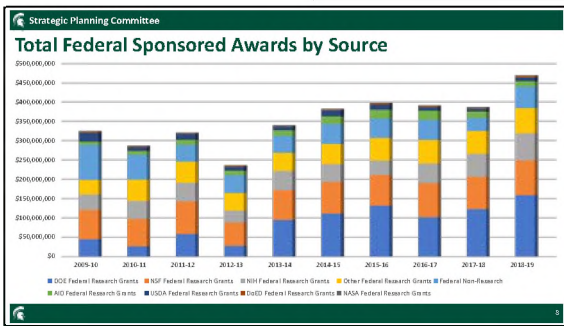
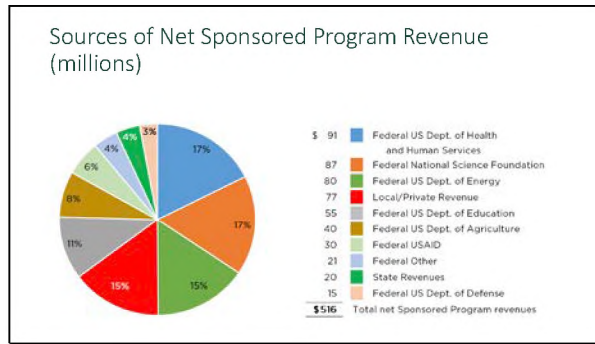
A.2 Tuition and State Appropriations:



A.3 Revenue Passthrough Programs:

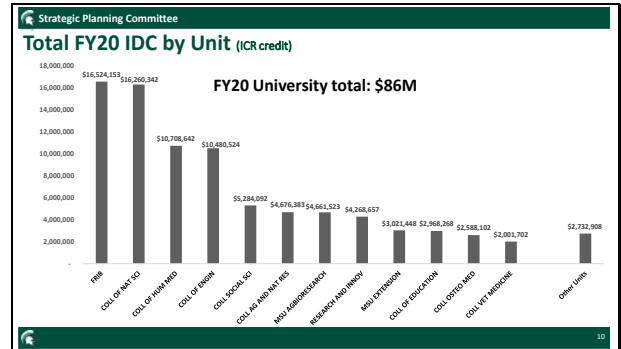
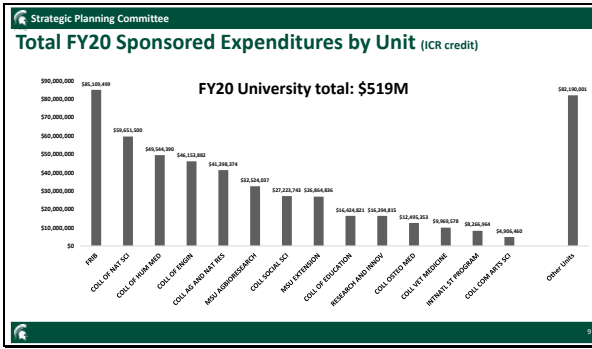


A.4 Sponsored Awards:



Total Awards by MAU by Fiscal Year:

	2015-16	2016-17	2017-18	2018-19	2019-20	Trend	1 Yr. Change	5 Yr. Change	% Annual Ch
UNIVERSITY	591,284,464	595,526,112	616,021,245	659,922,149	641,382,821		-2.8%	8.5%	2%
COLL AG AND NAT RES	60,274,911	56,558,725	56,553,837	51,929,643	40,193,339		-22.6%	-33.3%	-10%
COLL ARTS LETTERS	2,218,494	2,869,206	2,366,303	1,716,470	4,439,623		152.6%	100.1%	19%
ROAH	-	121,687	-	-	3,027		n.a.	n.a.	n.a.
E BROAD COL OF BUS	1,268,772	563,040	650,931	1,790,147	1,684,445		-5.9%	32.8%	7%
COLL COM ARTS SCI	4,587,955	4,890,809	4,533,853	4,698,701	4,983,277		6.1%	8.6%	2%
COLL OF EDUCATION	20,971,158	15,866,432	21,200,556	14,773,365	18,651,566		26.3%	-11.1%	-3%
COLL OF ENGIN	51,185,391	50,133,631	41,328,969	46,740,436	49,232,469		5.3%	-3.8%	-1%
COLL OF HUM MED	31,914,809	42,156,131	44,883,077	57,154,207	56,152,844		-1.8%	75.9%	15%
JAMES MADISON COLL	228,452	611,693	285,129	201,678	285,001		41.3%	24.8%	6%
LYMAN BRIGGS COLL	2,249,023	1,999,772	2,670,078	1,687,899	346,425		-79.5%	-84.6%	-37%
COLLEGE OF MUSIC	108,050	320,825	185,806	385,233	364,700		-5.3%	237.5%	36%
COLL OF NAT SCI	61,564,504	62,862,901	66,821,535	60,947,572	66,552,241		9.2%	8.1%	2%
NURSING	1,549,542	1,010,759	645,509	666,572	1,653,606		148.1%	6.7%	2%
COLL OSTEO MED	11,363,272	14,563,461	14,402,200	14,175,237	14,426,824		1.8%	27.0%	6%
COLL SOCIAL SCI	25,526,269	25,479,318	27,742,894	27,110,014	29,350,023		8.3%	15.0%	4%
HONORS COLLEGE	-	20,706	-	-	-		n.a.	n.a.	n.a.
ASC PROV UGRAD ED	2,497,939	3,046,307	2,447,943	1,867,063	2,529,821		35.5%	1.3%	0%
COLL VET MEDICINE	9,774,017	7,758,893	12,154,347	11,518,531	12,221,294		6.1%	25.0%	6%
IT SERVICES	-	-	2,008	-	364,060		n.a.	n.a.	n.a.
FRIB	128,465,378	105,549,517	124,674,550	157,397,116	101,891,174		-35.3%	-20.7%	-6%
PROVOST ACAD AFF	2,737,383	693,766	2,828,520	704,794	2,333,728		231.1%	-14.7%	-4%
ASC PRV ACAD SERV	6,493	2,533,109	309,609	397,388	2,828,698		611.8%	4346.8%	357%
ASC PRV OUTRCH EGT	2,275,886	1,526,829	2,080,132	2,246,331	1,537,219		-31.6%	-32.5%	-9%
INTNATL ST PROGRAM	3,702,639	3,108,805	3,840,505	4,517,777	3,573,241		-20.9%	-3.5%	-1%
MSU HEALTH TEAM	-	16,755	17,999	14,993	-		n.a.	n.a.	n.a.
LIBRARIES	18,719	3,150	13,300	-	-		n.a.	n.a.	n.a.
MSU AGBIORESEARCH	39,474,644	34,108,462	32,594,080	41,543,063	34,598,775		-16.7%	-12.4%	-3%
MSU EXTENSION	32,225,397	27,635,764	25,549,863	31,139,655	29,694,274		-4.6%	-7.9%	-2%
RESEARCH AND INNOV	11,137,409	13,491,489	8,691,261	31,399,600	14,759,830		-53.0%	32.5%	7%
VP STUD AFF SERV	421,056	2,264,366	1,060,806	1,347,502	1,268,621		-5.9%	201.3%	32%
GRAD SCHOOL DEAN	1,212,181	1,780,947	1,963,405	1,636,556	1,777,514		8.6%	46.6%	10%
UNIV ADVANCEMENT	78,216,096	109,010,138	101,930,444	81,478,978	90,985,565		11.7%	16.3%	4%
ADMINISTRATION	3,478,367	2,709,754	3,712,312	5,641,947	15,561,307		175.8%	347.4%	45%
IP AND FACILITIES	-	-	2,011,223	2,990	78,088		2511.6%	n.a.	n.a.
FINANCE	-	-	-	2,616,676	20,392,800		679.3%	n.a.	n.a.
PRESIDENT	95,194	78,064	310,729	420,384	15,970,373		3694.5%	16676.6%	260%
GEN UNIV ITEMS	243,374	25,800	407,218	53,132	325,974		513.5%	33.9%	8%
MSU COLL LAW	17,088	-	-	-	-		n.a.	-100.0%	-100%



- Opportunities Increasing Grants

There are several approaches that could generate more income. This would also impact the numbers of graduate students and thus tuition associated with the graduate population.

