

TO: Board of Trustees

FROM: Kirsten M. Volpi
Executive Vice President/COO/CFO/Treasurer

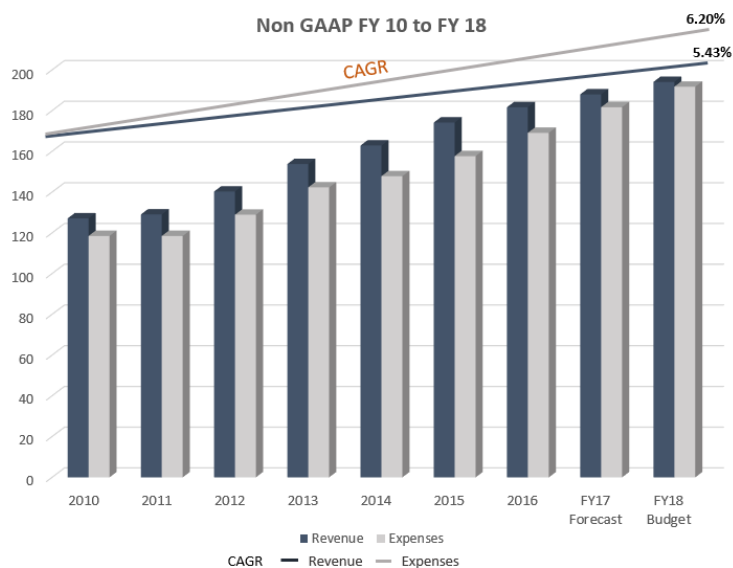
DATE: May 5, 2017

SUBJECT: Fiscal Year 2018 Budget

Outlook

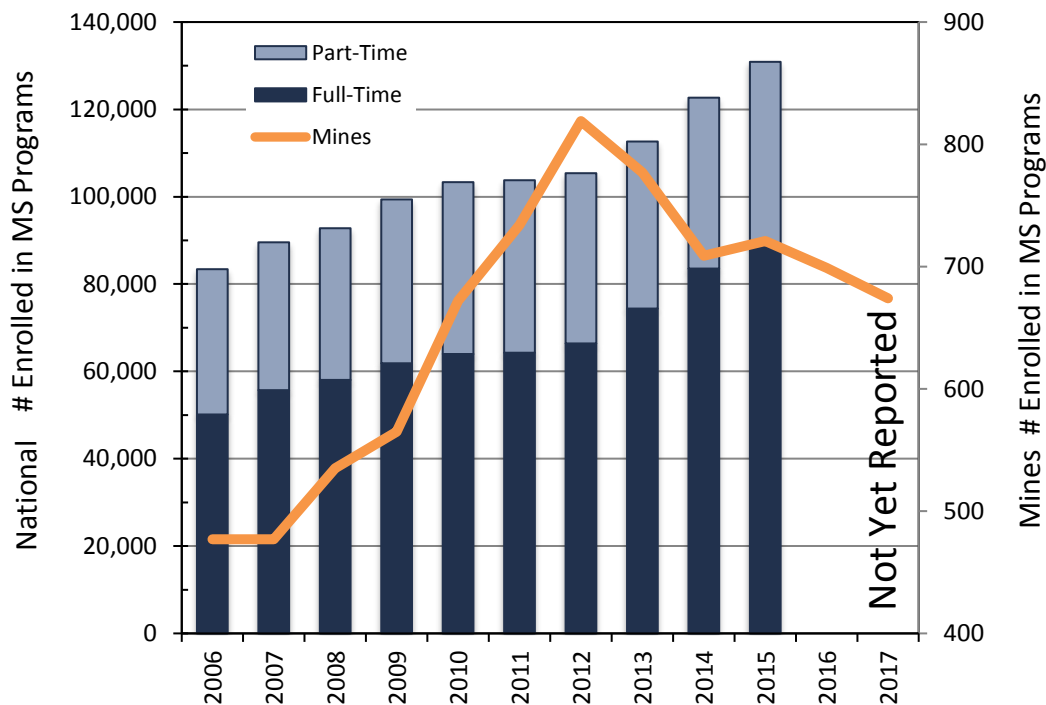
As we look to the fiscal year 2018 budget (and beyond), we (among many universities across the country) find ourselves at an inflection point; a crossroads where the limits of our traditional educational and economic model is running up against both our practical and aspirational goals. It is vital that we proactively position ourselves for a future in a highly competitive higher-education market. The key will be striking a balance between financial sustainability and our institutional aspirations while allowing us to produce additional revenue streams to support our core role and mission.

On a national basis, decreasing state and federal support, tuition increases, large student debt, low family income and the growing discount rate have and will likely continue to negatively impact the traditional higher education business model. At Mines, we have seen a slowing of revenue growth over the past few years primarily due to the flattening of our undergraduate enrollment, moderating of our tuition increases, a steady decline in our graduate enrollment, and a leveling off of other revenue (e.g., externally sponsored research). During this time, we have experienced operating expense growth that has been out pacing our operating revenue growth.



Complicating this picture, we have experienced significant difficulty in predicting enrollment and enrollment trends. The decline in the energy and commodities market that emerged several years ago, the geopolitical matters that surround our international prospective and current students, and our continued decline in graduate enrollment – that is counter to national trends – are placing significant uncertainty in our ability to predict future enrollment. Nationally, undergraduate enrollment is shifting to larger, more comprehensive universities as they pursue a business model that is based on enrollment growth. As a result, smaller to mid-sized universities are experiencing enrollment declines.

Compounding this trend, nationally universities are focusing on, and growing their STEM programming. Thus, we are seeing significant, and rising competition for our traditional, STEM-focused undergraduate students. For Fall 2016 and Fall 2017, we have had to admit a higher percentage of undergraduate students in order to achieve our incoming class. At the graduate level, we have seen enrollment declines over the past several years. These declines are most pronounced at the master’s degree level. Over the past decade, however, Masters enrollment nationally has increased by over 30%. With our STEM specialization, we should be keeping pace with if not out-performing the higher education market in attracting and retaining these students. We are not. Below is a chart reflecting national growth (prepared by ASEE) in M.S. compared to Mines growth.



With the downturn in the energy and commodities market, we have experienced a softening in our support from private industry; continuing education, research projects, and philanthropic support. While this year we are seeing research awards from the federal government rise, that future funding is uncertain. We have as a consequence of these changes seen significant changes in the diversity of the sources of external support for our research endeavors. Five years ago as much as 50% of our external research support was derived from our private industry collaborators. Today that percentage of support has dropped to 25%, leaving our research enterprise more-and-more dependent on highly uncertain federal funding.

At the state level, clouds are also forming on the horizon. For the past few years, state revenue for higher education has been relatively stable, and in fact we have experienced slight increases in state

support. The state however is projecting a \$124 million statewide loss this fiscal year and a possible loss next year. While the 2018 state budget that was passed by the Joint Budget Committee is more optimistic, we are watchful to upcoming forecasts and the resultant action for higher education funding.

But even with rising competition and the uncertainties in our environment, given our reputation, strong outcomes and distinction, we are well poised to strengthen our business model through enhancing and augmenting our core mission. Through innovations, unique student experiences, distinct academic programs, operational excellence, and expansion of course delivery modes, we can advance Mines' mission while creating long term financial sustainability. Many of these initiatives are underway and will continue in fiscal year 2018 and beyond. Some are reflected below:

- Innovation: pedagogical redesign/enhancement through the Trefny Institute for Innovation; the new center for Entrepreneurship and Innovation;
- Unique Student Experiences: Freshmen orientation Oredigger Camp; planning the next phase of the housing master plan; creation of a professional development program;
- Distinct Academic and Research Programs: the new Engineering, Design, and Society Division; the new BSE degree; new certificate programs for Computer Science, Civil and Environmental Engineering, Electrical Engineering, Mechanical Engineering, Space Systems, Sustainable Energy Systems, and Additive Manufacturing; development of the theme based institutes; focus on undergraduate research; strengthening the first year honors program;
- Operational Excellence: business process re-engineering; technology enhancements; energy management; enhancing an engaged campus; and
- Expansion of course delivery modes: developing on-line delivery models.

Paying attention to where we have been, we look forward to Mines strengths and opportunities to become a stronger, more vital university.

Fiscal Year 2018 Budget

Even with many opportunities and initiatives in front of us, for this years' budget, we are including a larger amount of cushion than we have in years past. A fair number of our new initiatives are just in the development phase. This along with the uncertainties in our current revenue structure; enrollment (particularly non-resident, both US and international), federal and state funding, and private support we felt it prudent to hedge against any needed mid-course correction.

We narrowed our budget process this year and focused on strategic initiatives that included revenue growth, program distinction and operational excellence. We also have put many initiatives in place that are projected to grow revenue and/or mitigate growth in expenses: incentives for Summer and Graduate enrollment growth; a new retirement plan; flexibility in the use of our state fee for service funds; position (personnel) management; deep dives in expense categories; energy savings; etc.

The budget is prepared and outlined below in three core categories;

1. Operating – funds that can be spent on any purpose for the university - the main budget;

2. Designated - funds that can only get spent on certain purposes; primarily student fees and faculty start up; and
3. Restricted – funds that can only be spent for the required purpose; primarily sponsored research and gifts.

Comprising all funds noted above, total revenue is budgeted to be \$312.10 million and expenses of \$303.27 million with \$2.49 in reserve set asides to net \$6.35 million.

Operating

Revenue projections:

Operating revenue is budgeted to increase 4.4% or \$8.15 million for a total of \$195.09 million.

We are projecting undergraduate **enrollment** to be up slightly, which includes a planned increase in freshman enrollment of 100 new students. Consistent with our graduate enrollment trend, we are projecting a decline in graduate enrollment (we anticipate many of our growth initiatives and incentives to have impact starting in fiscal year 2019). Tuition is budgeted to increase \$5.9 million resulting in a total of \$135.30 million.

The **tuition rate increase** proposed for this year is 3% for resident students and 3.5% for non-resident students. This year, we performed a tuition elasticity study (last performed in 2010). Through this study, we received confirmation that assuming no change in discount policy, it is predicted that our application and enrollment interest would remain stable, if not increase slightly, at a 3% increase in tuition.

Housing and dining revenue is budgeted to be up 3% to 5% or \$420,000 consisting of slight increases in housing and board rates. Also included is housing for an additional 100 freshman. Our housing and board rates are comparable to the other universities in the state, especially in the front range.

State funding is budgeted to be up 4.2% or \$850,000 for a total of \$21 million. **Research funding** including the indirect cost recovery derived from research spending is planned to be flat.

All **other revenue** streams are projected to remain flat with the exception of a new relationship with Nazarbayev University. This three year contract will bring in \$5.6 million to the university; much of which will pay for the specified deliverables, but a portion of the funding will be allocated to the unrestricted resources of Mines.

Expense projections:

Operating expenses are projected to increase 3.8% or \$7.05 million from the ongoing budget for a total of \$190.84 million. Labor (salaries and benefits) and student support (undergraduate financial aid and graduate support) are the largest two expense items and contain the largest increases.

Labor includes a 2.5% salary increase for all employees (the classified increase is mandated by the state). We are projecting a 1.5% increase to our faculty employee benefits and 0.4% increase to our classified employee benefits. Total labor is projected to be \$102.5 million. To account for the natural churn of our employee base, we have traditionally budgeted a \$3 million salary savings. This year, we are increasing that amount to \$4 million as our actual salary savings over the past five years has been near \$8 million each year.

We are projecting no new FTEs in this budget year. Over the past five years, we have added over 20 new faculty and staff each year in order to support students, our facilities and our operations. From 2010 to today, our academic and research headcount increased 28% and our administrative headcount increased 25% during the same time, enrollment increased 21%.

Student to faculty ratio remains a little under 18:1 and student to administrator ratio remains a little over 10:1. The student to faculty ratio is comparable to our peers and the student to administrator ratio is higher than our peers demonstrating that we are administratively leaner than our peers.

We are in the process of a Total Compensation Assessment. This assessment is analyzing our faculty (academic and administrative) salaries and benefits and the relative alignment (or miss-alignment) with the market. Through this assessment we will develop our total compensation strategy which will set the framework for compensation decisions. The results of this assessment will likely yield a financial impact but it is too soon to determine.

Student support, both undergraduate financial aid and graduate support, is projected to increase \$3 million totaling \$35.7 million. The increase is primarily for undergraduate financial aid that is provided to incoming and continuing students. With this increase, our total institutional support to undergraduate students will be \$24 million which represents an 18% average discount rate; 14% for resident students and 24% for non-resident students. Our financial aid strategy has remained relatively consistent since 2010.

Other expense increases include:

- Increase to operate CoorsTek and the new Heating Plant which are coming on-line this year. The Heating Plant has some one time, year one costs but beginning in year two, the operations of the Plant (versus purchased steam from MillerCoors) will provide financial savings annually;
- Increase to support the CSM Alumni Association;
- Required increases to Information Technology licenses and maintenance; and
- Increase to funds provided to new faculty in order for them to start up their laboratories.

Reserves:

This year we are setting aside \$2 million in reserves for an enrollment reserve as well as operating reserve. This is a slight reduction in reserve set asides from prior years.

From the Innovation reserve fund, we are providing \$300,000 of seed funding for initiatives that are focused on enrollment growth primarily for certificate programs with several of those being delivered on-line.

Designated

These funds primarily represent the revenue and use of student fees as well as the allocation and use of faculty startup funds. Revenue is budgeted at \$29.92 million and expenses are budgeted at \$26.96 million.

Restricted

Represents sponsored research funds as well as distributions from and use of the endowment and current gifts. Revenue is budgeted at \$87.09 million and expenses are budgeted at \$85.47 million.

The attached PowerPoint provides further detail and information regarding the fiscal year 2018 budget.

