DEPARTMENT OF HIGHER EDUCATION
FY 2018-19 JOINT BUDGET COMMITTEE HEARING AGENDA
(Day 3 of 3)

Friday, January 5, 2018
9:00 am – 12:00 pm

9:00-11:00 PANEL 4: UNIVERSITY OF COLORADO SYSTEM, COLORADO STATE UNIVERSITY SYSTEM, UNIVERSITY OF NORTHERN COLORADO, COLORADO SCHOOL OF MINES

INTRODUCTIONS AND OPENING COMMENTS (5 MINUTES PER GOVERNING BOARD)
Note: the JBC requests only one speaker per governing board

Presenters:
- Bruce Benson, President, University of Colorado System
- Dr. Tony Frank, Chancellor, Colorado State University System
- Kay Norton, President, University of Northern Colorado
- Dr. Paul Johnson, President, Colorado School of Mines

PANEL QUESTIONS

Higher Education Master Plan

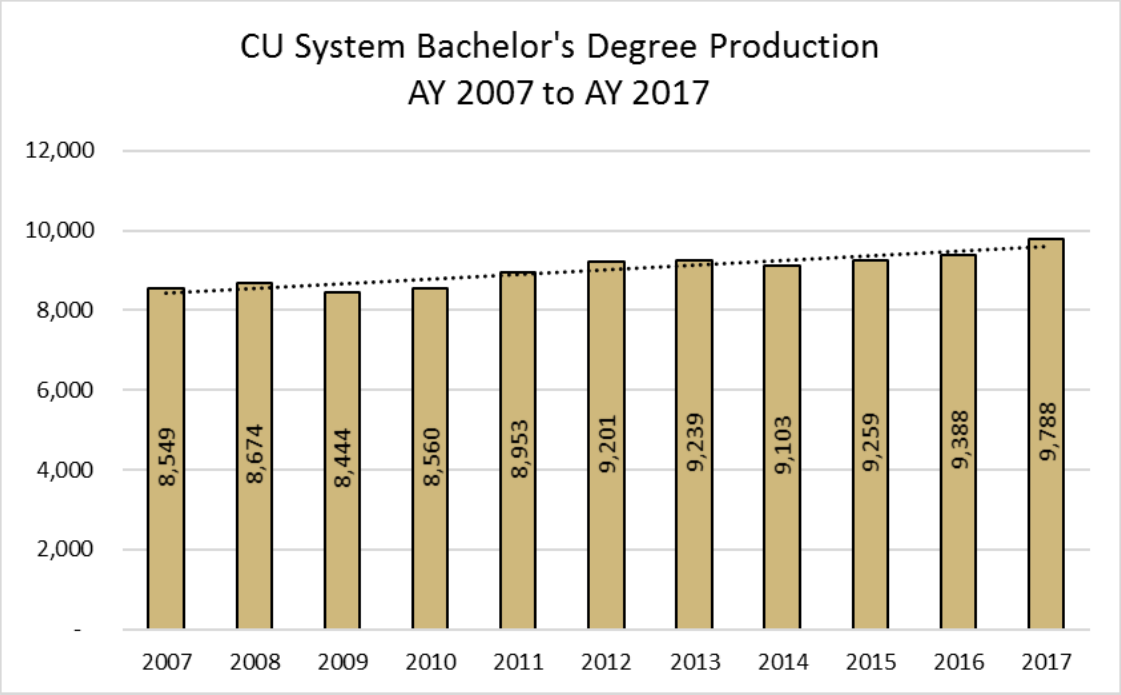
1 Did the 2012 State Master Plan affect your institution's activities for the last five years? If so, how? Do you expect the 2017 Master Plan refresh to affect your activities? If so, how? Are there specific initiatives you are implementing or plan to implement for this purpose? *[For background, please include data on your average annual rate of growth in increasing credential-production for the last five years versus the prior five years and your projected rate of growth between 2017 and 2025. How many credentials do you expect to issue as of 2025? How does this compare to the Department's aspirational goal for your governing board?]*

University of Colorado System

The University of Colorado is always striving to improve performance outcomes like degree completions. These priorities are highlighted in the 2012 DHE Master Plan as well. CU and the 2012 CCHE State Master Plan consider degree attainment one, if not the primary performance goal to be measured and improved upon.

Over the 10 years between 2007 and 2017, CU has increased Bachelor's degree production by over 14 percent, with a compound annual growth rate (CAGR) of approximately 1.5 percent, illustrated in Figure 1 below.

Figure 1



CU continues to lead the state in overall degree production for Bachelors level and above, despite having experienced an inflation adjusted reduction of over 54 percent in state funding per resident student since FY 2000-01 (the largest reduction in the state). CU's overall degree production (Bachelors degree and above) surpassed 15,000 in AY 2017.
Over this period of time, we also dedicated significant internal resources to financial aid to ensure CU remains accessible. In fact, we will spend nearly $200 million on institutional financial aid this year.

As further background to this question, both the 2007 to 2012 time frame and the 2012 to 2017 time frame are noted in Table 1 below. Both time frames maintain fairly consistent compound annual growth rates at 1.5 percent and 1.2 percent.

Table 1

Bachelor's Degree Production 2007 to 2012							
Academic Year	2007	2008	2009	2010	2011	2012	CAGR
Bachelor's Degrees	8,549	8,674	8,444	8,560	8,953	9,201	'07 to '12
Annual Percent Change		1.5%	-2.7%	1.4%	4.6%	2.8%	1.5%
Bachelor's Degree Production 2012 to 2017							
Academic Year	2012	2013	2014	2015	2016	2017	CAGR
Bachelor's Degrees	9,201	9,239	9,103	9,259	9,388	9,788	'12 to '15
Percent Change		0.4%	-1.5%	1.7%	1.4%	4.3%	1.2%

Source: *Colorado Department of Higher Education SURDS (Bachelor's degree completions 2007-2017)*

In 2015 the CU Regents established metrics covering several critical areas that measure performance over time. Each CU campus has established goals that align with the CU Regent metrics. All of the Regent metrics and Campus goal information can be found at:
https://www.cu.edu/budgetpolicy/regent-metrics-2015

One of the central campus goals is increased degree production.

Figure 2 and Figure 3 on the following page illustrate the difference in degree production between the:

- *2017 CCHE Master Plan goal for CU*
- *CU's goals for 2017 thru 2020 (as presented to CU Regents in July 2017)*
- *Historical average annual degree growth from 2007 to 2016*

Figure 2

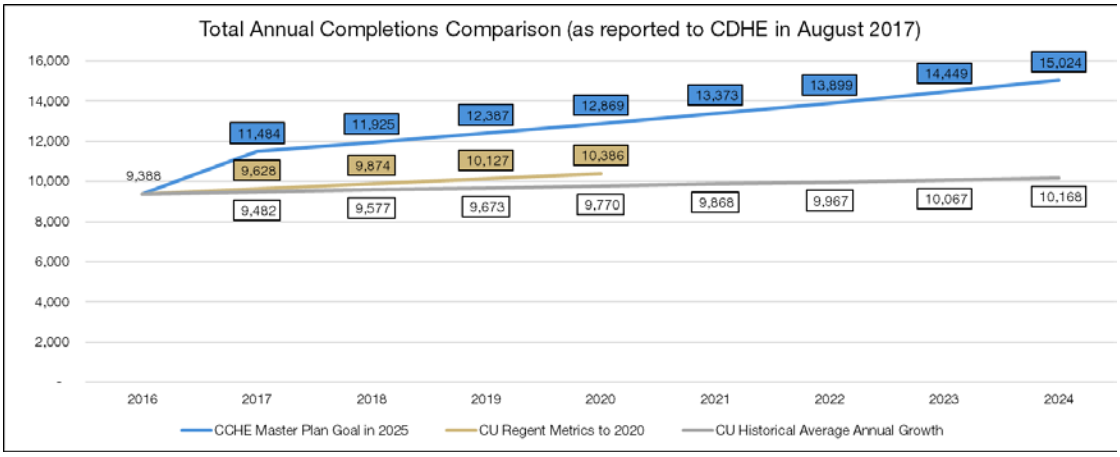
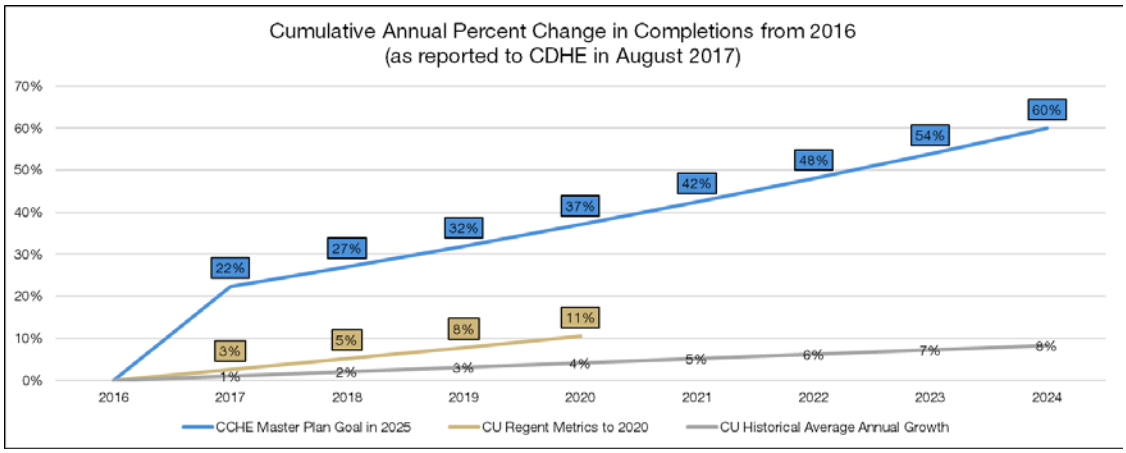


Figure 3



While being a stretch, CU believes our aspirational goals (in gold above) are achievable when implementing the strategies detailed below. This despite the enrollment headwinds being faced by many higher education institutions in our nation. ***Achieving the CCHE Master Plan goal for CU in 2017 would require CU to***

increase completions by roughly 22 percent over one year. This level of increase is not achievable. *We affirm our role in contributing to credential production in Colorado and look forward to working with the CDHE and CCHE in the future to serve the students and families of Colorado.*

Campus strategies presented to the CU Regents in July 2017 to help reach CU's campus goals include, but are not limited to the following:

CU Boulder

- *Revised core curriculum within the College of Arts and Sciences to open many academic avenues for students, especially those interested in pursuing multiple majors;*
- *Cross-departmental efforts to increase persistence of first-year students;*
- *Universal approach to advising provides a new advising platform accessible to every school and college, and shared advising notes between schools and student support offices;*
- *CU Achieve—a summer school grant for sophomores to achieve junior standing by the following fall;*
- *Expanded CU Promise from 300 to over 1,100 students (grants and work-study for Pell-eligible students covers student's share of tuition, fees and books);*
- *Esteemed Scholars Program: keeps Colorado's best and brightest in state by making us competitive with national peers for top state students. Awards are up from 791 students in the fall or 2013 to more than 1,000 students in the fall of 2016;*
- *Arts and Humanities Merit Scholarship: helps us compete to enroll top students in the arts and humanities;*
- *New Transfer Excellence Scholarship: provides more opportunities for students attending community college to attend CU Boulder; and*
- *Growth and development of online education, including post Baccalaureate in Computer Science to be offered in 2018.*

CU Denver

- *Launch Educational Advisory Board (EAB) / Student Success Partnership to improve educational outcomes;*
- *Strengthen undergraduate advising experience to aid in retention and completion;*
- *Increase institutional financial aid to undergraduates;*
- *Integrate more High-Impact Practices into pedagogy and curriculum, including experiential and engaged learning to aid in retention and completion;*
- *Implement strategies for clearer pathways with metro-area high schools and community colleges to improve enrollments, transfers and completions;*
- *Continue focus on recruiting and retaining students, faculty and staff from diverse backgrounds and fostering a culture of inclusion and respect; and*
- *Launch multi-year scholarship campaign.*

UCCS

- *Revise the Chancellor's Scholarship to a four year award to improve affordability and retention by providing assistance from freshman to senior year.*
- *Increase student employment and work-study opportunities on campus.*

- *Provide diverse instructional offerings so working students have more opportunities to complete degree programs and earn their degree:*
    - *Expansion of online instruction including fully online degree completion programs;*
    - *Expand Saturday course offerings;*
    - *Expand evening course offerings that go until 10:00 p.m.;*
    - *Provide hybrid offerings which include face to face and online;*
    - *Expand intense course offerings which are taught over a one or two week period; and*
    - *Expand summer session course offerings.*
- *Market-driven degree programs that attract students who do not have a degree but do have some college credit.*
- *Strengthen the relationship with community colleges, in particular Pikes Peak Community College, to support transfer students moving from AA degrees to a bachelor's degree.*

Colorado State University System

Response:
The State Master Plan is aligned with long-term CSU System goals, although its ambitious nature is causing us to increase the pace at which we are examining non-degree credentials and other non-traditional educational outcomes that would help the state address workforce needs.

CSU-Fort Collins

The change in resident graduates earning a bachelor's degree has outpaced the change in resident undergraduate FTE. From FY2012 through FY17, resident undergraduate FTE at CSU declined 3.93% while the number of residents graduating with a bachelor's degree increased by 3.10%.

FISCAL YEAR	RESIDENCY	GRADUATES (BACH.)	UG HEADCOUNT	UG FTE
2007	Resident	3,507	18,568	16,015
2008	Resident	3,571	18,725	15,966
2009	Resident	3,474	18,722	16,120
2010	Resident	3,609	19,178	16,519
2011	Resident	3,680	19,758	17,043
2012	Resident	3,837	19,820	17,081
2013	Resident	3,916	19,593	16,931
2014	Resident	4,010	19,354	16,620

2015	*Resident*	*3,989*	*18,875*	*16,078*
2016	*Resident*	*3,863*	*19,018*	*16,282*
2017	*Resident*	*3,956*	*19,074*	*16,411*

With our holistic admissions review, we are confident that all of our admitted students are capable, with appropriate support, of earning their degree. We are actively recruiting resident undergraduates with both high-quality academic programs and financial aid resources. This is reflected in our six-year graduation rate and other metrics (such as decreasing time-to-degree). We have undertaken a suite of new initiatives focused on student success, and these, along with efforts over the past 10 years, have garnered CSU national attention (most recently as a finalist this year for APLU's Degree Completion Award). Additional strategies that are in play are developing new degree programs that we expect to attract additional students (such as a new undergraduate degree in data science).

CSU-Pueblo

CSU-Pueblo's average annual change was -2.6% in students earning degrees for the last five years, compared with an average annual increase of 2.5% in the prior five years. The declines we have seen are in large part due to steadily declining enrollments that occurred since fall 2011. When the economy began to rebound, there was a corresponding decline in enrollment due to residents choosing to re-enter the workforce. CSU-Pueblo projects increasing enrollments over the next eight-year horizon. CSU-Pueblo projects at least 950 undergraduate degrees awarded in 2025. Over a recent three-year period, compared with our CCHE-approved peers, we are one of the smaller institutions, but second in the number of degrees awarded to Hispanic undergraduate students.

CSU-Pueblo is launching five new degree programs that are of local high demand:

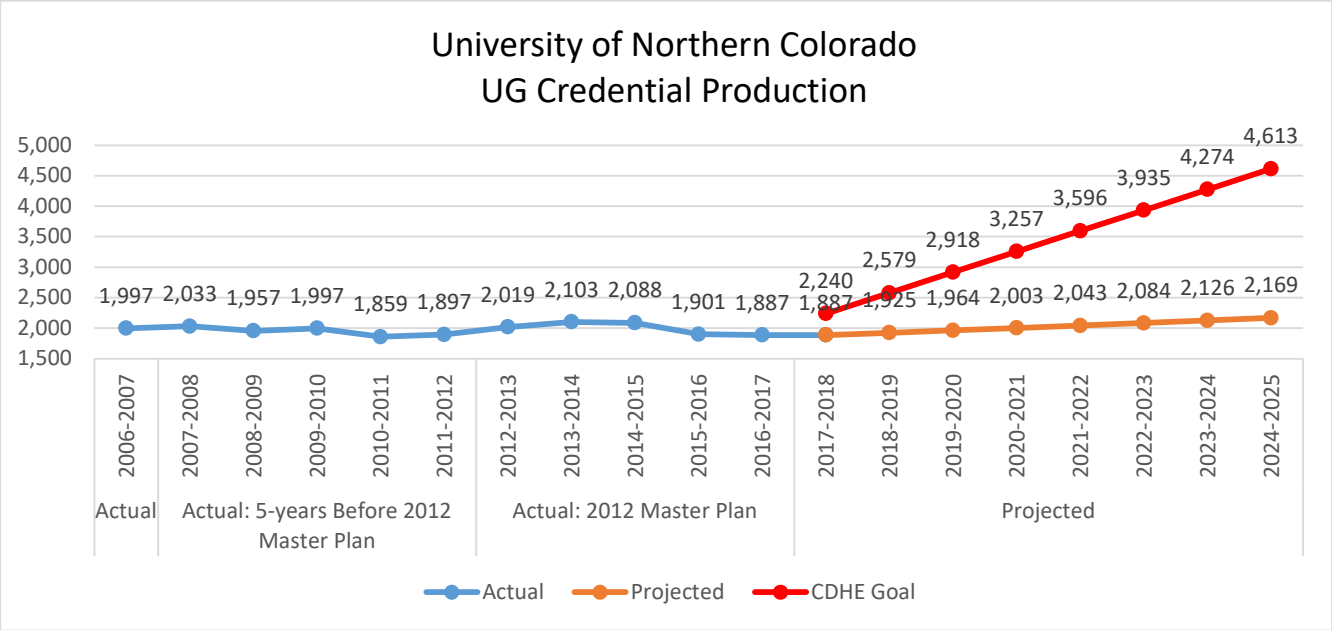
- *Master's in Social Work (which will support services needed in part for the large military community in southeastern Colorado and beyond; for practitioners to serve military veterans and others suffering from PTSD; for communities facing issues of substance abuse; and to meet a variety of social needs - especially since many currently employed practitioners are near retirement);*
- *Doctor of Nursing Practice (helping with the shortage of physicians in rural Colorado);*
- *B.S. in early childhood education (filling a need in southeastern Colorado);*
- *M.S. in athletic training;*
- *and B.S. in wildlife and natural resources.*

Additionally, CSU-Pueblo is increasing its cohort size for new nursing undergraduate admits, along with increasing our RN-to-BSN class sizes.

University of Northern Colorado

UNC's enrollment and student success strategic priorities are consistent with the State Master Plan goals of increasing credential completion, closing equity gaps, improving student success and investing in affordability and innovation.

As part of UNC's Five-year Fiscal Sustainability Plan and companion Enrollment Plan, we have been engaged in activities to increase the number of new students and improve the year-to-year retention of those students. In the past three years, we have increased our incoming freshmen class by 10% and increased the number of students of color in the incoming class from 42% to 51%. At the same time, we have been investing in academic support activities to improve student advising and success in critical classes such as Math and English gateway courses. Over time, the increased number of students and the improvements in academic support will yield growth in credential production, reversing our downward trend in recent years.



UNC Average Annual Rate of Growth in Credential-Production		
	Δ (%)	
	Total Growth Rate	*Annual Average*
2007/2008 - 2011/2012 (Actual)	*-6.7%*	*-1.6%*
2012/2013 - 2016/2017 (Actual)	*-6.5%*	*-1.6%*
2017/2018 - 2024/2025 (Projected)	*14.9%*	*2.0%*

Colorado School of Mines

Colorado School of Mines strategic goals have remained fairly consistent over the past decade --- specifically to 1) increase graduation rates to be comparable to other top-tier STEM-focused universities, 2) shorten overall time to degree completion, 3) have a student population that reflects the college-bound high school graduates in Colorado, 4) increase research funding, and 5) reach a student enrollment that optimizes use of our faculty and facilities to meet the goals above. In many cases our strategic goals closely align with the State Master Plan, particularly with respect to accessibility and student success.

From 2012 – 2017 the average annual growth rate in credential production was 8.7% for BS degrees and 6.1% for all degrees (BS, MS. PhD). Our strategic goal is to increase 6-year graduation rates from about 78% today to 85% by 2024. Our strategic plan calls for doubling of master's degree recipients combined with modest growth in undergraduate degrees, and those are driven by our interests to ensure future financial stability and sustainability while fulfilling our mission. We are planning on keeping our freshman class at around 1,100 due to capacity constraints. As a result increases in credential production will result through 1) increased graduation rates, 2) some additional transfer students, 3) non-thesis masters, and 4) development of online post-baccalaureate certificate programs. The success of #3 and #4 is largely unknown at this point, but we anticipate overall credential production could grow around 4-5% annually.

2 In your opinion, why has the State made so little progress in achieving its goals? Why is resident enrollment growth so weak? How much of it is the cost of higher education?

University of Colorado System

CU continues to contribute and make progress on the goals in the CCHE Master Plan. Since 2012 CU has increased bachelor degree production by 6 percent, which includes a 21 percent increase in bachelor degree production for Pell students. Figure 4, Figure 5, and Figure 6 below shows CU's contribution to all bachelor's degrees, master's degrees, and doctoral and professional degrees produced in FY 2016-17, respectively.