1. Increase individual productivity of each faculty member. This would require giving faculty more time and more pre-award support.
2. Improve long term planning for larger multidisciplinary grants. To be successful these normally need to have University a priori support to demonstrate an established network.
3. Recognize and coalesce MSU's niche/expertise portfolio and invest in an innovation space. The NEON application is a prime example.
4. Hire targeted opportunities for areas where previous national leadership has lagged (e.g., bioinformatics).
5. Strategically invest in infrastructure in partnership with State and Federal Agencies.

- Challenges Increasing Grants

The challenges are one of timing and distribution of resources (both financially and HR) with expectations of return on the investment. MSU seems late to the table for developing new graduate programs, for example with the movement toward environmental science programs and degrees.

1. The hiring of newly promoted full professors explicitly to lead and build research programs.
2. Lack of investment in the graduate program in general
3. Fragmentation of administration structures for support for Institutes and Centers and Faculty
4. No strategy for Increasing Diversity in programs and people.
5. Can Debt usage be decreased for Academic/research?

A.5 Fundraising

Summary of the past five years of fundraising activity:

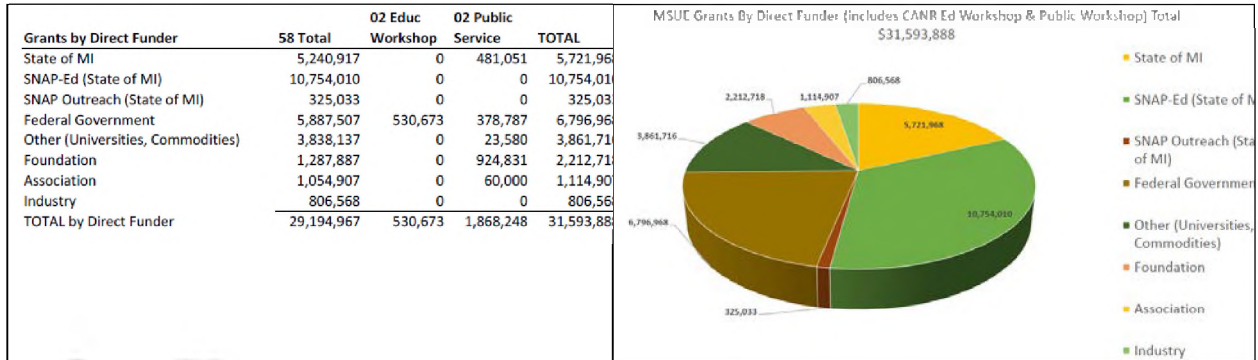
Fiscal Year	Total Gift Production (millions)	Total Cash Received (millions)
FY16	\$271.9	\$176.1
FY17	\$254.6	\$200.0
FY18	\$215.5	\$182.0
FY19	\$272.6	\$177.8
FY20	\$186.0	\$157.1

Previous *Empower Extraordinary* capital campaign was conducted from July 2011 through Dec. 2018

Total Gift Production: includes new cash, pledges, in-kind gifts and planned gifts at face value

Total Cash Received: includes cash, in-kind gifts, and irrevocable planned gifts received by MSU

A.6 Extension



Summary of Info:

Total FY20 funding from counties* 15,119,441

Millage Counties Total Current investments Multiple years** 10,982,479

Summary FY20 MSUE Contract and Grants Funding*** 31,593,888

*Includes direct payments to MSU and county budgets in-kind

**Verified per DDs

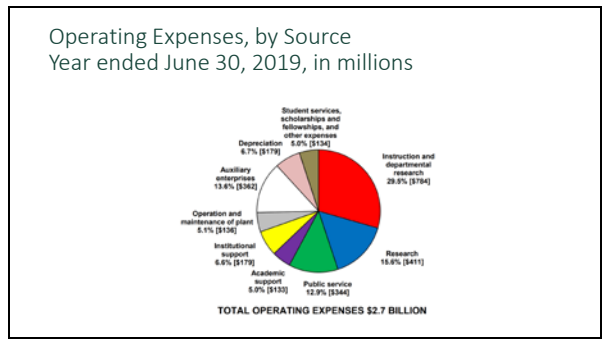
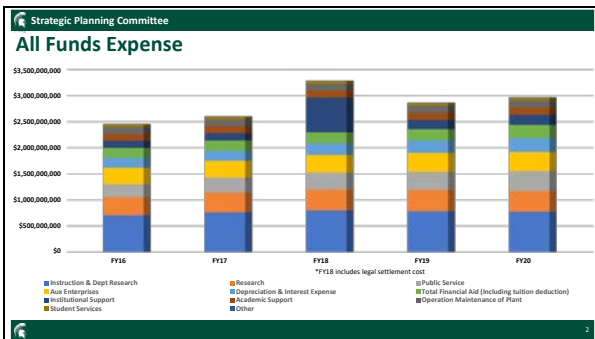
***Per grants accepted by BOT by 6/30/2020, includes 58 MAU and 02 Educ Workshop and Public Service

MSU Extension County Millage Data						
DISTRICT	COUNTY NAME	DATE(S) FAILED/PASSED	MILLAGE LENGTH	END YEAR OF MILLAGE	ANNUAL AMOUNT EXPECTED	TOTAL AMOUNT EXPECTED
4	Alcona	8/4/2020	4	2023	106,354	425,416
2	Alger	2017	5	2021	100,430	502,150
14	Alpena	8/7/2018	4	2022	40,000	160,000
6	Clare	8/4/2020	6	2026	141,994	851,964
1	Dickinson	3x 2011/12	n/a	n/a	n/a	n/a
9	Genesee	2014 & 2018	4	2022	370,000	1,480,000
6	Gladwin	8/7/18	5	2023	104,030	520,150
8	Gratiot	8/7/18	4	2022	212,000	848,000
4	Iosco	8/4/2020	4	2025	141,148	564,592
2	Luce	2016	5	2021	101,732	508,660
8	Montcalm	8/7/18	5	2023	241,875	1,209,375
14	Montmorency	8/7/2018	6	2024	127,000	770,000
4	Ogemaw	2016 & 8/7/18	8	2025	124,000	992,000
4	Oscoda	11/2012	n/a	n/a	n/a	n/a
9	Saginaw	3/10/2020	n/a	n/a	n/a	n/a
2	Schoolcraft	3x 2011	n/a	n/a	n/a	n/a
9	Shiawassee	2016	6	2022	129,278	775,662
10	Tuscola	2016	6	2021	175,000	1,050,000
6	Wexford	8/4/2020	5	2025	168,932	844,660
	Total					10,982,479