Resolution

The Board of Trustees reviewed the proposed budget for the academic year 2017 – 2018 and approves the Fiscal Year 2018 Budget consisting of:

- Total revenue of \$312.10 million
- Total expenses of \$303.27 million
- Total addition of reserves of \$2.54 million
- 3.0% increase for resident undergraduate and graduate rates;
- 3.5% increase for non-resident undergraduate and graduate rates;
- Increase in Housing of and Room and Board charges; and
- Increases in fees and charges, two new lab fees and a freshmen orientation fee.

FISCAL YEAR 2018 BUDGET

BOARD OF TRUSTEES MEETING

MAY 5, 2017

FY2018 BUDGET CONSIDERATIONS

- **Pressure on Revenue**
 - Tuition
 - State
 - Sponsored/Philanthropic
 - Other
- **Focus to Manage Costs**
- **Narrowed Budget Process Focused on Strategic Initiatives**
 - Revenue Growth
 - Program Distinction
 - Operational Excellence
- **Financial Aid and Personnel Highest Cost Increases**

All Funds Revenue Stream	Challenges to growth	Opportunities for growth
Tuition and Fees	<ul style="list-style-type: none"> • Tuition rate at market capacity • Enrollment variability <ul style="list-style-type: none"> • Undergraduate non-resident • Graduate trend 	<ul style="list-style-type: none"> • Grow enrollment <ul style="list-style-type: none"> • Freshman +100 • Graduate – incentives in place • Change statutory R/NR mix
State Support	<ul style="list-style-type: none"> • Potential cuts due to state budget challenges 	
Housing and Dining	<ul style="list-style-type: none"> • Housing margin tight • Competitive housing options 	<ul style="list-style-type: none"> • Develop plan to increase housing rates
Research	<ul style="list-style-type: none"> • Uncertainty in federal funding • Decline in private funding 	<ul style="list-style-type: none"> • Diversification <ul style="list-style-type: none"> • Focus on private industry • Create Institutes • Continue to hire productive/leading faculty
Gifts	<ul style="list-style-type: none"> • Decline due to energy market • Low return environment 	<ul style="list-style-type: none"> • Upcoming campaign • Diversification
Other Revenue	<ul style="list-style-type: none"> • Minimal 	<ul style="list-style-type: none"> • Expansion of continuing education • International relationships (i.e. NU)

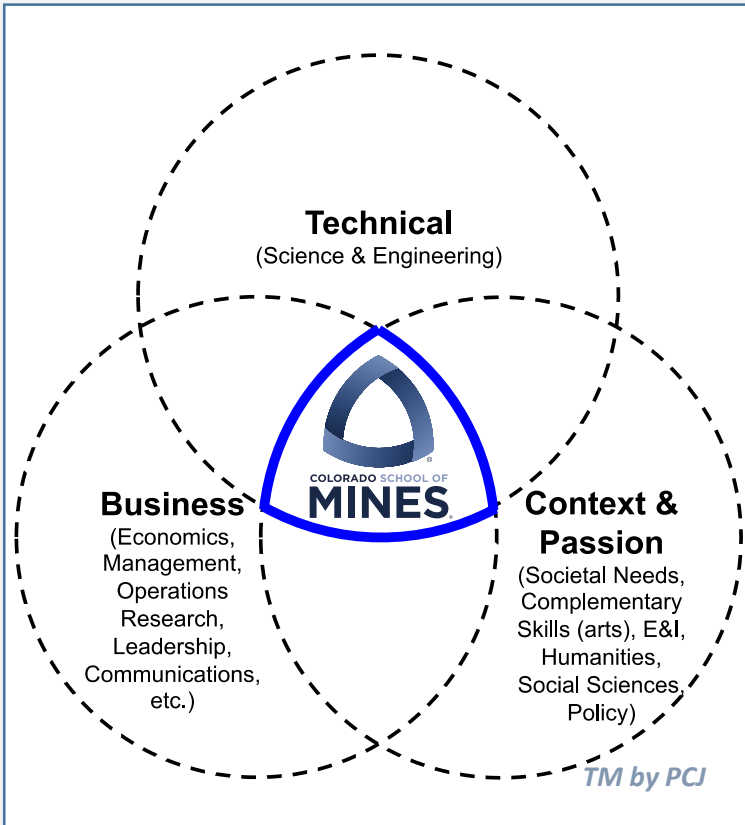
All Funds Expense category	Challenges to cost structure	Opportunities to manage costs
Personnel (salaries and benefits)	<ul style="list-style-type: none"> Classified mandate from State Pressure from academic faculty History of paying 100% health/dental benefits to faculty 	<ul style="list-style-type: none"> New retirement plan Position abolishments Hiring freezes Compensation assessment
UG Financial Aid and GR Support	<ul style="list-style-type: none"> Discount rate is low for an elite university 	<ul style="list-style-type: none"> HB17-1140 flexibility
Debt	<ul style="list-style-type: none"> Highly leveraged <ul style="list-style-type: none"> Rating stability Achievement of plan will necessitate capital investment (debt) 	<ul style="list-style-type: none"> Low rate environment (as of now)
Operating Expenses	<ul style="list-style-type: none"> Minimal base changes in past decade 	<ul style="list-style-type: none"> Opt out of State Risk Management Across the board cuts
Operations and Maintenance	<ul style="list-style-type: none"> Costs of new facilities 	<ul style="list-style-type: none"> Continual cost management; energy and operations
Information Technology	<ul style="list-style-type: none"> Enhancements in innovations Process streamlining 	
Renovation and Maintenance	<ul style="list-style-type: none"> Aging facilities 	<ul style="list-style-type: none"> Cut costs
CSMF Funding	<ul style="list-style-type: none"> Pressure on CSMF budget 	
Library	<ul style="list-style-type: none"> Pressure to provide more funding 	

Advancing Mines.....Taking us to the next level

Where are we going?

How do we get there?

What will we look like?



Undergraduate Programs:

- Create unique-to-Mines signature experience
- Increase graduation rates and decrease time-to-graduation
- Expand program offerings and pathways to completion
- Strengthen emphasis on professional preparation
- Services/experiences have to be like Elite universities

Non-thesis Masters & Non-Degree Programs:

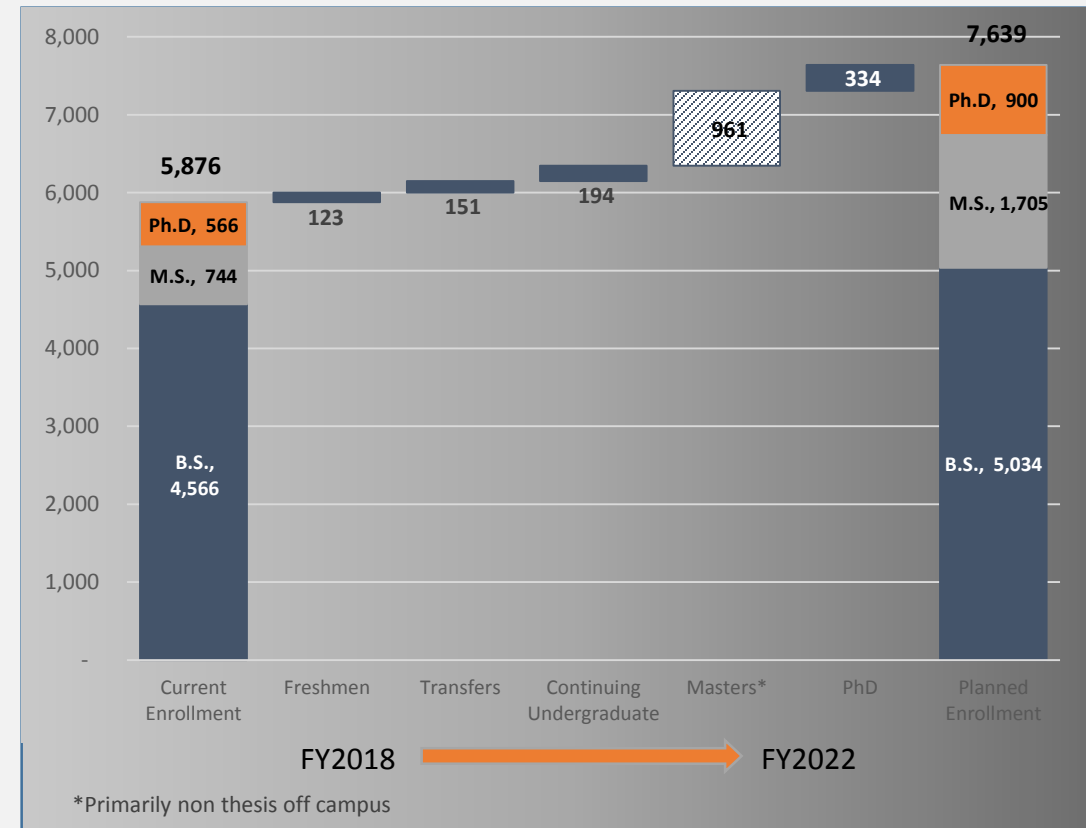
- Growth
- Need non-traditional delivery (times & method) for convenience

Research-based Masters & Doctoral Programs:

- Create signature graduate experience and professional preparation
- Grow/expand research enterprise
- Offer unique program options

Innovation throughout

Operational Excellence in everything we do

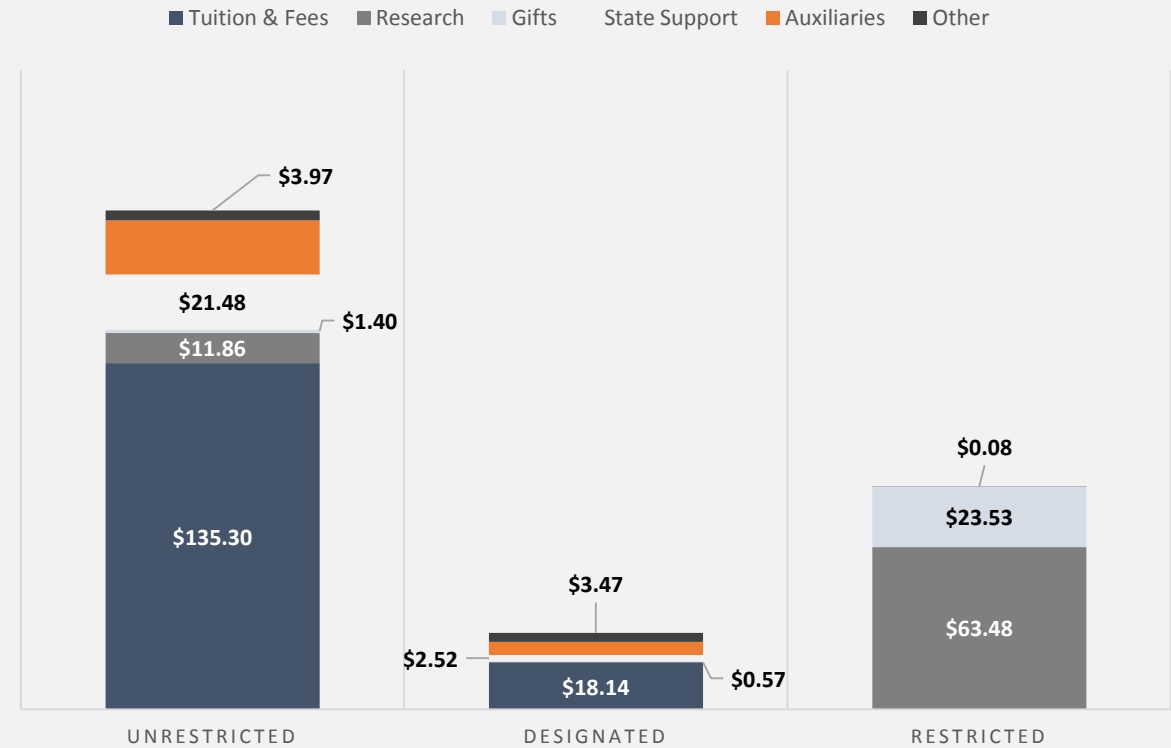
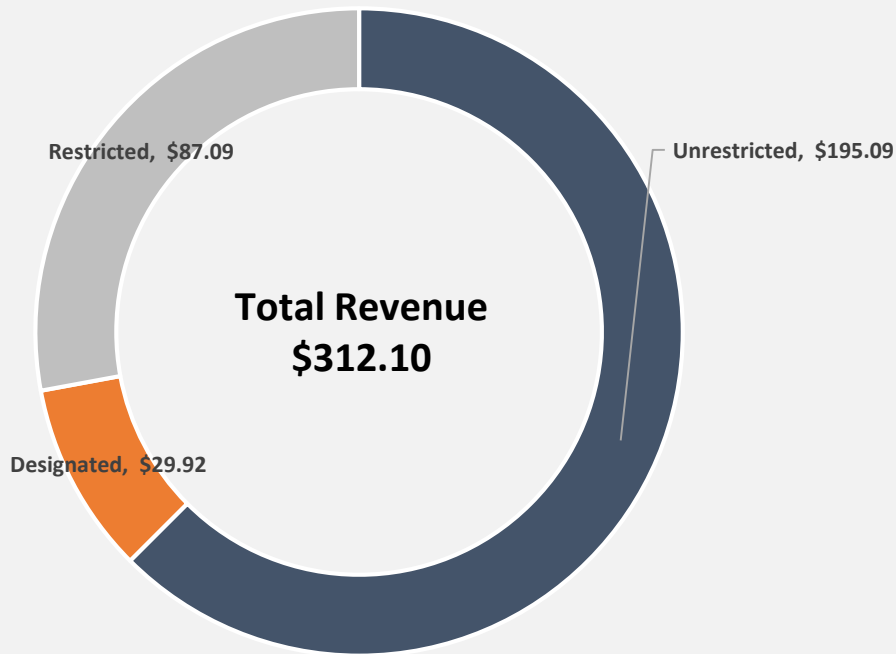