Figure 4

Percent Share of Baccalaureate Degrees Awarded FY 2016-17

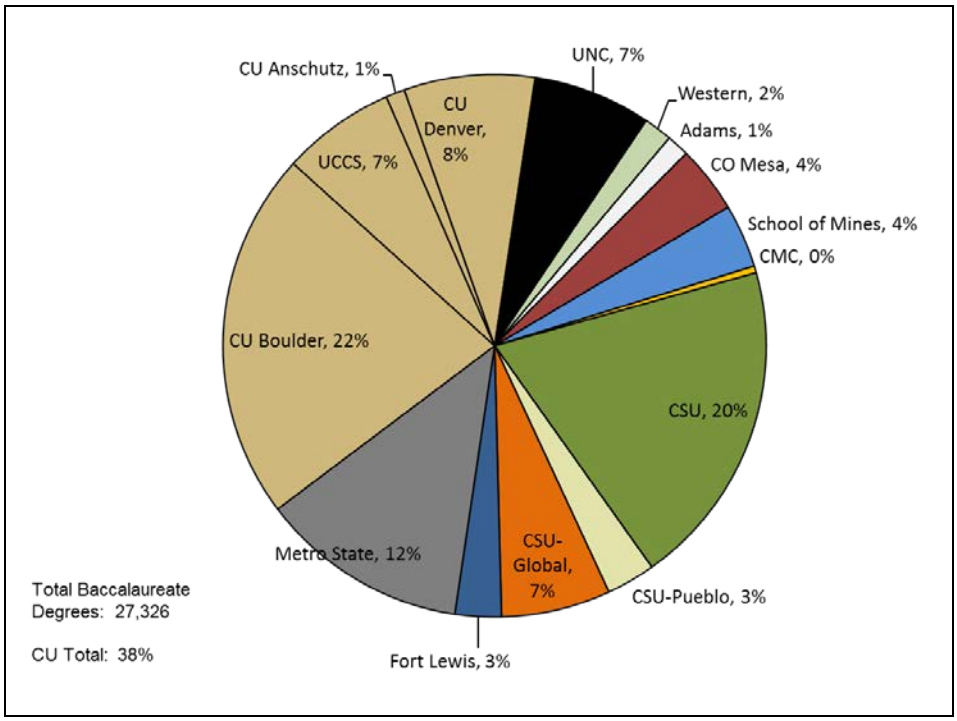


Figure 5

Percent Share of Master's Degrees Awarded FY 2016-17

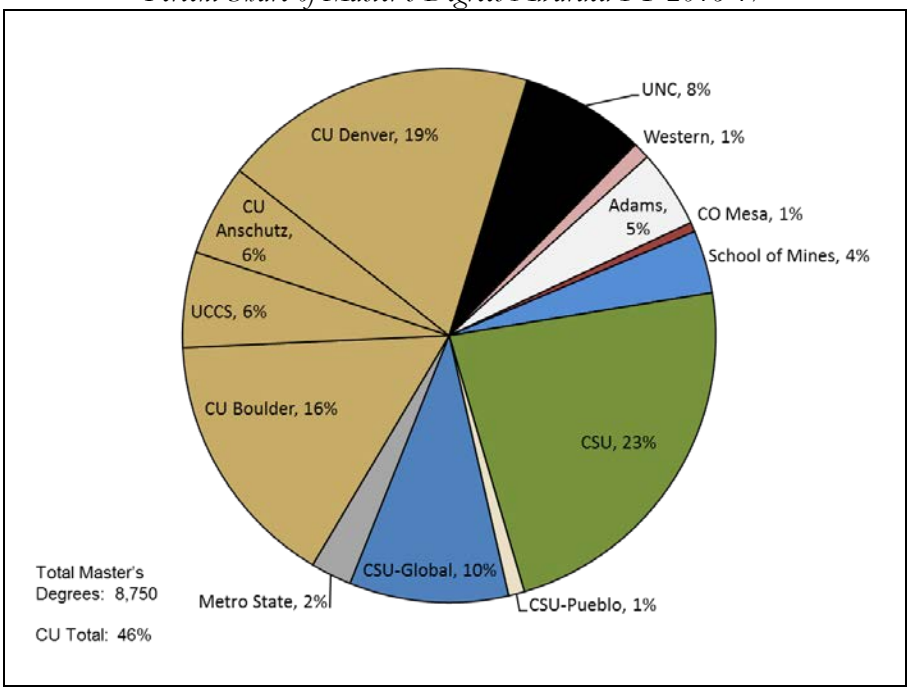
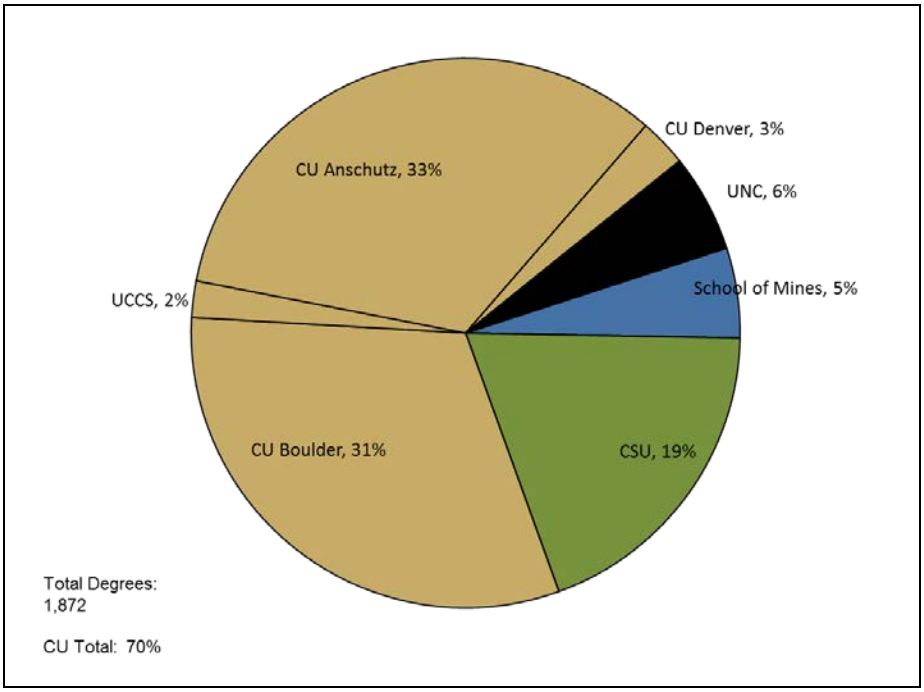


Figure 6

Percent Share of Doctoral and Professional Degrees Awarded FY 2016-17

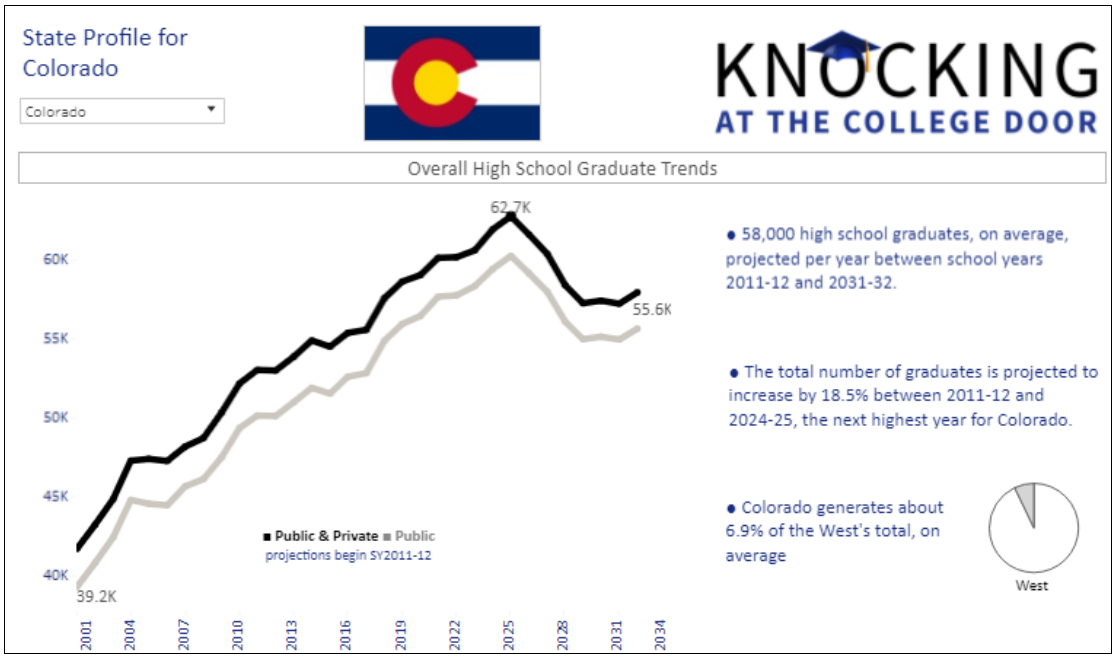


Despite the challenging enrollment headwinds being faced by many higher education institutions in our nation, CU enrollments are up. From Fall 2014 to Fall 2017, CU's total enrollment (headcount) has increased from 59,667 to 65,625 (9 percent increase). Over the same time frame CU's undergraduate resident enrollment (headcount) has increased from 32,724 to 35,175 (7 percent increase).

With this said, we are concerned about long term enrollment prospects for the entire system of public higher education in Colorado. Below, Figure 7 from the Western Interstate Commission on Higher Education (WICHE) shows that the number of ***Colorado high school graduates will peak in 2025****. A link to this interactive data can be found at: https://knocking.wiche.edu/state-profiles/*

The projected peak of Colorado high school graduates in the coming years will make it difficult for public institutions of higher education to continually increase credential production.

Figure 7



CU accepts all qualified resident students and will continue to do so in the future. *Of course the cost of higher education certainly plays a role in an individual's decision to pursue a higher education. Public institutions of higher education, in part, rely on the state to help make education more affordable. Data continue to be clear that the cost of higher education is very much worth it (please see our response to Question 5 where this is discussed further).*

CU Boulder recently implemented an undergraduate resident tuition and mandatory fee guarantee (CU Boulder Guarantee. This guarantee locks in tuition and mandatory fees at the same amount for four year. The CU Boulder Guarantee enables students and families to plan not just first-year tuition and mandatory fee costs, but

what those costs will be for four years. More information on the CU Boulder Guarantee can be found at: https://bursar.colorado.edu/tuition-fees/cu-boulder-tuition-guarantee/undergraduate-resident-tuition-guarantee/

CU Boulder is also planning a complete elimination of all course and program fees in FY 2018-19, which is anticipated to save students $8.4 million. We believe that our efforts in keeping down cost and allowing for individuals to understand the entire cost of pursuing an education are incredible valuable to attracting students.

Colorado State University System

Response:

As the state that consistently ranks as the most efficient in the country when it comes to the cost of producing college degrees, we believe the cost of higher education is being effectively managed in our state. Colorado remains a moderate tuition state in the national marketplace. This is supported by student loan debt data. While student loan debt has been increasing as a share of total household debt nationally, Colorado schools still compare favorably to the national averages, with stable debt rates at graduation and very low default rates compared to peers. We also continue to enjoy record levels of freshman enrollment at CSU, indicating that we are well-placed in the marketplace in terms of cost.

State demographic data and information on college readiness perhaps best address the other dimensions of this question. While data available online through CDE are limited to 2004-2017, the total high school graduation rate in Colorado has decreased over that time from 82.5% to 79%. According to ACT, 26% of 2017 graduates met all four College Readiness Benchmark Scores; 61% met Benchmark in English; 38% met Benchmark in Math. This is significant because math is highly associated with degree completion at the postsecondary level. At CSU, students who are unsuccessful in math in their first year display a graduation rate 20 points lower than students who are successful. Further, ACT reporting indicates that 22% of the 2017high school graduating class did not complete a core curriculum. In any given entering class at CSU, about 9% of students are flagged as "in need of remediation" in accordance with state guidelines. Most of that need is in math; these students have a freshman retention rate more than 10 points lower than their peers at CSU. If the need for remediation is across math and writing, the retention drops even further to around 60%.
Colorado is also facing increased competition from other states in recruiting the college-going population. While the growth rate of the 17-25 year old cohort has been in a flat and downward trend, Colorado is entering a time of moderate growth for that cohort. The prospect of having access to a well-prepared, economically healthy cohort of college-aged students has led to increased competition from out-of-state universities, evidenced by the increase in regional recruiters who are placed in the Denver area (more than 30 at this point). Additionally, while the growth anticipated in this cohort through 2025 is a positive, it must be noted that it is largely expected to be in populations with traditionally lower college-going rates and less economic capacity.

CSU-Fort Collins

We remain proud to be the institution of choice for Colorado high-school students, a reflection of the value proposition we continue to offer to state residents. Even as the cost of college attendance has risen nationwide, 1 in

4 of our students is still the first in their family to go to college and 1 in 5 is a Pell Grant recipient. Attending and graduating from CSU impacts socio-economic mobility in Colorado.

CSU-Pueblo

At CSU-Pueblo, enrollment growth has long been tied to the strength of the local economy. When the economy is strong, many prospective students elect to go directly into the workforce and only choose to enter higher education during an economic downturn, when education is viewed as a means for keeping a job or staying competitive for limited new opportunities. This is borne out by our enrollment trends, which showed strong increases after the recession of 2008, hitting a peak in FY11, then slowly receding as job opportunities returned to the community. This mirrors the trend among Colorado community colleges, which makes sense, since both have admissions standards geared toward access for underserved populations. Given that more than 90% of our entering students receive some form of financial aid and more than 45% of our students are Pell eligible, we know cost is an important factor in the college decision process for the populations we serve, and financial aid can make a significant impact on enrollment decisions. However, we do not believe our tuition costs are the most important factor in the college decision. For example, in FY 2014, CSU-Pueblo chose to freeze its tuition and saw no positive enrollment gains in that cycle.

University of Northern Colorado

In our opinion, clear and realistic goals, consistent measures for success, and consistent incentives are critical for goal achievement. Both a) the refresh of the Master Plan goals and b) the clean-up of the SB 11-052 performance funding (which was inconsistent with the HB 1319 funding model) should be helpful in providing the clarity and consistency necessary for goal achievement. It will also be important to have realistic goals.

Certainly, the rising cost of higher education contributes to the challenges. UNC has remained mindful of this and our tuition and fees are the lowest of the doctoral research institutions in Colorado.

Colorado School of Mines

Certainly the cost of higher education concerns all of us. Mines has made strong efforts to limit tuition rate increases in recent years and adjusts its in-state/out-of-state student mix to reflect both the State's investment in Higher Education and to mitigate impact to in-state families. For reference, it costs Mines about $27,420 per year to educate each of our students. This cost is much greater than what our in-state students pay in tuition plus state support per student.

While cost will always be a factor in higher education attainment it is certainly not the only factor. It is worth noting that the higher cost institutions tend to be most in demand, have highest graduation rates and, perhaps reflecting marketing demand, are growing. Plus, one needs to consider the cost relative to the benefit – the average salary for a Mines bachelor's degree recipient is over $65,000 per year.

3 Has the State chosen the right goals? Are these goals still relevant, in light of the experience over the last five years? Should the goals be more dynamic and updated more frequently?

University of Colorado System

Student success and performance metrics around retention and completion are timeless goals. The CCHE Master Plan goals in 2012 and 2017 are consistent with the CU Regents metrics and campus goals, and line up with goals being established by higher education systems across the county. More dynamic goals would likely still feed into the overall aggregate goal of completion.

Colorado State University System

Response:

The broad overall goal of meeting state workforce needs is appropriate. Given the length of the education pipeline, more frequent adjustments would be unlikely to be productive.
While the broad overall goal is appropriate, more emphasis needs to be placed on K-12 preparation and degree completion for adults who never attended postsecondary education or who have stopped out. Focusing almost exclusively on new-student entering cohort size or the high school college-going rate will not get us to our goal.

University of Northern Colorado

In our opinion the strategic goals -- increasing credential completion, closing equity gaps, improving student success and investing in affordability and innovation -- are relevant to the needs of Colorado. It is not clear that the specifically quantified results -- e.g., 66% of Colorado adults will earn a post-high school certificate or degree by 2025 -- are realistic. This is especially true, given the realities of statewide funding.

Recalibration may be appropriate, but frequent changes can be very problematic. A bachelor's degree is generally a four to six year proposition and it takes time for strategic initiatives to yield results. If goals and incentives change frequently, it becomes very challenging to get a valid assessment of what actually works. Consistency is critical to success.

Colorado School of Mines

The State Master Plan has 4 goals, but much of the attention and emphasis seems to be focused on the 66% attainment number. While we appreciate having an aspiration to shoot for it is less clear as to why that number is so magical to make it such a large focus of the State Master Plan. We remain concerned that the emphasis on achieving this goal will lead to small, highly selective and successful institutions like Mines getting lost in the shuffle.

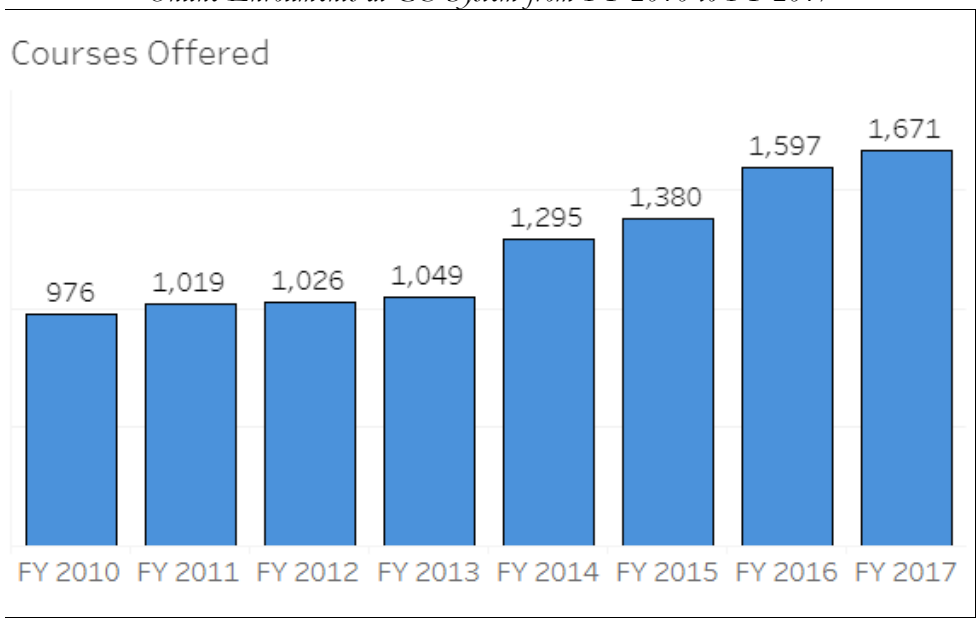
In addition to the 4 goals, we believe the State Master plan should explicitly include innovation and economic development as a strategic goal for higher education.

4 Given limitations on the state budget, how can we get a better education for citizens without simply building a bigger institutional system?

University of Colorado System

Demand for online courses has increased so campuses have adjusted offerings to meet the need. We now offer programs online through MOOCs and many programs have hybrid offerings. We have had over 1.6 million enrollments in our MOOCs from Fall 2013 to Fall 2016. We also plan to be offering a for credit masters in engineering via a MOOC platform in the near future. Below, Figure 8 illustrates the increase in online courses offered at CU campuses.

Figure 8
Online Enrollments at CU System from FY 2010 to FY 2017



(Source: https://www.cu.edu/online-enrollment)

We also work with partners throughout the state to improve access to higher education through pre-collegiate programs. These programs serve nearly 3,000 Colorado students at over 170 schools throughout Colorado. Programs are identified in Table 2 below by school districts.

Table 2

2016-17 Pre-Collegiate Development Program by School District				
CU Boulder	**UCCS**	**CU Denver**	**CU Anschutz**	**Rural Outreach**
Adams 12 Five Star Schools	Academy 20	Adams 12	Adams 12 Five Star Schools	Roaring Fork
Adams County 14	Colorado Springs 11	Adams 50	Adams 50	Summit
Adams 50	Falcon 49	Aurora Public Schools	Aurora Public Schools	Lake
Adams-Arapahoe 28J	Foutain 8	Cherry Creek 5	Cherry Creek 5	
Boulder Valley RE 2	Harrison 2	Denver Public Schools	Denver Public Schools	
Brighton 27J	Pueblo City 60	Jefferson County R-1	Jefferson County R-1	
Denver Public Schools	Pueblo County	Sheridan 2		
Mapleton 1	Widefield 3	Westminster Public Schools		
St. Vrain Valley RE 1J				
Weld County S/D RE-8				

Source: Pre-Collegiate Development Program Annual Report
https://www.cu.edu/doc/oaareportpre-collegiatedevelopmentprogram-2016-17pdf

- *At CU Boulder, 98 percent of CU Boulder participants indicated an intent to attend a postsecondary institution with 51 percent intending on enrolling on a CU campus*
- *At UCCS, 100 percent of the UCCS participants indicated an intent to attend a postsecondary institution with 48 percent intending on enrolling on a CU campus*
- *At CU Denver | Anschutz Medical Campus, 99 percent of CU Denver participants indicated an intent to attend a postsecondary institution with 41 percent intending on enrolling on a CU campus*

Colorado State University System

Response:
The State of CO already is the most efficient in the nation at producing a degree or credential per taxpayer dollar while holding tuition to national means (according to the National Center for Higher Education Management Systems).

CSU-Fort Collins:

We are constantly exploring opportunities for increasing our efficiency, with less than 5% of CSU's budget spent on institutional support (administration). CSU is also looking to innovation to assist our faculty and students in increasing attainment of student learning outcomes, with investments in hybrid and adaptive learning environments, peer-learning assistant programs, and revisions to core curricula that address student success. We also believe that increasing the efficiency to graduation is important. For CSU resident students, with an average net tuition cost of $7K each year (tuition less institutional financial aid) and an average starting salary around $45,000, every additional semester past four years actually costs the student almost $16,000. We have increased our 4-year graduation rate for residents by 5% in the last five years, and of those students that graduated from CSU in 2017, 64% did so in four years; nearly 80% completed their degree in 4.5 years or less.

CSU-Pueblo:

Increasing retention and graduation rates is an important goal of CSU-Pueblo, and figures prominently in our 2015-2020 university strategic plan. Recent increases have occurred in our six-year graduation rate, and our Hispanic graduation rate for the (most recent) fall 2011 cohort exceeds that of the overall campus rate, which is our highest in the past 9 years. Our fall 2016 cohort retention rate for Hispanic students also exceeded the overall campus rate. These increases are in part due to several US Department of Education HSI grants that CSU-Pueblo has received in recent years.

University of Northern Colorado

With limited funding, we need to be vigilant in assessing what actually results in a better education. Our decisions about where to invest need to be rooted in data about what works, not what we may want to work. As an example, while well-qualified faculty and an excellent classroom experience are essential to student learning and success, that alone is not sufficient. National data and UNC-specific data both demonstrate that student completion is also dependent upon robust academic support and student services.

Colorado School of Mines

Colorado's higher education system currently offers a wide variety of university models for Colorado residents to choose from. While there may be more efficient ways to organize a system of universities, we feel there is great value in giving students and their families choices, particularly with respect to university size and focus/mission, as those are key factors for student success.

5 There has been a lot of talk about the value of higher education. How do we know if a college degree or certificate is worth it?