A.7 MSU Foundation

Sum of Amount	2015	2016	2017	2018	2019	2020	Grand Total
Technology Commercialization	\$3,225,000	\$3,124,846	\$3,155,979	\$3,175,000	\$3,175,000	\$3,225,000	\$19,080,826
Capacity Building Grants	\$2,240,000	\$2,060,000	\$1,892,540	\$1,877,882	\$1,737,352	\$1,702,354	\$11,510,128
Strategic Partnership Grant	\$981,210	\$981,210	\$981,210	\$967,843	\$829,328	\$1,023,832	\$5,764,633
VP Research Discretionary	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$4,500,000
Block Facilitation Grants	\$682,550	\$682,550	\$682,550	\$682,550	\$682,550	\$680,000	\$4,092,750
MSU Foundation Professorships	\$80,000	\$340,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,420,000
Institutional Development Support	\$437,048	\$550,908	\$484,619	\$260,496	\$228,595	\$59,847	\$2,021,514
HARP Grants	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,800,000
Competitive Discretionary	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,800,000
Special Equipment	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,200,000
MSU Operating Units	\$114,157	\$96,556	\$82,410	\$108,307	\$87,250	\$116,000	\$604,680
University Entrepreneurship	\$30,000	\$30,000	\$30,000	\$35,000	\$28,747	\$217,219	\$370,966
Cisplatin History					\$42,829	\$20,000	\$62,829
Grand Total	\$9,339,965	\$9,416,070	\$9,359,309	\$9,157,078	\$8,861,652	\$9,094,252	\$55,228,325

A.8 Operational Expenses



Background Packet: General Revenue Debt

Summary of General Revenue Debt (as of 06.30.19)

\$772M in new debt in FY19, includes funding for legal settlement, ISTB, STEM Teaching and Innovation Center, Music building addition, other

Credit rating sustained through issuance of new debt, significant capacity remains at Aa2 level, resources for additional debt service may be constrained

Debt coverage ratio adverse to peer norms

General Fund Projects*	Millions
Long Term Debt**	\$1,209.7
**Includes legal settlement (\$491.8M)	
Revenue Based Projects	
Residential and Hospitality Services	334.2
MSU/CFacility for Rare Isotope Beams	83.3
Intercollegiate Athletics	62.1
Printing Operations and Violations	51.9
MSU College of Law	15.1
Wharton Center	12.7
Recycling	8.1
South Campus Amovable Dumpster	4.3
Executive Development Center	2.5
College of Vet Med	2.3
Donor Supported Projects	
Schick Center-CHM Wood MI	79.3
Broad Business College Complex Pavilion	31.2
Intercollegiate Athletics	16.6
Cook Hall	11.1
TOTAL	\$1,974.9

The chart above details expenses by Higher Education Function Code (HEFC) and adds depreciation. Functions source from the Uniform Accounting Structure (NACUBO) and are common across higher ed with reporting through this convention at both the State (HEIDI) and Federal (IPEDS) levels, with functions also serving as the basis for financial statement presentation.

Note that Function Descriptions are here: <https://ctrl.msu.edu/download/mbp/ex5HigherEdFunction.pdf>

Appendix B

Expenditures and Costs

Institutional Resources Cost-Reduction Report

John Beck, Dan Bollman, Chris Long, and Richard Saouma

Executive summary: The subcommittee was tasked with exploring resource allocation writ large across Michigan State University. While several broad tactics are explored below, the overarching recommendation is that the university espouse a continuous improvement framework intentionally aligned with core institutional values through which to make strategic decisions concerning academic programs, support infrastructure, and capital assets.

Section I: Strategy

The essence of strategy is choosing what not to do.

Michael Porter

As our nation's premiere land grant university, Michigan State has enjoyed resounding success around our core mission of educating students to prepare them to contribute fully to society as globally engaged citizen leaders over the last 165 years. As our university has grown, we have developed both academic depth, and to a greater extent, breadth with over 200 academic programs across 17 degree-granting colleges. Each year faculty and administrators identify new programs and capital projects that promise to unlock further educational opportunities and efficiency gains. And, while these new initiatives are diligently reviewed by academic governance and the Office of Planning and Budget, we have spent significantly less time and effort asking ourselves whether existing investments have continued delivering on their initial objectives. Put simply, we are entrenched in nearly every resource allocation made to date—regardless of their saliency today. Not only has the breadth of our offerings impinged on our ability to respond to the rapidly evolving post-secondary educational landscape, it has also exacerbated our vulnerability to economic downturns.

The committee has surfaced a set of tactics (see section 2) to address the immediate fiscal crisis, however we believe that the current hardship opens opportunities to elevate the quality of the University's activities and initiatives by cultivating intentional institutional habits of strategic decision making that are committed to enacting the core values of the mission. As is the case in all organizations, establishing programmatic integrity requires administrative courage. Without a strong history of strategic planning, a robust culture of shared governance, and an accountability infrastructure for iterative evaluation and improvement, MSU will be unable to meet the demands of an increasingly complex interconnected 21st century world. Further complicating any attempt to cultivate institutional habits of strategic improvement is the fact that many of our internal accounting systems comingle college finances, making it

nearly impossible to audit resource efficacy towards our shared mission, and our colleges' often idiosyncratic goals. Addressing these shortfalls requires that we bring a continuous and sincere commitment to values-aligned quality improvement to new initiatives and existing resource allocations alike. To this end, we propose that the university espouse a continuous improvement protocol involving a 2 to 3-year spool-up followed by program reviews every 2 years in sync with the strategic planning cycle every other year.

The sheer span of disparate goals and capital requirements across our colleges and programs present unique challenges to any university-level review process—especially when the review informs future investment between colleges. For example, financial metrics such as the (tuition) *return to instructional costs* ignores disparate instructional limitations—the time and attention required to train mastery in music is substantively different than that needed to prepare a student for a career in accounting. Even non-financial metrics, such as our standardized student success metrics belie the fact that some majors are simply more demanding or proffer less flexibility than others—all of which may be perfectly acceptable given a college's objectives (provided said objectives align with the university's shared values). These examples suggest that any university-level approach requires a candid acknowledgement that colleges, their programs, and their faculty's research (e.g. start-up costs) have vastly different resource needs. Deliberate measures of both resource consumption and the associated outcomes empowers the university to set both measurable and personalized goals for colleges and auxiliary units, which in turn paves the way for college and auxiliary leadership to better articulate objectives and ultimately manage their organizations. Without a shared vocabulary of resource consumption and intended outcomes identified through open institutional habits of strategic planning, strategic decisions related to the evaluation, adjudication, and reduction of resources are made more difficult. On the other hand, armed with clearly specified objectives and transparent resource consumption data, strategic conversations about resource reductions and program cuts can genuinely be framed as organizational priorities, thereby lowering the managerial cost associated with such conversations. The same principles apply to all university employees; the better we articulate and delineate both resource consumption, goals, and the efficacy of the status-quo, the easier it is for all employees to identify—and be recognized for—value-adding innovations.

Pulling back the telescope, deliberate resource consumption measurement forms one of five requirements needed to successfully deliver on the promise of continuous improvement. The complete list consists of: (1) identifying shared values (n.b. at a more granular level than our existing mission) at the provost's altitude, (2) surfacing and aligning college-level goals around the shared values, (3) measuring the resources consumed in each college/unit and appropriating them to the programs/initiatives driving their consumption, (4) committing ourselves to sharing one another's resource consumption and the associated returns, (5) incentivizing wins without excessively penalizing failures. Discussing the necessity of each requirement is beyond the scope of the present document, however we do wish to emphasize the importance of (4). While the leaderboard effect is a well-documented incentive mechanism, our university has a recent history of special arrangements being afforded to individual colleges or programs. Notwithstanding the possibility that such individual, special arrangements may have been optimal given the circumstances at the time, so-called *adherence gaps* have had a devastating effect on morale across adjacent units and colleges by eroding trust across the

university. Sharing college/program goals and the respective resources consumed with administrators and colleagues alike is the most direct way to restore our stakeholders' belief in our ability to make commitments and ultimately foster a more entrepreneurial culture at MSU, one where objectives outlast their original champions, and one where all college/program leadership can identify and learn from adjacent experiences.