Revenue

Budget – All Funds Budget 2018 - Proposed

in millions	Unrestricted Operating	Designated	Restricted	Total
<i>Revenue</i>	\$ 195.09	\$ 29.92	\$ 87.09	\$ 312.10
<i>Expense</i>	190.84	26.96	85.47	303.27
<i>Net Activity before Reserves</i>	\$ 4.26	\$ 2.96	\$ 1.69	\$ 8.84
<i>Addition to Reserves</i>	2.61	0.00	(0.11)	2.49
<i>Net Activity</i>	\$ 1.65	\$ 2.96	\$ 1.74	\$ 6.35

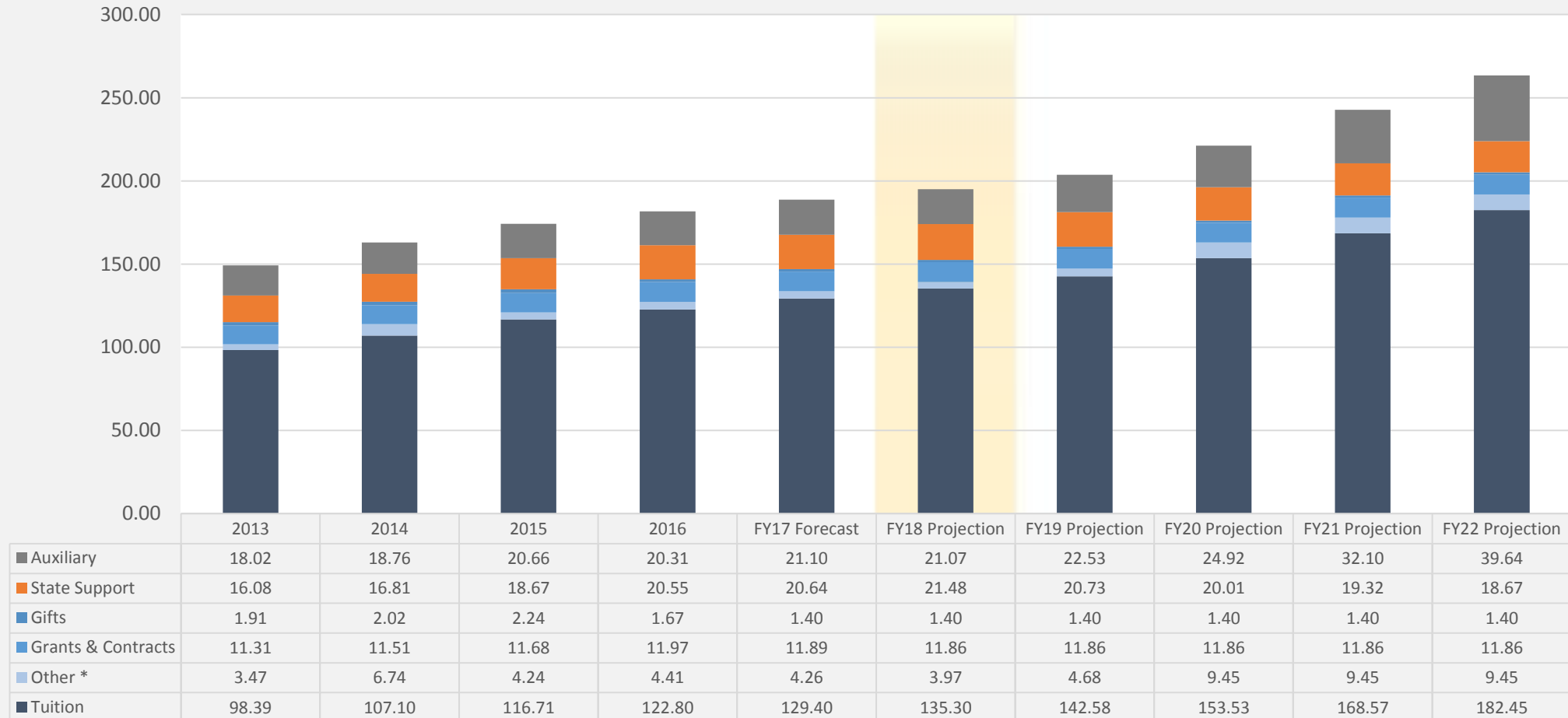
All Funds Budget Proposal



All Funds

Line	Unrestricted		Designated		Restricted		Total Funds	
	FY17 Base Budget	FY18 Budget	FY17 Forecast	FY18 Budget	FY17 Forecast	FY18 Budget	FY17 Forecast	FY18 Budget
REVENUES								
Tuition and Fees								
1								
2	41.86	43.91					41.86	43.91
3	6.19	6.32					6.19	6.32
4	62.42	66.38					62.42	66.38
5	8.95	8.86					8.95	8.86
6	16.16	16.16					16.16	16.16
7	1.37	1.28					1.37	1.28
8	-	-	16.59	18.14			16.59	18.14
	136.97	142.90	16.59	18.14	-	-	153.55	161.04
Grants and Contracts								
9					40.67	40.67	40.67	40.67
10			0.57	0.57	17.83	17.83	18.40	18.40
11					4.99	4.98	4.99	4.98
12	11.89	11.86			-	-	11.89	11.86
13	11.89	11.86	0.57	0.57	63.49	63.48	75.95	75.90
14	0.95	0.95	0.05	0.05	0.02	0.02	1.02	1.02
Other Income								
15	14.44	15.16	2.24	2.52			16.69	17.68
16	18.88	19.80	5.22	5.22			24.10	25.02
17	2.42	3.02	2.31	3.43	0.06	0.06	4.79	6.51
18	1.40	1.40	-	-	23.53	23.53	24.93	24.93
19	-	-	-	-			-	-
	37.14	39.38	9.77	11.16	23.59	23.59	70.50	74.14
	186.95	195.09	26.97	29.92	87.11	87.09	301.02	312.10
EXPENDITURES								
20	67.24	68.52	0.82	0.80	7.93	7.97	75.99	77.29
21	4.87	4.58	0.45	1.92	58.88	58.90	64.20	65.41
22			0.14	0.14	0.54	0.22	0.68	0.36
23	19.12	20.27	1.72	0.99	1.42	1.43	22.25	22.68
24	6.36	6.68	0.57	0.57	1.10	1.10	8.03	8.34
25	23.03	24.02	0.27	0.28	0.57	0.57	23.87	24.86
28	19.17	20.00	1.22	1.21	3.90	4.38	24.29	25.59
29	21.00	23.98	-	-	10.90	10.90	31.90	34.89
30	19.47	19.56	20.33	21.06			39.80	40.62
31	3.53	3.23	-	-			3.53	3.23
	183.78	190.84	25.50	26.96	85.25	85.47	294.53	303.27
33	3.16	4.26	1.47	2.96	1.86	1.62	6.49	8.84
34					0.33	(0.11)	0.33	(0.11)
35	1.00						1.00	
36	1.00	1.60					1.00	1.60
37	0.80	1.00					0.80	1.00
38								
39	0.15						0.15	
40								
41	0.21	1.65	1.47	2.96	1.53	1.74	3.21	6.35

Unrestricted Revenue



* Other income increase \$4.8M in FY20 for USGS new building rent

Unrestricted

<i>in millions</i>	FY 2017 Ongoing Budget	FY 2018 Changes	FY 2018 Budget
Revenues			
Tuition	\$129.40	\$5.91	\$135.30
State Funding	20.64	0.85	21.48
Indirect Cost Recovery	11.89	(0.03)	11.86
Auxiliary Revenue	20.25	0.82	21.07
Other Revenue	4.77	0.60	5.37
Total Revenues	186.95	\$8.15	195.09
Expenditures			
Labor - Salaries and Benefits	99.83	3.37	103.20
Adjunct	1.29	0.00	1.29
Salary Savings	(3.00)	(1.00)	(4.00)
New Faculty Startup	5.90	0.32	6.22
Undergraduate Financial Aid	21.00	2.99	23.98
Graduate Support	11.72	0.02	11.75
Other Operating	9.07	0.79	9.86
Debt	9.28	(0.01)	9.27
Operations and Maintenance of Plant	7.19	0.32	7.51
Housing and Dining Operating	8.02	(0.01)	8.01
Information Technology Operating	3.20	0.25	3.45
Capital Renovation and Controlled Maintenance	3.53	(0.30)	3.23
Indirect Cost Return Distribution	2.87	-	2.87
CSMF Development Fee and CSMAA support	2.01	0.18	2.19
Library	1.87	0.14	2.01
Total Expenditures	183.78	7.05	190.84
Reserve Additions			
Capital Reserve	1.00	(1.00)	-
Operating Reserve	1.00	0.60	1.60
Innovation Reserve	0.80	(0.80)	-
SB003 Reserve	0.15	(0.15)	-
Enrollment Reserve	0.00	1.00	1.00
Net Operating Activity	\$0.21	\$1.44	\$1.65

Tuition Revenue – Tuition Elasticity Study

- Overall, enrollment interest should remain stable at a 3% increase in tuition
 - *This budget proposes a 3% rate increase for resident students and 3.5% increase for non-resident students*
- Student Expectations are changing
 - 90% believe they will/should receive a merit scholarship
 - 50% believe they will receive need based aid
 - 40% anticipate obtaining a student loan
- Mines has established a well known reputation for excellence in engineering
 - Prospective students are drawn to the successful outcomes including job placement and practical experience opportunities
 - There is an opportunity to enhance the perceptions of an active student life with many opportunities to get involved
- Opportunities to expand interest if students are made aware of existing programs and facilities:
 - Challenging honors program
 - New/updated residence halls
 - The fact that Mines has the largest chapter of the Society for Women Engineers (for female students)
- Opportunities to create programs where students show interest (many from First Generation or underrepresented populations):
 - Innovation and Entrepreneurship minor
 - Humanitarian Engineering major
 - Biology major

MANDATORY FEES

Fee	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 *	2018-19 and Beyond
Academic Construction	275.00	275.00	275.00	275.00	275.00	275.00	Needs Addressing
Associated Students	94.10	94.10	100.00	100.00	101.17	68.38	TBD
Athletics	57.00	58.09	59.69	59.69	60.39	77.00	Needs Addressing
Health Services	86.00	87.63	90.00	90.00	95.22	110.22	TBD
Intermodal	48.50	48.50	48.50	48.50	48.50	49.00	TBD
Recreation Center	152.00	154.89	159.14	159.14	161.01	193.80	TBD
Student Services	259.50	264.43	271.70	271.70	274.69	274.69	TBD
Technology	60.00	60.00	60.00	60.00	60.00	60.00	Needs Addressing
Semester Total	1,032.10	1,042.64	1,064.03	1,064.03	1,075.98	1,108.09	
% Change	10.44%	1.02%	2.05%	0.00%	1.12%	2.98%	
Student Health Plan (annual) [†]	1,534.00	1,596.00	1,888.00	1,600.00	1,740.00	1,990.00	TBD

*Proposed

FY 2007-08 to FY 2017-18 the total compound annual growth rate (CAGR) is 5.07% including the academic construction fee and 3.14% without.

†Mines student participation in the Student Health Plan is 1,635 students or 28%.

Tuition Revenue – Cost of Attendance

CSM Undergraduate Cost of Attendance-Resident										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tuition 3% increase	13,590	14,400	14,790	15,225	15,690	16,161	16,646	17,145	17,659	18,542
Mandatory Fees	2,064	2,085	2,128	2,128	2,152	2,216	2,276	2,337	2,400	2,465
Room and Board	9,922	10,103	10,484	11,008	11,477	11,897	13,089	13,993	14,469	14,963
Books and Supplies	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Personal Expense	1,125	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215
Transportation Expense	1,300	1,300	1,300	650	650	650	650	650	650	650
Total Cost of Attendance	29,501	30,603	31,417	31,726	32,684	33,638	35,375	36,840	37,894	39,335
% Increase	7.77%	3.74%	2.66%	0.98%	3.02%	2.92%	5.16%	4.14%	2.86%	3.80%
CPI %	1.94%	2.77%	2.20%	1.40%	1.18%	2.80%				

CSM Undergraduate Cost of Attendance-Non Resident										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tuition 3.5% increase	28,620	30,330	31,470	32,700	34,020	35,211	36,267	37,355	38,476	40,399
Mandatory Fees	2,064	2,085	2,128	2,128	2,152	2,216	2,276	2,337	2,400	2,465
Room and Board	9,922	10,103	10,484	11,008	11,477	11,897	13,089	13,993	14,469	14,963
Books and Supplies	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Personal Expense	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215	1,215
Transportation Expense	1,300	1,300	1,300	650	650	650	650	650	650	650
Total Cost of Attendance	44,531	46,533	48,097	49,201	51,014	52,688	54,997	57,050	58,710	61,193
% Increase	5.88%	4.50%	3.36%	2.30%	3.68%	3.28%	4.38%	3.73%	2.91%	4.23%
CPI %	1.94%	2.77%	2.20%	1.40%	1.18%	2.80%				

New Student Fees in FY18:

- Introduction to Brewing Science Course Fee \$70:** The fee will help offset the expenses of the laboratory portion of this course where students malt their own grain, brew beer, and analyze the final product. Students will be positively impacted through the ability to apply brewing, malting and analyzation skills in real time.
- Microcomputer Architecture and Interfacing Course Fee \$100:** The fee will fund the purchase of a custom designed printed circuit board, electronic parts for that board, and a collection of tools for each student enrolled in the course. Students will be positively impacted through the ability to develop their own printed circuit board and the exposure to up-to-date technologies and fabrication techniques.
- Oredigger Camp Fee \$75:** The fee will go towards the new orientation program being offered this summer that is geared towards engaging incoming freshmen through leadership, engineering, and adventure workshops at an offsite location.

