

# **New Academic Administrators August 2017**

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University Budget Officer  
Office of Planning and Budgets  
Michigan State University

To begin: from the Innovative university

**...the standard model has become unsustainable. To avoid disruptions, institutions of higher education must develop strategies that transcend imitation.**

Clayton M. Christensen, Henry J. Eyring,  
The Innovative University

# Environmental Scan - National

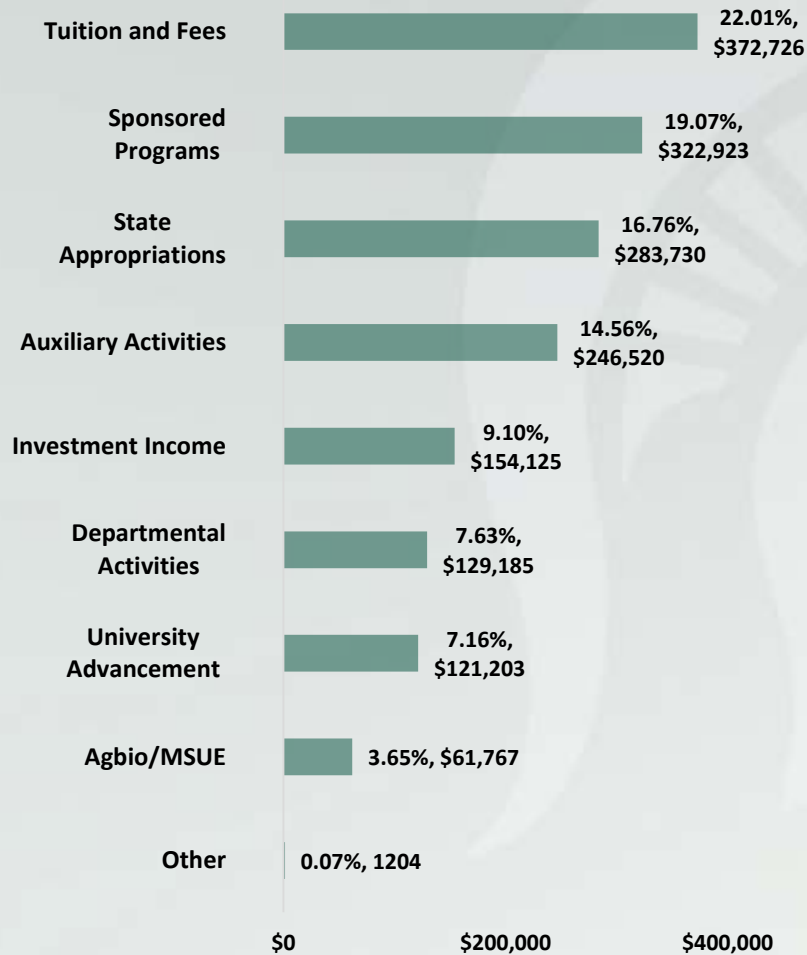
Monitoring	Most Recent Value	Trend (5 year)	Forecast (5 Year)	Commentary
High school completions (National)	2,868,000 (FY14 NCES)	-10%	~5%	Monitor demographic and geographic distribution; program demand
College going rates – 4 year (National)	43.7% (FY14 NCES)	5.56%	5%-8% (2-3 pp's)	Increasing demand for 4 year degree; offsets some demographic changes; differential demand for program/locations/experience
International Enrollment	1,043,839 (FY16 Open Doors)	44%	TBD 7% Avg. Annual	Future uncertainty; MSU population; increasing competition
Federal Discretionary Spending	\$531B (FY15 OMB)	-3.5%	5% Subject to new administration	MSU ability to improve competitive position in face of potentially shrinking resource environment and competing priorities – Potential ACA repeal and follow on impact unknown
Proportion of Students with Debt (National)	68% (FY15 Proj. on Student Debt)	2%	TBD Rising nationally, and in state	Sustainability of personal college financing model – MSU proportion down 13 percentage points over 10 years

# Environmental Scan - State

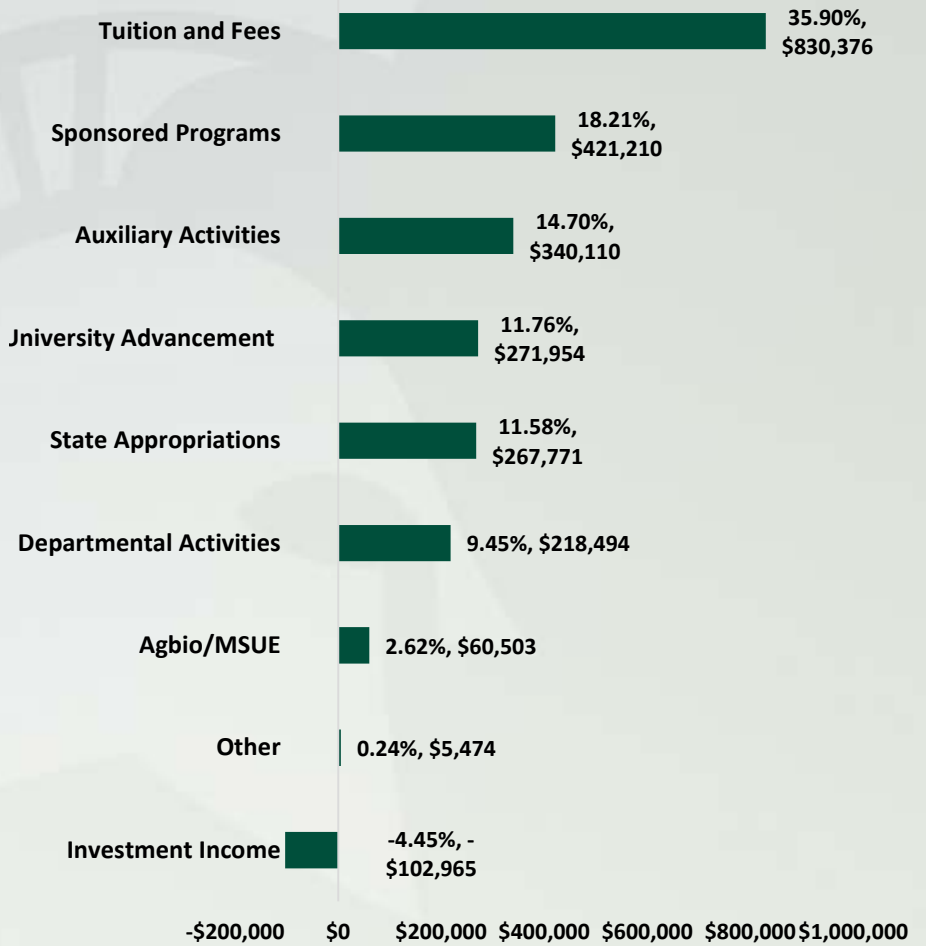
Monitoring	Most Recent Value	Trend (5 year)	Forecast (5 year)	Commentary
State of Michigan Jobs	4.3M (Q3 FY16, RSQE)	7.5%	~1-2%/yr	State recovered over 70% of job losses experienced 2000-2009
General Fund/General Purpose Revenue Growth	(2.1)% (2016, RSQE)	N.A.	4% 2017 4% 2018	Recovery of business tax revenue as MBT credits exhausted – competing priorities for incremental resources
Michigan Personal Income	3.5% (2016, RSQE)	N.A.	3.7% 2017 4.3% 2018	Continued job growth and non-wage income outperformance
Domestic Light Vehicle Market	17.4M (2016 RSQE)	~20%	17.3M 2017 17.2M 2018	Forecast roughly flat, Detroit 3 market share grows marginally
High School Completions (Michigan)	100,000 (FY16, NCES)	(-9)%	(-5)%	National and regional growth, improving MI economy may stem loss