Our dedication to continuous improvement is really designed with the entire university in mind. Though we do not believe in simply managing by numeric scores and metrics, we do believe in an ethic of evaluation and reflection. To claim that things cannot be easily measured is not a negation of the idea that everything needs to be based in institutional goals and objectives, be fairly reviewed, and be part of a robust cycle of planning, action and reflection. It is easier to set out such an agenda for that part of the University where things are measured routinely (energy usage, solid waste and recycling, e.g.) and we see that agenda as part of the larger whole. In taking on this agenda of both transformational and incremental change, we are mindful of the need to make our values plain within the work to ensure both outcome and process goodness. We suggest that the following non-exhaustive list of values be embedded in the work as we move forward:

A commitment to include all stakeholders associated with our decisions so they have a hand in designing and deciding future direction.

A fair accounting of the risks and benefits of suggested courses of action, including such issues as amendment and reconsideration of these actions.

Fair bidding, notice, and disclosure on all third party financial arrangements;

The University's commitment to diversity, equity and inclusion should be reflected and strengthened in and through all our actions.

Section II: Tactics

Cost reduction strategies are an important component in maintaining a balanced budget, and ensuring limited resources are available to allocate toward mission driven priorities. Of the many strategies one could employ to reduce costs; most can be categorized into 5 areas:

Public Private Partnerships (P3's)

A P3 is a contract between a public agency or nonprofit and a private sector entity, in which they can share skills, technology and responsibility when delivering a product or service (www.ncppp.org).

These are often used in higher education to infuse 3rd party capital (cash) into an operation in exchange for operating revenues. P3's often adds flexibility and efficiency into the process, creating alternative opportunities in financing, construction and management of assets.

MSU has limited experience with P3's however two recent experiences demonstrate how successful deployment can save University resources:

- **Grand Rapids Research Park:** Using 3rd party funding, the project focuses on driving innovation to bring new discoveries to market. Anticipated outcomes of the collaboration include research, testing and commercialization of new therapies and medical devices. The project will be approximately 200,000 square feet with a 600-car parking structure. A third building is on the existing planned for the future development.

- **12MW solar carports:** Constructed by a 3rd party energy developer, MSU entered into a 3rd party power purchase agreement to bring low (fixed) cost affordable electricity to campus. The developer owns the solar carports, and MSU agrees to purchase electricity at a fixed price over a period of years.

Asset Monetization

Monetize refers to the process of turning a non-revenue-generating item into cash, essentially liquidating an asset or object into legal tender (Investopedia).

This strategy is sometimes used in Higher Education to create a pool of cash to establish endowments or pursue mission critical investment. Common targets for asset monetization include non-core, high value assets, like energy plants and parking systems.

Using the energy plant example; monetizing energy assets is an effective way to offset annual utility and infrastructure expenses or develop new sources of revenue.

MSU does not have experience with asset monetization however, recent examples in the Big Ten include:

Energy generation and distribution – Ohio State University entered into a public-private partnership with ENGIE Services on behalf of Ohio State Energy Partners (OSEP) in July 2017; OSEP paid \$1.165 billion upfront. Ohio State pays an annual utility fee starting at \$9.2 million, a fixed fee that starts at \$25 million and grow 1.5 percent each year. Ohio State continues to buy electricity, natural gas and other energy sources directly from providers.

Parking Facilities - Ohio State University leased all its parking facilities to an Australian firm, Campus Parc. The terms included a 50-year lease arrangement and a \$483 million payment to the university.

Other Big Ten institutions with experience in Asset monetization include Maryland and Iowa.

Shared Services

Services that can be shared among the various business units of a company include finance, purchasing, inventory, payroll, hiring, and information technology. ... Ideally, companies that implement shared services enjoy significant cost savings by standardizing practices and procedures and by creating economies of scale. (www.inc.com)

Many university systems have developed shared services units providing centralized services to their university as well other individual units in their systems. One obstacle to embarking on a shared service strategy is to try and consolidate too much at one time. Due to the distributed nature of many University systems, completely consolidating into a shared service model is often too daunting a task to get off the ground. There are however many shared service opportunities between colleges and units that are less comprehensive, but equally lucrative in opportunities to reduce costs. Examples of successful shared service strategies include:

Finance – Yale

Human Resources/Payroll – University of Georgia, serving 26 institutions within their system

Investigations/Mandatory Employee Training/Procurement Training/Student Information Systems – University of Wisconsin System. These services are used in varying degrees in serving 8-12 entities

Human Resources/IT/Business Services/Service Operations – University of Wisconsin System (entire system)

Human Resources & Finance – University of Michigan, Michigan Medicine, UM Dearborn, UM Flint, UM Centers

Human Resources/Payroll/Finance/Procurement Services – University of Denver

IT – University of California System

A variation of the shared service strategy is to consider consolidating individual colleges to reduce administrative overhead. A thoughtful review of MSU's 17 colleges or a subset of our 200+ academic programs alongside any potential realignment could reduce institutional overhead and streamline systems. Another approach is to review administrative overhead within colleges to ensure that institutional human resources are fully utilized within and across departments, centers and programs.

Outsourcing

Outsourcing refers to the privatization (contracting) of non-core activities that have traditionally been accomplished using "in-house" forces. The decision to outsource is driven by a belief that privatization will either improve quality or reduce costs for the institution. Before a decision is made to outsource, a number of decision factors should be explored including the development of a deep understanding of the impacts on human resources, service quality, efficiency, cost control, management and response, legal and ethical concerns and impact to mission. There are many case studies of higher education activities that have been outsourced, with varying degrees of success. Typical candidates for outsourcing are shown in the charts below developed by the Institute for Higher Education Policy.

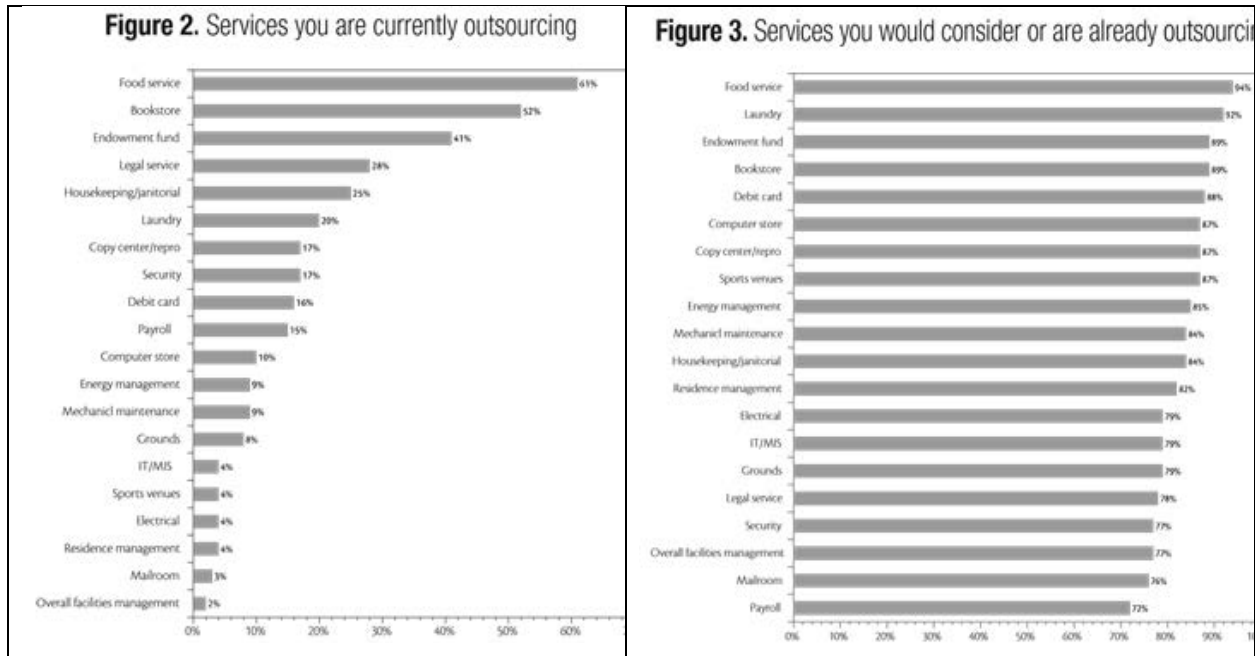
For well-run units, outsourcing will not significantly save costs. Rather costs will be transferred to an outside entity along with a degree of operational and fiscal control.