University of Colorado System

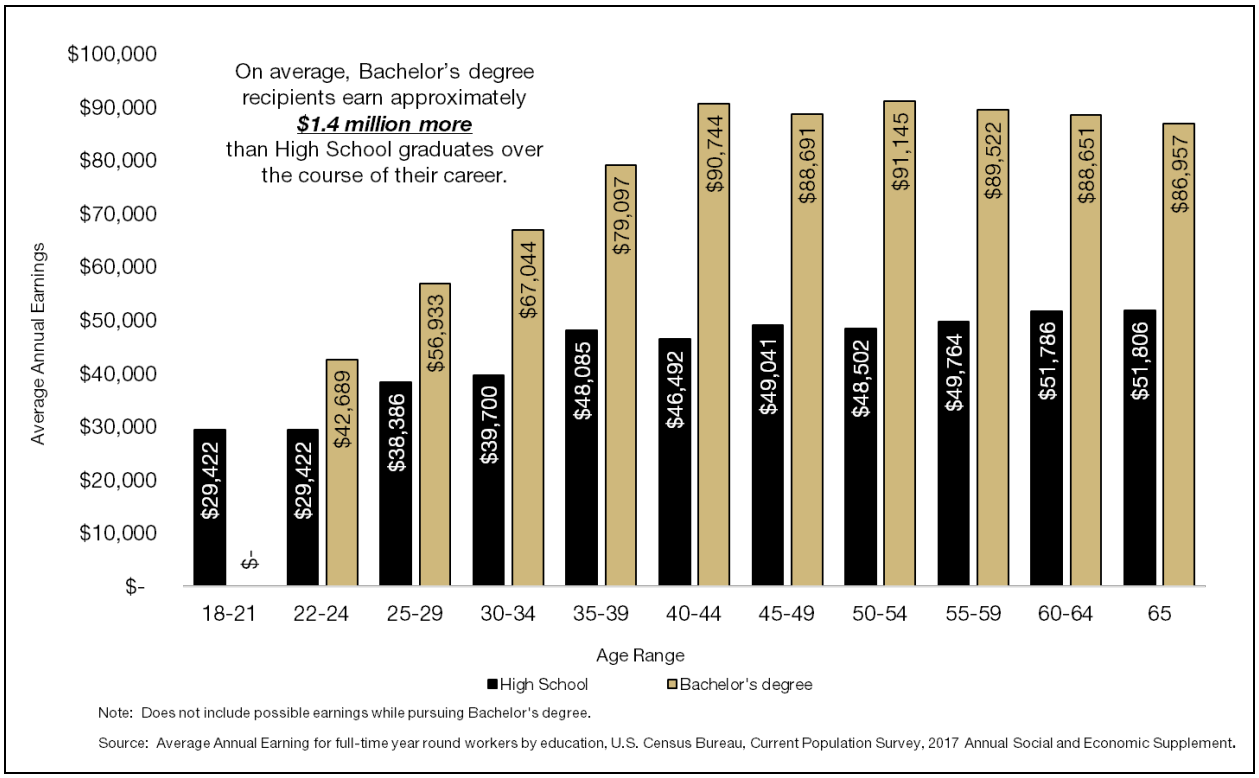
The most recent information available through the U.S. Census Bureau, Current Population Survey, 2017 Annual Social and Economic Supplement, continues to show that post-secondary education leads to higher earnings over an individual's lifetime. The entire data set for with this information can be found here: www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf

Using the U.S. Census Bureau data cited above, the CU System Budget office calculated the difference in average lifetime earnings between an individual who only graduated high school and an individual who obtained a Bachelor's degree.

As illustrated and noted in Figure 9 (below) on average, Bachelor's degree recipients earn approximately $1.4 million more than High School graduates over the course of their career. This data also indicates that lifetime earnings continue to increase based on additional educational attainment (i.e. Master degree, Professional degree, Doctoral degree).

Figure 9

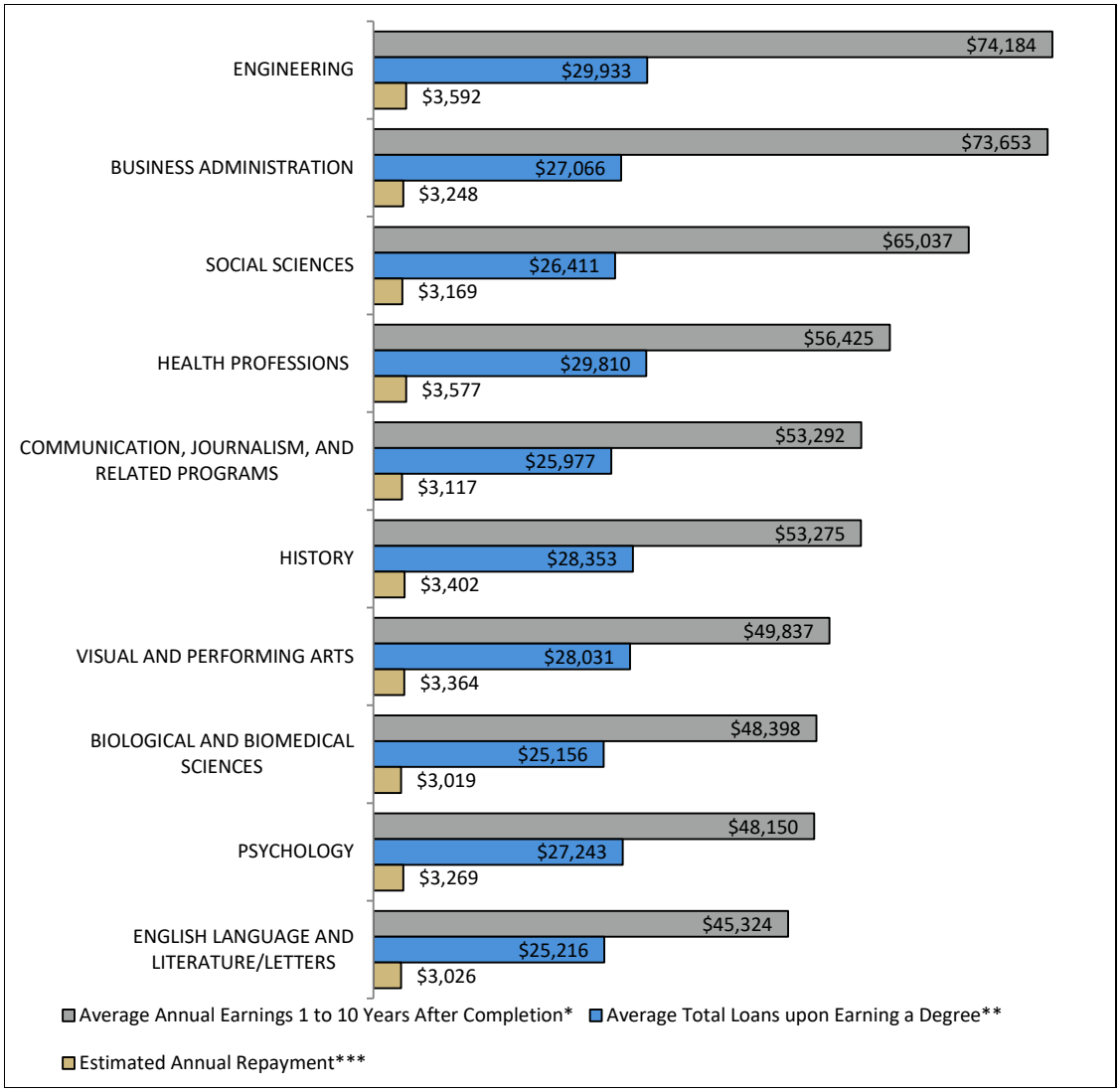
Average Annual Lifetime Earnings, By Level of Education



CU has also looked at earnings by degree type for CU alumni. In the summer of 2016 the CU system received over 15,000 responses to an alumni survey that in part asked CU graduates to share information regarding their annual earnings. CU then paired these amounts with the conferred CU degree to better understand the incomes of our graduates. We then calculated the average annual loan repayment by degree type from the CDHE SURDS data system. The following Figure 10 illustrates the annual loan repayment compared to reported annual earnings by popular degree types.

Figure 10

Average Reported Earnings, Loan Amounts and Loan Payments by Program at CU

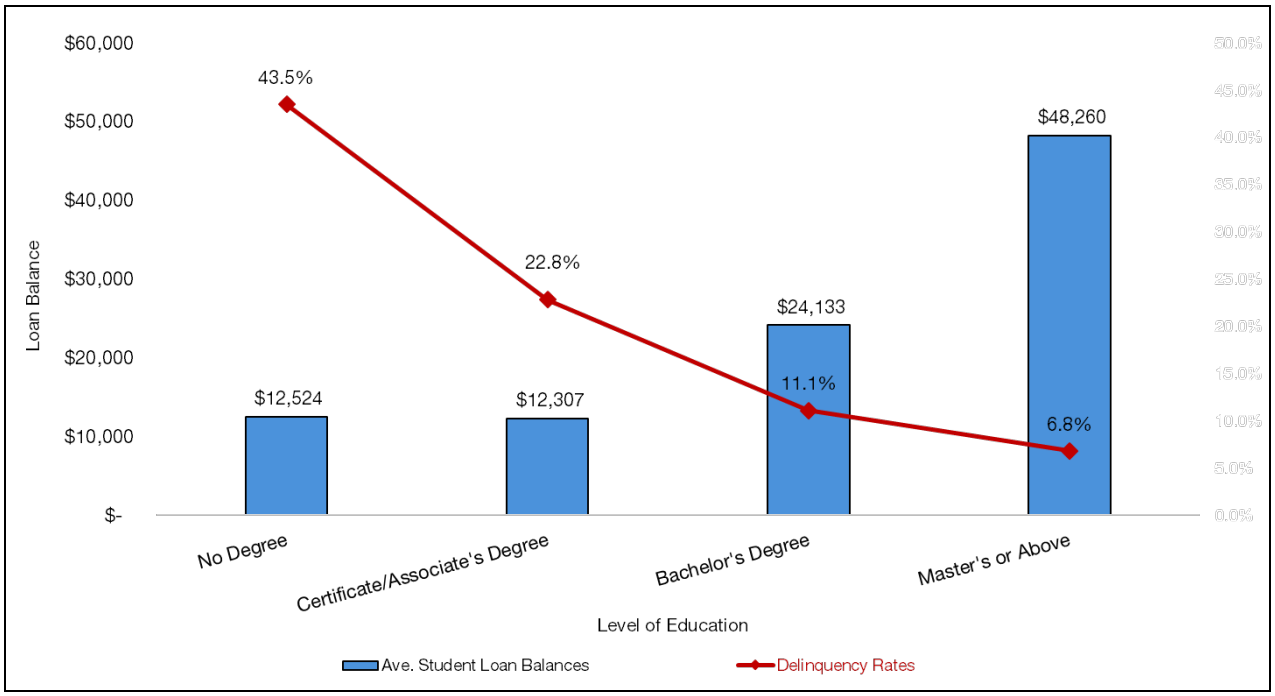


Sources: Average Earnings based on CU System Alumni Survey (FY 2006 - FY 2015 graduates). Annual Loan Payment based on average loan from CDHE SURDS (2015) & standard 10 year repayment at 3.9%

These findings show that with a CU degree is well worth the investment.

Analysis done by the Federal Reserve Bank also points to the value of getting a degree. It indicates the higher the level of educational attainment, the less likely an individual is to be delinquent on student loan repayment. This is illustrated in Figure 11 below.

Figure 11
Loan Delinquency Rates and Average Student Loan Balances by Level of Education



Note: Delinquency means failed to make payment within 30 days up to nine months for federal loans, after nine months delinquency is considered default.
Source: Mezza, Alvaro and Kamila Sommer. "A Trillion Dollar Question: What Predicts Student Loan Delinquencies?", Board of Governors of the Federal Reserve System, FED Notes. October 16, 2015

Colorado State University System

Response:

The data are unambiguous on this point: An investment in higher education returns significant benefit to individual students and the state of Colorado.

ROI to students:

- *Among workers in Colorado, 1 in 25 has a CSU degree, which significantly boosts their lifetime earning power over those who didn't graduate from college.*
- *CSU graduates are employed at a rate 10% higher than the national average – 86 percent of our graduates secured employment or continuing education within 6 months of graduation. According to "Launch My Career Colorado," CSU students graduate with a median debt of $16,707 (significantly less than the price of a new car), earn about $45,000 their first year out, and nearly $80,000 in year 10.*
- *Nationally, millennials ages 25 to 32 with college degrees working full time had median earnings in 2013 of $45,500 vs $28K for full-time workers with just a high school degree.*

- *To illustrate the clear value added, recent economic impact analyses report that CSU alumni in Colorado collectively earn* ***$2.2 billion more*** *because of their college degrees than they would with only a high school.*
- *Repeated studies show that college graduates in Colorado are more likely to be employed – and to professionally withstand an economic downturn – than their peers without a degree.*

ROI to the State:

- *In addition to being the single largest employer in Northern Colorado, CSU supports around 19,000 jobs annually in Colorado through spending by the university and out-of-state students, and from increased productivity resulting from the university's research and engagement work.*
- *In terms of ROI for the state, CSU contributed $465.2 million in tax revenue to the state's bottom line during 2015, which was nearly four times the amount of funding the state of Colorado provided to the university during the same year.*
- *Higher education is a long-term revenue source for the state: The return on Colorado's investment in a single graduate is 3:1 in higher taxes alone.*
- *The average CSU graduate repays the state's investment in their education in less than 3 years.*

University of Northern Colorado

Research consistently shows that there is significant value to higher education. The Lumina Foundation's publication "It's Not Just The Money: The Benefits of College Education to Individuals and Society" provides compelling data not related to the return on investment (ROI), as well as typically unmeasured benefits of a college education like the benefits to society:

On average in 2012, Americans with bachelor's degrees (and without graduate degrees) receive the following benefits in comparison to high school graduates never attending college:

• Annual earnings are about $32,000 (134 percent) higher. Moreover, there is no evidence that the college earnings premium is declining. Indeed, it has been increasing.
• Lifetime earnings are, conservatively, about $625,000 (114 percent) greater in present discounted value (using a 3 percent real interest rate and taking forgone earnings while in college into account).
• The incidence of poverty is 3.5 times lower.
• The likelihood of having health insurance through employment is 47 percent higher. Annual additional compensation in the form of employer contributions for health insurance is $1,400 (74 percent greater).
• The likelihood of having a retirement plan through employment is 72 percent greater. Retirement income is 2.4 times higher.
• Job safety is greater. The incidence of receiving workers' compensation is 2.4 times lower.
• Measures of occupational prestige are significantly higher.
• The probability of being employed is 24 percent higher.
• The likelihood of being unemployed is 2.2 times lower.
• The likelihood of being out of the labor force (neither employed nor unemployed) is 74 percent less.

• Age at retirement is higher. The probability of being retired between the ages 62 through 69 is about 25 percent lower.
• The likelihood of reporting health to be very good or excellent is 44 percent greater.
• The likelihood of being a regular smoker is 3.9 times lower. The incidence of obesity and heavy drinking are significantly lower. The likelihood of exercising, having a healthy diet, wearing seat belts and seeking preventative medical care are significantly higher.
• The incidence of a disability making it difficult to live independently is 3.6 times lower.
• Life expectancy at age 25 is seven years longer (for those having at least some college compared to those never having gone to college).
• Asset income is 4.9 times greater ($1,900 more per year).
• The likelihood of not having a bank account is 8.1 times lower. Reliance on expensive forms of banking and credit is significantly lower.
• The probability of being in prison or jail is 4.9 times lower.
• The probability of being married is 21 percent higher and the probability of being divorced or separated is 61 percent lower.
• The likelihood of being happy is significantly higher.

For UNC specifically, our 2017 economic impact study reflects that the average bachelor's degree completer will see an increase in earnings of $22,000 each year compared to someone with a high school diploma or equivalent in Colorado. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately $946,000 in higher earnings. The average annual rate of return for students is 10.7 percent — compared to the 10-year average of 7.2 percent return in the U.S. stock market.

Expected earnings by education level at the midpoint of a UNC student's working career

EDUCATION LEVEL	REGIONAL EARNINGS	DIFFERENCE FROM NEXT LOWEST DEGREE	STATE EARNINGS	DIFFERENCE FROM NEXT LOWEST DEGREE
Less than high school	$18,300	n/a	$20,500	n/a
High school or equivalent	$25,700	$7,400	$28,700	$8,200
Associate degree	$33,500	$7,800	$37,400	$8,700
Bachelor's degree	$45,500	$12,000	$50,700	$13,300
Master's degree	$57,700	$12,200	$64,500	$13,800
Doctoral degree	$72,500	$14,800	$80,900	$16,400

For every $1 students invest in UNC in the form of out-of-pocket expenses and foregone time and money, they receive a cumulative of $3.10 in higher future wages.

Additionally, for every dollar provided by taxpayers, UNC returns $8.70 in revenue. As students earn more, they make higher tax payments, as do their employers.

Colorado School of Mines

Studies continue to show that on average individuals with college degrees earn significantly more over a lifetime than those only high school degrees. That said there is great variability across disciplines and even within disciplines. It is easier for Mines to show the value of its degrees because of the professional nature of our degree programs.

We also know that there are many aspects of a college experience beyond the knowledge gained in the classroom. Employers seek candidates who have developed a combination of strong technical skills, strong communication skills, and leadership experiences. Some of this qualities can be learned in the classroom but co-curricular programs have a significant impact on the benefits students receive from their education.

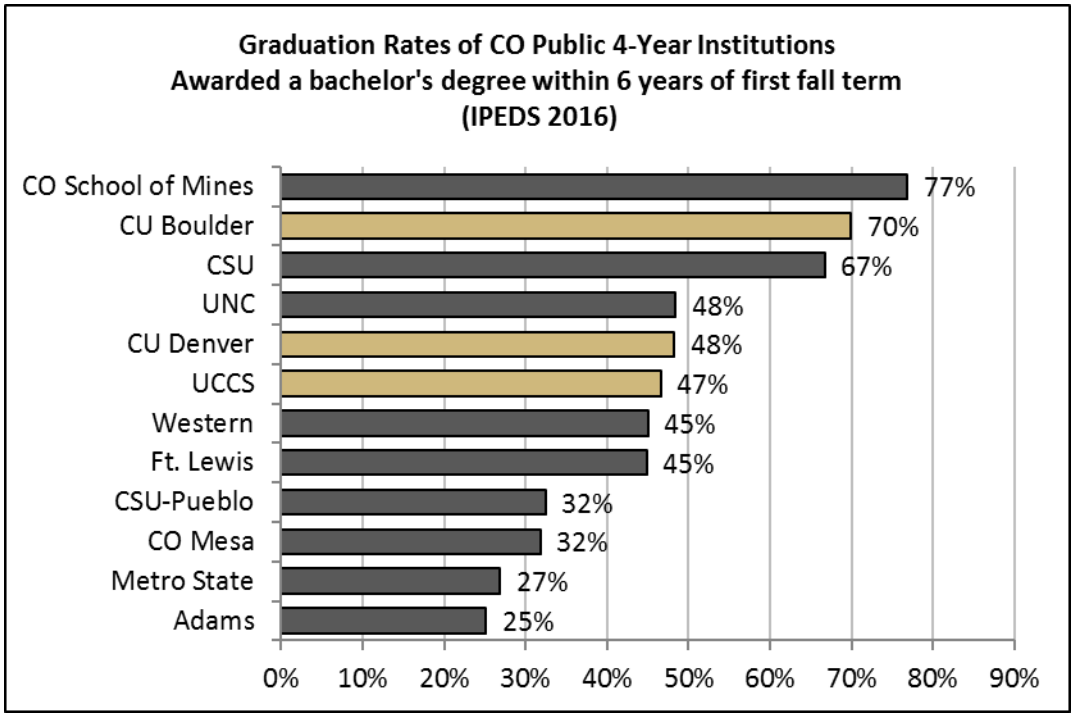
6 What is your institution's graduation rate, and how does it compare to your peers? What is the default rate for your graduates who have debt? What can the legislature do to help your institution(s) retain and graduate students?

University of Colorado System

CU institutional graduation rates are illustrated in Figure 12 below (along with other 4 year public institutions of higher education in Colorado). Improving graduation rates is a key leadership priority and a Regent metric on our campuses.

These rates identify the first-time, full-time freshman students, awarded a bachelor's degree within 6 years of the first fall term. This data is the most recent available through IPEDS for Fall 2010 to Fall 2016.

Figure 12



The following Table 3 is the data presented in the JBC staff briefing dated December 19, 2017.

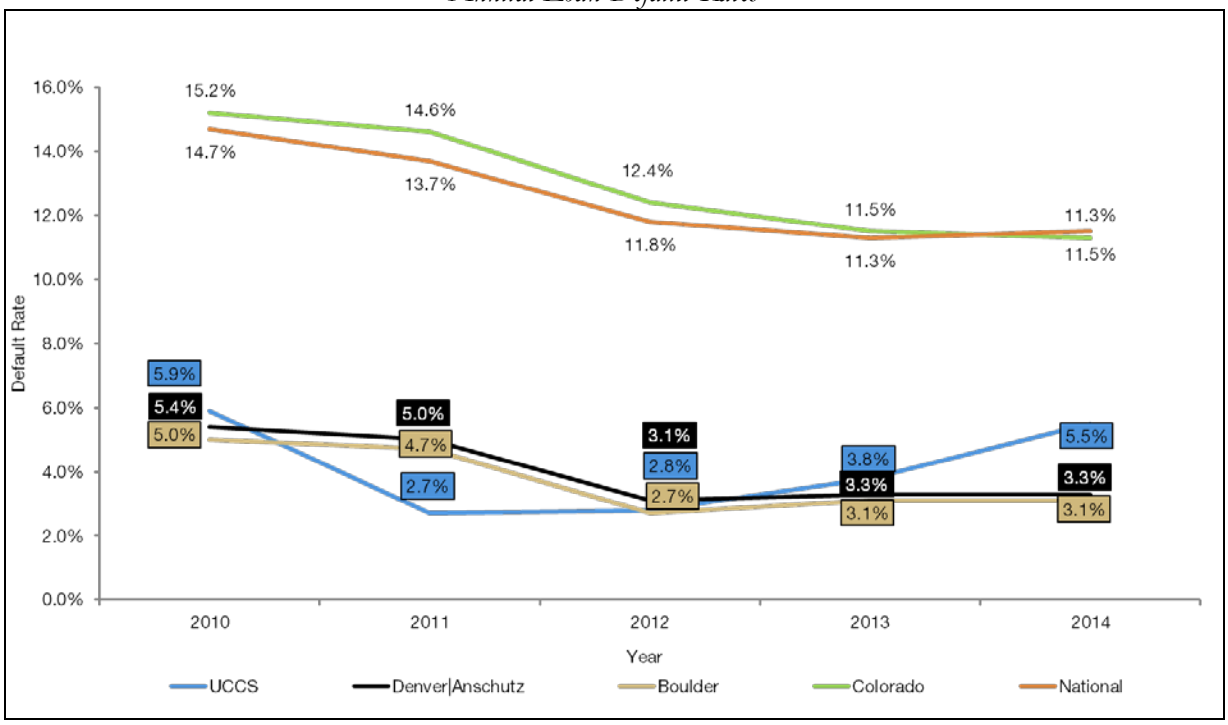
Table 3

CU Campus	Grad Rate
CU Boulder	70%
CU Boulder IPEDS Peers	82%
UCCS	47%
UCCS IPEDS Peers	46%
CU Denver	47%
CU Denver IPEDS Peers	46%

CU's current and historical loan default rates by campus are illustrated in Figure 13 below. This data is from the U.S. Department of Education and can be found at: https://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html

CU's loan default rates a consistently below both the national and Colorado averages.