# MSU All Funds Revenue

## 2006 All Funds Revenue



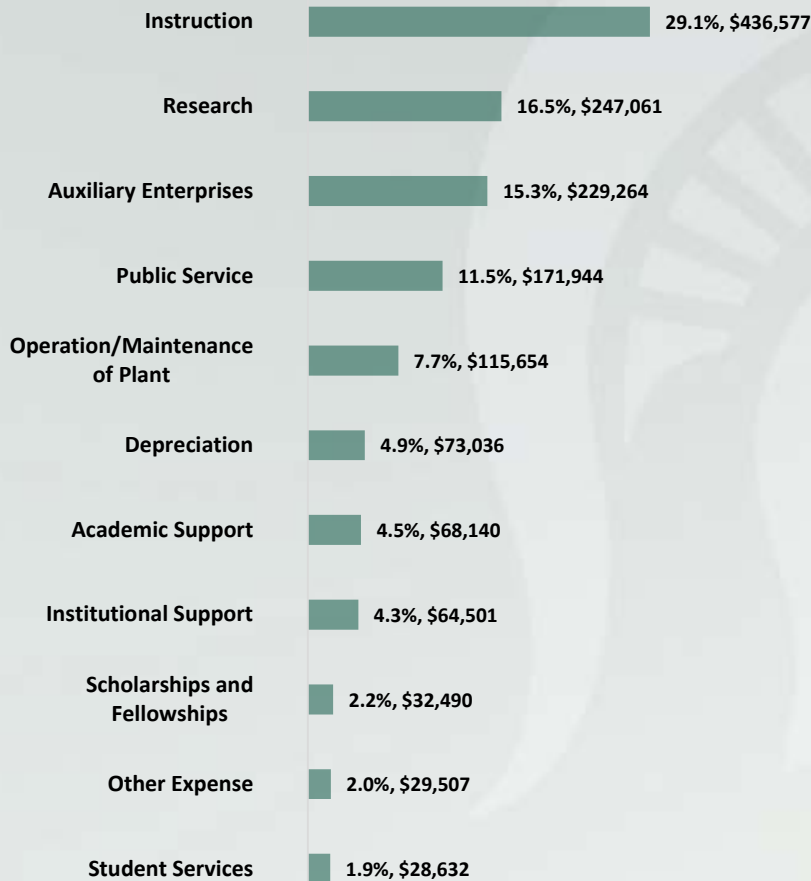
## 2016 All Funds Revenue



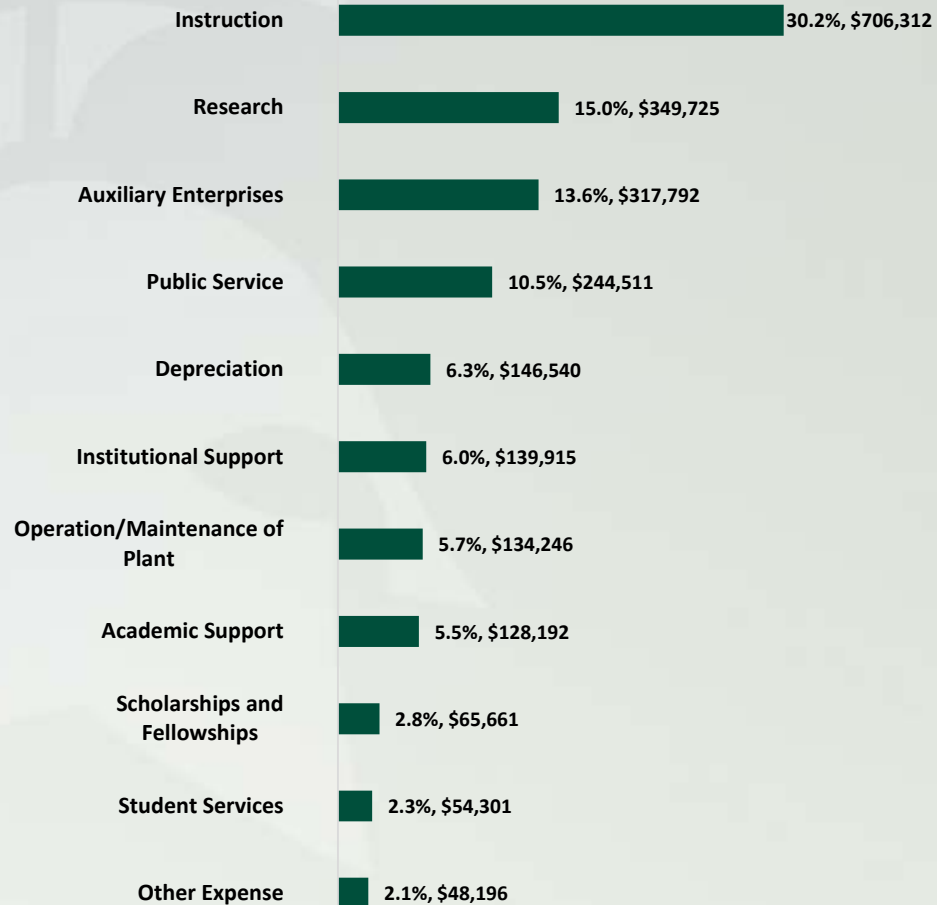
Fluctuations between annual revenue and expense totals vary with investment performance and State appropriations outcomes