Tuition Revenue – Cost of Attendance Peer Comparison

Total Cost of Attendance										
	Stanford FY18	Georgia Tech FY18	RPI FY18	Cal-Berk FY18	WPI FY18	Lehigh FY18	Carnegie- Mellon FY18	CSU - Eng. FY18	CU Boulder - Eng. FY18*	Mines FY18
Resident on Campus	\$ 69,109	\$ 28,096	\$ 70,132	\$ 34,400	\$ 65,046	\$ 64,580	\$ 70,094	\$ 30,030	\$ 31,199	\$ 33,638
Non Resident on Campus	\$ 69,109	\$ 48,894	\$ 70,132	\$ 62,414	\$ 64,046	\$ 64,580	\$ 70,094	\$ 48,238	\$ 54,929	\$ 52,688

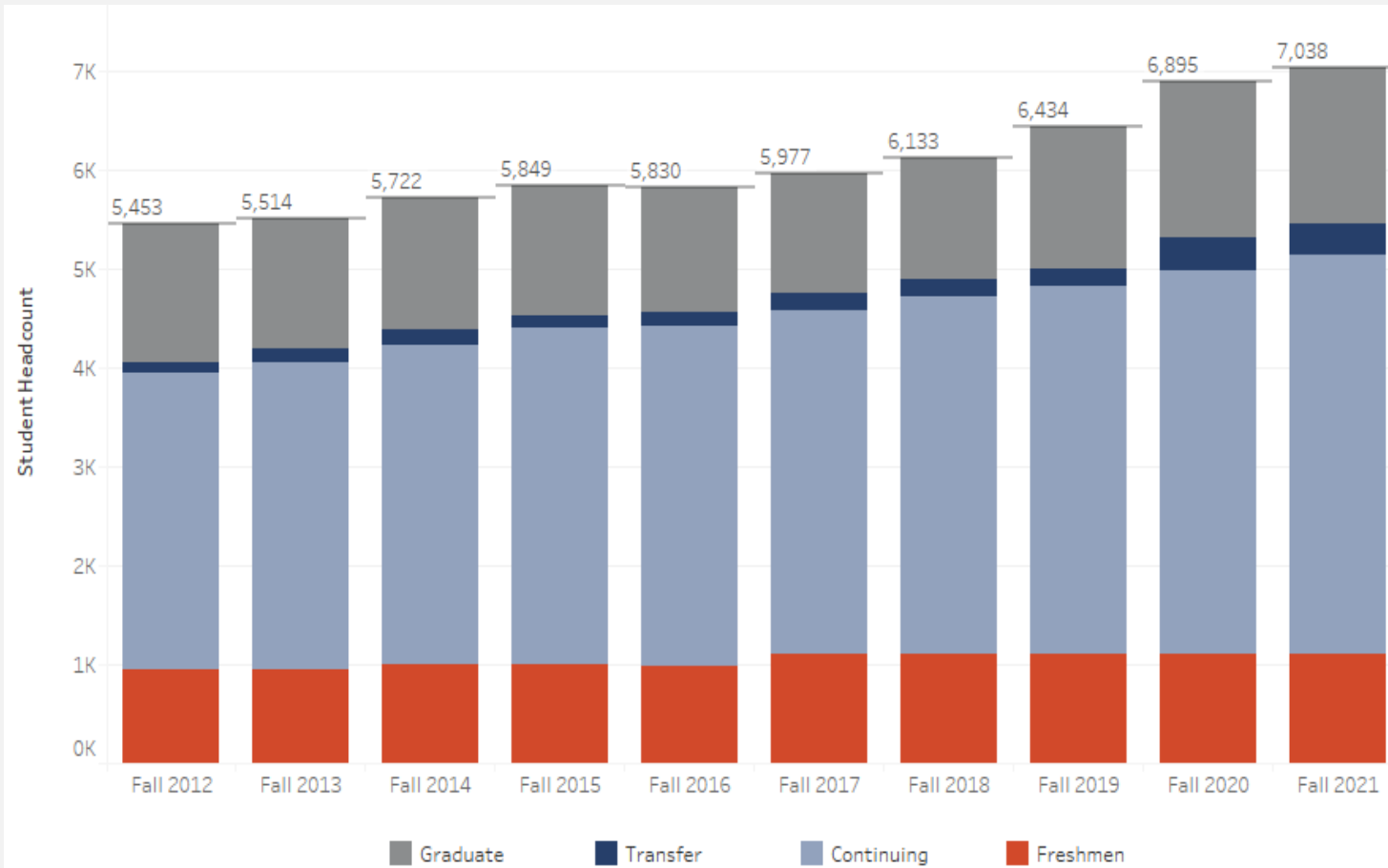
*As presented to the CU Board of Regents. Official 2017-2018 rates will be published on May 1, 2017.

Tuition										
	Stanford FY18	Georgia Tech FY18	RPI FY18	Cal-Berk FY18	WPI FY18	Lehigh FY18	Carnegie- Mellon FY18	CSU - Eng. FY18	CU Boulder - Eng. FY18*	Mines FY18
Resident (15 hours)	\$ 48,987	\$ 10,106	\$ 51,000	\$ 14,068	\$ 47,988	\$ 50,840	\$ 52,732	\$ 14,362	\$ 13,560	\$ 16,161
Non Resident (15 hours)	\$ 48,987	\$ 30,904	\$ 51,000	\$ 42,082	\$ 47,988	\$ 50,840	\$ 52,732	\$ 31,870	\$ 37,290	\$ 35,211

note: CU Non Resident has set tuition rates dependent first semester enrolled. Showing rate for Summer 2017-Spring 2018.

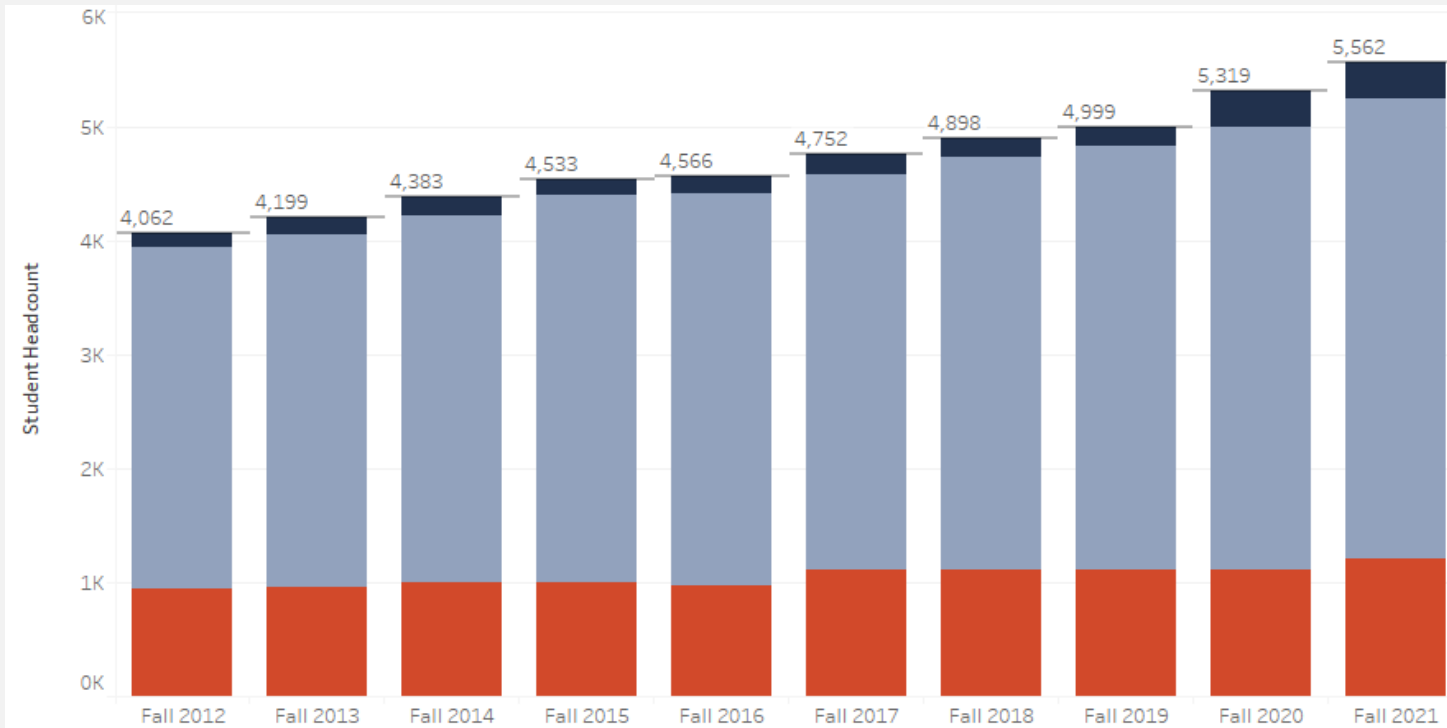
*As presented to the CU Board of Regents. Official 2017-2018 rates will be published on May 1, 2017.

Total Enrollment



	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Continuing	2,996	3,101	3,224	3,401	3,440	3,465	3,611	3,712	3,881	4,024
Freshmen	949	954	1,000	1,003	977	1,113	1,113	1,113	1,113	1,113
Transfer	117	144	159	129	149	174	174	174	325	325
Graduate	1,391	1,315	1,339	1,316	1,264	1,225	1,235	1,435	1,576	1,576

Total Undergraduate Enrollment

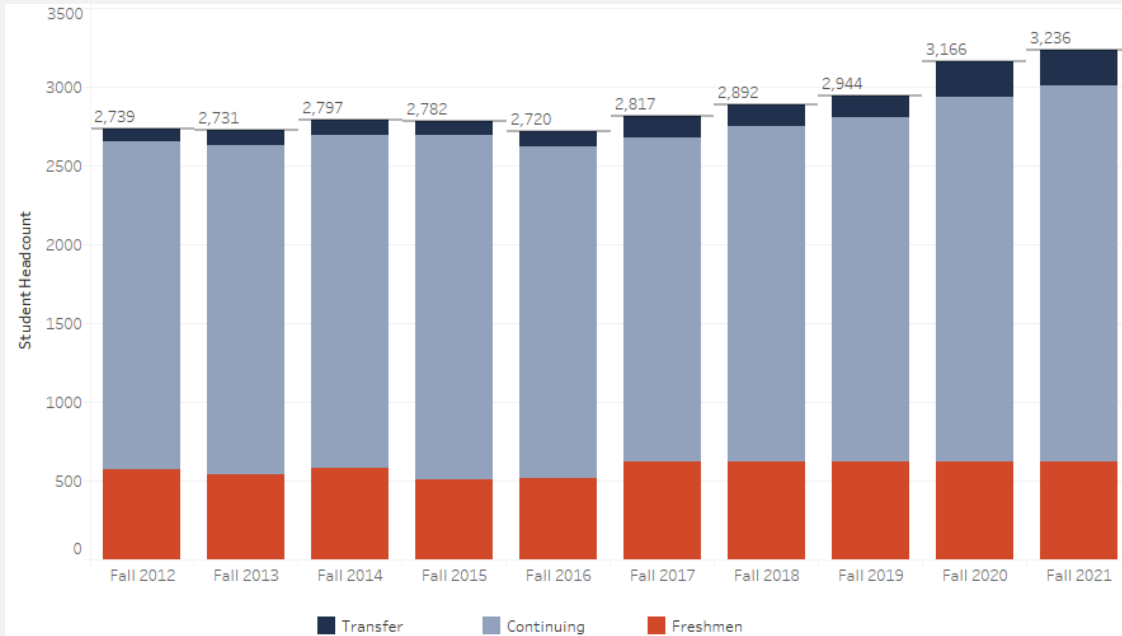


	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Continuing	2,996	3,101	3,224	3,401	3,440	3,465	3,611	3,712	3,881	4,024
Freshmen	949	954	1,000	1,003	977	1,113	1,113	1,113	1,113	1,213
Transfer	117	144	159	129	149	174	174	174	325	325

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Total Applications	12,517	13,060	13,197	12,422	12,814	11,085
Admit Rate	36.63%	35.91%	35.85%	37.14%	40.66%	55.90%
Yield Rate	23.25%	23.41%	24.50%	24.56%	21.61%	19.80%

Undergraduate Enrollment by Residency

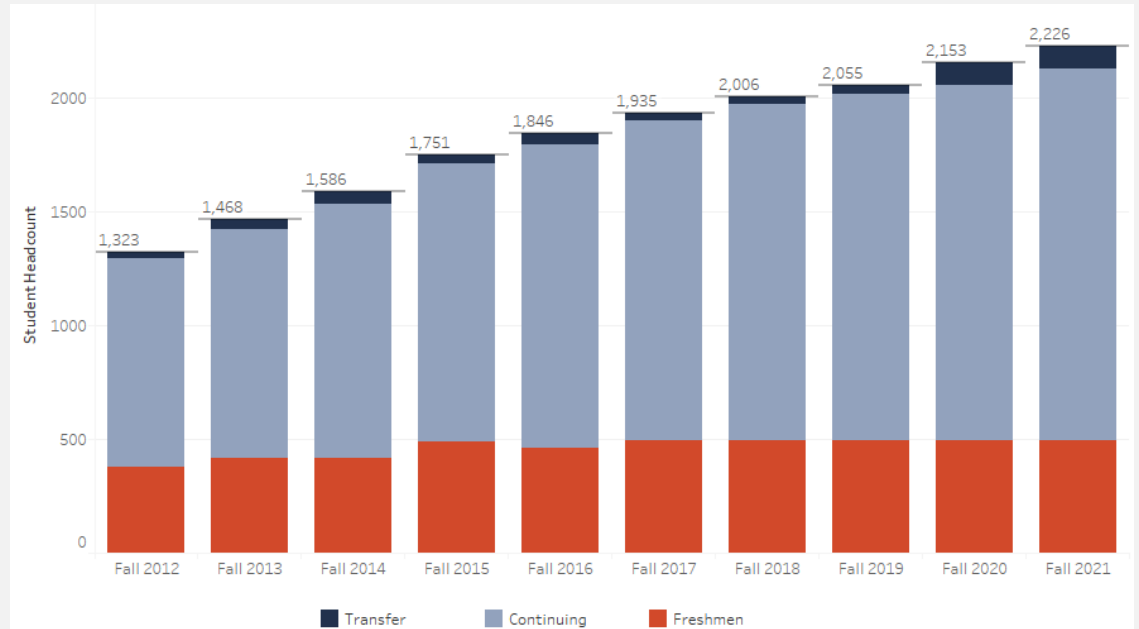
Resident



	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Continuing	2,082	2,097	2,109	2,183	2,108	2,062	2,137	2,189	2,321	2,391
Freshmen	572	537	584	512	517	618	618	618	618	618
Transfer	85	97	104	87	95	137	137	137	227	227