An example of outsourcing support units is described below:

Food Service, Landscape, Maintenance, Custodial - Texas A&M outsourced their food service, landscape management, maintenance services and custodial services in 2012. The move privatized over 1,000 employees at Texas A&M and was believed to be the largest of its kind at the time. The contract with Compass, while very inclusive, has resulted in many change orders to address extensive weekend work for housekeepers (e.g. special weekends), etc. this resulted in increased costs to the units (e.g. housing, etc.)

- Compass made significant staffing changes which resulted in lay-offs, etc. (especially "middle management). One estimate indicates turn over at 30-40% as a result of the outsourcing.
- Compass employees were not eligible for the state retirement system, etc. (Texas has its own state retirement system) - so, staff that had years at A&M were forced to change their retirement plans.

- The move is said to have been highly NPV positive for the institution, netting significant projected savings over the 10-year life of the contract.



Excerpted from “Is Outsourcing Part of the Solution to the Higher Education Cost Dilemma?” By Ronald Phipps and Jamie Merisotis – Institute for Higher Education Policy, September 2005

Section III: Conclusion

The committee recognizes that the current fiscal situation requires tactical measures to reduce costs. While we have provided a brief survey of standard cost-reduction tactics in the previous section, we also wish to acknowledge that our present vulnerability stems from a more systematic concern on both the infrequency and the process through which we make arrive at sunseting decisions.

Committing to a culture of continuous improvement by establishing institutional habits of strategic planning and decision-making can pay big dividends for Academic and Administrative units alike. The underlying principles of respect for people, iterative improvement, and the elimination of processes and activities that do not add value have a place in an educational environment. Mature organizations (MSU) often grow organically over time increasing overhead, adding complexity, and adhering to policies and processes that made sense at the time but have since outlived their usefulness. An intentional system of process mapping, periodic review of activities, and looking to front line employees for improving business processes could be implemented at MSU for little cost, and pay on-going dividends in cost savings, employee satisfaction, employee engagement, and institutional relevancy.

Appendix C

University Budget Models

(S. Gupta, J. Johnson, L. Kempel, M. Zeig) July 27, 2020/October 20, 2020

PART 1

UNIVERSITY BUDGET MODELS – AN OVERVIEW

Much interest in and discussion about public university budget models dates back two or three decades ago. The confluence of declining revenues from state support, increasing dependence on tuition revenues which were rising faster than inflation each year but were being capped, declining externally funded research support, and declining numbers of college-age students, created the perfect storm in which university leadership around the country had to look closely at their budget and financial models for sustaining their operations and meeting their strategic objectives.

These same factors also led to questioning the status quo about most public university budget models that were based on centralized allocation schemes that likely had legacy connections to activities and priorities, and then each year were tweaked using some form of incremental budgeting mostly based on *ad hoc* negotiated arrangements. Clearly, with the fiscal, political and demographic headwinds, such budget models were unlikely to serve the institutions well. It was in this setting that more public universities in the late 1990's and early 2000's started to look at budget models termed "Responsibility Centered Management" (RCM) models that put increased responsibility for revenues and costs in the hands of those administrators who were making decisions that directly impacted the revenues and costs.

Responsibility Center Management (RCM) Budget Model v Centralized Budget Model.

The fundamental feature of any RCM model is the transfer of responsibility for revenues and costs away from the central administration to colleges, departments and schools. With this transfer of responsibility also comes control over managing the tuition and fees and receipt of revenues from these sources, along with the responsibility to manage the expenses.

Apart from delegation of responsibility, RCM also usually involves changes in management and budget structures.

The basic differentiation in RCM models across institutions is driven by the degree of delegation of responsibility and authority; for example, whether the delegation is at the college-level or the department-level/school-level.

RCM has many different variations and labels, including Revenue Center Management, Value Center Management, and Incentive Based Budgeting. However, all of these models have one common feature – delegation of authority and responsibility.

Key Features of RCM models:

Revenues flow to the unit conducting the activity that generates the revenues:

- Allocation of revenues is based on criteria that need to be specified. In the case of Minnesota, the program evaluation criteria were: quality, demand, centrality to mission, comparative advantage, and efficiency/effectiveness. Obviously these criteria need to be defined and agreed upon.

- Question: can the criteria change? How often? What process needs to be in place to decide when and how?
- Under RCM, it is important to first establish a system that ties revenues to performance because the essence of an RCM model is to reward units for good performance that could be measured in different ways (e.g., enrollment levels, research activity, institutional mission priorities, etc.)
- Units carry-over residual funds at end of year

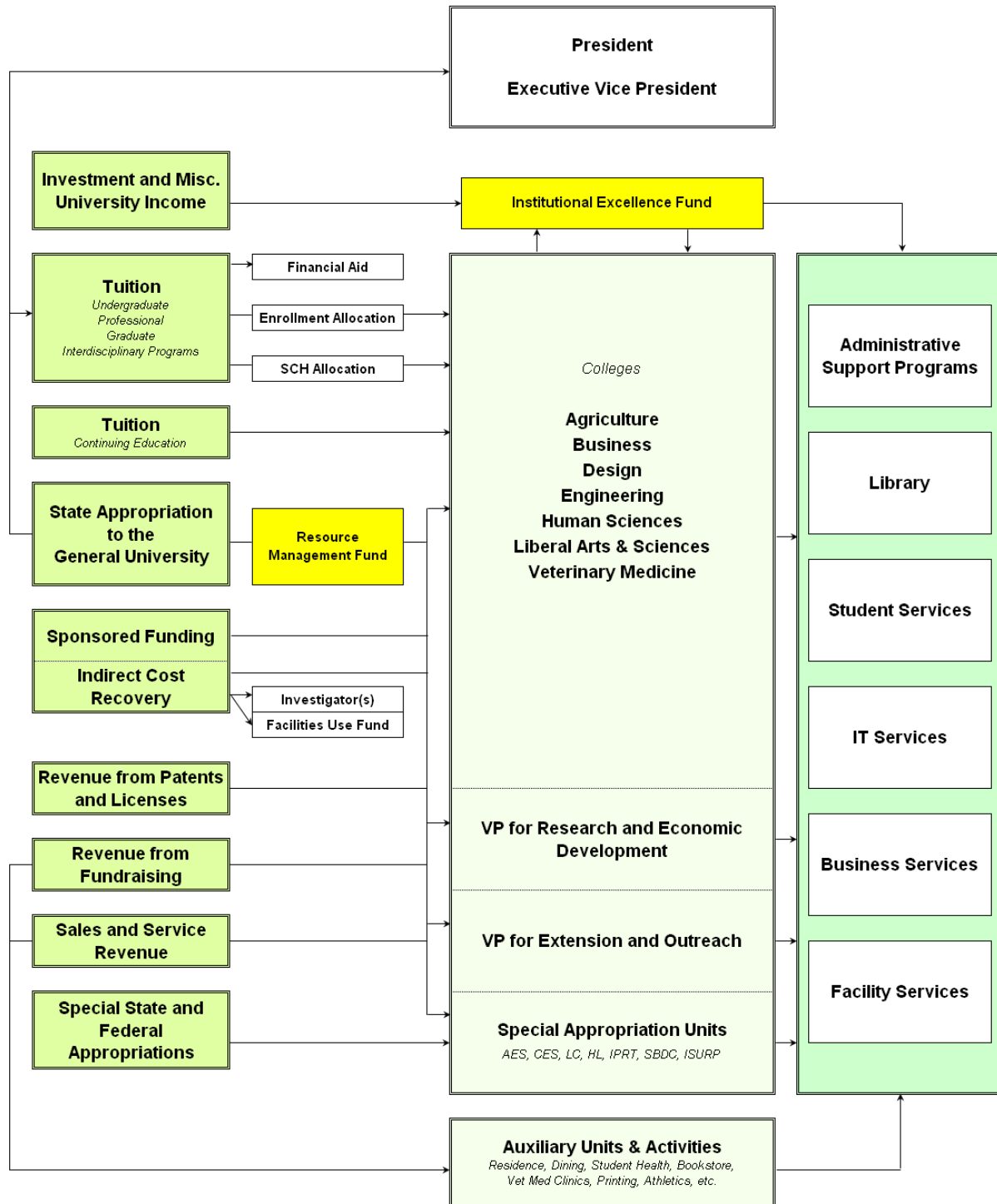
Key Issues that need to be addressed in RCM Models:

(Source: Adapted from the brief prepared by the Hanover Research Council, "Responsibility Centered Management at Major Public Universities," April 2008)

- How do you handle unplanned costs?
- What should the horizon be for planning of programs or initiatives? And over what period of time is performance to be evaluated?
- How do you support non-self-sustaining units in carrying out their roles as efficiently as possible?
- How do you insure institution-wide collegiality?
- How do you guard against the profit motive having an undesirable effect on academic quality?
- What type of courses/programs become devalued?
- Does the adoption of RCM create winners and losers, with certain type of operations to definitely be losers?
- Should tuition follow the student or the program he/she is registered in?
- What would be the likely impact on graduate programs?

Iowa State University's RCM Model – University of Michigan has a very similar model

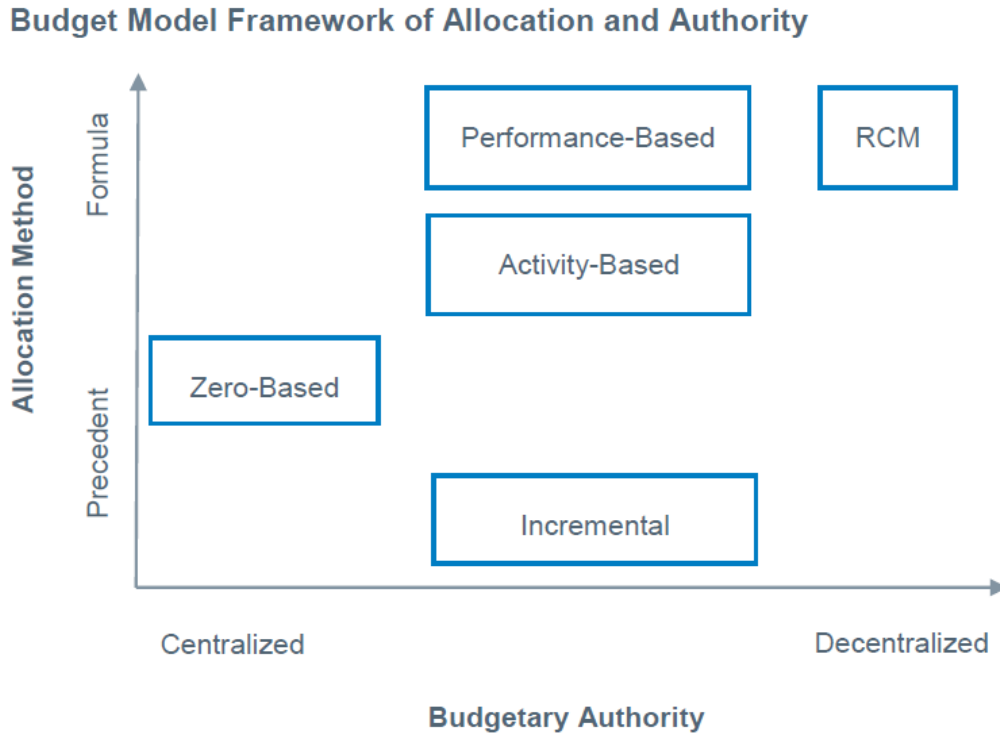
Resource Flow Diagram



Source: "Responsibility Centered Management at Major Public Universities," Hanover Research Council, April 2008

Additional dimensions along which budget models can be arrayed. For example, budget models can vary by allocation method. Allocation methods could depend on input metrics (e.g., enrollments, SCH, tuition revenue) or output metrics (e.g., graduation rates, research publications, rankings).

Below is a framework for budget models arrayed by budgetary authority and allocation methods.



Source: EAB Report (2013)

PROS AND CONS OF RCM MODELS

Responsibility Center Management	Pro	Con	Notes
Items			
Responsive to market	Costs drive resource allocation	Base needs (e.g., GenEd) can be starved	
	Space allocation based on rent	Two short an averaging time harms planning	Need averaging - 3 years? 5 years?
	Energy savings		Have a selfish reason to save energy in units
		Lower income programs lose	
		Land-grant programs can suffer	Engagement, Int'l programs, etc.
		Can lead to less diversity	Resources in units w/ low capacity to grow diversity?
Incentivize entrepreneurial activity	Keep gains of taking risk		
Institution dependent on tuition		Tax on units needed to fund operations	Most income in academic units, need to fund police, etc.
Focus on Core Mission	Resources applied to strengths	Lose auxiliary service control	
	Divestiture frees up embedded \$		Divestiture creates one-time cash from past investments
Transparency and accountability	Costs tied directly to income		
	Increases accountability		
	Units must manage and balance their own budgets		
Decision-making	Ability to use "equation"	New programs try to "game the equation"	
	Decentralized; assigned decision-		

	making authority to academic units				
Intra-Institutional Partnering	Decisions made locally		Incentive to "keep my own"		
	Move quickly...		Can lead to multiple, redundant offerings		
			Lose some economies of scale		
			More difficult to launch large, university-wide initiatives b/c resources are decentralized		
			Can lead to competition among units		
Definition					
Revenues and costs are decentralized to Colleges, Departments, or faculty so that budgetary authority is aligned with responsibility.					
RCM incentivizes:					
Revenue generation and expense reduction. In higher education, RCM models often target tuition revenue, but as far as I can tell, the model itself can incentivize anything that can be monetized.					
"Financially viable activities"					
Broad goals of RCM are to increase revenues, contain costs, and improve decision-making by lower-level actors.					
Other notes					
Universities' main sources of revenue include tuition, research, philanthropy, investment, auxiliaries revenue, state appropriations. Tuition revenue is often the target of RCM models b/c it's seen as the most predictable and easy to change.					