# MSU All Funds Expense

## 2006 All Funds Expenditures

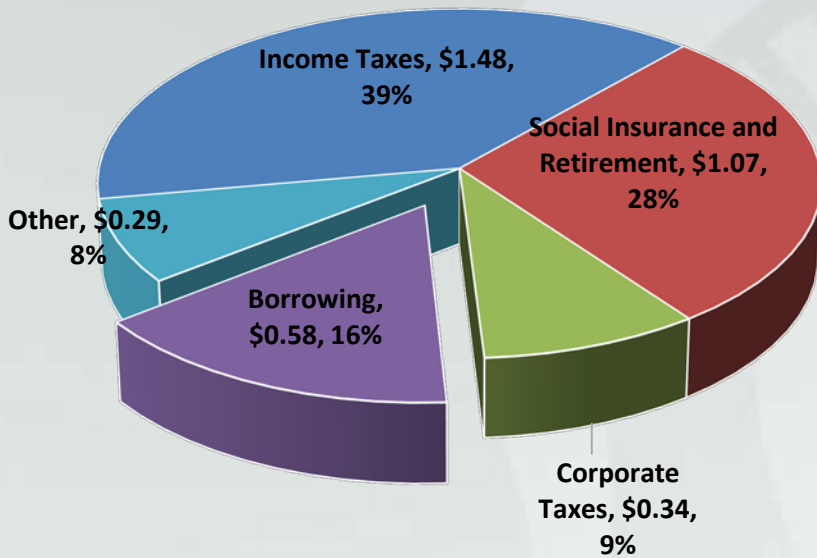


## 2016 All Funds Expenditures

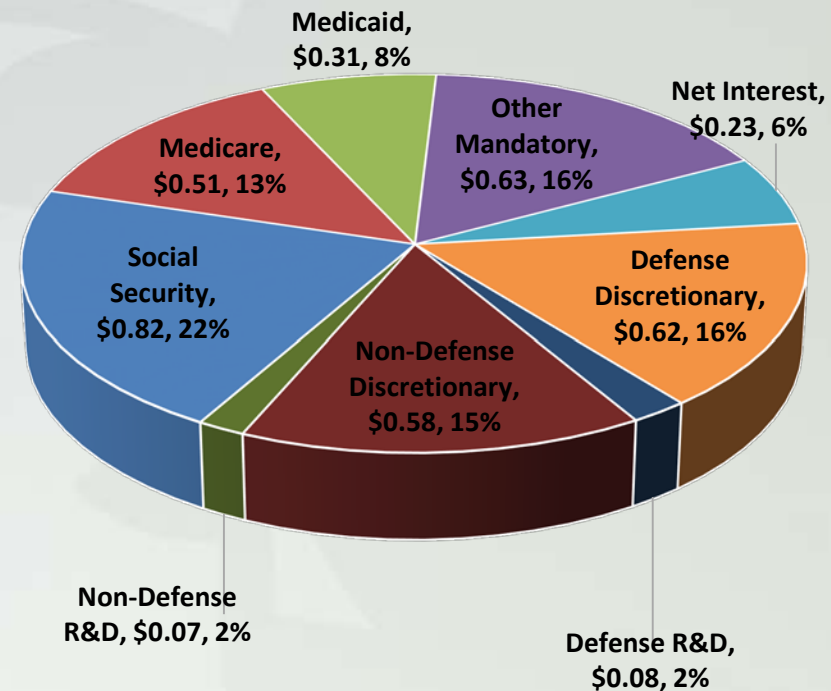


# Federal Budget Sources and Uses

Total Federal Budget Sources: \$3.8T



Total Federal Budget Uses: \$3.8T



# Big Ten Sponsored R&D Expenditures

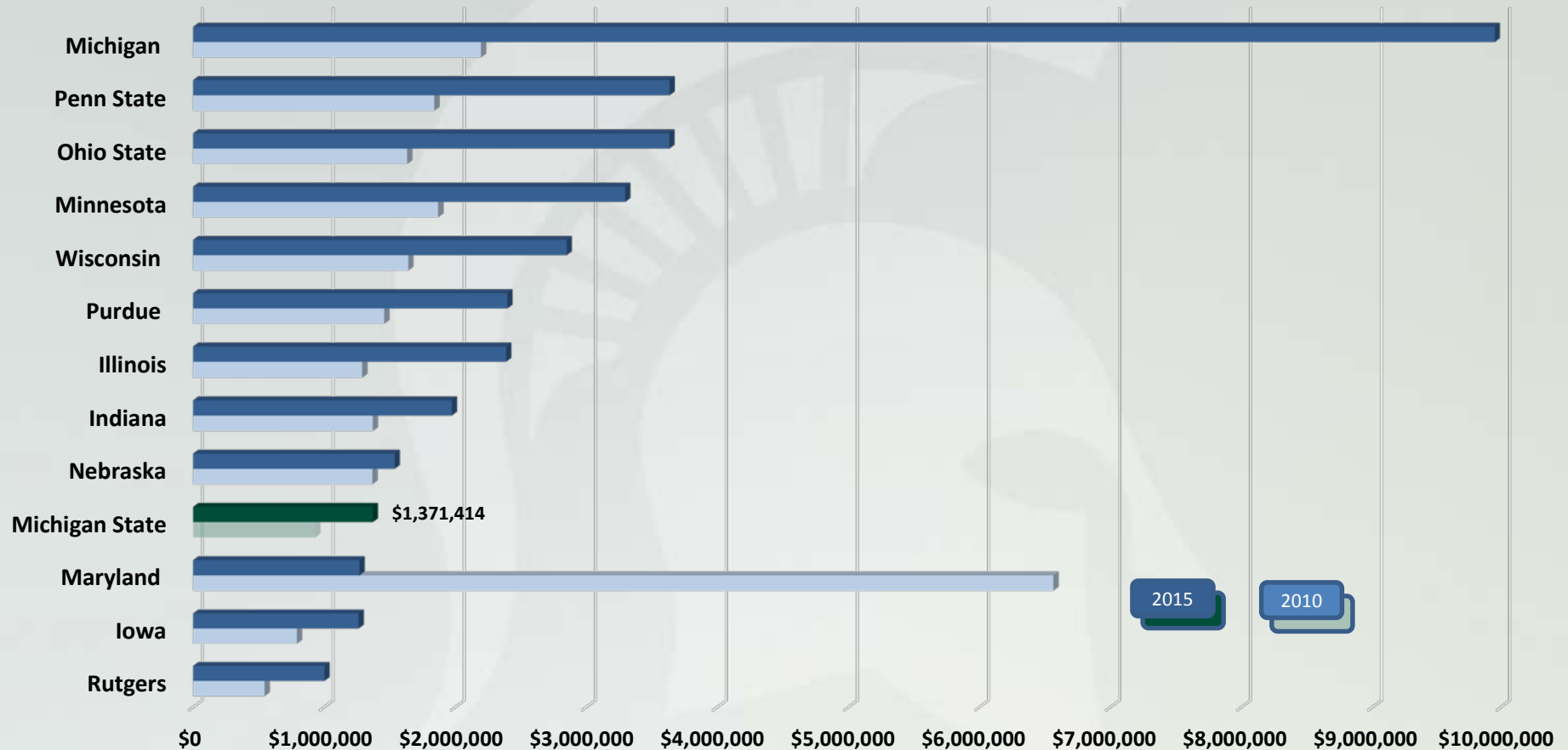
- MSU ranks 4<sup>th</sup> in the Big Ten for 3-year change in R&D expenditures
- MSU ranks 38<sup>th</sup> nationally and 10<sup>th</sup> in the Big Ten for R&D expenditures
- MSU ranks 35<sup>th</sup> nationally for Federal R&D expenditures, an improvement of 5 places over 3 years

	2015			2012			Change
	Expenditure	National Rank	Big Ten Rank	Expenditure	National Rank	Big Ten Rank	%
U. Michigan, Ann Arbor	1,369,278	2	1	1,322,711	2	1	4%
U. Wisconsin-Madison	1,069,077	6	2	1,169,779	3	2	-9%
U. Minnesota, Twin Cities	880,618	14	3	826,173	14	3	7%
Ohio State U.	817,881	20	4	766,513	19	5	7%
Pennsylvania State U.	791,031	22	5	797,679	18	4	-1%
Northwestern U.	656,167	29	6	631,078	28	6	4%
U. Illinois, UC	639,817	32	7	583,754	33	8	10%
Rutgers, State U.	628,613	33	8	434,901	45	12	45%
Purdue U.	558,611	37	9	602,501	32	7	-7%
<b>Michigan State U.</b>	<b>558,248</b>	<b>38</b>	<b>10</b>	<b>507,061</b>	<b>36</b>	<b>9</b>	<b>10%</b>
U. Maryland, College Park	505,699	43	11	502,406	37	10	1%
Indiana U.	485,076	46	12	184,486	105	14	163%
U. Iowa	443,218	49	13	446,429	42	11	-1%
U. Nebraska, Lincoln	284,438	79	14	253,320	83	13	12%