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Total Applications	3,591	3,705	3,834	3,583	3,600	3,006
Admit Rate	47.93%	43.10%	41.68%	43.79%	44.97%	61.00%
Yield Rate	38.23%	39.45%	43.05%	38.11%	37.49%	37.60%

Non-Resident



	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Continuing	914	1,004	1,115	1,218	1,332	1,403	1,474	1,523	1,560	1,633
Freshmen	377	417	416	491	460	495	495	495	495	495
Transfer	32	47	55	42	54	37	37	37	98	98

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Total Applications	8,926	9,355	9,363	8,839	9,214	8,079
Admit Rate	32.09%	33.06%	33.46%	34.45%	38.97%	54.00%
Yield Rate	14.25%	15.13%	15.03%	17.57%	14.45%	12.40%

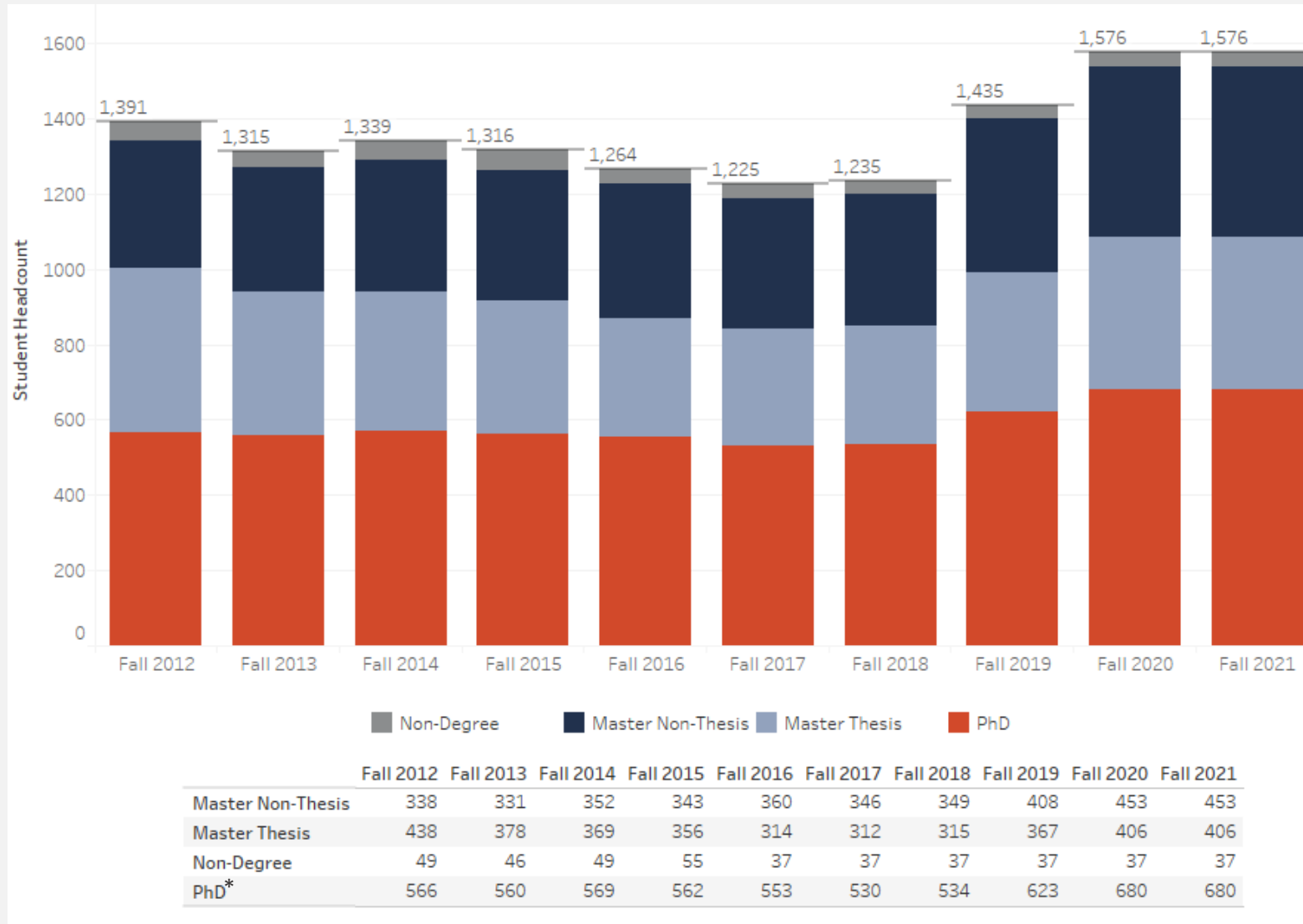
Admit and Yield Rates (and compared to peers)

Peer Institutions*	Fall 2012			Fall 2013			Fall 2014			Fall 2015		
	Total Applications	Admit Rate	Yield Rate	Total Applications	Admit Rate	Yield Rate	Total Applications	Admit Rate	Yield Rate	Total Applications	Admit Rate	Yield Rate
Carnegie Mellon University	17,313	27.8%	29.3%	18,884	25.5%	30.0%	19,812	24.6%	30.2%	20,547	23.7%	32.3%
Colorado State University-Fort Collins	17,929	74.7%	34.2%	17,970	77.4%	31.9%	16,655	80.5%	32.5%	18,556	80.8%	31.6%
Georgia Institute of Technology-Main Campus	14,088	51.2%	37.4%	14,645	54.9%	37.8%	25,884	33.4%	32.5%	27,277	32.2%	35.2%
Lehigh University	11,529	32.6%	32.4%	12,589	30.8%	30.9%	11,512	34.3%	32.9%	12,843	30.4%	32.3%
Rensselaer Polytechnic Institute	15,222	43.6%	20.0%	16,150	41.2%	21.2%	18,602	37.5%	19.1%	17,752	41.9%	18.6%
Stanford University	36,632	6.6%	72.8%	38,828	5.7%	76.0%	42,167	5.1%	78.2%	42,497	5.0%	80.4%
University of California-Berkeley	52,982	21.6%	38.8%	61,717	18.0%	37.5%	73,782	16.0%	46.3%	78,893	16.9%	41.7%
University of Colorado Boulder	21,744	83.6%	30.1%	22,473	87.7%	29.7%	28,852	84.2%	24.2%	31,325	79.6%	24.9%
Worcester Polytechnic Institute	7,585	52.6%	23.9%	8,578	51.6%	24.9%	10,233	43.8%	23.6%	10,172	48.5%	22.1%
Colorado School of Mines	12,517	36.6%	23.3%	13,060	35.9%	23.4%	13,197	35.9%	24.5%	12,422	37.1%	24.6%

	Fall 2016			Fall 2017		
	Total Applications	Admit Rate	Yield Rate	Total Applications	Admit Rate	Yield Rate
Colorado School of Mines	12,814	40.7%	21.6%	11,085	55.9%	19.8%

* Source = IPEDS

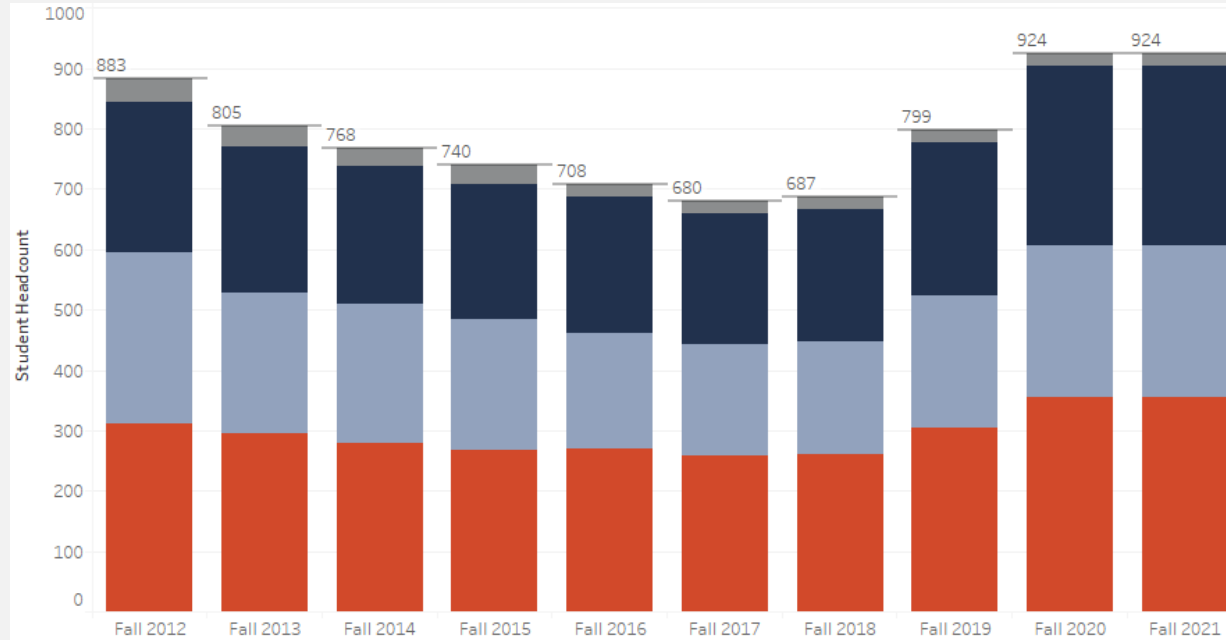
Graduate Enrollment



*Assumes commensurate research growth

Graduate Enrollment by Residency

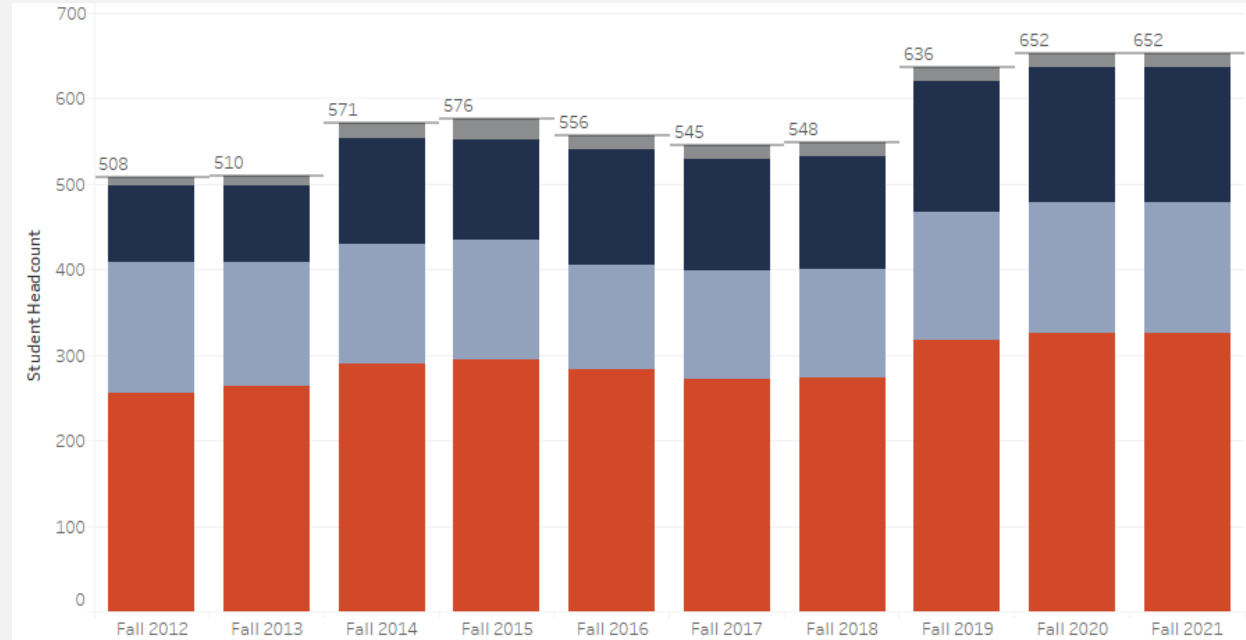
Resident



■ Non-Degree ■ Master Non-Thesis ■ Master Thesis ■ PhD

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Master Non-Thesis	248	242	228	225	225	216	218	255	296	296
Master Thesis	285	233	229	216	193	185	187	218	253	253
Non-Degree	39	34	31	31	21	21	21	21	21	21
PhD *	311	296	280	268	269	258	261	305	354	354