MSU Budget Model

Pros

- Long-standing budget model at MSU
 - This alone is not reason to keep the same model moving forward, but it needs to be recognized upfront because many units make strategic decisions based upon our current environment. Any change in budget models should recognize the shift in unit strategy, planning and culture that might require time to adjust to.
- Relative simplicity and stability
 - Allows units to easily know and plan for what their budget will be each year
- Select areas of clear incentives
 - OCCI and RBI programs incentivize enrollment and program growth
 - Research startup funding and indirect cost recovery formulas are clear and based upon productivity (does not mean funding levels are always sufficient)
- Current model has allowed for significant investments in residential colleges, outreach and engagement, and international programs (all key to our land-grant mission) that might otherwise receive smaller investments in other budget models.

Cons

- Lack of transparency
 - Many universities have formal budget review committees with dean and faculty representation. MSU does not.
 - New budget investments are not widely publicized or known.
- Lack of clear decision-making framework and incentive structure
 - No clearly published criteria for how new budget allocations are made.
 - Outside of OCCI and RBI programs, no direct budget increases or reductions based upon a unit's enrollment, research productivity, etc.; can result in lack of investment in growing areas and over-investment in shrinking areas.
 - Discourages innovation since the majority of the budget is stable year-to-year without incentives to innovate.
- More limited ability to respond quickly to changing external factors
- 1% PERF
 - Creates a "spread even mentality" – by taking 1% from units each year, there is pressure on senior executives to re-distribute new allocations across every unit, otherwise they are de-facto cutting units year after year.
 - Difficult for new units to build their initial program when they are immediately cut 1% each year from initial "bare bones" budgets.
- Lack of comprehensive reviews of expenses and service assumptions
 - When services are provided centrally and budgets are generally stable, there is a lack of incentive to comprehensively review those services. No one turns down a "free" good if it is centrally paid for, but nothing is truly "free," there is an opportunity cost for what else those resources could have gone to.

PART 2 (October 2020)

This write-up draws heavily from:

Education Advisory Board's (EAB) White Paper: *Aligning the Budget Model to Strategic Goals* (Business Affairs Forum, 2016)

"BIG" DECISIONS

1. **FINANCIAL ACCOUNTABILITY:** How do we create Financial Accountability for both Revenues and Costs (included are some examples of issues that will need to be addressed)?
 - a. **REVENUES:**
 - i. How do we incentivize Program Growth through Revenue Allocation?
 - ii. How do we ensure that programs align with institutional priorities?
 - iii. How do we ensure meaningful collaboration across the university and avoiding duplication of programs and efforts?
 - b. **COSTS:**
 - i. How do we drive unit-level Cost Containment?
 - ii. How do we ensure the existence and size of programs are evaluated against established criteria and decisions made accordingly?
 - iii. How do we ensure efficiency in delivery of programs and support services?
2. **MISSION AND VISION:** How do we preserve Mission-Critical Activities?
3. **STRATEGIC GOALS:** How do we incorporate Institutional Strategic Goals in the decision-making?

MSU'S STRATEGIC PRIORITIES/GOALS ... (need to get agreement on; President/Provost's voices, etc.)

1. Diversity, Equity, Inclusion
2. Student Success
3. Student Access – Scholarship Fund
4. Top 100 Research Universities
5. Land-Grant Mission

BUDGET MODEL'S OPERATIONAL ISSUES – Decisions will need to be made about:

1. What's covered **CENTRALLY**?
 - a. Necessary activities: Internal Audit, Compliance, General Counsel
 - b. Based on Strategic Choice: university-wide DEI initiatives, outreach
2. What's covered by **USER FEES**?
 - a. What are baseline services (e.g., central IT/security)?
 - b. What are additive services (e.g., specialized technology, software)?
 - c. What factors and/or combination of factors determines fees for different services (e.g., SCH, number of majors, number of faculty, square footage occupied)

- i. Are separate formulas utilized to determine fees for each service (can number in the hundreds) or is a simpler set of a few universal formulas applied across most services areas? Do centralized services need competitive approved rates (e.g., similar to the process to establish a testing center that offers services to entities outside MSU)? Different universities have taken different approaches. No one-size fits all approach.
- ii. Illustrative examples of how IT is funded in RCM models:

Central Michigan

- Enterprise IT services part of a larger RCM tax without formulas for each specific administrative service provided.

Iowa State

- Formula that equally weights units' percent share of faculty FTE, staff FTE, undergraduate headcount, graduate headcount, and professional headcount.

Minnesota

- Costs allocated based on a proportionate share of total employee and student headcount.

Temple

- Formula with 40% weight for undergrad credit hours, 5% weight for grad credit hours, 5% weight for professional credit hours, 25% weight for faculty FTE, 25% weight for staff FTE.

Virginia

- Formula with 75% weight for salaried employees FTE and 25% weight for regular session students FTE.

WHAT WILL BE NEEDED FOR SUCCESS?

- Clear statement of Values and priorities
- Strong executive leadership and direction
- Sufficient IT, data and analytical capabilities

The model proposed in the EAB report indicate that a successful process has two steps:

1. Core budget model, priorities and values are clearly articulated by a small group of senior leaders that include the President, Provost, CFO and a faculty member knowledgeable regarding financial models. In addition, we recommend including an experienced Dean to this group to provide historical context from the college-level.
2. To gain buy-in from a wider group, a follow-on engagement that seeks answers to the thirteen decision points (see below) is conducted. This includes: Senior administrators, budget and finance staff, budget officers, faculty senate representative and representative Deans (e.g., financially savviest dean, dean of largest college and most skeptical dean)

WHAT DOES SUCCESS LOOK LIKE?

- Need to have clear goals and metrics

EAB's 13 Decision Points (“Aligning the Budget Models to Strategic Goals”):

1. FINANCIAL ACCOUNTABILITY

a. REVENUES: How do we incentivize Program Growth through Revenue Allocation?

- **Decision Point 1:** What percentage of tuition revenue should we allocate through an activity-based formula?
- **Decision Point 2:** How should we weight SCH versus majors in tuition allocation?
- **Decision Point 3:** Should we use enrollment smoothing to allocate tuition revenue?
- **Decision Point 4:** Should we allocate any forms of differential tuition revenue?
- **Decision Point 5:** Should we allocate unrestricted state appropriations?

b. COSTS: How do we drive unit-level Cost Containment?

- **Decision Point 6:** How do we allocate overhead costs to maximize incentives and maintain buy-in?
- **Decision Point 7:** How do we regulate unit spending to protect institution finances and strategic goals?

2. MISSION-CRITICAL ACTIVITIES

- **Decision Point 8:** How do we ensure sufficient central reserves for strategic investments?
- **Decision Point 9:** How overt or hidden should subvention be?
- **Decision Point 10:** How do we motivate units receiving subvention to still make financial improvement?

3. STRATEGIC GOALS

- **Decision Point 11:** How do we incent student success goals through the budget model?
- **Decision Point 12:** How do we incent research growth through the budget model?
- **Decision Point 13:** How do we incent targeted new program launches through the budget model?

APPENDIX D

Transition and Implementation

(Chris Long and Richard Saouma); October 20, 2020

Executive Summary:

- Legacy funding models previously enabled post-secondary institutions to effectively execute against their missions
- Legacy funding assumptions—however—are unravelling at an ever-increasing rate, requiring post-secondary institutions to prioritize resources
- Effective resource prioritization requires:
 - Codification and communication of university core values/priorities
 - Decentralized value-aligned strategic decision making (to best leverage real-time, ground-level information and context)
 - Infrastructure to preserve core priorities amongst self-interested colleges
- Decentralized budgeting models provide potential frameworks towards (more) effective resource allocation (relative to incremental paradigms)
- Leading post-secondary institutions are adopting hybrid models that harness the benefits of centralized and de-centralized budgeting models while minimizing the limitations of each (as opposed to a pure-RCM paradigm)
- Any budgetary pivot requires executive leadership to align on a limited set of hard tradeoffs, the long list of secondary and tertiary supporting decisions proffer a strategic vehicle with which to engage broader university leadership towards the ultimate goal of securing buy-in.