Figure 13
Annual Loan Default Rates



Continuing to reinvest in public higher education is the single best thing the legislature can do to help CU improve our retention and graduation rates. State supports enables us to invest in support services that are critical to student success. Over the past few years, reliable and increasing state funding has helped keep tuition in check.

Colorado State University System

Response:

Financial aid, including work-study or other job opportunities, is always a clear, direct benefit to helping students graduate in a timely way. A large number of students and their families continue to be reluctant to take advantage of federal and other loans, particularly those from low-income and underrepresented groups.

CSU Fort Collins:

The average CSU student default rate declined to 2.4% from 2.8% in 2016 and 4.8 percent in 2015. This is among the lowest default rates in the country.

As a result of a decade-long strategic focus on student success and retention, our graduation rate has increased steadily – rising from 63% to 68% in the last 5 years alone. For resident students, the rate has increased from

about 66% to 69%. Our six-year graduation rate of 68% for the full-time, first-time cohort (2017) exceeds the predicted graduation rate, according to U.S. News and World Report, given the profile of our entering freshman class. Comparing to our peers is difficult given that the entering profile is different across institutions, but we are making steady gains. Below are the 2016 graduation rates (Fall 2010 cohort).

Institution Name	*6-year Graduation Rate (2016)*
University of California-Davis	*85*
University of Illinois at Urbana-Champaign	*85*
Virginia Polytechnic Institute and State University	*84*
Texas A & M University-College Station	*80*
Michigan State University	*78*
North Carolina State University at Raleigh	*77*
Purdue University-Main Campus	*76*
Iowa State University	*74*
The University of Tennessee-Knoxville	*69*
Colorado State University-Fort Collins	*67*
Washington State University	*67*
Kansas State University	*63*
Oklahoma State University-Main Campus	*63*
Oregon State University	*63*

CSU-Pueblo:

CSU-Pueblo's 2011 cohort preliminary retention rate is 35%. The most recent IPEDS data show the median of the CCHE peer set is 41% (and ranges from 31% to 57%). Our default rate is 8.2%; the median of our peer set is 6.9% (and ranges from 5.5% to 14.1%).

Innovative course redesign efforts along with supporting advising for both new students and transfer students have improved retention rates at CSU-Pueblo.

University of Northern Colorado

Graduation Rates for UNC and Peer Institutions										
	2006 Cohort		2007 Cohort		2008 Cohort		2009 Cohort		2010 Cohort	
Institution Name	**4-yr Rate**	**6-yr Rate**	**4-yr Rate**	**6-yr Rate**	**4-yr Rate**	**6-yr Rate**	**4-yr Rate**	**6-yr Rate**	**4-yr Rate**	**6-yr Rate**
University of Northern Colorado	26.5%	44.8%	26.5%	46.4%	26.9%	46.4%	26.6%	47.6%	29.4%	48.4%
Ball State University	32.5%	56.8%	35.1%	59.7%	37.0%	60.3%	40.5%	61.1%	44.7%	62.0%
Bowling Green State University-Main Campus	36.0%	57.6%	31.2%	54.0%	32.0%	54.3%	34.1%	55.6%	33.7%	53.3%
Indiana University of Pennsylvania-Main Campus	28.7%	50.3%	31.4%	51.2%	34.2%	53.1%	35.9%	55.0%	36.6%	54.0%
Louisiana Tech University	27.1%	47.5%	29.4%	49.9%	30.1%	53.9%	31.6%	52.9%	34.3%	52.9%
Middle Tennessee State University	15.6%	45.0%	16.1%	45.6%	19.9%	46.2%	19.0%	43.8%	18.0%	42.6%
South Dakota State University	27.1%	55.5%	26.7%	56.8%	29.2%	58.3%	30.3%	54.6%	29.1%	53.5%
University of Louisiana at Lafayette	12.9%	43.9%	13.4%	44.8%	14.5%	48.4%	14.6%	45.5%	16.0%	45.5%
University of North Carolina at Greensboro	29.4%	54.3%	29.7%	55.4%	30.7%	55.6%	32.2%	56.1%	30.4%	53.8%

Default Rate for UNC:

Fiscal Year	*Default Rate*
2010	*5.5%*
2011	*4.3%*
2012	*4.9%*
2103	*4.9%*
2014	*5.1%*

Source: US Department of Higher Education

At UNC 77% of the student body receives some form of financial aid and about $80M or 65% out of $130M (all forms of aid) is in the form of loans.

While an unpleasant reality, higher education debt is necessary for many students. Financial education is a critical success factor for families and students making decisions about financing higher education. UNC recruiters and financial aid staff are trained (to a certain level) to help students understand basic financial principles for budgeting, saving, managing credit card debt, homelessness, and repaying student loans.

For many families there is a stigma around debt; rather than seeing it as an investment with a return, there may be a sense of shame related to borrowing. Legislators could be helpful in reducing the stigma through consistent communication with constituents and perhaps a communication campaign. Legislative action should continue to support early awareness of the value of higher education through organizations such College Invest, College in Colorado etc. Additionally, legislators can strive to minimize regulatory burden that has grown at both the federal and state level.

Colorado School of Mines

6-Year Graduation Rate (2011 Cohort) – 78.5%
4- Year Graduation Rate (2013 Cohort) – 62.2%

Our graduation rates are highest among in-state publics. Our strategic targets are to increase our 6-year graduation rate to 85% and our 4-year graduation rate to 75%, and those are typical for top-tier STEM-focused universities.

3 Year default rate is 0.8%.

Requests R1 and R2 - General Fund and Tuition Increases

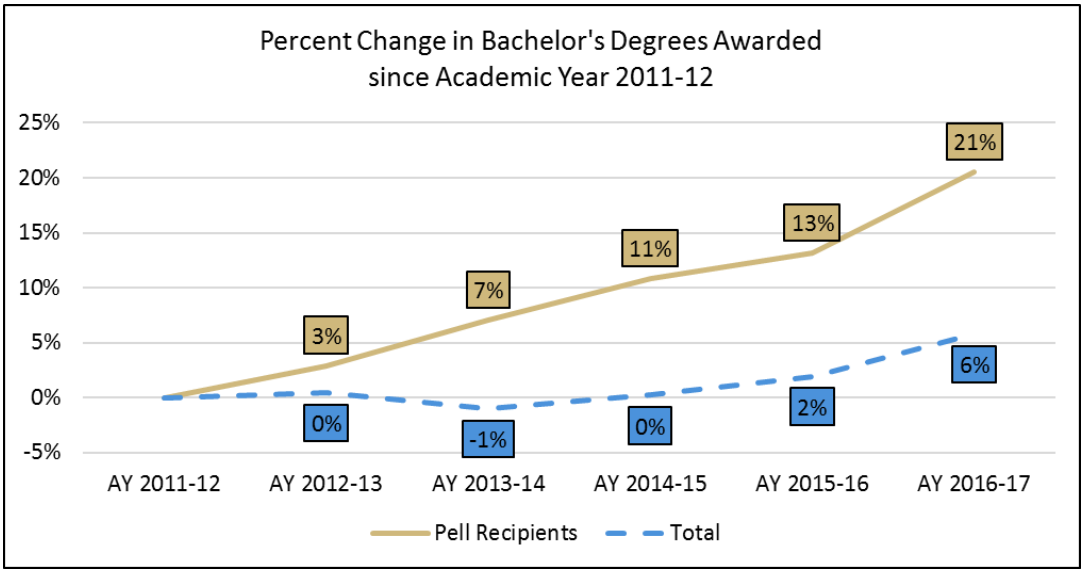
7 Discuss your thoughts on the current funding allocation model. How do you feel about the increased weight on Pell? Are there other adjustments you support this year? If certificates were weighted more heavily, would you expect that to result in more enrollments and completions? How could we track this?

University of Colorado System

CU supports the funding allocation model submitted in the November 1 Budget Request for FY 2018-19.

CU also supports the increased weighting for Pell eligible student in both the COF stipend bonus and the completions bonus in the FY 2018-19 model. Since Academic Year 2011-12, the percent of bachelor's degrees awarded to Pell eligible students at CU has increased by 21 percent as compared to the percent increase in bachelor's degrees awarded to all students at 6 percent (illustrated in Figure 14 below).

Figure 14



All of the components in the FY 2018-19 higher education funding allocation model are included in an attempt incentivize a behavior, address an issue or policy area, or reward desired outcomes. No higher education funding model will function perfectly. The primary challenge faced by all higher education institutions in Colorado is that the funding they receive from the model is inadequate.

The model is a compromise and each institution can identify specific components they would like to change. CU is grateful that the Governor and General Assembly have been prioritizing higher education to address the funding deficiency but much progress is still needed.

Any change to the funding model absent additional funds will come at a cost to other institutions of higher education. This would likely drive the need for higher tuition or program reductions at those other institutions.

Of course CU believes there are items in the model that could be improved. One of these would be the weightings assigned to graduate degrees. Currently the weights in the model underfund some bachelor's degrees, graduate degrees, doctoral degrees as well as some other degree types.

When comparing the degree weights in the model to an independent cost study matrix developed by the National Center for Higher Education Management Systems (NCHEMS), many of our graduate degrees are significantly under weighted in the model. This matrix is provided on Table 4 on the following page.

However, CU would only recommend adjusting the model to address this cost of degree issue if additional dollars were added to the model beyond the Governor's request to fund the cost of such a change. ***We would not want***

such an adjustment to come at the expense of other institutions *relative to the Governor's FY 2018-19 budget request.*

Table 4

NSHE Course Taxonomy
Weights by Discipline Clusters

COMMUNITY COLLEGES AND STATE COLLEGE

Discipline Clusters	Lower Division	Upper Division	Masters	Doctoral
Liberal Arts, Math, Social Science, Languages, Other	**1.0**	**2.0**	**4.0**	**5.0**
05. Area, Ethnic, Cultural & Gender Studies	1.0	2.0	4.0	5.0
09. Communication, Journalism and related programs	1.0	2.0	4.0	5.0
16. Foreign Languages, Literature and Linguistics	1.0	2.0	4.0	5.0
19. Family and Consumer Sciences/Human Sciences	1.0	2.0	4.0	5.0
23. English Language & Literature/Letters	1.0	2.0	4.0	5.0
24. Liberal Arts & Sciences, General Studies and Humanities	1.0	2.0	4.0	5.0
25. Library Science	1.0	2.0	4.0	5.0
27. Mathematics & Statistics	1.0	2.0	4.0	5.0
28. Reserve Officer Training Corps	1.0	2.0	4.0	5.0
29. Military Technologies	1.0	2.0	4.0	5.0
30. Multi/Interdisciplinary Studies	1.0	2.0	4.0	5.0
38. Philosophy & Religious Studies	1.0	2.0	4.0	5.0
42. Psychology and Applied Psychology	1.0	2.0	4.0	5.0
45. Social Sciences	1.0	2.0	4.0	5.0
54. History	1.0	2.0	4.0	5.0
99. Honors Curriculum and Other	1.0	2.0	4.0	5.0
Basic Skills Cluster	**1.5**			
32. Basic Skills	1.5			
Business Cluster	**1.0**	**2.0**	**4.0**	**6.0**
44. Public Administration & Social Service Professions	1.0	2.0	4.0	6.0
52. Business Management, Marketing & related support services	1.0	2.0	4.0	6.0
Education Cluster	**1.5**	**2.0**	**2.5**	**5.0**
13. Education	1.5	2.0	2.5	5.0
Services Cluster	**1.5**	**2.0**	**3.0**	**4.0**
31. Parks, Recreation, Leisure & Fitness Studies	1.5	2.0	3.0	4.0
12. Personal & Culinary Services	1.5	2.0	3.0	4.0
43. Security and Protective Services	1.5	2.0	3.0	4.0
Visual and Performing Arts Cluster	**1.5**	**2.5**	**5.0**	**5.0**
50. Visual & Performing Arts	1.5	2.5	5.0	5.0
Trades/Tech Cluster	**2.0**	**2.5**		
46. Construction Trades	2.0	2.5		
47. Mechanic Repair Technologies/Technicians	2.0	2.5		
48. Precision Production	2.0	2.5		
49. Transportation & Materials Moving	2.0	2.5		
Sciences Cluster	**2.0**	**3.0**	**5.0**	**8.0**
01. Agricultural, Agriculture Operations & related sciences	2.0	3.0	5.0	8.0
03. Natural Resources & Conservation	2.0	3.0	5.0	8.0
11. Computer & Information Sciences & Support Services	2.0	3.0	5.0	8.0
26. Biological & Biomedical Sciences	2.0	3.0	5.0	8.0
40. Physical Sciences	2.0	3.0	5.0	8.0
Law Cluster	**2.0**	**2.0**	**4.0**	**4.0**
22. Legal Professions and Studies	2.0	2.0	4.0	4.0
Engineering/Architecture Cluster	**2.0**	**3.0**	**5.0**	**8.0**
04. Architecture	2.0	3.0	5.0	8.0
14. Engineering	2.0	3.0	5.0	8.0
15. Engineering Technologies/Technicians	2.0	3.0	5.0	8.0
Health Cluster	**2.0**	**2.0**	**5.0**	**6.0**
51. Nursing, Allied Health, Health Professions	2.0	2.0	5.0	6.0

It is unclear if weighting certificates more heavily in the model would result in more certificate production. A study published in the Community College Review in December of 2017 examined this question.

CU produces graduate certificates, some of which are included in the allocation model. We would not anticipate an increase in certificate production if they were weighted more heavily. Students enroll in our certificate programs because of the value these certificates provide to the individual. We already pursue and encourage enrollment in these programs. Additional funding will not impact the student demand for programs.

Applying a heavier weight to certificates would of course disproportionally benefit the Community College System. Like the other systems in Colorado, the Community College System is underfunded. If a proposal to increase the certificate weighting is accompanied by additional dollars beyond the Governor's operating budget request for FY 2018-19, we would not object. However, we would not support such a proposal if it reallocated operating funds within the Governor's operating budget request.

If a certificate weighting change is considered for FY 2018-19, we would ask that the adjustment be made by DHE or JBC through the model and not through legislation. This DHE/JBC approach is clearly outlined, anticipated and authorized in H.B. 14-1319. Making such a change in law would elevate this one component of the model above all others. This change is not uniquely more important than the other component of the formula.

Colorado State University System

Response:

The funding model simply reflects balancing competing, legitimate state priorities. If the model is distributing funds in a fixed sum game, then choices must be made between funding successful outcomes, funding research universities and their economic impact, funding access, etc. We support the proposed changes in Pell weighting as recommended by the Department.

University of Northern Colorado

Increased weight on Pell is understandable, with two important notes.

First, affordability can be at least as challenging for students whose families are just outside the Pell eligibility cutoff. As shown in the following table, the median adjusted gross income (AGI) for families with 150% of Pell eligibility is typically around $70 thousand per year. Students from these families receive no federal Pell, and in many cases do not receive any financial support from their families. Anecdotally, these are the students who are working more than 30 hours per week (often at more than one job) to pay for college. To help address the financial need, UNC invests more institutional aid per student for those students just outside the Pell cutoff, than for those who are receiving Pell.

Fall 2017 Degree-Seeking UG Students who Filed as a Dependent	*#*	*Median AGI*	*Mode AGI (Range)*
Pell Eligible	*2,010*	*$34,281*	*$30,001 - $40,000*
Not Pell Eligible, Pell EFC < 150% of EFC Cutoff	*517*	*$70,789*	*$60,001 - $70,000*

Second, while the model is an important tool for aligning funding with state higher education policy, changing the model every year limits the opportunity for a reasonable planning and assessment cycle. It is hard to plan and manage when the "rules of the game" keep changing.

The current 0.25 weight of certificates seems logical given the relative cost of delivering a certificate, an associate's degree and a bachelor's degree. In our opinion, weighting them more heavily would not change the number of enrollments and completions. Students choose among types of programs and credentials based upon their interests and needs. All that weighting certificates more would accomplish is shifting funding among institutions – again changing the "rules of the game".

Colorado School of Mines

Despite best intentions the current model is still too dependent on institution size, and does not recognize and reward differentiated missions. This reality was perhaps predicted when the legislature removed the funding for CU Health Sciences and CSU Vet Med from the allocation model. Because of the heavy emphasis on headcount, the model incentivizes movement towards large, comprehensive institutions. When the large institutions grow, their numbers dwarf any growth among small institutions, and garner the larger share of the State funding. The success of an institution to graduate a larger share of its students is not necessarily rewarded unless the institution grows. And at some point for small institutions, additional growth threatens the mission and character of that institution. This year highlights that impact. Although Mines has the highest graduation rates in the State, our share of the increase represents about half of the average increase for all governing boards.

Colorado School of Mines supports the increased weight on Pell.

8 Potential model changes: Are there other changes you would like to see in the model in the near-term or longer term? Should the model be used to incentivize training that prepares students for real jobs, e.g., based on student employment after completing training or based on training in high-demand fields? Is the model sufficiently transparent? Sufficiently flexible?

University of Colorado System

Are there other changes you would like to see in the model in the near-term or longer term?

Every component of the formula is underfunded. Our response to Question 7 notes degree weighting, which warrants review if additional funds are available. Another component of the formula that we would draw you attention to is the Science, Technology, Engineering, and Math (STEM) STEM adjustment. ***This factor severely underestimates the additional costs involved with educating and graduating students in STEM fields****.*

Policy makers, school districts, businesses and advocacy groups have been very effective in encouraging students to enroll in STEM disciplines. Enrollments in these programs have continued to increase. Tuition for STEM programs is either the same or only slightly higher than other degree programs at CU. However STEM programs are often several times more expensive to provide.

Attempts in the current model to address this cost disparity are sorely inadequate.

However, any change to address this issue would need to be accompanied with additional funds beyond the Governor's FY 2017-18 operating request. We would not want an increase in the STEM adjustment to come at the expense of other institutions.

Should the model be used to incentivize training that prepares students for real jobs, e.g., based on student employment after completing training or based on training in high-demand fields?

The state has the authority to add an employment factor to the model. This could reward institutions whose graduates successfully enter the workforce. However, such a factor would likely not result in colleges or universities changing their program offerings because student and industry demand already drive changes to ensure workforce relevance.

Is the model sufficiently transparent? Sufficiently flexible?

The higher education allocation model is quite flexible. It includes many factors that can be adjusted and law allows additional factors to be added. The challenge is that the formula is an attempt to create a one-stop allocation methodology for universities and colleges that have significantly different roles and missions.

Using a single formula to determine funding for a flagship research institution and community colleges (and everything in-between) is inherently difficult. The current formula is far from perfect, but its output is generally fair and a product of years of negotiation. It is important to note that modest adjustments to the model have been made over time that have had a meaningful impact on the allocation of funds. If significant adjustments to the model were implemented, they could result in severe funding shifts between institutions of higher education. This would drive significant tuition and program changes that could have a positive impact on access and quality at some institutions and a negative impact on access and quality at others.

Colorado State University System

Response:

The question presupposes that education is not training for "real jobs" when data from a large number of multinational employers indicate that the broad, critical thinking and communication skills imparted by a college education are the most important factor employers seek. For demonstrated trained worker shortages, targeted funding to directly ramp up capacity to meet demand has proven effective nationally.
The funding model is a multi-year collaboration among the governing boards, the Department of Higher Education and the General Assembly. Every governing board would propose some changes to the model, however, a consistent and predictable funding allocation benefits all institutions.

Additional support for programs that involve experiential learning as part of a comprehensive undergraduate degree may be valuable. Programs targeted at workforce training programs only are less capable of developing the long-term workforce and citizenry needs of the state.

Changing the model frequently can lead to uncertainty in the amount of state funds that will be available to institutions. For this reason, it may be prudent to not adjust the model.

University of Northern Colorado

UNC understands the reality that there is insufficient state funding for higher education. With students and families paying over two-thirds of the cost of higher education, we believe our time is best spent implementing and assessing initiatives to improve student success in as cost-effective a manner as possible. Spending time understanding and reacting to changing models is not particularly valuable to improving higher education. We simply want consistency. The model is reasonable, but for UNC to engage in long-term performance and financial planning, it would be most valuable for the model to be consistent from year to year.

Colorado School of Mines

When the enacting legislation was first proposed, the initial model had a larger share of funding for "keeping the doors open" and for mission specialization. We would like to suggest re-engaging those elements to try to find the right balance for the success of small institutions and achieving the 66% goal. In the same vein, consideration should also be given to factors that recognize the rate of student success and outcomes such as graduation rates and student outcome rates – as opposed to the current emphasis on headcount.

9 How significant is the model in incentivizing institutional behavior? Do you feel it affects your institution's choices? How?

University of Colorado System

The model includes many components that reflect important priorities that drive toward student success. CU Leadership and the Board of Regents have developed metrics that measure and encourage improvement in many areas included in the state-funding model.

Enrollment growth, retention, completion, access and research are all critical priorities to CU. The importance of these areas is obvious and they are reflected in our mission, the CCHE Master Plan and the state funding model. Additional funding for the model would make a real difference at CU but the model itself does not drive CU's behavior. Improving enrollments, completions, Pell enrollments, STEM offerings and other behaviors and outcomes recognized in the model are all areas we are already deeply committed to.

Colorado State University System

Response:

Our institutions cover nearly all of the competing priorities the model attempts to balance. Since we are already working toward improvements in all of these areas, the model itself is not driving our institutional behavior, which is aligned with the marketplace of consumer demand.

University of Northern Colorado

The intended model incentives are generally consistent with UNC's enrollment and completion goals. It is these goals – better serving more students – which drive our choices. The model is an effective policy statement, but it is not a significant incentive to change behavior.

Colorado School of Mines

Colorado School of Mines makes choices to fulfill its strategic objectives. In many cases these align well with the State's Master Plan. We feel that the model encourages and rewards significant enrollment growth. While this will meet the State's objectives it does not necessarily incentivize efficiency – higher graduation rates. Essentially an institution could benefit from dramatically increasing enrollment but keeping its graduation rates the same or even allowing those rates to fall as long as the number of graduates grows significantly. This could result in unintended consequence of more students leaving higher education without degrees – which may be worse than never having ever attended – even while the state achieves its credential goals.