Source: NSF HERD survey, 2015



# Big Ten Endowment Comparison

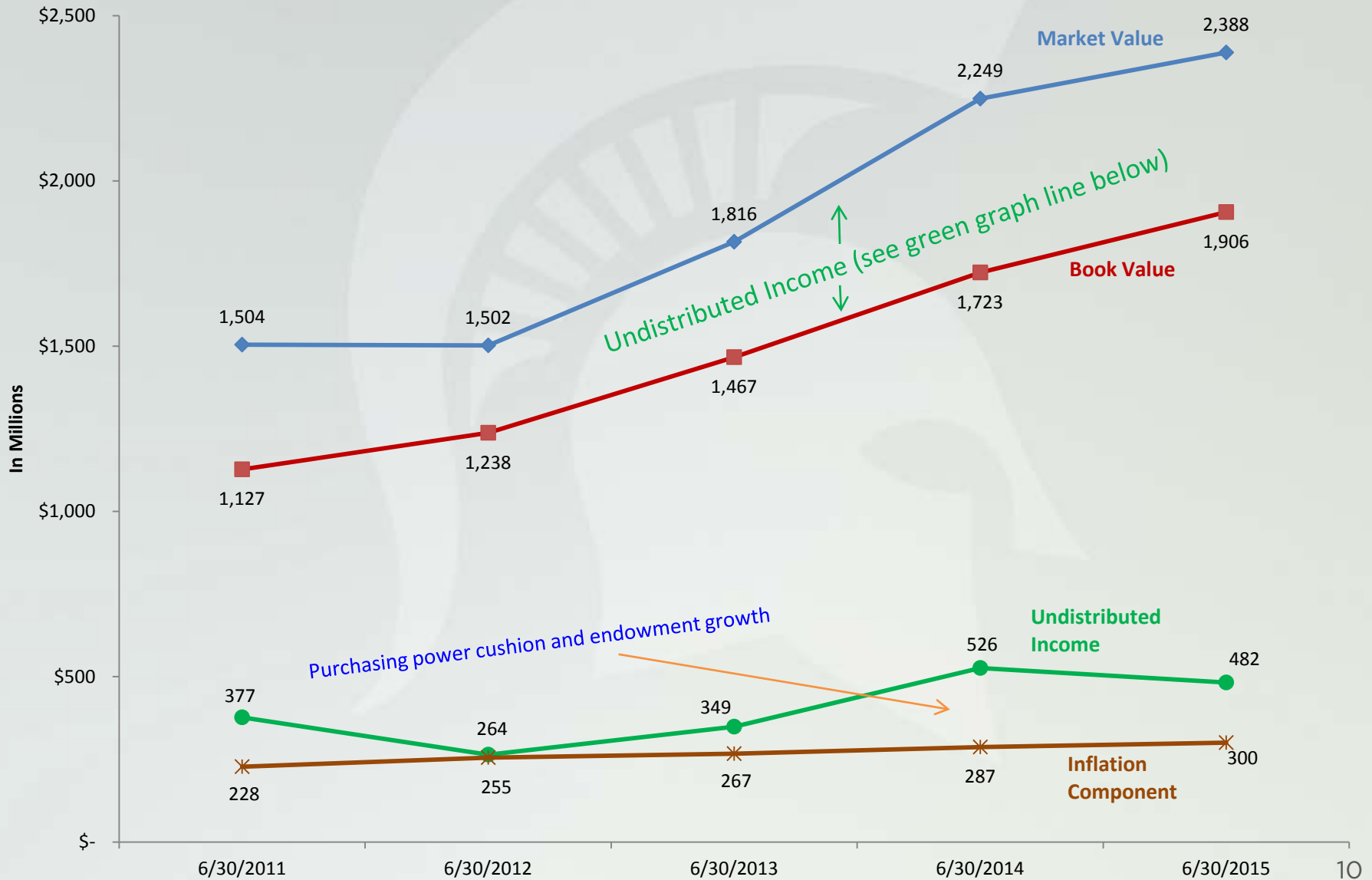


Includes \$985M traditional endowment and \$384M MSU Foundation endowment. Does not include Endowment Trust investments (\$985M)

SOURCE: Council for Aid to Education reports - 2014

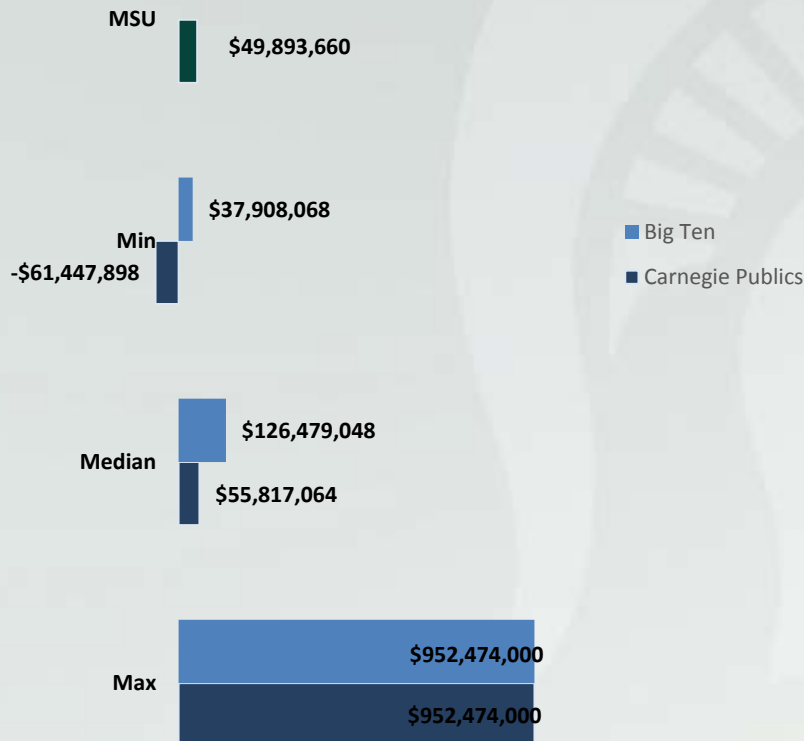
Institutions with on campus hospitals, such as U of M, include patient donor support in the above calculations

# Big Ten Endowment Performance

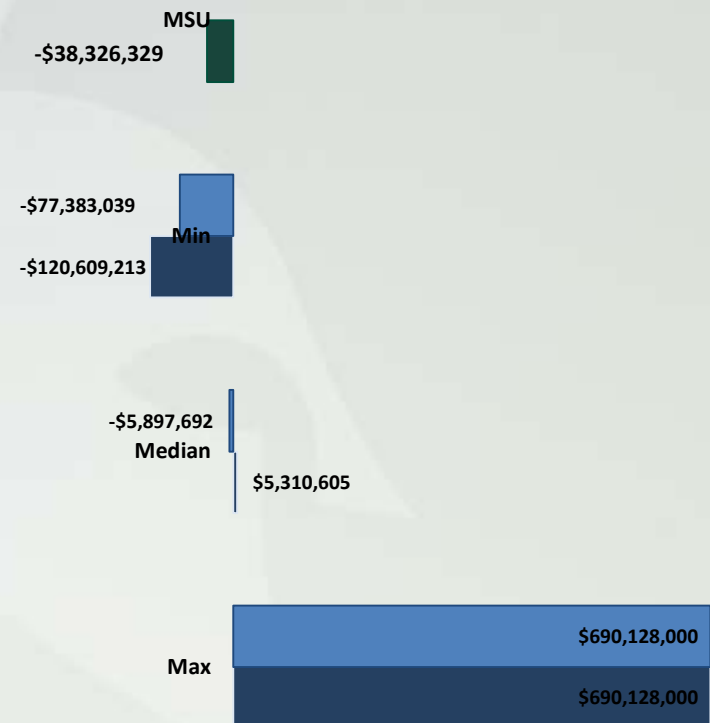


# MSU Financial Data Change in Expenses & Debt

## Growth in Expenses



## Change in Outstanding Debt



# Key Metrics

## Illustrative Overview

### Departmental Overview

DEPT Name	Fall Undergrads	Masters Students - Fall	Doctoral Students - Fall	General Fund Budget/Fiscal Yr Admin SCH	Admin Based SCH Per Ranked Fac FTE	Tuition Revenue Instructional Cost	Total Grant 3Yr Average PI Based FY	Total Grant PI Based/Ranked Fac All Funds FTE
Sample	1,298	57	42	\$272	687.4	179%	\$7,515,512	\$138,309