Principles:

Any budgeting paradigm that buttresses an organization’s priorities must:

1. Balance the resources available for central investment with unit-level financial accountability
2. Incentivize strategically consistent decision making *within* units and collaboration *between* units
3. Align stakeholders to financial realities—enabling unit leadership to influence their unit’s destiny (*responsibility centers*)
4. Support land-grant, mission-critical programs that may not be financially sustainable
5. Insulate units from fiscal shocks while rapidly rewarding strategically-aligned behaviors
6. Foster a culture of trust and transparency across the institution

Tradeoff 1: Adoption Timing

Near-term vs delayed Adoption?

Advantages

- Leverage the current crises to justify the need for (temporarily) disruptive change
- Current financial strain affords opportunities to “stress-test” and ameliorate new budgeting paradigm, reducing future value at risk

Risks

- Current financial strain amplifies early subversion needs—eroding university trust in new system while (potentially) requiring more working capital than otherwise

Tradeoff 2: Adoption Speed

Staggered Piecemeal vs Gradual Adoption
Staggered (units adopt overnight, albeit at different times)
<ul style="list-style-type: none">• Affords leadership the opportunity to cherry-pick well-positioned units early on, leading to early wins, penultimately growing confidence in the new paradigm across the organization, and highlighting best-practices• Prevents units from fully internalizing the benefits of decentralized budgeting; e.g. poor cross-college collaboration incentives and potentially inaccurate costs given that the rest of the campus operates on a different set of books
Gradual (all units adopt over a prolonged period of time)
<ul style="list-style-type: none">• For instance: allocating costs and revenues based on rolling average enrollments• Allows units to familiarize themselves with new paradigm before subjecting them to significant risk• Enables senior leadership to catch any problems before they become existential

Tradeoff 3: Adoption Rate

Rapid Adoption (24-months)
Advantages
<ul style="list-style-type: none">• Potentially delivers earlier results• Signals leadership's commitment to change• Makes transition/planning team participation more appealing to university faculty/staff
Risks
<ul style="list-style-type: none">• Unanticipated loopholes (e.g. invites gaming)• Significant short-term disruption• Inadequate institutional infrastructure and unit-level budgeting acumen to motivate behavioral change
Incremental Adoption (48-months)
Advantages
<ul style="list-style-type: none">• Greater opportunities for buy-in and institutional on-boarding (lowering risk of unsustainable subversion)• Affords opportunities for sandboxed implementations allowing units to safely practice responsibility accounting with limited risk• Better understanding of revenue and cost drivers (fewer indirect overhead "taxes")• Tighter coupling with MSU strategic vision
Risks
<ul style="list-style-type: none">• Codify non-strategic policies/practice• Opens itself to obstruction tactics delaying change• Potentially signals a lack of commitment• Greater risk of perceived—and real—favoritism

Implementation:

Implementation necessitates a dedicated working committee consisting of OPB members, Senior Leadership, and financially-savvy faculty to:

- Conduct pre-planning:
 - Undertake unit interviews
 - Surface appropriate set of overhead pools and associated drivers
 - Settle the limited set of pivotal decisions
 - Develop policy around non-tuition revenue, subversion/subsidy policies
 - Articulate table-stakes, strategic priorities, and (most importantly) non-priorities (e.g. prioritizing growth **or** extant program experience, unit financial stability **or** innovation incentives, etc.)—put simply, define success
 - Adjudicate whether revenue trickles up from or down to units
- Prepare timelines for: unit leadership involvement (optimizing buy-in), communication, and adoption (with contingency plans)

Example: A potential RCM-based hybrid timeline

The following is an *incremental* roll-out with an aggressive staggering:

- Thoughtful pre-planning (6-12 months)
 - Review of historical finance variability, work with deans to separate historical shocks (e.g. new programs, competitive entry, etc.) from future expected variation, codify President-level strategic priorities for the university.
- Spool-up (18-months)
 - Shadow implementations (maintain second set of books for units to learn how their actions influence outcomes under new system), prepare ERP system to accommodate new coding, finalize subvention and subsidy policies.
- Staggered roll-out (12-months)
 - Activate new model in select units, prioritizing (likely) early wins in addition to at least one skeptical dean.
- Minor re-calibration and Review (1-year post MSU-wide launch)
 - Consider feedback, correct egregious errors/omissions, hold the course (i.e. resist addressing disgruntled units) to allow for thorough evaluation
- Major recalibration and Review (2-years post MSU-wide launch)
 - Revisit prior feedback, determine if adjustments are necessary

Challenges:

RCM-based hybrid models afford many choices:

- Assigning resources programmatically versus at the provost's discretion (e.g. share of tuition returned to colleges, share of non-academic revenues pre-destined for college disbursement versus provost strategic fund)
- Setting drivers to temper the need for cross-college coordination versus incentivizing innovation (e.g. share of tuition revenue allocated to host college versus credit hour allocation)
- Prioritizing responsiveness versus enrollment risk (e.g. determining whether allocations are based on estimates, 1- or 2-year moving average levels)
- Establishing governance to consider adjudicate deviations from RCM: both to subsidize long-term strategic priorities to provide “loans” to units experiencing adverse shocks, start-up funding for new programs

Next Steps:

- Establish university-level committee (ahead of any implementation conversations) to define success, flesh-out preliminary budget models options, and determine what information is needed to converge on a particular paradigm
- Outline roadmap based on implementation strategy (see “Implementation” above)
- Specify detailed 24-month time-line/cadence
 - Map-out committees with concrete commitments/charges, specify timelines, and articulate reporting schedules between provost, executive committee, and various sub-committees
- Align with colleges and units on public announcement, communication/education campaign, and community responsibilities
- Evaluate cadence every 6-months, adjust if necessary

APPENDIX E

Select Papers and Reports

1. **RCM Models Overview – Hanover Research Council (2008)** This report documents the different versions of RCM adopted at major public universities. While the document is old (2008), it provides a nice overview of RCM models. Based on approaches applied at Indiana University-Purdue University, Indianapolis (IUPUI), Iowa State University, University of Minnesota and University of Michigan, the article provides an in-depth review of the financial and programmatic impacts of RCM and strategies universities have used to counteract the drawbacks of RCM. Overall, the case studies suggest that RCM has a positive effect.
2. **Budget Allocation Report – University of Minnesota** This document provides a historic perspective about UMinn’s decision to go to a RCM model and the transitional steps it took to get to the current state.
3. **Effects of RCM on Revenues – Jaquette et al. (2018)** This is an academic paper that explores the impact of RCM adoption at four public universities on their tuition revenues.
4. **RCB and RCM at the University of Toronto – Lang (2002)** This paper discusses Toronto’s experience with both Responsibility Centered Budget and Responsibility Centered Management. Author concludes the experience has been mixed.
5. **25 Years of Experience with RCM – Strauss & Curry (2002)** This paper discusses how RCM can be the mechanism used to couple authority with responsibility for performance.
6. **Budgeting Models in Institutions – Kaufman & Covaleski (2019)** This field study discusses the budget model changes at the University of Wisconsin-Madison.
7. **Aligning the Budget Model to Strategic Goals: Executive-Level Decision Points to Ensure Impact on Cost, Growth, and Strategy.** Business Affairs Forum: Education Advisory Board, 2016.