10 Discuss the total General Fund and tuition increase proposed for your governing board in the Executive request.

How much of an increase in education and general *revenue* do you anticipate needing in FY 2018-19? If this is greater than the projected increase in the Boulder-Denver-Greeley CPI, explain why.

University of Colorado System

When controlling for enrollment growth, the education and general revenue increase at CU did not exceed Denver-Boulder-Greeley CPI from FY 2016-17 to FY 2017-18.

The 2017 CU Budget Data Book's change from FY 2016-17 actual to FY 2017-18 estimated education and general revenue increased from $1.381 billion to $1.449 billion, or a 4.9 percent increase. A significant portion of this increase is attributable to enrollment growth. Of the 4.9 percent increase, 2.1 percent is a result of enrollment growth. If the increase were adjusted to remove the enrollment growth, it is estimated that growth from FY 2016-17 to FY 2017-18 would have been 2.8 percent. This is the same growth rate as CPI (Denver-Boulder-Greeley) in 2016 and lower than the projected 3.0 percent in 2017, according to the OSPB December 2017 forecast.

It is anticipated that CU would experience similar growth in FY 2018-19, however the exact amount is unknown until funding for higher education is approved by the General Assembly, the CU Board of Regents takes action on tuition and the university's budget, and actual student enrollments are realized.

It is important to also note that after adjusting for inflation, state funding per resident student at CU has declined 54 percent since FY 2000-01. The statewide average funding decline per resident student since FY 2000-01 is 38 percent.

Colorado State University System

Response:

The cost driver analysis that DHE has developed results in a funding model that we support. The model, results in a matrix that balances the funding between the State General Fund and corresponding tuition increases. The overall proposed General Fund increase for the CSU System of $11.7M, paired with a 3% tuition increase, will allow CSU to cover anticipated increases in compensation, benefits, and mandatory costs, such as insurance and utilities. The summation of the General Fund and tuition increases match the projected increase in costs based upon the Denver-Boulder-Greeley CPI.

University of Northern Colorado

UNC will be entering the fifth year of our Five-year Fiscal Sustainability Plan. While our enrollment has grown, it has not grown as much as originally anticipated. We have been intentionally investing reserves to address critical salary parity issues, campus deferred maintenance, and initiatives to increase enrollment and student success. This investment of reserves means that we have been spending down our cash balances.

Mathematically, we need $6 million in education and general revenue to meet our commitment to cash flow positive in FY19.

We are planning to balance our budget with the assumptions of a) increased state funding consistent with the Executive funding proposal and b) a 3% tuition cap. We also expect to have modest undergraduate and graduate enrollment growth. Balancing our budget will require employing a variety of cost saving measures, some of which are temporary and some of which are permanent. We are planning not to increase faculty or exempt staff salaries, which is a challenge for recruitment, retention and morale.

The 3% tuition increase is less than our five-year plan called for. We continue to have the lowest tuition and fees of Colorado doctoral research institutions.

Colorado School of Mines

Although budget projections at Mines are still in development, following are high level estimates using basic assumptions. At this time, Mines anticipates increasing general fund revenues by 5% (net of financial aid and graduate support) to meet the capital and operating needs for next fiscal year. The increase over CPI is due to moderate enrollment growth and the need to support that growth as well as investing in new programs. The majority of the increased revenue will be used to fund:

- *3% salary increase for classified staff and exempt faculty as well as increases to benefits*
- *Capital infrastructure, debt, and operating increases for new academic space*
- *Expansion of student support services due to enrollment growth and to meet need*
- *New investments in technology and classroom infrastructure to diversify revenue streams (e.g. on-line programs) and develop innovative learning facilities.*

a) *45% of our net general fund increases (net of financial aid and graduate support) will go to fund total salary and fringe increases, of which $0.5 million is for classified staff.*
b) *Mines tuition spending authority is included in the Long Bill for informational purposes only. Mines is not anticipating increasing tuition greater than 3% based on our market and enrollment strategy.*

a) How much of your annual need for increased revenue for educational programs is driven by salary and benefits for staff overall? How much of this is for classified staff?

University of Colorado System

Salary and benefits comprise the majority of the education and general expenditures at CU. Based on actuals reported to the CDHE in the annual Budget Data Book submission, total salary and benefit expenditures comprised 70 percent of total educational and general expenditures in FY 2016-17. Classified salary and benefit expenditures comprised 8 percent of the total educational and general expenditures in FY 2016-17. In

FY 2017-18, total compensation costs (salary and benefits) at CU increased by $41.3 million. CU received a state funding increase of $7.8 million, which, if totally applied to compensation costs, would have covered 19 percent of the cost. If total compensation increased at the same rate in FY 2018-19, the Governor's requested increase would cover 44 percent of CU's expected compensation cost increase.

Colorado State University System

CSU-Fort Collins

Compensation, salaries, and benefits represents over 60% of our total costs that are funded through our tuition and the state. Of this amount, about 15% represents state classified employees.

CSU-Pueblo

Approximately 40% of the increase is needed to support compensation increases anticipated for faculty and administrative professionals, and 15% is for classified staff.

University of Northern Colorado

See response above.

Colorado School of Mines

See response above.

b) Does the maximum undergraduate resident tuition rate increase proposed for your governing board in R3 (3%) accurately reflect your tuition need if R1 General Fund support is approved? Why or why not?

University of Colorado System

CU believes the combination of state funding from R1 and the governing board specific tuition footnote caps proposed in R3 accurately reflect our needs. We anticipate this will allow us to absorb mandatory expenditure increases and make critical investments in our infrastructure and provide access and affordability by continuing our investments in institutional financial aid.

Colorado State University System

CSU-Fort Collins

Given the Governor's proposed level of State funding, the resulting 3% tuition increase is responsive to our needs.

CSU-Pueblo

Yes, the 3% figure is an accurate reflection of the need if R1 General Fund Support is approved. The R1 request (if approved) would go a long way to addressing the funding needs of the institution.

University of Northern Colorado

See response above.

Colorado School of Mines

See response above.

Financial Aid, R4, R6, and Last Dollar Scholarship option

11 How significant do you believe the *real* net cost of attendance, after grant aid, is to whether students attend and complete at your institution? How significant do you believe *perceived* cost is in whether students enroll in your institution? How does your institution work with high schools to help students understand the real net cost, as opposed to the perceived cost?

University of Colorado System

Real cost of attendance plays a role in recruitment, retention and completion, but it is difficult to know how significant price alone effects college choice. Many students understand that the need to complete the Free Application for Federal Student Aid (FAFSA) application to qualify for federal aid, but that does not mean that the Expected Family Contribution (EFC) assumed in the FAFSA is aligned with the amount a family has saved or plans to contribute to their student's college costs. In some cases, students and families may cover the EFC with loans. Financial aid offices combine federal, state, and institutional resources to buy down the cost of attendance for as many students as possible.

During recruitment outreach sessions, frequent questions revolve around cost of attendance. At CU we approach these concerns aggressively through outreach and information sharing during recruitment and the admissions processes. Transparency about the cost of attendance helps students and families to make informed decisions. We provide ongoing communication through information seminars and workshops, printed handouts, electronic communications, financial literacy programs, and detailed websites to help students and families make informed decisions. Information sessions are offered through pre-enrollment sessions on campus, at area high schools and college fairs.

At CU we know that students and families have a choice about where they enroll and net cost of attendance is an important factor in that decision. The underlying issue when discussing net cost of attendance is affordability. At CU, we recognize that part of affordability is predictability. Being as transparent as possible about pricing is one way to make college costs predictable for students and their families.

Colorado State University System

Response:

CSU-Fort Collins:

Overall, national indicators are strong that students see cost as a primary factor in college choice, to the extent that 40% of students who decided not to enroll at their first choice college cited reasons related to cost. To offset both real and perceived concerns, our recruitment of students focuses on "financial fit" as cost, aid, strategies, and outcomes to broaden the conversation from cost alone. In addition, our admissions, financial aid, and access teams work closely with under-represented student serving high schools and pre-collegiate partners to help their students understand the affordability of CSU when factoring in financial aid.
We have seen steady increases in first-generation and low-income students enrolling at CSU since we adopted a financial aid award model focused specifically on funding tuition and fees for Pell-eligible and other low-income students. Our Commitment to Colorado awards effectively buffer low-income students from the effects of tuition increases. And yet we continue to see net cost as a significant factor from an access perspective. It is still a challenge for first-generation low-income students and families to trust that sufficient and consistent financial aid will be awarded to negate the actual cost each year. We believe it to be less of a factor when considering success, as our financial aid awarding system and student success initiatives are intentional in focusing on these subgroups of students.

CSU-Pueblo:

Between 48% and 51% of CSU-Pueblo undergraduate students over the past five falls have been Pell-eligible, i.e. this proportion has held steady. CSU-Pueblo's student population has increased in the percentage that are first generation, from 28% in fall 2014 to 33% in fall 2017.

We believe the majority of prospective students who decide whether to enroll based on financial constraints make those decisions on cost perception and often do not recognize the difference between published costs and actual costs after aid. This can be especially true for first generation students and others from underserved populations for whom admissions and financial aid can be confusing. First-generation student enrollments have increased to the point that approximately 30% of our incoming students each fall will be the first in their families to earn a degree, and about 50% of our incoming class is from an under-represented population. CSU-Pueblo has adjusted its financial aid award documents and communications in recent years to make that bottom line more clear to students, and to get actual cost information to them earlier in the decision process. We have also focused on educational efforts that help students and parents better navigate the college process, particularly as it relates to cost and affordability, as part of our desire to improve the college-going culture in our service region. This includes school and community-based information sessions about the college-going process, as well as special programs with partner schools.

University of Northern Colorado

Both the perceived cost and real net cost of attendance matter, although they are not the sole factors in determining whether students attend and complete at UNC.

Our research suggests that students perceive UNC to be relatively inexpensive. "Cheap" is a word that appears frequently when current and potential students in focus groups describe UNC. Additionally, in our 2015 CIRP Freshman Survey, UNC students were more likely to report cost as a very important factor influencing their decision to enroll here (57% vs. 44% from a comparison group).

Nonetheless, the real net cost of attendance affects UNC students. Additional findings from the 2015 CIRP Freshman Survey include:

- *First-year UNC students reported working more hours per week while in high school than peers from comparison institutions (18% of UNC students worked over 20 hours per week compared to 9% of the comparison group).*
- *17% of first-year UNC students indicated they would work full-time while attending college compared to 6% of the national peer group.*
- *31% of first-time students reported they would receive no financial support from family resources to cover their college expenses compared to 23% of the comparison group.*
- *21% reported they had major concerns about paying for college compared to 11% of the national group.*
- *43% of UNC's graduating seniors reported that they worked full time while taking classes compared to 20% of the comparison group.*
- *14% reported that they frequently contributed money to help support their families compared to 8% of the comparison group.*
- *23% reported that their family contributed less than $2,999 to cover educational expenses during their last year of college compared to 13% of the comparison group.*

Major financial challenges for students include loan aversion and lack of knowledge regarding how to plan for and manage the cost of attendance. At UNC we partially address these issues through the following kinds of activities:

- *We provide a web-based true price calculator, a tool that provides a highly accurate net price estimate to students in minutes, including academic merit scholarship and need-based aid components.*
- *Our admissions efforts actively engage on-campus financial aid counselors to assist as part of student recruitment.*
- *We have full time outreach coordinator who plans and executes financial aid literacy-tactical approach and financial aid education-skill building. Outreach events allow us to connect with almost 6000 individuals (students and family members) either face-to-face or through social media. Content includes information about the financial aid process, types of aid, timelines, and determination of cost. The demand for outreach continue to grow within the institution and outside organizations, schools and community centers.*

Colorado School of Mines

While cost is an important factor for students considering Mines it is not the primary factor for most students and their families. The degree and quality of education, closely followed by perceived fit are the main drivers of decisions. This may be a result of the many options that students considering Mines have because of their high school performance and qualifications.

Given that a Mines education has resulted in excellent outcomes after graduation perceptions on cost are often outweighed by the value the students and families place on the benefits of the Mines degree.

The Mines admissions office and financial aid staff attend and visit more than 100 college fairs and high schools throughout the State annually. They regularly make presentations to discuss net price versus sticker price, and discuss the resources available to help students and families understand attend Mines.

12 How does your institution use financial aid for resident students to promote enrollment, retention, and completion? Given that institutions have flexibility to establish their own financial aid policy, how does your institution's use of state-supported financial aid differ from that of other public institutions?

University of Colorado System

Financial aid offices at CU target federal, state and institutional resources to improve affordability for as many students as possible, with the intent of encouraging full-time enrollment and timely completion.

CU Denver targets aid to students who fall within 150% of Pell eligibility. They follow the state model of increased aid amounts for students who are making timely progress towards completion.

The CU Boulder financial aid policy is designed to be consistent and predictable each year that students will be at CU Boulder. That is, if students' financial circumstances remain relatively the same each year, they can expect their grant aid to be the same or greater for each year they are attending and making satisfactory academic progress towards their degree. This predictability ensures that the student does not end up in a 'bait and switch' scenario from one year to the next.

CU Boulder offers a number of institutional scholarships programs. The CU Promise helps ensure access for Pell eligible, resident students. Financial aid is awarded as early as possible and students are notified so they can make educated decisions about their attendance. Boulder's consistent financial aid awarding policy, along with the four-year tuition guarantee help students predict costs for the time they attend our institution. To attract and retain Colorado's top academic high school graduates, Boulder offers the Esteemed Scholars program that provides $2,500-$5,000 in renewable scholarships annually for students with high academic achievement. The CU Boulder Impact Scholarship is awarded to a select group of Colorado resident students entering CU Boulder as first-time freshmen. This automatic-consideration merit scholarship is based on a holistic review of each admitted Colorado student's academic performance in high school, as well as additional information provided in the

student's admission application. The award is $14,000 ($3,500 per year). Ninety percent of the pilot round scholarships awarded in Fall 2017 went to first-generation students.

The UCCS financial aid policy is designed to support students to attend full-time and make progress to on-time completion. New high school students and incoming transfer students are eligible for a renewable scholarship each year up to $2,500 per year as long as students meet eligibility requirements. Pell Eligible students receive financial packages (including state financial aid) to cover the average tuition and fees plus books for a full time student.

Colorado State University System

Response:

CSU-Fort Collins:

For the last decade, we have made institutional financial aid a priority to ensure the state's land-grant university system remains affordable and accessible for Colorado students and that our average student debt loads at graduation remain below the national average. Through our Commitment to Colorado initiative, CSU leverages federal aid and a portion of state need-based aid to ensure tuition and fees are covered for Pell-eligible students and covers half of tuition and fees for students at or below the Colorado median income. Additional state aid is used to help offset the cost of room and board. We also take additional steps to ensure that only those students that truly need financial support are recipients of our state and institutional need-based financial aid. This allows us to focus aid not only from the access perspective, but from the success perspective as well.

This approach has been particularly important during a time when we have seen a steadily increasing number of resident Pell-eligible students with significant financial need, and it also gives us some additional ability to better support Colorado's most talented students with additional merit awards. The investments made in student aid and student success have contributed significantly to increased graduation rates and shortened time to graduation, as well as a closing of the graduation gap between minority and majority students (CSU is on track to eliminate this gap with the Fall 2014 entering cohort). Last year, 47% of CSU graduates left the university with zero student loan debt.

CSU-Pueblo:

CSU-Pueblo has a unique mission as a Hispanic Serving Institution (HSI). CSU-Pueblo's undergraduate degree-seeking student population is composed of 48% minority students, including 33% who are Latino. Approximately 40% of CSU-Pueblo undergraduate degree-seeking students are Pell-eligible, and 41% of students report being first-generation students. CSU-Pueblo uses need-based financial aid to promote the enrollment of students who would otherwise be unable to attend because of their personal financial constraints. Merit-based financial aid enables the university to remain competitive by attracting more highly qualified students who may be considering other institutions, including universities outside of Colorado. The Financial Aid Office retains a portion of its institutional aid dollars to provide targeted assistance to students who are at risk of dropping out because of their inability to continue their education due to their financial challenges and limitations.

CSU-Pueblo uses federal, state, and institutional aid dollars to make education as affordable as possible. Students are encouraged to complete the FAFSA so their package will reflect the full complement of available aid. We use both institutional and donor funds to fill gaps for the neediest students, particularly those who also demonstrate strong academic potential. In addition to need-based programs, our institutional merit scholarships offer tiered awards for students who earn a 3.2 GPA or higher. Recently, transfer student scholarships were added in recognition of the need to support those students, to make sure they are able to successfully complete their degrees.

University of Northern Colorado

For FY18, UNC anticipates awarding over $28 million in institutional financial aid to undergraduate students. This is equivalent to 34% of total tuition charged. We have engaged Ruffalo Noel Levitz for the last two years to assist us in maximizing the way those dollars are used, including our merit scholarships, need-based aid, program-specific (e.g., music student) scholarships, and special programs (e.g., a Greeley Promise award for local students and an emergency retention program). We supplement our institutional need-based aid with about $6 million in state aid.

Colorado School of Mines

Colorado School of Mines differs from some other institutions by awarding state grant aid to students up to 150% of Pell-eligible. This is a category that had previously been included in the state's directives for state financial aid.

To help retention and completion, Mines makes grant commitments for 8 semesters or until they complete a bachelor's degree (whichever comes first).

Mines also designates a portion of its fee-for-service for grants and scholarships. The biggest program is for Pell-eligible students who qualify for merit scholarships. We provide funding to cover full tuition and fees for those students.

13 Would it be better to merge COSI scholarships, the proposed Emergency Retention Grants, and any other scholarship programs into a single comprehensive program? Would this allow for more or less transparency? More or less efficiency in administering the funds?

University of Colorado System

CU believes the most effective way for the state to deliver financial support to students is through need based financial aid, merit based aid and work-study. All of these programs are significantly underfunded. An increase in these programs would have a direct impact on affordability and student debt loads.

Yes, it might be more efficient to merge COSI scholarships with other special purpose programs and have CDHE administer the programs through CCHE policy instead of the current structure.

The limitations of how much COSI funding can be used for government entities (not more than 30 percent of the annual award amount (C.R.S. 23-3.3-1004, (4) (III) (B)) make public institutions of higher education minority beneficiaries of COSI. Students would potentially receive more direct assistance if these funds were merged with other programs and administered through CDHE and the Commission.

The COSI program provides a limited number of scholarships to the CU campuses that we match with institutional aid, certainly other institutions benefit as well. However, COSI is also intended to encourage partnerships with private entities to make higher education more affordable and to improve persistence. These are worthy goals.

While we appreciate any additional scholarship dollars to help our students, COSI has an administrative burden through application and reporting requirements which duplicate data we already report to the CDHE through the Student Unit Record Data System (SURDS). Streamlined data collection between CDHE and COSI would be a benefit to public institutions.

Colorado State University System

Response:

State-wide administration does not always lead to improved efficiency. But a common language around the programs available to improve perceptions of college viability at a young age would be a major step forward. Whether a merger would be beneficial also depends greatly on the qualification requirements assigned to the merged programs. Sometimes the benefit of multiple programs is the opportunity to serve students with one program who may not meet qualification guidelines for another. For example, emergency retention grants could potentially apply to any student with a demonstrated need that is limiting re-enrollment. However, other scholarship programs may have more defined parameters for inclusion, such as EFC ranges, Pell eligibility, etc. A program most beneficial to CO students, particularly for retention, would be one that allows flexibility in award parameters.

University of Northern Colorado

Given that the amount of institutional aid far outweighs the amount of state aid, it would be more efficient and effective for the COSI, Emergency retention grants and other state aid to be consolidated into a single program. We have multiple institutional aid programs and having to balance and manage those programs along with state programs having slightly different requirements, creates unnecessary administrative burden and cost. Most important, is consistency from year to year. As mentioned previously with regard to the state funding model, changing the rules of the game frequently can be distracting from the challenging work that needs to be done to educate more students, with better results, as affordably as possible.

Colorado School of Mines

We would recommend that that state combine all of its financial aid programs under a single entity to ensure efficiency or allocate funding directly to the institutions to determine how best to award financial aid to meet the unique circumstances of each institution.

14 R4 emergency retention grant program:

a) Discuss how your institution would use R4 emergency retention funding, if approved. If your institution has already implemented an emergency grant program, are there additional students not currently served whom you would like to serve if this request were approved?
b) Is there sufficient flexibility within your state need-based aid allocations to provide an emergency grant program such as that requested in R4 if you wished to?
c) Is there another way to fund this program? Isn't an R4-type grant program attractive to private donors?

University of Colorado System

Need based aid is the most valuable resource at any institution to promote affordability and access. At CU, affordability is the first goal of our financial aid policies. Emergency funding is a part of affordability for a small number of students during critical times in their lives. Each CU campus has some flexibility in financial aid packaging and they dedicate a small pool of funding for this purpose. If a student is in good academic standing and has not exhausted financial aid eligibility, they can be considered for emergency assistance if resources are available.

At CU Denver R4 emergency retention funding would be used in concert with other resources (Loving Lynx Fund) on campus to support students in emergency situations. Current funding for the Loving Lynx Fund is heavily dependent upon individual contributions. If approved, the additional state funding would provide a baseline of support that would help enhance and expand current campus efforts and allow the campus to provide more aid to students in need of emergency financial assistance.

CU Boulder assess aid eligibility on a case-by-case basis when a student or their family experiences some type of hardship. This process can cover the student's additional financial needs, but depending on a student's financial aid eligibility and availability of resources, the need may be covered with loans. R4 Emergency funding may be used for special circumstances when other sources are not available or if the student is ineligible for an adjustment. Using guidelines from the US Department of Education, the campus has also provided emergency funding in response to national and local catastrophes such as hurricanes, floods, and fires. The funds have been used to help students with necessities such as housing, clothing, and replacement of books and supplies.

UCCS would use R4 emergency funds to supplement the scholarship dollars that have been given for similar situations. Existing emergency funds are prioritized for students who will graduate that academic year and have either reached their aggregate loan limits and/or federal Pell grants. Any additional funds available would go to students with emergency needs such as medical expenses or other factors that would affect the student completing their last year. Currently, a small group of staff reviews emergency appeals. Every semester UCCS has more applicants than award funds available.

a) Is there sufficient flexibility within your state need-based aid allocations to provide an emergency grant program such as that requested in R4 if you wished to?

Yes. However because the purpose of need based aid is to address need for as many eligible students as possible, need based aid funds may be fully expended without funds remaining for emergencies, depending on when a student requests assistance.

b) Is there another way to fund this program? Isn't an R4-type grant program attractive to private donors?

See responses above.

Colorado State University System

a) Discuss how your institution would use R4 emergency retention funding, if approved. If your institution has already implemented an emergency grant program, are there additional students not currently served whom you would like to serve if this request were approved?