### AAU Comparison (Academic Analytics)

DEPT Name	N of Faculty	N of National Academy Members	Dept in mult taxon	Taxonomy	FSPI Percentile	Rank of FSPI score	N of depts in discipline at AAU	Percentile on Journal pubs per faculty	Percentile on Citations per faculty	Percentile on Citations per pub	Percentile on Grants per faculty	Percentile on Grant dollars per faculty	Percentile on Awards per faculty
Sample	53	0		Sample	59.02	26	60	44.26	31.15	24.59	27.87	22.95	26.23

### Persistence and Graduation

Dept Code and Name	N in Cohort	PERSIST 1st FALL	Rank	PERSIST 2nd FALL	Rank	PERSIST 3rd FALL	Rank	GRADUATED by 4th FALL	Rank	GRADUATED by 5th FALL	Rank	GRADUATED by 6th FALL	Rank
Sample	238	88.2	56	80.7	58	79.8	53	54.6	32	70.6	50	73.1	54

# Academic Analytics Metrics for Departmental Comparisons

Grant metrics	Percentile on Grants per faculty
	Percentile on Grant dollars per faculty
	Percentile on Percent of faculty with grant
	Percentile on Dollars per grant

Publication metrics	Percentile on Journal pubs per faculty
	Percentile on Percent faculty with journal pub

Citation metrics	Percentile on Citations per faculty
	Percentile on Citations per pub
	Percentile on Percent of faculty with citation
	Percentile on percent authors with a citation

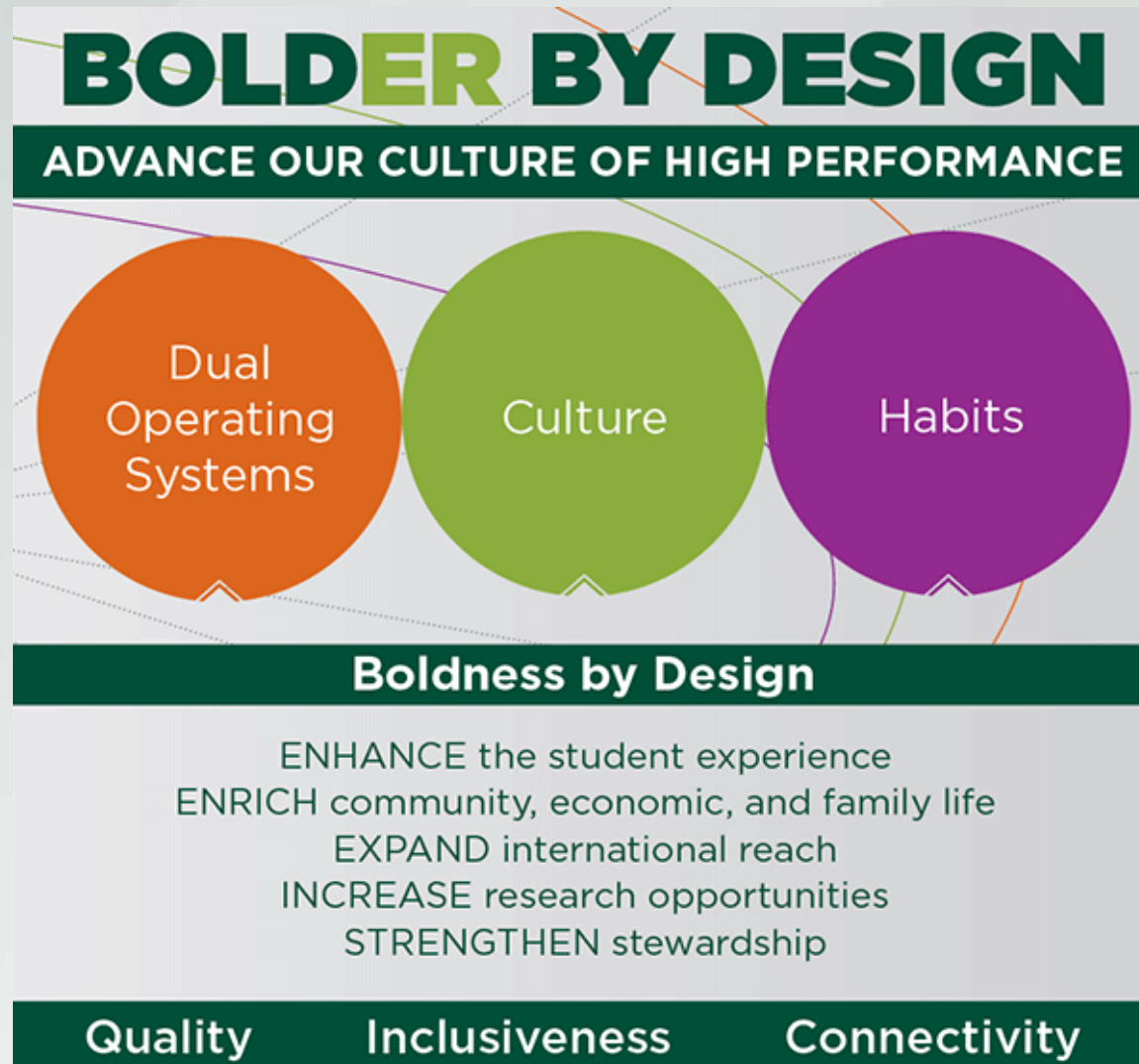
Book metrics	Percentile on Books per faculty
	Percentile on percent faculty with book

Conference metrics	Percentile on conference proceedings per faculty
	Percentile on percent of faculty with a conference proceeding

Award metrics	Percentile on awards per faculty
	Percentile on Percent of faculty with award