Non-Resident

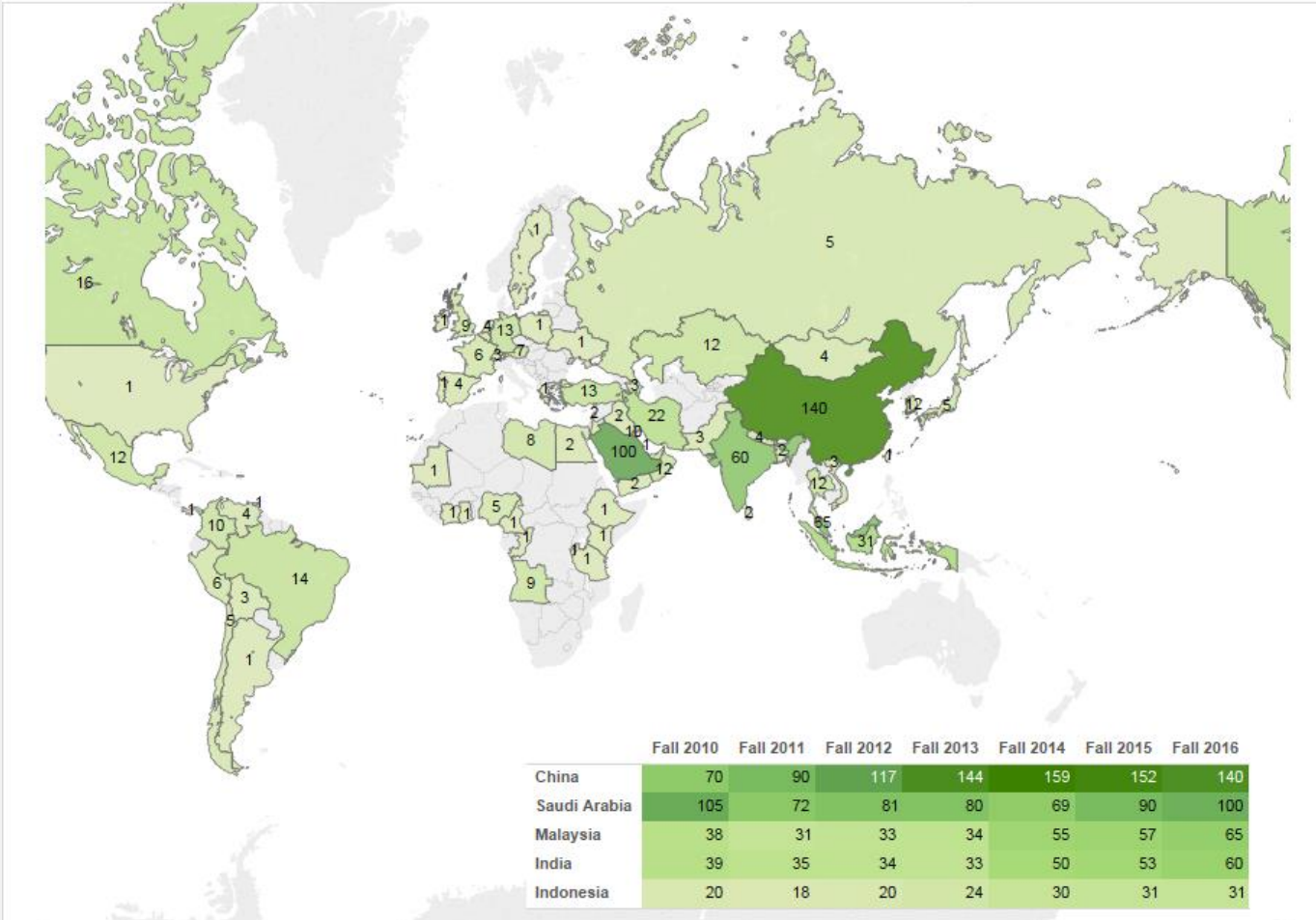


■ Non-Degree ■ Master Non-Thesis ■ Master Thesis ■ PhD

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Master Non-Thesis	90	89	124	118	135	130	131	153	157	157
Master Thesis	153	145	140	140	121	127	128	149	153	153
Non-Degree	10	12	18	24	16	16	16	16	16	16
PhD	255	264	289	294	284	272	273	318	326	326

International Enrollment

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Bachelor	228	203	231	235	253	316	314
Master	151	190	170	163	180	162	162
Doctoral	193	193	216	232	250	244	231
Grand Total	572	586	617	630	683	722	707

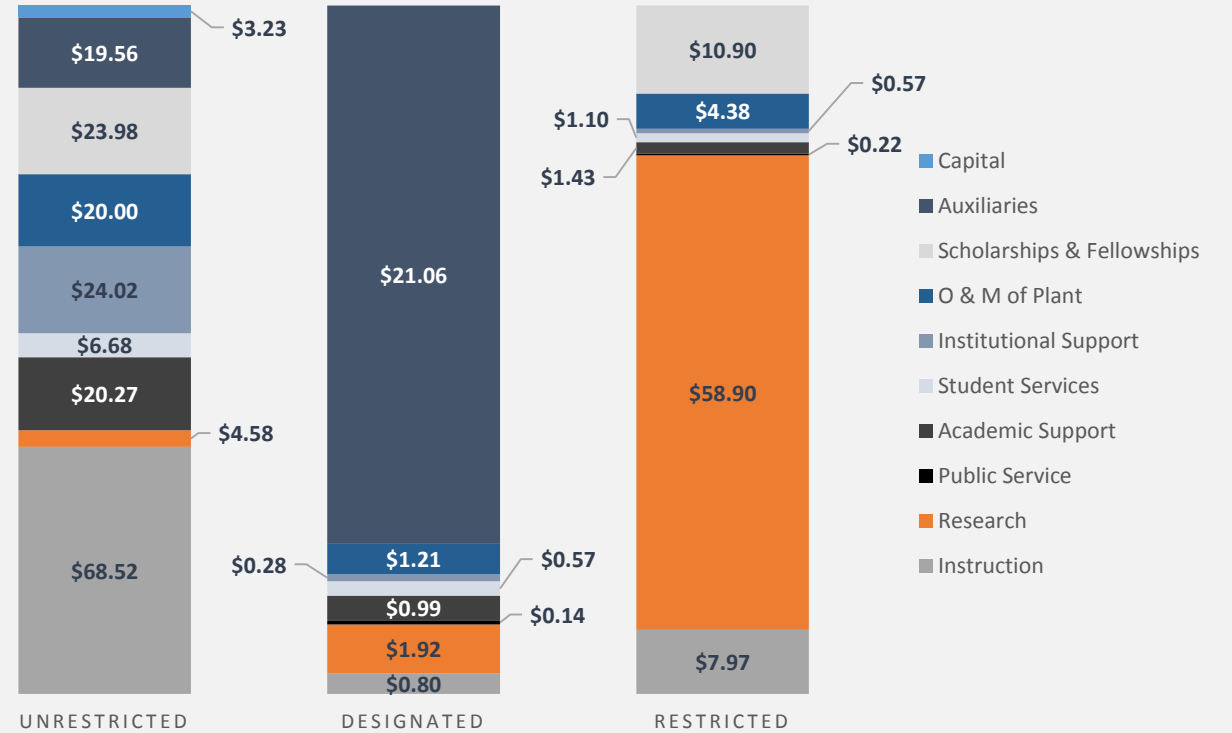
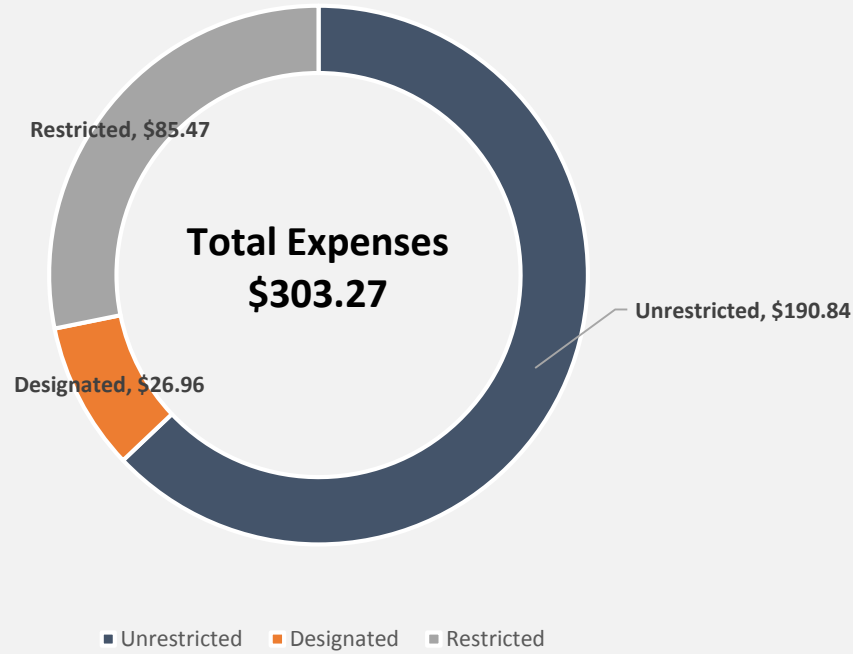


State Funding

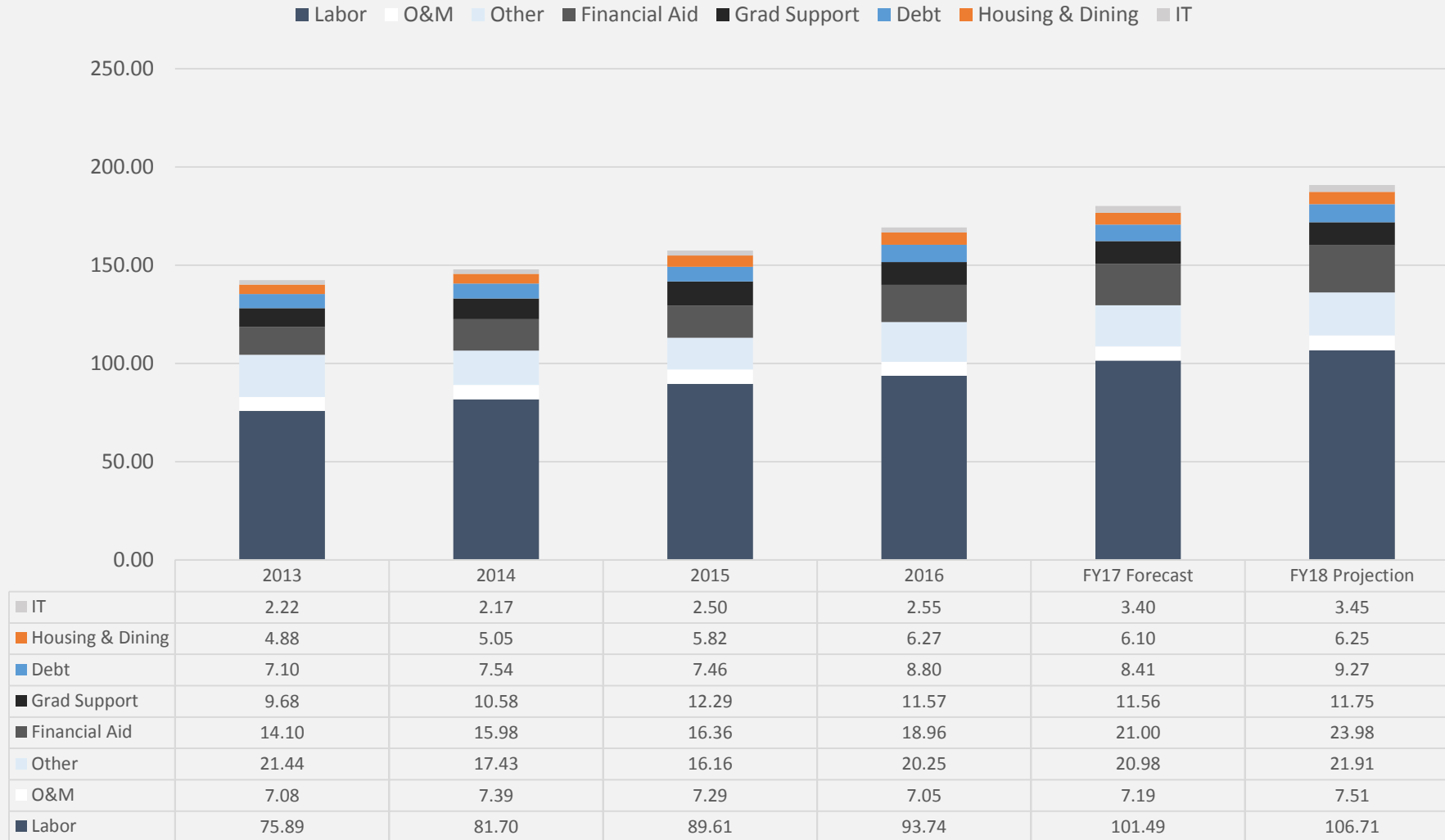
- FY17 State deficit of \$124M
 - JBC balanced the budget by lowering required reserve
- FY18 State Revenue did not meet required spending thus putting the State budget in a hole
 - JBC adopted the more optimistic financial outlook +\$143M to balance the budget
- FY18 Statewide \$20M increase for Higher Ed
 - Mines = 4.2% or \$850,000
 - In jeopardy of mid-year correction