Response:

CSU-Fort Collins:

Emergency retention funding would be used to supplement our existing retention programs and address critical, unmet retention needs.

CSU-Pueblo:

CSU-Pueblo emergency retention funding would likely be used to support the continued enrollment of those students who cannot currently enroll for the following semester due to financial limitations. This could include clearing outstanding student account balances, assisting with books, or allowing for the coverage of tuition/fees not available through other means. Priority would likely be given to those students with a track record of academic success who are either moving from their freshman to sophomore years, or graduating within the current academic year.

b) Is there sufficient flexibility within your state need-based aid allocations to provide an emergency grant program such as that requested in R4 if you wished to?

Response:

There is sufficient flexibility within our state need-based aid allocation, but we need to see an increase in the allocation to support including emergency grants. That is, our current allocation does not cover the existing amount of need from an access and success perspective, so pulling from existing funds would weaken that impact.

c) Is there another way to fund this program? Isn't an R4-type grant program attractive to private donors?

CSU- Fort Collins:

Fundraising for student emergency/crisis support is often an opportunistic activity. It is most successful when there is a specific reason to be asking. For example, this year many people wanted to give in reaction to the DACA decision and its effect on Dreamer students. We saw many gifts of $495, which was the exact amount needed to reapply for Dreamer status.

There are several outlets for donors to support students in crisis at CSU: We currently have 7 privately supported funds that provide emergency assistance in one form or another to our students. There is an opportunity to generate more funding for those with some targeted proactive fundraising, however, the circumstances under which students find themselves needing assistance at times can be polarizing topics for donors.

CSU-Pueblo:

The institution does not have an established fund of this sort. Attempts have been made through various academic departments, Associated Student Government, and the CSU-Pueblo Foundation to attract donor funding for this need, but it has not gained traction with potential donors.

University of Northern Colorado

a) Discuss how your institution would use R4 emergency retention funding, if approved. If your institution has already implemented an emergency grant program, are there additional students not currently served whom you would like to serve if this request were approved?

Since the 2012-13 school year, UNC has implemented a similar emergency retention fund with some success. Our funding is limited and we are seeing more and more students who are running out of Federal loan and/or Pell eligibility while being within one or two semesters of graduation. Additional funding would improve student success and completion rates and positively affect the lives of students who are in a frustrating and challenging situation.

b) Is there sufficient flexibility within your state need-based aid allocations to provide an emergency grant program such as that requested in R4 if you wished to?

While there is flexibility, the constraint is the total funding available. Emergency retention grants are important, but so is the basic need-based aid that is being awarded to students from year one at UNC.

c) Is there another way to fund this program? Isn't an R4-type grant program attractive to private donors?

It could possibly be attractive to donors to fund a statewide program. UNC donors show strong interest in student scholarships, but often their funding decisions are driven by specific interests and passion, which may not align with emergency retention grants. Additionally, based on our historic mission, UNC does not find itself with as robust a donor wealth base as other doctoral research institutions.

Colorado School of Mines

Mines financial aid and admissions staff has not had an opportunity to fully discuss how R4 emergency retention funding would be allocated. Overall, Mines tries to work with students who face emergency financial situations as best as we can, but do not have funding to offer significant grants. State need-based aid is fully allocated at the beginning of the year and is not a source for emergency grants at Mines. A few donors have established funds to assist students in this manner and could be a source for additional support.

15 What are your thoughts about the various "last dollar scholarship" options presented by staff:
A - Free tuition and mandatory fees for community college (subsidy could extend to ATCs and other institutions with a 2-year mission) without regard to income, for students coming directly from Colorado high schools/GED under age 19 who attend 30 credit hours per year and follow a degree pathway;
B - Free tuition and fees at any institution for students who are Pell eligible or have a household income under $75,000 for students coming directly from Colorado high schools/GED under age 19 who attend 30 credit hours per year and follow a degree pathway;
C - Additional $1,000 for any Pell-eligible student coming directly from Colorado high schools/GED under age 19 who attends 30 credit hours per year and follows a degree pathway. This is expected to translate to free tuition and fees for these students.

(a) Is Option C (or any of the options) the best way to spend dollars to improve recruitment, retention, and affordability?
(b) Would students benefit from a consistent statewide message that low-income students may attend any public institution in the State without paying tuition and mandatory fees? Do you think this would drive enrollment?

University of Colorado System

(a) Is Option C (or any of the options) the best way to spend dollars to improve recruitment, retention, and affordability?

CU believes the most effective way for the state to provide funding to students to improve recruitment, retention and affordability is through need based financial aid, merit based aid and work study. While any new financial aid dollars are welcomed, these existing programs give our financial aid professionals the flexibility they need to create aid packages that maximize student success and affordability.

If additional funding beyond the Governor's request is being considered for financial aid, we would encourage the JBC to direct the funds to the existing underfunded financial aid programs noted above. However, if the committee would like to fund one of the options recommend by staff, we would prefer Option C.

(b) Would students benefit from a consistent statewide message that low-income students may attend any public institution in the State without paying tuition and mandatory fees? Do you think this would drive enrollment?

Perhaps. Messaging about free tuition and fees for low-income is more complicated because even if base tuition and fees are covered, students could have out of pocket costs to pay for books, program/course fees, tuition differentials and EFC. The more generous the program the more it could potentially drive enrollment growth.

Colorado State University System

A - Free tuition and mandatory fees for community college (subsidy could extend to ATCs and other institutions with a 2-year mission) without regard to income, for students coming directly from Colorado high schools/GED under age 19 who attend 30 credit hours per year and follow a degree pathway;

This option would of course be of value to students intentionally seeking a community college program but would not aid the considerable number of students ready to begin a degree pathway at a four-year institution. It is important for any state incentives to promote pathways most likely to lead to degree completion and a credential, and four-year institutions generally report higher completion rates.

CSU-Fort Collins:

With a proven retention and success record for low-income students, the Pell eligible students that would normally enroll at CSU, at this point, do have base tuition and fees covered and have access to our significant investment in student success initiatives.

CSU-Pueblo:

As a regional comprehensive university, CSU-Pueblo is often the pathway to a four-year college degree for students who are first generation, low income, and minority, as well as those who come to us from school districts with low test scores and poor graduation and college-going rates. Provision of last dollar scholarship funds solely to students attending community colleges ignores the fact that CSU-Pueblo and other institutions like ours are also committed to higher education access for students from all walks of life.

B - Free tuition and fees at any institution for students who are Pell eligible or have a household income under $75,000 for students coming directly from Colorado high schools/GED under age 19 who attend 30 credit hours per year and follow a degree pathway;

CSU-Fort Collins

This is a variation of what CSU does already through our Commitment to Colorado initiative; it does not, however, address the growing needs of middle-income students. We believe this option would be most viable if all institutions implemented an additional intuitional application to better determine true financial capacity. Many factors related to capacity are not addressed in the FAFSA.

CSU-Pueblo

This proposal would absolutely be expected to have a significant impact on enrollment and would support the efforts CSU-Pueblo has underway to help improve the college-going culture in our region.

C - Additional $1,000 for any Pell-eligible student coming directly from Colorado high schools/GED under age 19 who attends 30 credit hours per year and follows a degree pathway. This is expected to translate to free tuition and fees for these students.

Response

This is most similar to our current model of aid distribution, although it requires more than $1,000 to meet the actual cost of tuition and fees. Our institutional application has allowed us to better identify students with the most need and allocate our resources accordingly.

(a) Is Option C (or any of the options) the best way to spend dollars to improve recruitment, retention, and affordability?

The bottom line is that there is a need to increase need-based aid for our lowest-income students as well as those from middle incomes. Additional aid for our most needy students would allow us to shift existing aid to middle-income students, a vulnerable population at this point. Allocating aid and allowing institutions to use proven methodology to award to students that need it most would be most valuable.

(b) Would students benefit from a consistent statewide message that low-income students may attend any public institution in the State without paying tuition and mandatory fees? Do you think this would drive enrollment?

Yes – our data support this. Students would benefit from a consistent message about affordability and tuition support. The increase in students at CSU in the lowest income bands since the implementation of Commitment to Colorado demonstrates the efficacy of this approach. This would benefit enrollment at CSU-Pueblo and elsewhere and support efforts to help improve the college-going culture regionally and statewide.

University of Northern Colorado

While UNC is supportive of making higher education more affordable for students, we are concerned that a program like this is complex and costly to administer. There seems to be a very real potential that state funding/ additional personnel will be directed toward building new processes and systems to administer the free college program. This does not seem to make sense when the basic needs of Colorado higher education are not being funded. Initial data from statewide free college programs such as New York's have shown no increases in enrollment.

Colorado School of Mines

Any additional support the State can provide for financial aid, whether through institutions or to students directly, is greatly appreciated. As to the question of whether additional funding will increase attainment is not easily answered. As noted in an earlier response we believe there are many factors in addition to cost that impacts decisions to pursue post-secondary education. We would recommend that any additional funds available by studied by the Colorado Commission on Higher Education and the Department of Education to produced an integrated effort instead of creating one-off programs.

Concurrent Enrollment

16 How many concurrent enrollment partnerships do you have between your institution and local high schools? How many students are you serving each year?

University of Colorado System

Concurrent enrollment partnerships are generally with districts, not individual high schools. In FY 2017-18, 134 high school students are taking classes on CU campuses under partnership agreements. Concurrent enrollment levels are growing at both Denver and UCCS campuses and Boulder enrollment is constant.

- *CU Denver has 48 students from 17 different high schools (including home school)*
- *CU Boulder has 48 students from two districts, from 24 high schools*
- *UCCS has 38 students from three districts*

Colorado State University System

CSU-Fort Collins:

In fall 2017, we had fewer than 10 concurrently enrolled students. Our concurrent enrollment efforts are focused on offering high-level mathematics and world languages classes to Poudre School District students (usually less than a dozen students each year). The majority of these students do not matriculate to CSU.

CSU-Pueblo:

In fall 2017 and spring 2018, CSU-Pueblo offers 154 courses in 24 high schools in 13 school districts in Colorado. We also partner with three school districts to bring students onto campus for courses. Between the two types of offerings (i.e. off-campus and on-campus concurrent enrollment), CSU-Pueblo serves well over 1,300 high school students each year in credit-bearing courses.

University of Northern Colorado

UNC has signed partnerships with seven local high schools. Concurrent enrollment at UNC has grown for the past four years to a high of 772 students at the end of Fall 2017.

Colorado School of Mines

We do not have any formal concurrent partnerships due to limited capacity. With over 1,100 freshman and 250 transfer students the classes that high school students typically take at Mines (Calculus, Differential Equations, Core science classes) are generally full and often are at over-capacity. We do allow students to individually make arrangements with through our admissions office, and typically have 15-20 students throughout the year.

17 Do you think we could do more to grow concurrent enrollment in Colorado?

University of Colorado System

Yes. The most effective way is to increase funding to districts to allow for four-year tuition reimbursement. The current agreement allows reimbursement rates equivalent to cover two-year tuition rates. Families are responsible for the difference, so access is limited. The general assembly could increase access for concurrent enrollment students seeking to attend four-year institutions by increasing funding to school districts to fund reimbursement rates for four-year institutions.

Colorado State University System

CSU-Fort Collins

The concurrent enrollment space is well addressed by regional 4-year institutions and community colleges – including FRCC in Fort Collins -- and to a lesser extent by CU Succeeds out of CU Denver. While there are growth opportunities in the state, we do not see great benefit to students (nor the institution) in growing our current program.

CSU-Pueblo

CSU-Pueblo can grow concurrent enrollment in several ways: partner with more high schools, expand the curriculum offered, and let high school students know that concurrent enrollment can be an important first step towards completing a four year college degree, by showing them that they can be can be successful in a college-level course. We can further encourage them by making clear that we offer student support services to help them be successful once they graduate from high school; we have financial aid to help them afford the courses they still need. Additionally, by working with high school counselors, we can create specific individualized pathways for degree completion for each student.

University of Northern Colorado

Higher Learning Commission (HLC) qualifications needed for teaching college-level courses are limiting factors to growing concurrent enrollment in Colorado. UNC continues to develop online graduate certificate programs to provide high school and other concurrent enrollment instructors with the credentials needed to meet HLC qualifications. More importantly, until the demand for qualified high school concurrent enrollment instructors can be met, UNC is investigating ways to deliver concurrent enrollment courses online, specifically as a benefit to rural high school students, using UNC instructors, with the high school teacher serving as facilitator for the students.

Colorado School of Mines

No response provided.

Certificates of Participation - S.B. 17-267

18 Do you expect any of your institutional buildings to be part of the COPs issued pursuant to S.B. 17-267? Are you engaged in a process to determine which buildings are selected? Do you expect the COPs issued pursuant to S.B. 17-267 to affect your bond ratings?

University of Colorado System

The CU Board of Regents approved two buildings at the November 2017 board meeting to be designated as collateral for the share of controlled maintenance funding CU is designated to receive through S.B. 17-267. CU used the following parameters in designating buildings for collateral.

- *Total collateralized should equal between 90% - 110% of institution's value received ($18.0 million - $22.0 million for CU)*
- *No outstanding debt on pledged facilities*
- *Buildings must be in good condition*
- *Must be in current use for the life of collateralization (20 Years)*

CU does not anticipate the collateralization of these two facilities will affect our bond rating.

Detail on the amount of funding CU anticipates receiving through S.B. 17-267 and the buildings that the CU Regents approved as pledging for collateral are in Table 5 below.

Table 5

Additional Controlled Maintenance Funding from S.B. 17-267		
Campus	Amount	Number of Controlled Maintenance Projects
CU Boulder	$ 10,481,496	2
UCCS	$ 2,964,768	2
CU Denver	$ 6,549,416	3
CU Total	***$ 19,995,680***	***7***
Amount and Buildings Pledged as Collateral		
Campus	Amount	Building Name
CU Boulder	$ 13,803,762	Ketchum Arts & Sciences Building
UCCS	$ 5,405,220	Campus Services Building
CU Total	***$ 19,208,982***	***(2 Buildings Total)***

Colorado State University System

Response:
Given the guidance provided by OSPB, via DHE, the CSU System Board of Governors approved a resolution that identified approximately $109M as proposed collateral in conjunction with SB17-267. The identification process considered our revenue pledge that exists within our System's Master Bond Resolution. The impact of providing such assets as collateral on our bond rating is unknown.

University of Northern Colorado

In November 2017, UNC's Board approved collateralization of the Jackson Soccer Team Building (CRV $2.8 million) for financing our SB 17-267 controlled maintenance projects. We do not anticipate this collateralization to affect our bond ratings.

While we have submitted a list of ten buildings as requested, we believe UNC's assets should not be encumbered, except for projects that directly benefit UNC's students.

Colorado School of Mines

Pursuant to the bill, Mines provided a list to the Department of Higher Education of 10 buildings that meet the definition of eligible facility. We do expect that COPs issued pursuant to S.B. 17-267 will negatively impact our bond rating. Colorado higher education bond ratings are already stressed by the unfunded PERA liability; issuing COPs collateralizing higher education assets will put further stress on our bond ratings by introducing another risk factor.

Program Duplication

19 It seems there is more and more higher education program duplication. Does this drive costs? Is this a problem? If it is, what should be done to address it?

University of Colorado System

As institutions seek to meet the needs of the workforce, they sometimes offer similar degree programs. This could drive a cost to the institution that is investing in creating a brand new program. The primary consideration should always be need. Is there demand for the similar program, is it accessible to students and will it draw enrollment away from other institutions?

State law establishes each governing board's unique role and mission which outlines the types of education and activities that each governing board should provide and pursue. Each governing board has educational programs or areas that it specializes in. When governing boards seek to go beyond their role and mission to offer new degree programs they should first consider if there are existing degree programs being offered by other public institutions of higher education in the same service area and if partnerships could be developed between institutions.

One example of a successful partnership (in lieu of degree duplication) is the Mechanical Engineering degree partnership developed by CU Boulder and Colorado Mesa University. The first two years of the program are taught by CMU faculty and the second two years of the program are taught by CU-Boulder faculty that reside in Grand Junction. Students that complete the CU Boulder/CMU Mechanical Engineering Partnership Program receive a Bachelor of Science in Mechanical Engineering Degree from CU Boulder.

Colorado State University System

Response:

Where duplication exists, it's driven by consumer demand, as low-enrollment programs are not sustainable in a competitive higher education marketplace. To the extent that duplication exists and demand is strong, encouragement of cooperative arrangements are preferable to more artificial contractions of programs – students will be better served across the state. New programs undergo a detailed needs assessment using federal and regional data.

University of Northern Colorado

Internally to the UNC process, any request for a new academic program must address duplication in the state. The expectation is that new UNC programs not mirror exactly the programs of our neighboring institutions. The request for programs also must include research on the need for the program and plans for fiscal sustainability. Some duplication of programs is necessary in order to meet demand. Through the thorough process for approving new academic programs, UNC is doing due diligence to contain the costs for credentials. Admittedly, enrollment dilution could become increasingly consequential should all institutions continue to add new academic programs

without reviewing duplication and sustainability of the programs. However, enrollment market forces will demonstrate unsustainability more efficiently than prior regulatory review.

Colorado School of Mines

Institutions should be encouraged to find innovative solutions to ensuring financial stability as long as they can deliver quality programs. That said, certain programs like engineering and science require significant and expensive capital investments and maintenance. The State might wish to consider criteria on how it will invest in such capital investments since these funds are very limited.

ADDENDUM: OTHER QUESTIONS FOR WHICH SOLELY WRITTEN RESPONSES ARE REQUESTED - GOVERNING BOARDS ONLY

1 Provide a list of any legislation that the governing board has: (a) not implemented, or (b) partially implemented. Explain why the governing board has not implemented or has only partially implemented the legislation on this list. Please explain any problems the governing board is having implementing any legislation and any suggestions you have to modify legislation.

University of Colorado System

CU has and will continue to implement all legislation that is enacted.

Colorado State University System

Response:

The Board of Governors of the Colorado State University System is in compliance with all applicable legislation.

University of Northern Colorado

UNC is not aware of any legislation that the governing board has not implemented.

Colorado School of Mines

NONE.

2 Does the governing board have any HIGH PRIORITY OUTSTANDING recommendations as identified in the "Annual Report: Status of Outstanding Audit Recommendations" that was published by the State Auditor's Office and dated June 30, 2017 (link below)? What is the governing board doing to resolve the HIGH PRIORITY OUTSTANDING recommendations? Please indicate where in the governing board's budget request actions taken towards resolving HIGH PRIORITY OUTSTANDING recommendations can be found.

http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2017

University of Colorado System

No. The OSA's June 30, 2017 Annual Report: Status of Outstanding Audit Recommendations, states:

"From July 1, 2011, through June 30, 2016, the University of Colorado System (System) agreed to implement seven audit recommendations— all were from financial audits. Based on the OSA's follow-up audit process, as of June 30, 2017, the System has no outstanding audit recommendations."

Colorado State University System

Response:

The HIGH PRIORITY OUTSTANDING recommendations referred to relate to the Financial Aid Program at CSU-Pueblo. During FY 2017, the state auditors identified a prior audit recommendation that had not been fully implemented. This recommendation called for the CSU System to work with the National Student Clearinghouse (NSC) to identify and resolve errors noted on roster files and resubmit corrections within the required 15 business-day timeframe. In August 2017, we learned that NSC had not been sending the error resolution report to National Student Loan Data System (NSLDS) until the 18th day. The NSC has now changed their due date for error reports to the 13th day, instead of the 15th day, to ensure reports are sent to NSLDS within the required 15-day timeframe. We have since updated our current policies and procedures to reflect this change initiated by NSC and will continue to monitor the enrollment reports. We do not anticipate any impediments to complying with this audit recommendation going forward.

University of Northern Colorado

UNC does not have any High Priority Outstanding recommendations.

Colorado School of Mines

NONE.

3 If the governing board receives federal funds of any type, please respond to the following:

a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the governing board is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the governing board by the federal government during FFY 2017-18 or 2018-19.
b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each program?
c. Does the governing board have a contingency plan if federal funds are eliminated?

University of Colorado System

a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the governing board is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the governing board by the federal government during FFY 2017-18 or 2018-19.

Neither the CU Boulder or UCCS campuses are aware of any potential federal sanctions. However, in 2015 CU Denver|Anschutz self-disclosed a single misreported crime statistic under the Clery Act to the U.S. Department of Education (DOE) which occurred at the Auraria Higher Education Center. The DOE has not responded to this self-report. In similar circumstances for other institutions of higher education, some have been fined (up to $37,500) while other have not received any sanction at all.

b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each program?

Federal funding for FY 2017-18 continues to be uncertain. At the time of this response, Congress is operating under a Continuing Resolution (CR) through January 19, 2018, which will keep federal funding at current levels until an agreement is reached. Because a CR is as short term funding mechanism, it is difficult to forecast how much federal funding CU will receive for the remainder of FY2017-18 and FY 2018-19. However, despite efforts to cut federal spending in many areas, research funding continues to have bipartisan support in congress. So far, congressional appropriators have protected federal research funds and education programs important to CU students and faculty. We are working with our delegation and our national higher education colleagues to ensure federal research funds remain protected. While this issue will not be resolved until longer term federal action is taken, we remain optimistic.

c. Does the governing board have a contingency plan if federal funds are eliminated?

Public institutions of higher education have a limited number of funding sources. The primary funding sources for CU are: tuition and fees, research grants, cooperative agreements and contracts, philanthropy, endowment income, and state appropriations. An elimination of federal funding would mean:

- *CU would no longer be able to conduct research on behalf of federal agencies and support the infrastructure for research activities including personnel and facilities.*
- *The elimination of federal financial aid and student loans would have serious impact on CU students. This could result in decreased enrollments, retention, and completion as students that rely on this type of funding can no longer afford a post-secondary education.*

Colorado State University System

a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the governing board is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the governing board by the federal government during FFY 2017-18 or 2018-19.

The CSU System is currently undergoing two separate audits, as follows:

- *National Science Foundation (NSF) Data Analytics Audit. This audit, now in its second year, is not for cause. This type of audit is somewhat new to NSF. CSU received formal audit selection notification*

from NSF on 11/10/2015. The data sample period covers 10/1/2012-9/30/2015 with over 750,000 transactions totaling $90M provided to NSF. NSF selected 250 transactions for which CSU has provided detail. Another 150 transactions are anticipated for additional testing. While the outcome of the audit is indeterminate, CSU has taken a number of proactive steps to mitigate any findings that might occur.