# MSU Long Term Planning

## Spartans Will.



# Provost Priorities

**Provide support for faculty resulting in greater scholarly productivity and instructional effectiveness**

Recruiting and retaining a diverse faculty

Creating a more supportive work environment - WorkLife Office

Creating a more positive campus climate - Healthy Campus Initiative

Creating a more positive campus climate - Policy changes and education

Continue to emphasize the University's elevating expectations

**Pursue multiple strategies for expanding, enhancing, elevating scholarship**

Increase competitiveness in key areas - Global Impact Initiative

Build academic infrastructure to support emerging work - new academic departments

Build physical infrastructure to support emerging work - Bio Engineering, Grand Rapids, Business

Expand research infrastructure that supports emerging work

Continue to identify and hold to metrics for improvement

**Pursue multiple strategies for enhancing student success: retention, graduation, achievement**

Use analytics to understand the teaching and learning process - The University Innovation Alliance

Use technology to enhance teaching and learning - Hub for Innovation in Learning and Technology

Create new models for curriculum and instruction

Use the Higher Learning Commission accreditation process to encourage progress around learning outcomes

Continue to look at institutional outcomes and goals

# MSU Budget Process

- **Involves engagement of campus stakeholder groups**
  - **Board of Trustees**
  - **Academic governance**
  - **ASMSU**
  - **COGS**
  - **University administrators**
  - **Collective bargaining groups**
  - **RHA**
  - **State policy makers**
- **Refines multi-year planning focused on improving the value proposition for stakeholder**



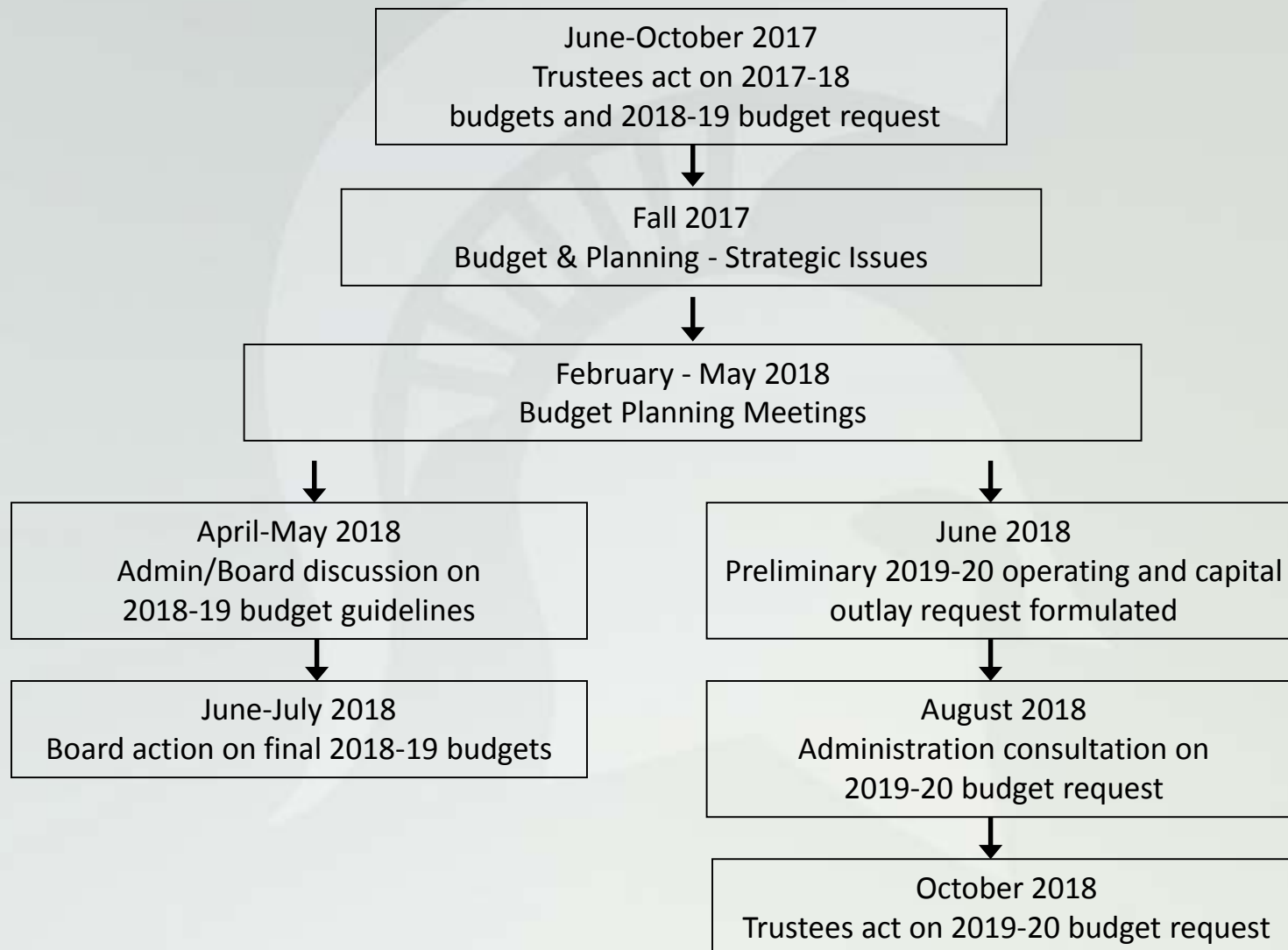
# MSU Financial Framework

Item	Funding	Timing	Notes
Global Impact/ Academic Excellence	\$6.1M \$7M	FY17 FY20	Unfunded need of \$7-\$21M over ten years to advance status as top-100 institution; increasing competition for federal funds
Technology	\$13M - \$23M R	FY17-FY21	IT Stabilization
	\$45M Data Center	FY17	Data Center
	\$75M-\$150M other NR	Ongoing	Strategic Technology (NR)– Student Success, Student Information, Research, Analytics, EMR, Network/WiFi
Research/Critical Space Infrastructure	\$17.5M-\$70M \$100M-\$140M \$10M-\$20M	When authorized FY17-FY20 Variable	STEM teaching and learning building Interdisciplinary science facilities Research infrastructure
Power and Utilities	\$80M-\$120M	FY18-FY24	Address overall obsolescence of Simon Plant, Augment E.L. waste water treatment facility, provided through utility allocations
Deferred Maintenance- Just-in-Time	\$300-\$500M NR	FY17-FY27	5 year projection includes HVAC replacements, need to prioritize projects and define scope
Financial Aid	\$25M R	Campaign conclusion	Adjust proportion of donor versus institutional aid through increasing donor support
Health Care	To be determined	TBD	Monitor ACA impact, limit institutional cost growth to 5%