Expenses

All Funds Budget Proposal



Unrestricted Expense

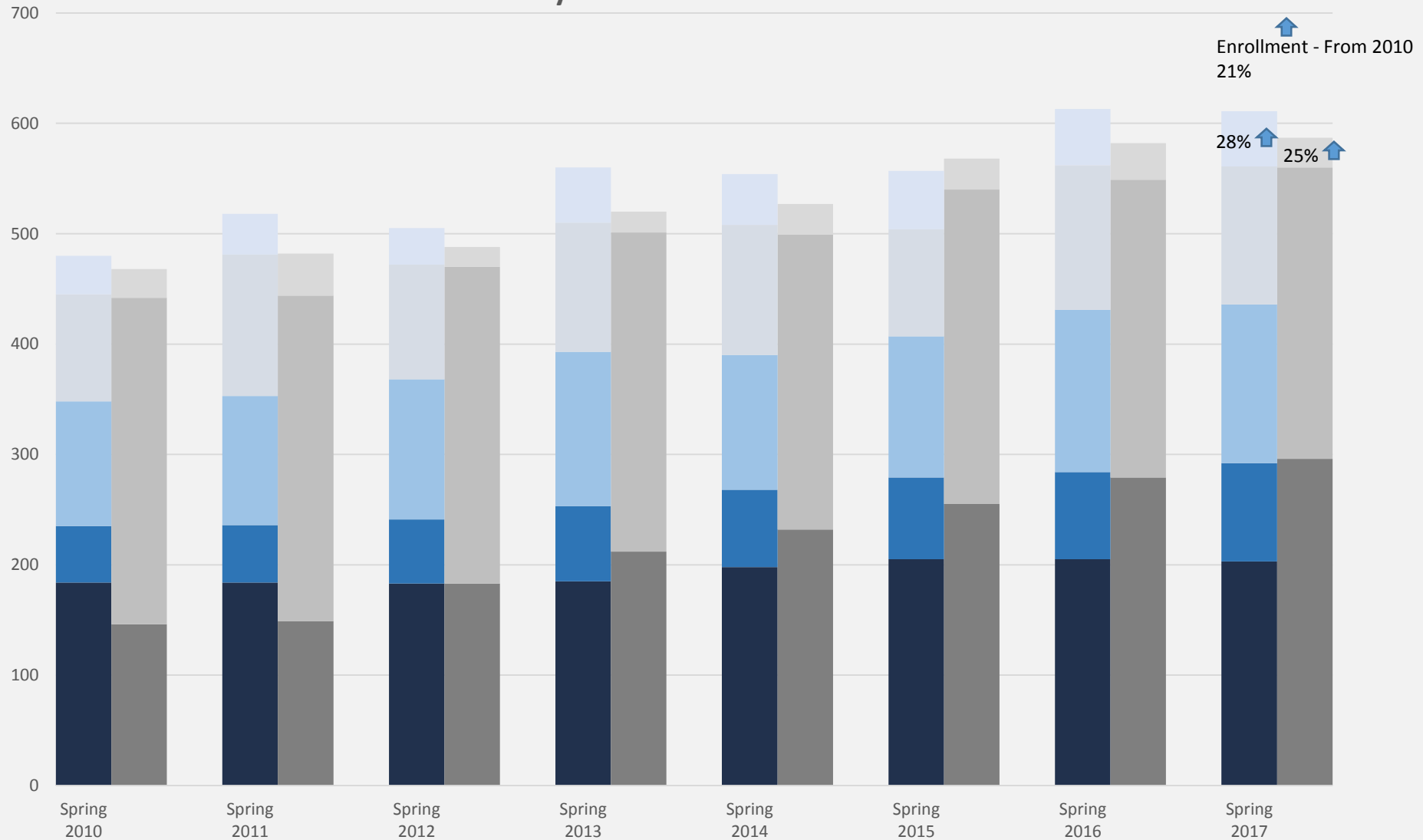


Expenses as a % of Total (and compared to peers)

				Peer Private*		Peer Public*	
2014-15	Mines	Change from FY10		Average	Median	Average	Median
		Percent	Dollar				
Instruction	38.5%	+1.7%	+ \$30.94	34.9%	34.9%	32.5%	31.5%
Research	24.5%	-19.4%	+ \$9.56	22.6%	20.3%	32.2%	25.0%
Academic Support	9.9%	+26.2%	+ \$10.98	8.4%	7.1%	7.3%	9.2%
Student Services	3.8%	+29.2%	+ \$4.36	7.9%	8.6%	6.3%	6.4%
Institutional Support	9.5%	+15.8%	+ \$9.50	14.9%	13.9%	10.1%	9.1%
Auxiliary Enterprises	13.5%	+6.2%	+ \$11.76	11.2%	11.3%	9.8%	7.1%

* Source = IPEDS

Faculty and Administration Headcount

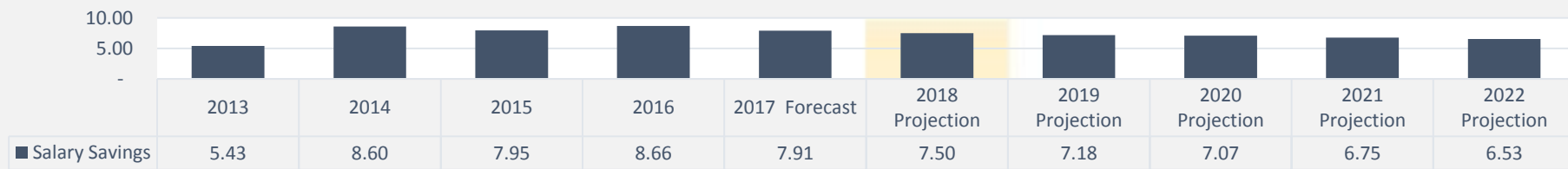
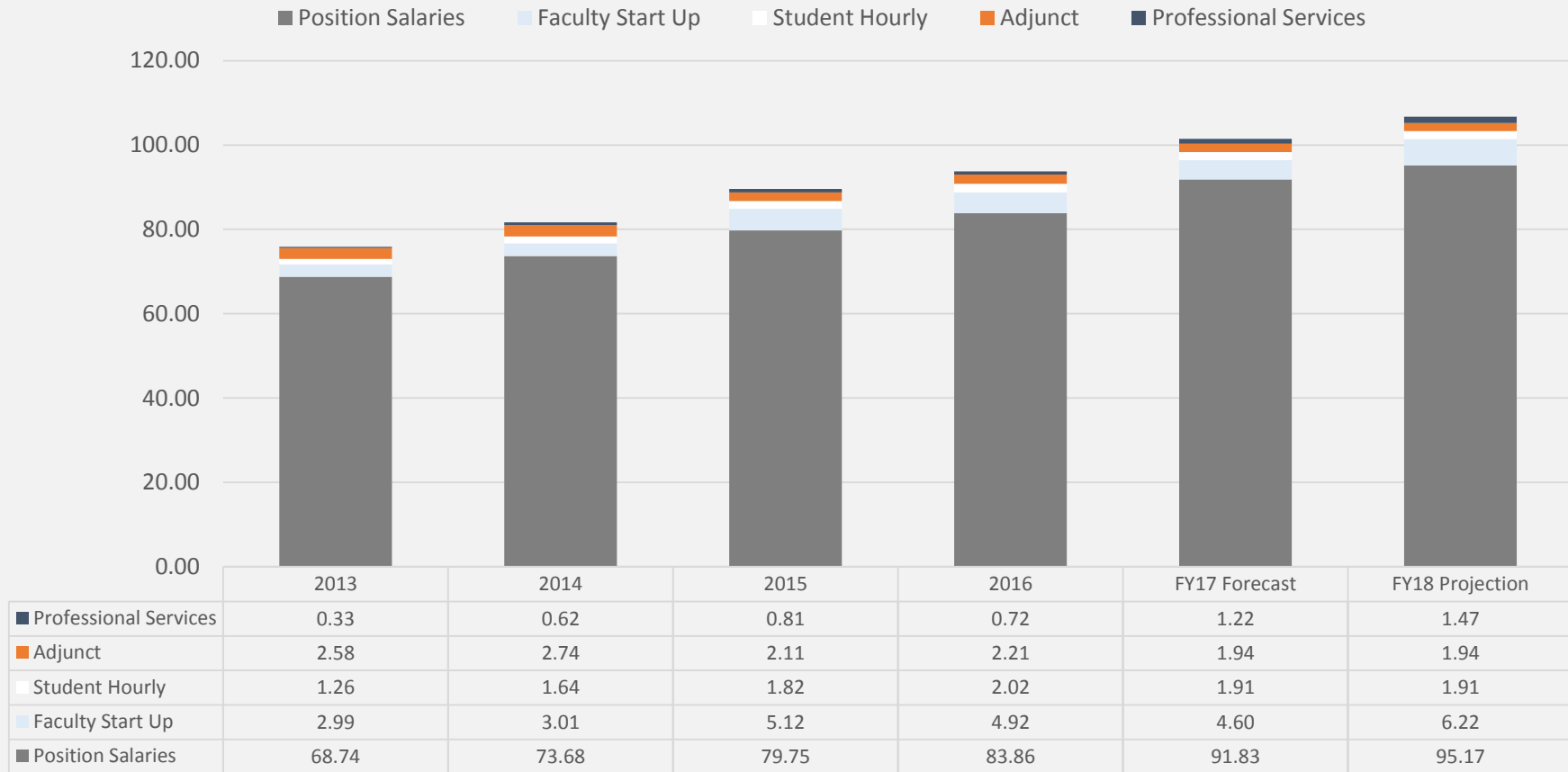


New administration staff includes but is not limited to:
 Colleges – 12 CASA – 8
 CGS – 16 Compliance – 4
 ORA – 4 Buildings - 22

- | | | | |
|-----------------------|------------|-----------------------|--------------|
| <u>Faculty</u> | | <u>Administration</u> | |
| ■ Tenure/Tenure Track | ■ Teaching | ■ Administrative | ■ Classified |
| ■ Research | ■ Adjunct | ■ Other | |
| ■ Other | | | |

*UR/GR Enrollment

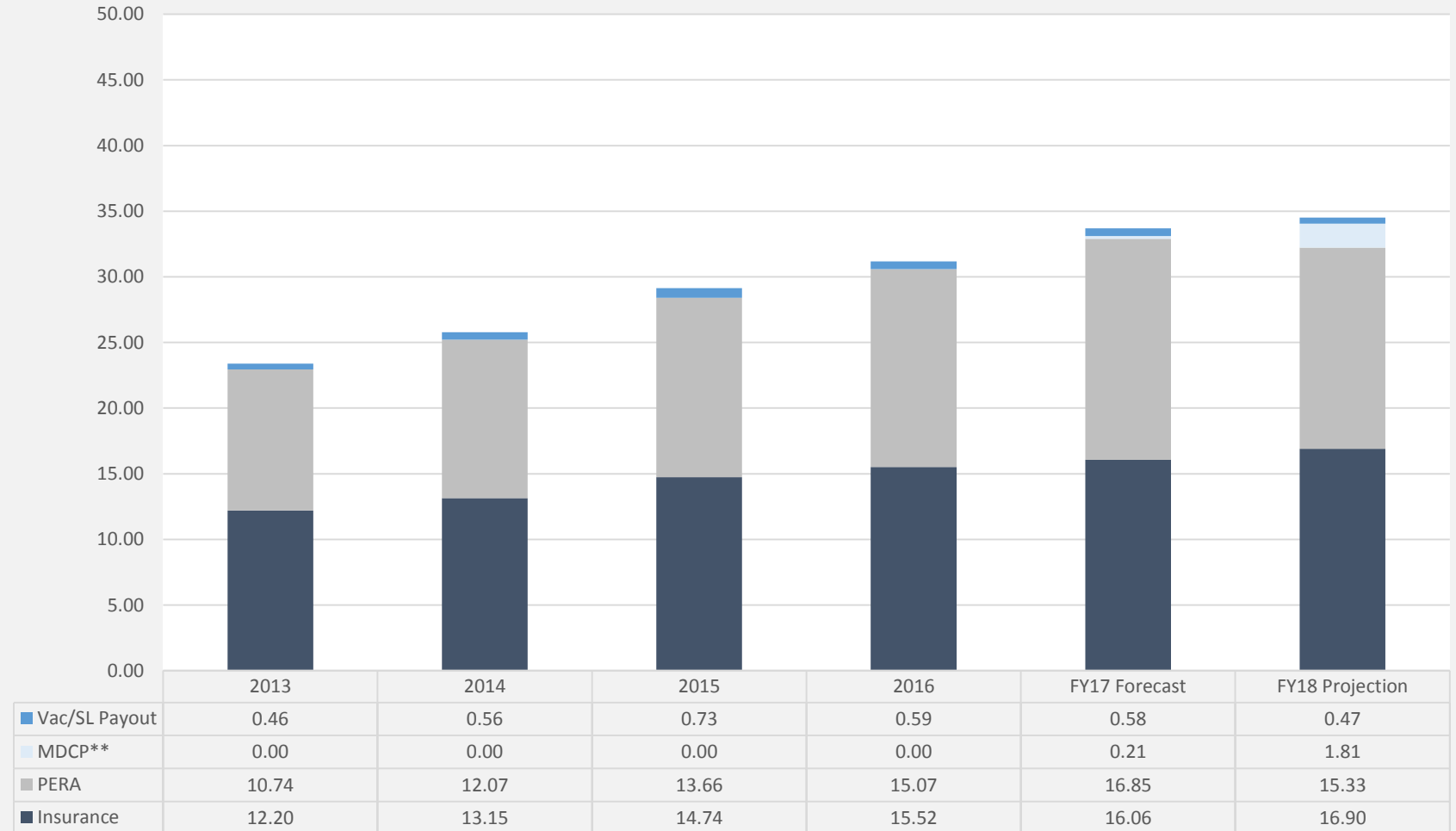
Labor



Health Benefits

Health Insurance – Peers*	
	Employer Coverage
Mines	100% coverage; employee + family
Stanford	Offers a plan for 100% coverage for full-time (employee only)
CSU - Eng.	Offers a plan for 100% coverage (employee only)
Cal-Berkeley	Offers a plan for 100% coverage (employee, emp + children, emp + adult, family)
Georgia Tech	Offers a plan for 90.7% coverage
RPI	78% coverage for full-time at \$50k or less 75% coverage for full-time at \$50k or more