- *Defense Contract Audit Agency (DCAA) audit of CSU's Center for Environmental Management of Military Lands (CEMML). This relates to CSU's voluntary self- disclosure to the US Department of Defense in 2015, regarding a flawed salary allocation process within CEMML. The audit is being conducted at the request of the Army Corps of Engineers, Omaha District, one of CEMML's largest sponsors. CSU expects this audit to be concluded by the end of February. The system is not expecting material sanctions as a result of this audit.*

b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each program?

Response:

- *We do not anticipate any impact on federal funding already obligated to CSU. However, given the drop in funding anticipated for certain federal agencies in the coming year, we are expecting a drop in federal funding, particularly from the Department of Energy, the Environmental Protection Agency, and the Department of Defense if proposed cuts are ratified. The cuts to environmental research potentially have broad impact across the university, but particularly in the Walter Scott Jr. College of Engineering, the Energy Institute research projects, the Natural Resources Ecology Laboratory (NREL) and the Center for Environment Management of Military Lands (CEMML), and all atmospheric science areas.*

c. Does the governing board have a contingency plan if federal funds are eliminated?

Response:

If federal grant funds are eliminated, CSU and CSU-Pueblo may be required to cease the activities funded by those resources. In the event that federal funds for student financial aid were to be reduced, it would have a significant adverse impact on the students who rely on those funds. Because CSU-Pueblo serves a high percentage of low-income, first-generation, minority students, a reduction in federal student financial aid would cause a significant hardship to the students and the university. Other Colorado institutions would experience similar adverse consequences if this were to occur.

University of Northern Colorado

We are not aware of any federal sanctions, actual or potential, for FY 2017-2018 or 2018-2019 nor are we aware of any specific programs that will be cut in the 2018-19 federal budget. Should federal funding for programs be eliminated, UNC would evaluate the specific outcomes of those programs to determine whether using institutional funds is appropriate.

Colorado School of Mines

a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the governing board is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the governing board by the federal government during FFY 2017-18 or 2018-19.

NONE.

b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each program?

Funding allocations to specific federal agencies continues to evolve as the FY18 Federal Budget is negotiated by Congress. Mines is monitoring the changes; particularly, the proposed budget amounts of the National Science Foundation and the Department of Energy, our largest federal funders. If these agencies receive significant budget cuts, Mines will see an impact on future research funding. It is not anticipated that cuts in the FY18 budget will impact funding currently allocated to Mines from previous federal fiscal year budgets.

The National Science Foundation and the Department of Energy, as well as various other federal agencies, have programs that include matching requirements. To meet the matching requirements, Mines uses a combination of faculty effort and cash sources. Cash sources have come:

- Mines operating budgets
- State entities, including, but not limited to:
  - Colorado Higher Education Competitive Research Authority
  - Colorado Energy Research Collaboratory
  - Colorado Office of Economic Development and International Trade
- Third parties:
  - Industry partners
  - Non-profit entities
  - Other institutions of Higher Education

Currently funded federal projects with matching requirements have their matching allocations already agreed upon and should already been reserved in budget forecasts. Matching requirements for future projects will be managed through normal budgeting processes.

c. Does the governing board have a contingency plan if federal funds are eliminated?

While a significant decrease in federal funding would have a negative impact on our research volume, Mines maintains a diverse research portfolio that can help mitigate a reduction in federal funding. On average 30% of Mines' research revenue comes from non-federal sources including private industry. With the continued recovery of the oil and gas industry, Mines

could see additional funding from those industrial partners. In addition, Mines research faculty continue to broaden their research endeavors and explore new federal funding opportunities.

4 Is the governing board spending money on public awareness campaigns? If so, please describe these campaigns, the goal of the messaging, the cost of the campaign, and distinguish between paid media and earned media. Further, please describe any metrics regarding effectiveness and whether the governing board is working with other state or federal departments to coordinate the campaign?

University of Colorado System

CU System office spends $3 million annually (this includes no state or tuition revenue) on its All Four: Colorado campaign. It is delivered largely through paid media. The multimedia campaign targets TV, radio, print, social media, digital media, search engine marketing and billboards. CU also pursues non-paid communications strategies including the CU Advocates program that identifies and engages supporters throughout Colorado and the use of the President's Newsletter that is distributed to nearly half a million people.

The goals of the campaign are to:

- *Promote the value and contributions of the University of Colorado to targeted segments of key constituents;*
- *Leverage campus-based marketing efforts and provide connective tissue among them;*
- *Lay the groundwork for fundraising.*

Effectiveness is assessed by annual research surveys to a geographically diverse and statistically significant number of Colorado registered voters. Additionally, survey work done on campus-specific campaigns query the effectiveness of the All Four campaign. The CU System also has a contract with RTD for the University of Colorado A line from Union Station to Denver International Airport for $1 million per year for 5 years. CU does not work with other state or federal departments to coordinate the campaign.

CU Boulder

The CU Boulder campus launched an advertising program in fall of 2015, called "Hometown Heroes," designed to: connect the benefits of CU Boulder programs and activities to residents in their local communities; put a human face on the university; reflect CU Boulder's values, emotional connection and commitment to the people of Colorado; and add dimension to what it means to Be Boulder. The campaign is directed to specific geographic areas: Western Slope, Greeley/Sterling, Lamar and Colorado Springs/Pueblo. This is a multi-market, in-state effort (TV broadcast/cable, Facebook, earned media). Additionally, the university has dedicated staff that proactively shares CU Boulder research discoveries, outreach and other relevant news with Colorado media outlets. The campus spends approximately $560,000 on these efforts annually.

CU Denver

The CU Denver campus spends just over $1 million for advertising and public awareness. This includes approximately $374,000 in production and $746,000 in paid media (ad buys) in support of the CU in the City advertising campaign. The goal of the campaign is to build overall awareness of the Denver campus, to establish our foothold as the only public research university in the heart of downtown, and to educate the Front Range community on our academic quality and variety of degree programs. Success is measured via an annual tracking study that measures advertising recall, overall image and awareness and likelihood to recommend CU Denver to others. Click traffic is also measured through online as well as pre-roll video completion online.

UCCS and CU Anschutz

Do not conduct any additional public awareness campaigns.

Colorado State University System

Response:

The CSU System and governing board are not engaged in any public awareness campaigns, but the various system campuses are individually engaged in marketing efforts and strategic partnerships. Any funds used for brand awareness at the campus level in terms of public relations, community engagement, and sponsorships are reviewed and approved based on mission and strategic objectives for increasing access and opportunity for higher education in Colorado and beyond. The Colorado State University System has no staffing or significant budget dedicated to System-based communications and marketing. The public information and awareness activities from the System and the Board center largely on sharing the actions of the Board of Governors and the decisions of the board as they relate to the three institutions in the System. These activities take place primarily through media relations activities. For efficiency, staff from the flagship institution in Fort Collins serve in communications support roles for the Board and the System as part of their normal duties and do not receive additional pay for this support.

University of Northern Colorado

UNC collaborated with CSU, Aims Community College and Front Range Community College to prepare an economic impact study using Emsi as a consultant. The study was unveiled in August 2017 at a Northern Colorado Legislative Alliance event. UNC disseminates findings from the study through existing social media, student recruitment and other ongoing activities. Thus, there is no incremental cost to sharing the information.

Colorado School of Mines

Colorado School of Mines sponsors the following public awareness programs:

i. Denver Nature of Museum and Science Girls & Science Day. Cost of sponsorship is $27,000. The purpose of this event is to encourage more girls to consider careers in STEM. We evaluate success on the attendance. Last year over 11,000 young girls and family members attended.

ii. CBS4 Future Leaders in STEM. CBS4 and Mines selects and recognizes a K-12 student each month who has achieved success in science and math. Cost of sponsorship is $125,000. This is a new sponsorship. The purpose of Mines' involvement is to encourage more students to consider math and science, and possibly attending Mines. A major portion of this sponsorship is paid TV and digital advertisement to promote Mines.

5 Please provide an update on the governing board's status, concerns, and plans of action for increasing levels of cybersecurity, including existing programs and resources. Does the governing board work with the Chief Information Security Office (CISO) in the Office of Information Technology (OIT)? Have your information technology infrastructure and policies been audited for cybersecurity capabilities? If so, was the audit completed by the legislative auditor or an outside entity? Do you have dedicated cybersecurity personnel? What unique security issues does your governing board have? What unique cybersecurity processes or tools do you use to protect this data?

University of Colorado System

State law [Section 24-37.5-404.5, C.R.S. (2017)] requires CU to provide the Department of Higher Education a description of its information security program. CU provided the annual report from 2008 through 2016 when statute was adjusted to require submission of the information security plan once every three years. CU has consistently met the program requirements stipulated in state statute. CU's plan update is next due on July 1, 2018. Additionally, CU's CISO has been a member of the State of Colorado Information Security Advisory Board.

CU's information technology infrastructure and policies are regularly audited by its internal auditor as well as an external auditor authorized by the state.

CU has 23 FTE dedicated to cybersecurity across all its campuses. In addition to full time professional staff CU leverages student employees which includes their activities directly related to academic and professional training.

CU has many unique security issues as the scope of customers served by CU network services is one of the largest in the state with 120,000 devices on wired and wireless networks in support of student residences, academic, and research services. Because of its mission over 180,000 Faculty, staff, students, alumni are provided access to IT services. As a public research university CU maintains highly regulated data including:

- *Family Educational Rights and Privacy Act (FERPA),*
- *Colorado Revised Statute (CRS) § 6-1-716,*
- *Gramm Leach Bliley Act (GLBA) and Fair and Accurate Credit Transaction Act (FACTA) Red Flag Rules,*
- *Health Insurance Portability and Accountability Act (HIPAA) and Health Information Technology for Economic and Clinical Health act (HITECH),*
- *Payment Card Industry Data Security Standards (PCI-DSS),*
- *Federal Information Security Management Act (FISMA),*

- *Federal Acquisition Regulation (FAR), and*
- *Defense Federal Acquisition Regulation (DFARS), and NIST 800-171*

Because of CU's unique IT needs required to support research, such as high-performance computing, advance data informatics, and archival of research data, CU's cybersecurity program continues to adapt to support advanced technology. Typical enterprise cybersecurity solutions designed to meet the collaboration and scalability requirements for research are only affordable to the largest public-sector companies. As such CU will continue to partner with other top research universities on security appropriate solutions. For example, CU has collaborated with teams from the International Computer Science Institute (in Berkeley, CA) and the National Center for Supercomputing Applications in (Urbana-Champaign, IL) to run one of the largest intrusion detection clusters of its type in the nation.

Colorado State University System

Response

CSU-Fort Collins:

There is no other IT area to which we are devoting as much attention as IT security and privacy. Our internal and external auditors routinely review our IT environment, with a focus on infrastructure and security, and an internal IT security review is also conducted annually. We work with the State's Chief Information Security Officer (CISO) in a variety of ways, including participation in SANS IT security training and collaboration around purchase of anti-virus/anti-spyware software. We submit our IT Security updates through the Colorado Department of Higher Education on a three-year cycle, with the next submission due in 2018. We have three IT positions dedicated to IT security, one of whom is our CSU CISO. We have many, many IT security processes and tools in place to protect our IT environment -- too many, some of great complexity, to articulate in this response. There are IT Security and Privacy provisions that run through a variety of touch points: FERPA, GLBA, GAAP from GASB, federal IT security requirements, SOX, PCIDSS, and the GLBA. Higher education has spearheaded the deployment of shibboleth authentication that affects great privacy and security for accessing shib-enabled sites. We are currently coming into compliance with NIST 800-171 compliance for the confidentiality of Controlled Unclassified Information (CUI), which is requiring significant investment of one-time and annually recurring base funds. This is a federal government mandate that is relatively unique to us in higher education.

CSU-Pueblo:

Similar to most institutions, cybersecurity at CSU-Pueblo is an ongoing challenge as the cyber-threat landscape continuously changes. Concerns are in three primary areas: (a) compliance, (b) training, and (c) reporting/visibility. Existing programs and resources include:

- *CSU-Pueblo has a technical Network Security Team that reviews, investigates and addresses potential cybersecurity issues as they identified. There is also an interdepartmental Information Security Working Group (ISWG) that exists for the purpose of raising cybersecurity awareness and identifying threats or potential security weaknesses in operations and processes.*

- *CSU-Pueblo is in the process of raising its cybersecurity profile by reviewing processes regarding account creation, system access, password guidelines and by putting technology in place to enable more visibility into network systems access and utilization for reporting and auditing purposes.*

- *CSU-Pueblo was awarded $350k in 2016-2017 from capital construction funding for IT projects by the Colorado General Assembly. This funding was specifically awarded to acquire software specifically for the purpose of raising the cybersecurity profile of the University. Training platforms have been purchased, software has been purchased to support security inventory, increasing encryption on public-facing systems, security logging software within the data centers and enhanced email protection for all campus email users.*

- *CSU-Pueblo has had little communication with the CISO office at OIT, though their online resources have provided guidance. A comprehensive audit of cybersecurity capabilities by an outside entity or legislative auditor has not occurred in recent years. Campus security reviews have been internal only. Penetration testing has occurred for PCI compliance, which has only been specific to credit card payment environments. CSU-Pueblo has staff members who have cybersecurity as a portion of their responsibilities.*

CSU-Global Response:

CSU-Global is in the process of securing a contract with an external vendor to provide SOC services, monitoring and security planning. CSU-Global utilizes network-monitoring tools including FortiAnalyzer, FortiClient, FortiEMS and other FortiNet solutions to monitor and secure our network. All school issued computing equipment is completely encrypted. We are using a single identity management system that is role based to control access to systems and we are moving to a single and secure document storage and mobility platform.

University of Northern Colorado

We work with the CISO of OIT. Previously we submitted a yearly report, now we will submit once every three years. Our next report is due in 2018.

As part of our annual financial audit, the independent audit firm reviews our cybersecurity. Our most recent full external audit was in 2014.

We have dedicated cybersecurity personnel with a CISO and two security engineers. There are no unique security issues or solutions, although clearly we are facing all the cybersecurity issues that generally exist.

Colorado School of Mines

Colorado School of Mines continues to increase its efforts and its investment, both financially and in personnel, in addressing cybersecurity challenges. Mines currently has 1.25 FTE dedicated to cybersecurity, including both a Chief Information Security Officer and dedicated cybersecurity engineer. Mines will be increasing those dedicated resources to 2.0 FTE during Q1 of CY2018. The CISO reports to the Chief Information Officer (CIO). The CIO keeps the Mines Executive Team apprised of cybersecurity efforts, and meets with the Mines Board of Trustees as needed. The next scheduled update to the Board by the CIO regarding efforts in this area is scheduled for February 9, 2018.

Mines also works with the State's Chief Information Security Officer. The State CISO has attended the state-wide meeting of higher ed IT professionals, which includes most all CIO's and many CISO's. Along with other institutions of higher education in Colorado, Mines provides a comprehensive update on information security efforts on a three-year cycle. Our next report is due in June, 2018. Additionally, we notify the State CISO of any significant Information Security incidents.

We utilize both internal reviews (by institutional Internal Audit) as well as external, 3rd-party reviews to assess our information security program across multiple fronts, including policies, processes, controls, and response. The most recent external audit was performed in 2016. Further, our annual external state financial audit includes assessment of our technology security controls around financial systems and processes. Finally, we invest annually to engage an external assessment of the effectiveness of various security controls we have implemented to protect both systems and data from unauthorized access.

Like many institutions of higher education, our information resources not only include employee and financial data, but also student information and research data. Our approach is based on widely accepted NIST and ISO standards for implementing a comprehensive information security framework. We take a 'defense-in-depth' approach, with multiple layers of controls, tools, and monitoring systems. We ensure our technology environment is compliant with standards such as PCI-DSS, PCI-DAS, and FERPA, and are currently coming into compliance with the new NIST 800-171 requirements.

6 Describe the expected fiscal impact of proposed changes to PERA made by both the Governor's Office and the PERA Board of Directors. In addition to direct budgetary impacts, please describe any anticipated secondary impacts of an increase in employee contribution rates. For instance, does the governing board anticipate a need to increase employee salaries to compensate for the increase in PERA contributions?

University of Colorado System

The University of Colorado agrees that thoughtful changes should be made during the upcoming legislative session to stabilize the program's finances. System-wide, CU estimates that the PERA Board proposal which assesses contributions on gross earnings as well as the two percent increase in the employer share effective January 1, 2020 would cost $5.5 million in FY 2019-20 and $11.3 million when fully annualized in FY 2020-21. To provide perspective, when fully implemented the proposed change would be about one percent of the total CU salary and benefit expenditure.

The University of Colorado does not anticipate any secondary impact on its budget as a result of the increase in the employee contribution requirement.

Colorado State University System

Response

The proposed changes by the PERA Board of increasing the employer contribution by 2.0% of base salaries will have an estimated increase to CSU of $3.7M and $200K to CSU-Pueblo annually. CSU Global Campus has a small number of employees within the PERA system, and the impact will be minimal. The Governor's budget request for statutory recommendations for PERA to increase employee contributions by 3.0% will cost employees an additional $4.1M at CSU and $240K at CSU-Pueblo. This may adversely affect employees at both universities. While the secondary impacts are expected to be minor, there may be pressure to increase salaries to offset the additional costs to employees. As the Board of Governors and CSU System leadership continue to develop the FY 2019 budget, they will monitor the impact of any legislative changes to PERA and the financial impact to employees and to the University. No decision has been made to increase salaries to offset the PERA increase.

University of Northern Colorado

The current PERA proposal will increase our employer cost $1.15M. The Governor's Office proposed 3% classified employee pay increase will cost UNC $560,000.

Colorado School of Mines

Both the PERA and Governor's proposed changes increase the contribution of existing PERA covered employees at future effective dates. These increases, whether 3% effective January 2020 or 2% effective January 2019, will likely create at least two problems. For employees who do not have a significant amount of PERA covered service, we expect to see a bump in turnover as well as some expectation of salary increases to offset the increase in required employee contribution.

For employees who do have a significant amount of PERA covered service, we expect there to be a strong expectation of salary increases to offset the increase in required employee contribution, and we expect some bump in retirements. Because this group of employees has a significant investment in their future retirement tied to PERA, we do not foresee an increase in turnover not related to retirements occurring.

If the unemployment rate in Colorado remains low as these changes to PERA occur, it will exacerbate turnover and pressure to increase salaries because employees will have other job opportunities available to them. If higher than usual turnover occurs, Mines expects to have to invest more resources into recruiting and hiring faculty and staff as well as the costs associated with bringing new hires on board. The growth in turnover-related costs pulls dollars away from those monies used to directly support educating students. If the job market is robust, it is likely that salary requirements to complete hires will also go up. It is not possible to estimate these costs with any certainty at this point, but it is fair to say that costs will be increasing.

7 Has the governing board been engaged in (or disputed) federal land, environmental, jurisdictional, and/or water policy issues? How do you coordinate with state government agencies, the Governor's Office, local governments, and/or citizens on these issues?

University of Colorado System

CU recently concluded negotiations with federal partners at the CU Anschutz Medical Campus related to real property transactions with the Department of the Army over miscellaneous plots of land at the former Fitzsimons Army Base. Activities at Anschutz Medical Campus include some environmental mitigation. Periodically, CU campus researchers enter lease and license agreements with federal agencies to access federal lands in order to conduct research, including Department of the Interior and Department of Agriculture.

CU engages the impacted agencies at the federal, state, and local government level as needed and appropriate given the issue. All of the CU campuses engage impacted citizens in the communities where the campuses reside or where research is being conducted.

Colorado State University System

Response:
The Board of Governors has not been directly engaged in any disputes or other matters concerning federal lands, environmental, jurisdictional, or water policy issues. The institutions of the Colorado State University System are active in environmental, forest, and water policy issues through the Colorado State Forest Service and the Colorado Water Institute, for example. The institutions and units within the Colorado State University System frequently coordinate with state agencies. For example, the Colorado State Forest Service and the Colorado Department of Natural Resources regularly coordinate on projects and matters, and institutions and units within CSU System coordinate with local governments and citizens. For example, the Colorado Water Institute, which is an affiliate of Colorado State University, exists for the purpose of focusing the water expertise of higher education on the evolving water concerns and problems being faced by Colorado citizens. The Chancellor of the Colorado State University System coordinates communications with the Governor's Office.

University of Northern Colorado

No

Colorado School of Mines

As an institution or governing board the answer is no. Colorado School of Mines faculty members conduct research in these areas and have unique expertise. As a result they are often invited to speak at national conferences, with state/local agencies, an occasional local community forums.

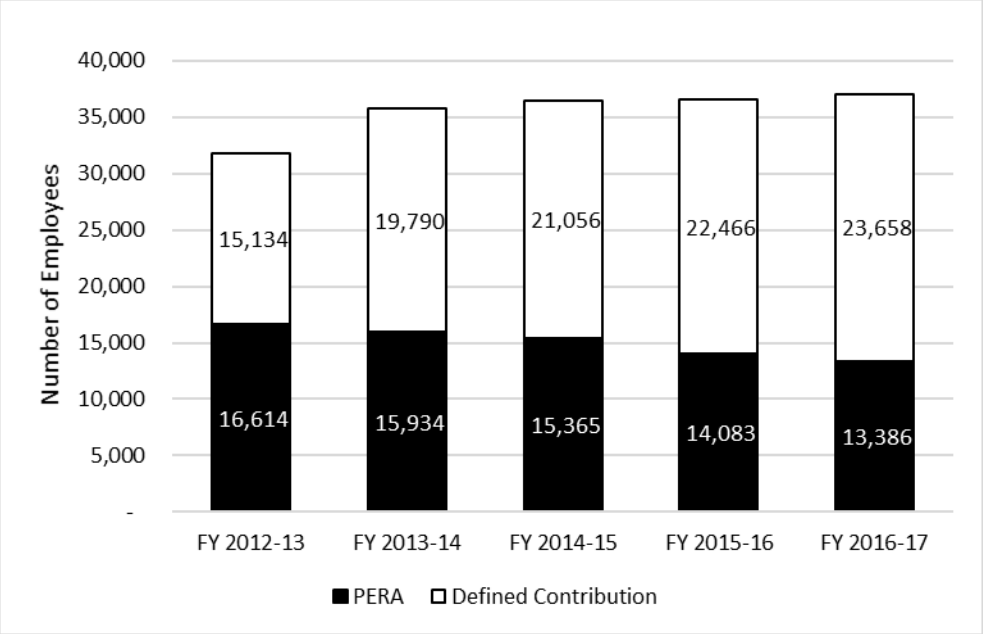
8 Please describe your retirement programs. How many of your staff are on PERA? How many of your staff are on another retirement program? How has the share of your staff who are on PERA versus another retirement program changed over time?