# Planning and Financial Process



# Big Ten Endowment Comparison



# Values-Driven Data-Oriented Planning

- Continuing discussion: Board of Trustees, President, Provost, Deans, Governance, Community
- Fall--Strategic Planning
  - Major challenges/opportunities (e.g., intellectual, educational, research, outreach) facing the unit
  - Goals, outcomes or benefits anticipated, and contribution to **BbD**?
  - Supports sustainable programmatic visions that are dynamic and responsive
  - Identify requests that align with priorities, build unique advantage, and add value
  - Build internal and external alliances
  - Use metrics to demonstrate results and accountability with clear outcomes and impacts
  - Investment from multiple sources; both internal and central
  - Reward high performing units and address non-performing and lower-priority areas

# Values-Driven Data-Oriented Planning

- **Spring- -Internal Budget Issues**
  - Solidify programmatic plans including reductions
  - Problem/opportunity addressed (current baseline metrics)
  - What will be done
  - Accountability: outcomes and milestones related to college and **BbD** metrics
  - Continue integration of college and university priorities
  - Continue progress on Boldness by Design initiatives and links requests with strategic directions outlined in the fall
  - State economic condition indicates a period of flat resource growth
  - Most investments come from reallocated funds from elsewhere in the institution
  - Seek multiple strategies for achieving goals

# Annual Planning & Budget Development

Separately Reviewed  
Items

Operating Units

<p><b>Formula based on budget proposal</b></p> <ul style="list-style-type: none"> <li>Salary increments</li> <li>Operating support</li> <li>1% reallocation</li> </ul> <p><b>Differential</b></p> <ul style="list-style-type: none"> <li>Program allocations</li> <li>Reductions</li> </ul>	<ul style="list-style-type: none"> <li>Financial aid</li> <li>Utilities</li> <li>Health care</li> <li>Other benefits</li> <li>Financial framework</li> </ul>
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# FY18 & FY19 Budget Planning

<b><u>Budget Item</u></b>	<b><u>2017-18 Current Proposal</u></b>	<b><u>2018-19 Illustrative Pro Forma</u></b>
State Appropriations	1.9%	2.0%
Tuition and Fees	2.8% Resident Lower Division 3.8% Resident Upper Division 4.0% Non-Resident Undergraduates 2.0% Resident Graduate Professional 0.0% Non-Resident Graduate Professional	Freeze FY19 resident freshmen tuition rate to incentivize Go Green Go 15 credit initiative, within the context of a 3.2% change in tuition & fee revenue
Total Tuition & Fee Revenue	\$976.9	\$1,014.4
Financial Aid	4.5%	4.5%
Graduate Assistants	2.0%	2.0%
Faculty Salaries	2.5%+0.5%*	2.5%+0.5%*
Utilities	-7.0%	0.0%
Health Care	5.0%**	5.0%**
<b><u>Financial Framework</u></b>		
Competitiveness	\$2.5	\$2.5
Technology	\$2.8	\$5.0
Performance Efficiency Reallocation	-1.0%	-1.0%
Base Budget Reduction	<u>-1.0%</u>	<u>-0.5%</u>
<b>Total</b>	<b>\$1,362.1</b>	<b>\$1,401.4</b>

\* Includes 2.5% general merit and 0.5% market pool administered centrally

\*\* Health care budget augmented by amounts previously committed to collective bargaining groups due to claims experience

# Budget Rates of Change

	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Base	2.5%	2.70%	2.69%	2.29%	1.99%
Financial aid	0.4%	0.40%	0.61%	0.89%	0.47%
Enrollment Growth	0.1%	0.14%	0.00%	0.00%	0.00%
Indirect Cost Pass-Through	0.0%	0.00%	0.00%	0.00%	0.23%
<b>Sub-Total</b>	<b>3.0%</b>	<b>3.2%</b>	<b>3.3%</b>	<b>3.2%</b>	<b>2.7%</b>
Financial Framework	0.2%	1.02%	0.65%	0.40%	0.76%
<b>Sub-Total</b>	<b>3.2%</b>	<b>4.3%</b>	<b>3.9%</b>	<b>3.6%</b>	<b>3.4%</b>
Revenue Based Initiative	0.8%	0.71%	0.73%	0.63%	0.46%
<b>Total</b>	<b>3.98%</b>	<b>4.97%</b>	<b>4.67%</b>	<b>4.21%</b>	<b>3.90%</b>



# Predictors of Long-Term Budgetary Success

- Consistency with MSU planning initiatives
- Reputation for administrative competence
- Ability to catalyze longer-term, wider impact initiatives
- Multi-disciplinary in nature
- History of programmatic success
- Willingness to commit internal matching funds
- Entrepreneurial talent
- Quantify objectives and results
- Development of long-term planning model that allows for identification of financial and operational issues

The imagining university works continuously at doing its best within its circumstances, exploiting the spaces available to it, and so even changing its circumstances in the process

Ronald Barnett  
Imagining the University

# Source for Information

[www.opb.msu.edu](http://www.opb.msu.edu)

## Additional Issues

Faculty Start-Ups

Technology Funding

Facility and Renovation Needs

## Attachments

Fall Planning Letter

Spring Budget Planning Letter

## Questions & Follow Up

Dave Byelich	AVP & Director	5-9271
Barbara Kranz	Facility Planning	3-5062
Mike Zeig	Long-Range Planning	5-5115
Brent Johnston	Budget	3-
5519		
Bethan Cantwell	Institutional Studies	5-9273