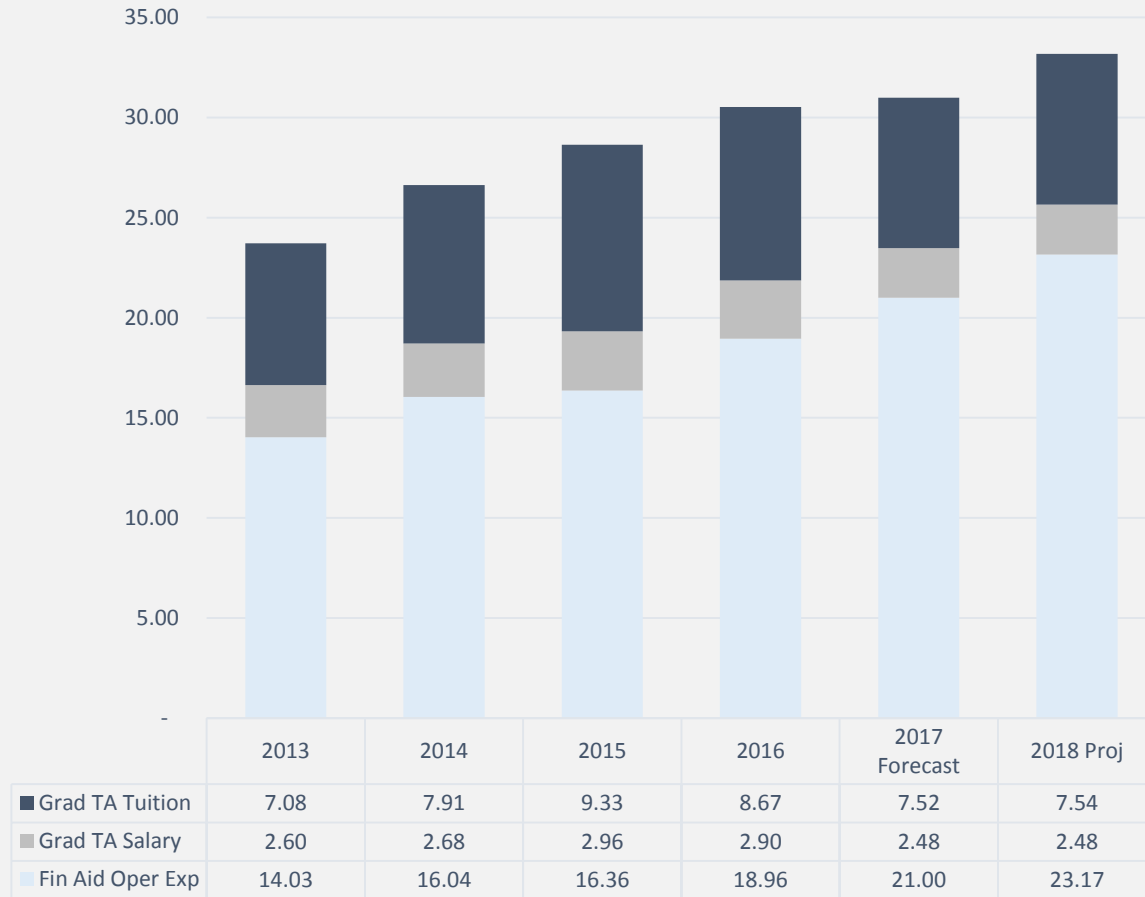
* Source = respective peers websites



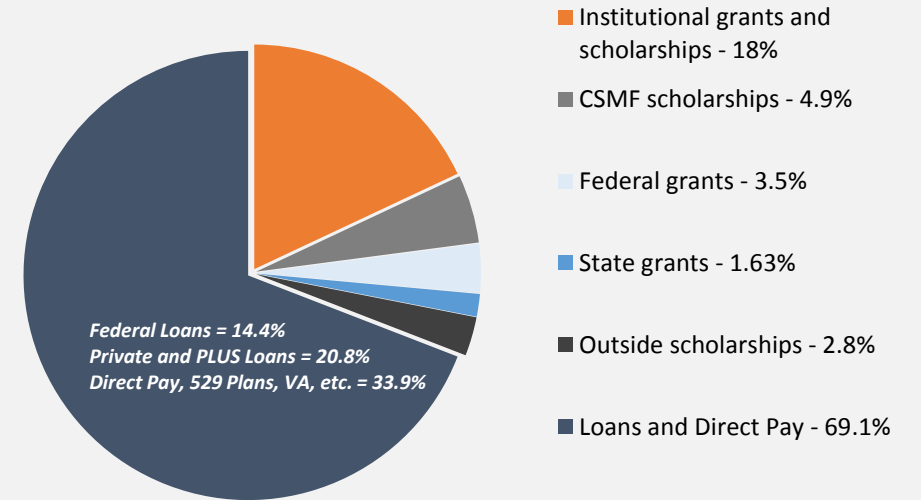
**Mines Defined Contribution Plan

■ Insurance ■ PERA ■ MDCP** ■ Vac/SL Payout

Undergraduate Financial Aid and Graduate TA Labor



On average, how is Undergraduate tuition paid?



Reserves

Unrestricted Net Assets Excluding Pension Liabilities

	Undesignated	Designated					Total Unrestricted
		Faculty Start up	Petroleum Institute	Colorado Scholars	Student Fee/ Health Insurance	Other	
Beginning Balance at July 1, 2016	42,639,704	19,446,965	13,560,282	6,996,405	6,806,486	26,606,884	116,056,726
Additions	10,823,426	5,900,000	740,809	375,082		3,424,863	
Reductions	(32,819,323)	(8,500,000)				(3,036,804)	
Ending Balance June 30, 2017	20,643,807	16,846,965	14,301,091	7,371,487	6,806,486	26,994,943	92,964,779
Additions	2,000,000	6,219,096				597,581	
Reductions	(9,430,000)	(8,500,000)					
Ending Balance June 30, 2018	13,213,807	14,566,061	14,301,091	7,371,487	6,806,486	27,592,524	83,851,456
Additions	2,800,000	6,219,096					
Reductions	-	(8,500,000)					
Ending Balance June 30, 2019	16,013,807	12,285,157	14,301,091	7,371,487	6,806,486	27,592,524	84,370,552
Additions	2,800,000	6,219,096					
Reductions	(1,200,000)	(8,500,000)					
Ending Balance June 30, 2020	17,613,807	10,004,253	14,301,091	7,371,487	6,806,486	27,592,524	83,689,648
Additions	2,800,000	6,219,096					
Reductions	-	(8,500,000)					
Ending Balance June 30, 2021	20,413,807	7,723,349	14,301,091	7,371,487	6,806,486	27,592,524	84,208,744

Undesignated uses FY2017:

CoorsTek - \$17,825,945
 Boiler Plant - \$6,889,665
 1600 Jackson Street - \$4,930,000
 Strategic Initiatives - \$368,944
 Rollforward for FY17 operating - \$947,150
 Other - \$1,857,619

Undesignated uses FY2018:

CoorsTek - \$459,777
 Green Center Roof - \$8,500,000
 Campus Switch Gear - \$470,000

Undesignated uses FY2020:

Potential Real Estate adjacent to
 campus - \$1,200,000

CSM Foundation Budget

CSM Foundation – Preliminary FY18 Unrestricted Budget

	FY'18	FY'17	Change from PY	
			Amount	Percent
REVENUE:				
CSMF Endowment Advancement Fee - 1.75% (FY17 was 1.8%)	\$ 3,167,844	\$ 3,196,778	\$ (28,934)	-1%
CSM Endowment Held Fees - 1.75%	451,240	474,739	(23,499)	-5%
Net CSM Advancement Services Fee *	1,786,649	1,625,771	160,878	10%
Administration Fee on Non-Endowed Restr Gifts	260,000	260,000	-	0%
Unrestricted Cash Gifts-Bequests, trusts, etc	250,000	250,000	-	0%
Reserve Endowment Support	387,222	148,616	238,606	161%
Other Sources	48,000	48,000	-	0%
Unrestricted Investment Income	-	110,000	(110,000)	-100%
CSMF Reserve Endowment-Starzler Welcome Center lease	-	200,900	(200,900)	-100%
Subtotal Revenue excluding Alumni Relations	\$ 6,350,955	\$ 6,314,804	\$ 36,151	1%
Foundation Alumni Relations support	-	175,000	(175,000)	---
University Alumni Relations support	285,000	110,000	175,000	---
CSMAA Alumni Relations Support	72,400	72,400	-	---
Alumni Relations Revenue	37,600	50,609	(13,009)	
Subtotal CSMF Alumni Relations Revenue	\$ 395,000	\$ 408,009	\$ (13,009)	---
Total CSMF Revenue (includes Alumni Relations)	\$ 6,745,955	\$ 6,722,813	\$ 23,142	0%

EXPENDITURES:

Personnel Compensation	\$ 5,235,258	\$ 5,132,606	\$ 102,652	2%
Operations	1,510,697	1,590,207	(79,510)	-5%
Total CSMF Expenditures (includes Alumni Relations**)	\$ 6,745,955	\$ 6,722,813	\$ 23,142	0%

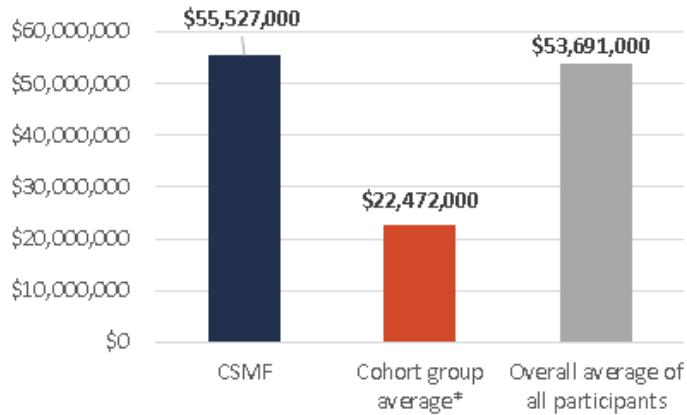
*CSM Advancement Fee	\$ 1,900,000
Less Colorado Legislative Services contract	\$ (113,351)
	<u>\$ 1,786,649</u>

** In addition to the \$400,000 Alumni Relations budget, the Foundation provides AR Program management, financial and legal oversight, marketing and media support, alumni database management, and systems support.

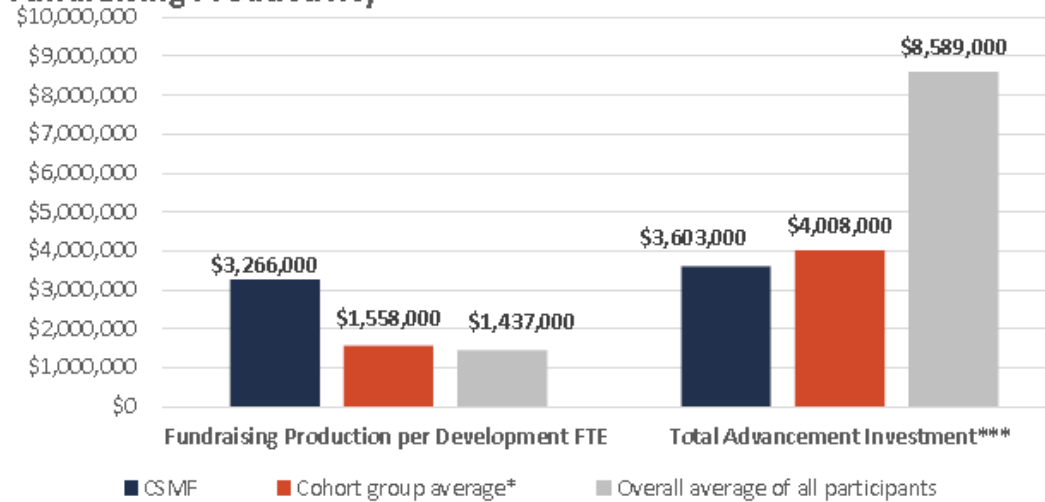
Advancement Investment & Performance Benchmarking (provided by CSMF)

We participate in the EAB (Education Advisory Board) Advancement Investment and Performance Initiative to benchmark ourselves with 30+ universities on staffing, operation budget and fundraising production. The following observations are based on FY2013-2015 data averages.

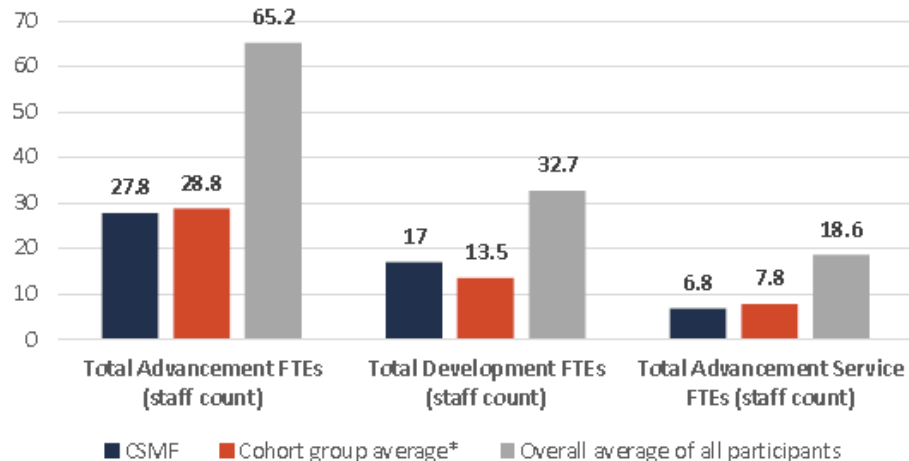
Total Fundraising Production



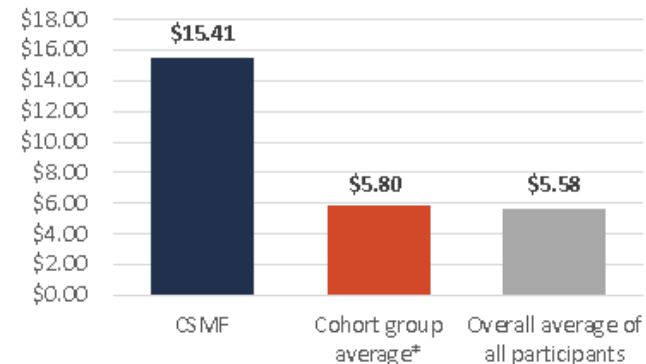
Fundraising Productivity



Staffing Investment



Return on Investment ROI**



*cohort universities based on a combination of alumni of record, enrollment size, endowment value and classification (research or master's university)

**ROI calculation is dollars raised per dollar of investment (EAB calculation)

***Institutions total advancement investment including personnel, operating and capital expenses