University of Colorado System

The University of Colorado maintains two retirement programs for its employees. Employees that begin service directly with CU are automatically enrolled in a defined contribution plan administered by TIAA. The exception to this rule is classified employees. They are enrolled in PERA. Individuals who were previously employed with a PERA employer under the defined benefit plan, and gain employment with CU are afforded a one-time election to remain with the PERA defined benefit plan or to join the defined contribution plan through TIAA.

Approximately two-thirds of CU's employees participate in the defined contribution plan administered by TIAA (23,658 employees in FY 2016-17), and the remaining one-third participate in the defined benefit plan administered by PERA (13,386 employees in FY 2016-17). Over the last five fiscal years, between FY 2012-13 and FY 2016-17 a decreasing portion of CU employees participate in PERA while an increasing portion is participating in TIAA, as illustrated in the Figure 15 below.

Figure 15:
Number of CU employees
PERA vs. Defined Contribution (TIAA)



Note: The numbers above include non-permanent employees such as student workers.

Colorado State University System

Response:

University Optional Retirement Plan – The Defined Contribution Plan for Retirement (DCP)

Under the University's optional retirement plan, all Academic Faculty, Administrative Professionals, Post-Doctoral Fellows, Veterinary Interns and Clinical Psychology Interns appointed on or after April 1, 1993, are required as a condition of employment under Colorado law to participate in either the University's Defined Contribution Plan (DCP) for Retirement or, in very limited cases, in the PERA Defined Benefit plan (as eligibility permits). DCP participants may select from three investment companies as follows:

1. *Fidelity Investments / MetLife (eligible Faculty/Staff at CSU-Pueblo do not have access to this investment company)*
2. *Teachers Insurance and Annuity Association (TIAA)*
3. *Variable Annuity Life Insurance Corporation (VALIC)*

The defined contribution retirement plans are established pursuant to state statute (24-54.5-101 to 24-54.5-107 C.R.S.). The CSU plan was adopted by the Board of Governors in December 1992 and the CSU-Pueblo plan was adopted in April 1993. The Defined Contribution Retirement Plan is a qualified plan under Section 401(a) of the IRC. CSU and CSU-Pueblo are the Plan Sponsors. All participants contribute the required 8.0 percent of eligible salary. As required, CSU provides a matching contribution of 11.5 percent of eligible salary for all "permanent" appointees (those with regular, special and senior teaching appointments at half-time or greater) and for temporary appointees with appointments of half-time or greater for the second and subsequent consecutive year(s). CSU-Pueblo provides a matching contribution of 11.1 percent, as required, of eligible salary for all nonstudent employees, including those employees at less than half-time and nonstudent temporary, hourly employees. Both employee and employer contributions are vested immediately. Investments are participant-directed within the funds available through the authorized investment companies. The Federal retirement system covers a very limited number of employees at CSU Extension. The System's contribution to this plan was approximately $77 thousand for the fiscal year ended June 30, 2017 and $97 thousand for the fiscal year ended June 30, 2016.

How many of your staff are on PERA? How many of your staff are on other retirement plans?

Current PERA and DCP Participation are shown in the table below.

Institution	*PERA*	*DCP*
CSU	*2,991*	*4,551*
CSU-Pueblo	*360*	*519*
CSU Global Campus	*34*	*796*
Total	*3,385*	*5,866*

(Note: we did not include the Student Employee Retirement Plan (SERP) as it is credit based for enrollment and not a comparative to the DCP or PERA).

How has the share of your staff who are on PERA versus another retirement program changed over time?

CSU PERA enrollment % change:

a. *Faculty & Administrative Professionals: 61.4% increase (2012 to 2017)*
b. *State Classified <12.7%> decrease (2012 to 2017)*
c. *Non-Student Hourly: 13.4% increase (2012-2017)*

CSU DCP enrollment % change:

FAP 33.9% increase (2012-2017)
(State Classified and Non-Student Hourly are not eligible for enrollment in the DCP)

CSU-Pueblo enrollment % change:

PERA - 0% increase (2012 to 2017)
DCP Plan - 7.4% increase (2012 to 2017)

CSU Global Campus enrollment % change:

PERA 0% increase (2015 to 2017)
DCP Plan – 44% Increase (2015-2017)

University of Northern Colorado

We offer two different retirement plans: The PERA defined benefit plan is available to our classified employees and any new professional exempt staff or faculty who have one year of previous PERA employment. Our second plan is an Optional Retirement Plan (ORP) and is a defined contribution plan. This plan is offered to all new faculty and non-classified staff hired since 1992. We currently have 55% (approximately 1000) of our employees enrolled in the ORP and 45% (approximately 800) in PERA. The number in PERA decreases each year as non-classified employees hired prior to 1992 that are on PERA retire. We will eventually hit a floor of approximately 30% of our employees in PERA and 70% in the ORP when we only have classified staff remaining in PERA.

Colorado School of Mines

Mines offers two retirement plans to its workforce. Until January 2017, PERA was the only retirement option. Effective January 1, 2017, Mines implemented its optional retirement plan, the Mines Defined Contribution Plan (MDCP), for all new hires. In addition, in accordance with governing statute, all Mines PERA covered employees were given an option to stop PERA and join the new plan. At the end of the period when Mines employees could choose to switch plans, 86 employees had converted from PERA to the MDCP. As of December 11, 2017, Mines has 996 employees participating in PERA and 244 employees in the MDCP. We expect to see the mix of PERA and MDCP participation change over time such that within ten to fifteen years, virtually all non-classified employees will be members of the MDCP rather than PERA. At present Mines has about 260 classified employees, and these employees must remain in PERA in accordance with state law.

9 What is the value of the physical assets at your institution(s)? How many have already been collateralized? How much is available for future collateralization?

University of Colorado System

The Office of the State Architect Annual Report from December 2016 identified a Current Replacement Value of just over $5 billion for all buildings at CU (system wide).

The CU Board of Regents approved two buildings to be pledged as collateral related to S.B. 17-267 at the November 2017 board meeting. More detail on this is provided in the response to the previous Question 18.

Since 2006, CU's borrowing has been structured as "Revenue Bonds". It's a pledge of revenues from the "University Enterprise" that includes all the facilities, systems, etc. that the University uses to produce revenues. As part of the revenue pledge, section VIII of the Master Bond Resolution prohibits the University from disposing of facilities used to produce revenues unless they are unneeded by the University Enterprise. There is a specific prohibition against placing a lien or other encumbrance against University Facilities except for proper rent (fair value received).

Colorado State University System

Response:

The replacement value of the System's physical assets is approximately $3.5B. The majority of these assets are directly tied to producing revenue that is pledged in conjunction with the System's Master Bond Resolution. We currently have pledged one facility, the Howes Street Business Center which is located north of Campus, in conjunction with a prior State COP issue. In conjunction with the National Western Center COPs, we will be collateralizing the specific facilities that will be built with these funds. Interim collateral my need to be identified in the event title to certain facilities is delayed. The Board has approved approximately $109M of assets as collateral in conjunction with SB17-267.

University of Northern Colorado

The current replacement value (CRV) of UNC's infrastructure is about $880 million. In 2008, UNC's Parsons Hall (CRV $8.4 million) was collateralized in the financing of renovations made to the Butler-Hancock building. In November 2017, UNC's Board approved collateralization of the Jackson Soccer Team Building (CRV $2.8 million) for financing our SB 17-267 controlled maintenance projects.

We believe UNC's assets should not be encumbered except for projects that directly benefit UNC's students.

Colorado School of Mines

Total Value of the physical assets at Colorado School of Mines — $608.6 million.

Already collateralized — $525 million. Of this total number, $366 million of asset value have debt directly tied to the building. The balance are the value of assets that we estimate are needed to fulfill our obligation to bond covenants which pledge a portion of our tuition revenue.

Available for future collateralization — $83.6 million.

10 The OER Council has recommended an initiative costing $660,000 General Fund for FY 2018-19, annualizing to $1.1 million in subsequent years, for a grant program to promote the use OER at public institutions. Staff has also recommended including a statutory requirement that by fall 2021 institutional course catalogs identify which courses use OER. Do you have any input on this proposal?

University of Colorado System

The additional funding recommended by the Council would help implement the grant program helping promote OER across the state and this idea has merit.

Although there is some value in identifying OER courses in institutional course catalogues, CU does not recommend pursuing a statutory requirement at this time and for the following reasons:

- *The assumptions of the requirement are binary: either a course is OER or is not OER. This means that courses that have affordable learning materials are branded negatively, the same as those with very expensive textbooks. It does not acknowledge courses where mixed resources—open and for-fee—are appropriate, even though the use of mixed resources still furthers the cause of cost reduction for students. Without understanding full material costs in all courses, the requirement does not provide a true point of financial comparison for students.*

- *The catalogue requirement assumes that institutions have the technological systems and resources to be able to comply with the requirement, which is not the case across all institutions in the state. Adding this requirement to technical systems would not be quick, painless, or inexpensive, even at institutions with a robust technological infrastructure.*

- *The processes that would need to be put into place to verify OER adoption for every section of every course, every semester, would be burdensome and expensive.*

- *Because it is a mandate, this proposal has the potential to cast a negative pall over campus OER initiatives and have an overall negative impact on efforts to promote adoption of OER. It represents a top-down model antithetical to the local model proposed by the Council. It would divert human, fiscal, and IT resources away from a thoughtful process of dialogue with multiple stakeholders and take away institution choice and implementation customization.*

- *Labeling courses does not respect the faculty role or timetables in selecting course materials. In some institutions or programs, this selection may be done by committee and last several years; in others, the decision may be made by an individual faculty member at the section level.*

- *It is not necessary to implement this requirement to track the benefits of state investments in OER, and there are other methods of getting information about total cost of a course to students so they can make decisions that are in their best financial interest.*

Although identifying courses as OER in public ways might be a potential option for campuses to pursue in the future, we should be focusing at this time on awareness and adoption, not on a mandate that sets up faculty and programs to artificially compete with one another for students.

Colorado State University System

Response

The CSU System strongly supports the OER council's suggested request for funding. Experience in other states suggests that the investment over three years would likely lead to a four-fold return in total savings to Colorado students. This is therefore an efficient way to have a large impact, and one which would also serve to benefit the state in terms of higher graduation rates, lower debt burdens on students/citizens, eliminating the academic performance divide between students who have access to materials the first day of class and those who don't, and an increased flexibility and engagement of instructors with material. Some of that investment should be considered to be used for common purposes to be coordinated at the state level with the institutions by CDHE, to achieve economies of scale. This may include identifying OER materials for GTPathways courses, scaling across all of Colorado. This would be far more economical than, for example, individual institutions paying Lumen Learning $10 per student-per course for this service.

The Colorado State University System does not favor an inflexible requirement to include notice of OER offerings in course catalogs. Course catalogs are distinct from the course schedule/listings that most students see when they register. Course catalogs consist of topical descriptions that are enduring, while materials required for each course may change from semester to semester and section to section. However, we are in favor of a requirement to list OER materials for course sections online, accessible to students, but recommend that the manner of doing so remain flexible.

University of Northern Colorado

UNC supports the funding of the Colorado Open Educational Resources initiative as proposed by the Colorado OER Council. This funding will elevate OER awareness and adoption across state institutions. Research and statistical evidence from other states suggest that over a three-year period there can be much as a 4 times return on investment, when comparing state/institutional investment to the reduction of student textbook costs. Reduction of textbook costs, in turn, reduces the cost of attendance and increases student success and completion. Funding this initiative will further access to public higher education for students in Colorado as well as increasing student success and graduation rates.

The University of Northern Colorado does not support the statutory requirement that all institutional catalogs identify which courses use OER.

- *Institutions should identify mechanisms to raise student awareness of courses that utilize OER. However, a rigid mandate regarding OER assumes that OER is the only tool to mitigate textbook costs when low cost textbooks (for instance under $40) or other emerging technology solutions may equally effective. Institutions should have the flexibility to determine the best mechanisms to inform students of the courses that utilize no/low cost textbooks.*

- *The mandate to put the information in the catalog forces institutions to focus human, financial, and technology resources on updating systems, including legacy systems, that may not be changeable. These resources might be more effectively directed to promoting adoption and implementation of OER*

- *Requiring institutions to identify open/low cost classes is a reasonable expectation but the method and manner of doing this should be delegated to the institutional level*

Colorado School of Mines

We do not have any concerns with the OER Council's recommendation. We have not fully discussed staff recommendation with academic departments but believe, at this time, that staff recommendation could be implemented.

ADDENDUM

For background on financial aid questions, please provide the net cost of attendance, after grant aid, for each institution by different income levels and, specifically, for Pell-eligible students.

University of Colorado System

Please see Attachment A.

Colorado State University System

CSU-Fort Collins

Average net price for FTFT students who receive grant aid	$16,232
Average net price for FTFT students who receive Title IV federal student aid	
$0 – 30,000	$11,287
$30,001 – 48,000	$11,474
$48,001 – 75,000	$15,705
$75,001 – 110,000	$22,814
$110,001 and more	$24,061

CSU-Pueblo

Average net price of attendance for full-time, first-time, degree/certificate-seeking undergraduate students who paid the in-state or in-district tuition rate and were awarded Title IV aid, by income:

Income	*2015-16*
$0 - $30,000	*$10,626*
$30,001 - $48,000	*$11,360*
$48,001 - $75,000	*$14,141*
$75,001 - $110,000	*$17,045*
$110,001 and more	*$17,381*

University of Northern Colorado

UNC Average Grant/Scholarship Aid-Fall 2017 (New-First Time, Fulltime UG, In-State)				
		[A]	*[B]*	*[C]*
Pell Eligibility	*EFC*	*Cost of Attendance*	*All Grant/Scholarship Aid (Average)*	*Net Cost of Attendance [A] - [B]*
Pell-Eligible	*$0 EFC*	*$24,902*	*$13,848*	*$11,054*
	$1 - $5,328 EFC	*$24,902*	*$11,101*	*$13,801*
Not Pell-Eligible	*EFC > $5,328*	*$24,902*	*$4,247*	*$20,655*

Colorado School of Mines

In an effort to provide standardized data, we are using data that we report to the US Department of Education and publically available via IPEDS Student Financial Aid. The reported data is for IPEDS group 4 – defined as full-time first-time undergraduates enrolled who paid in-state tuition rate and were awarded any Title IV/federal student aid, including federal grants of federal student loans. This is the only data available that breaks down cost of attendance by income level.

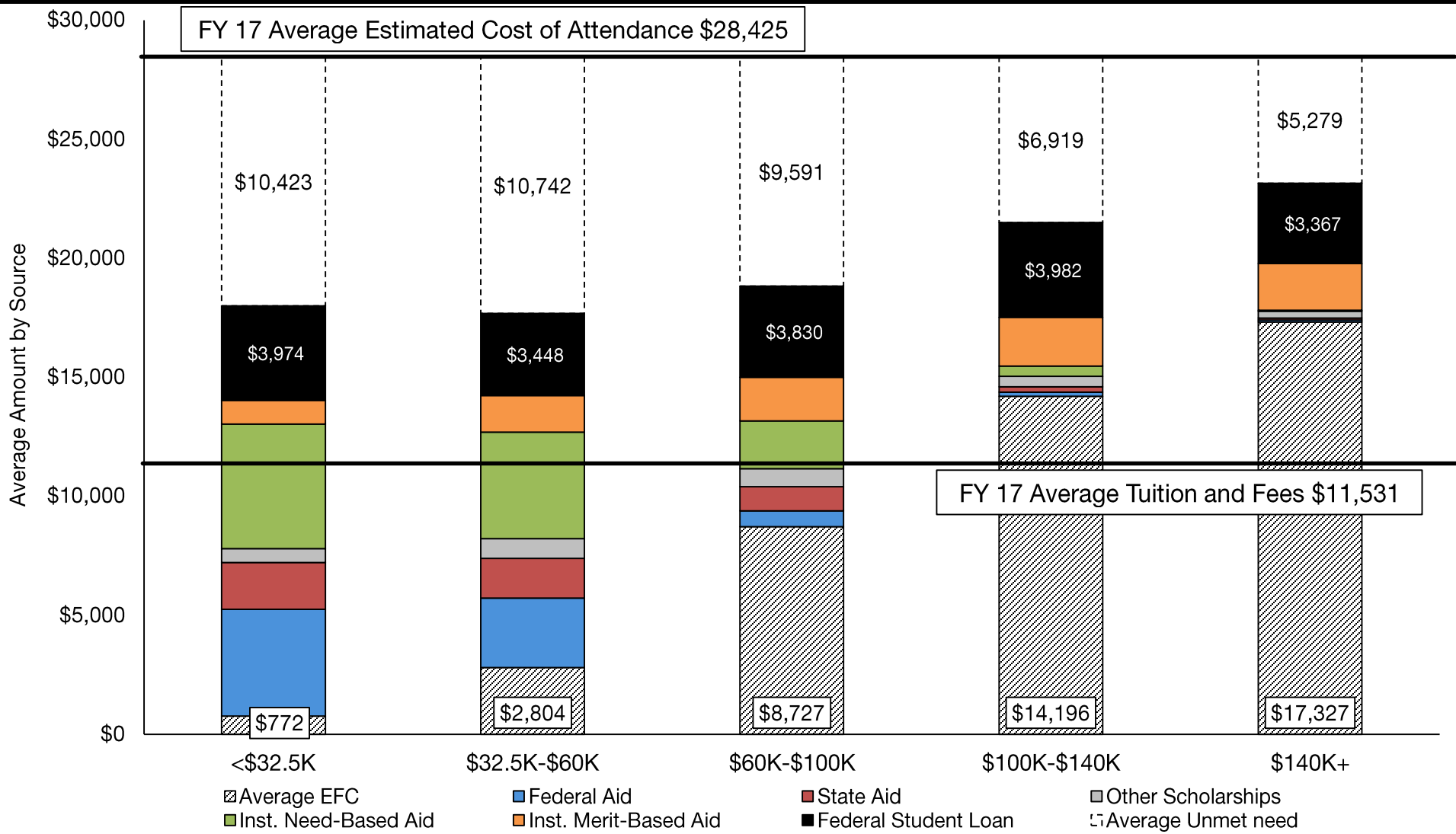
The data reported below is for 2016-17. This is more recent information than is currently available on IPEDS.

Average institutional net price for Group 4 students

Income Level	*2016-17*
$0-30,000	*$16,392*
$30,001 – 48,000	*$21,113*
$48,001 – 75,000	*$23,099*
$75,001 – 110,000	*$29,604*
$110,001 and more	*$30,377*

Net price is total cost of attendance minus average amount of grant or scholarship aid awarded from federal government, state, local, and institution. Total cost of attendance at Mines for 2016-17 was $32,684 and includes room, board, books, and supplies. Total cost for room, board, books, and supplies which for 2016-17 was $14,816 using weighted average per IPEDS.

CU Boulder Resident Undergraduate Average Financial Assistance, 2017



University of Colorado

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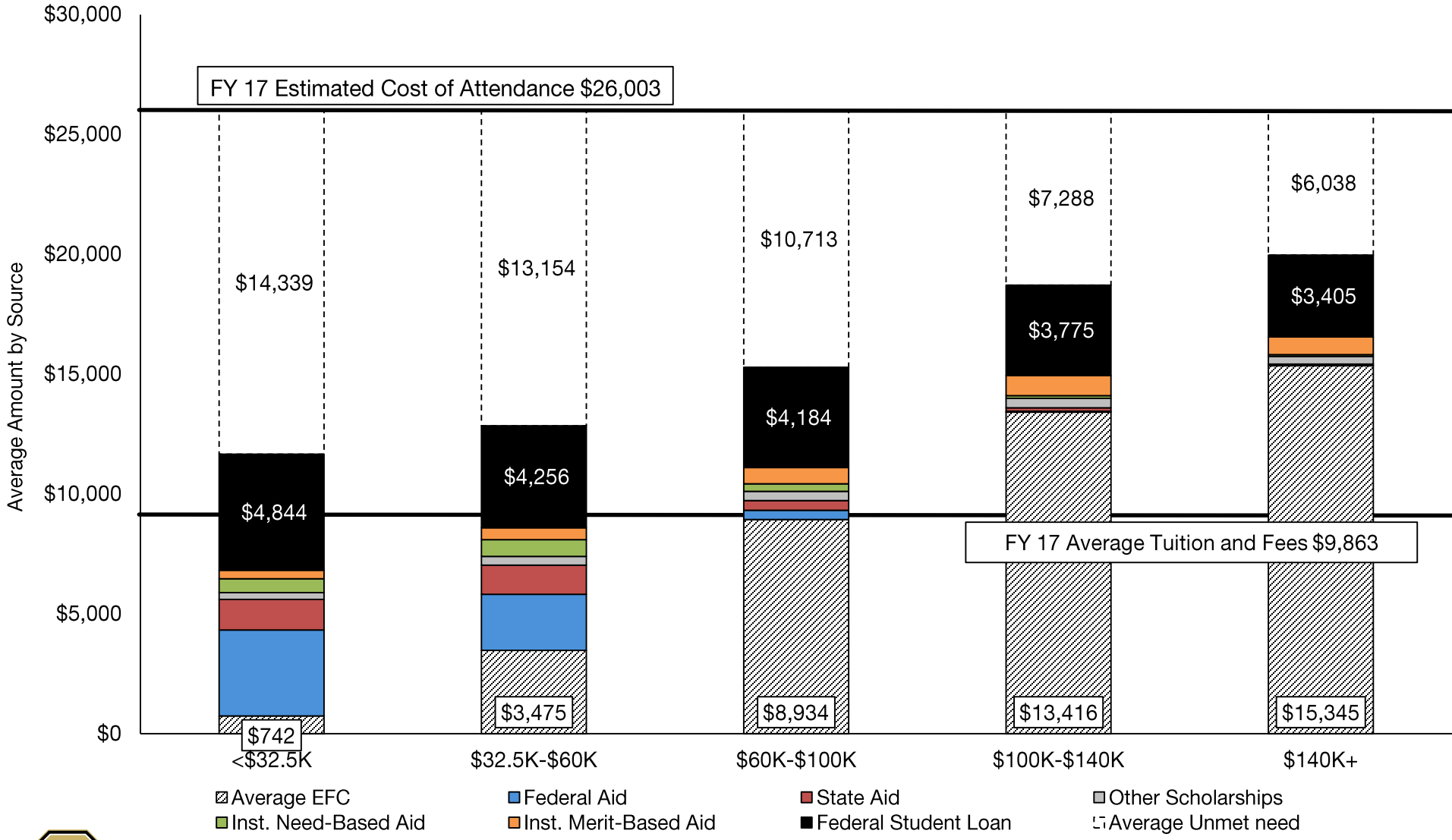
FOUR CAMPUSES UNITED

UCCS Resident Undergraduate Financial Assistance, 2017

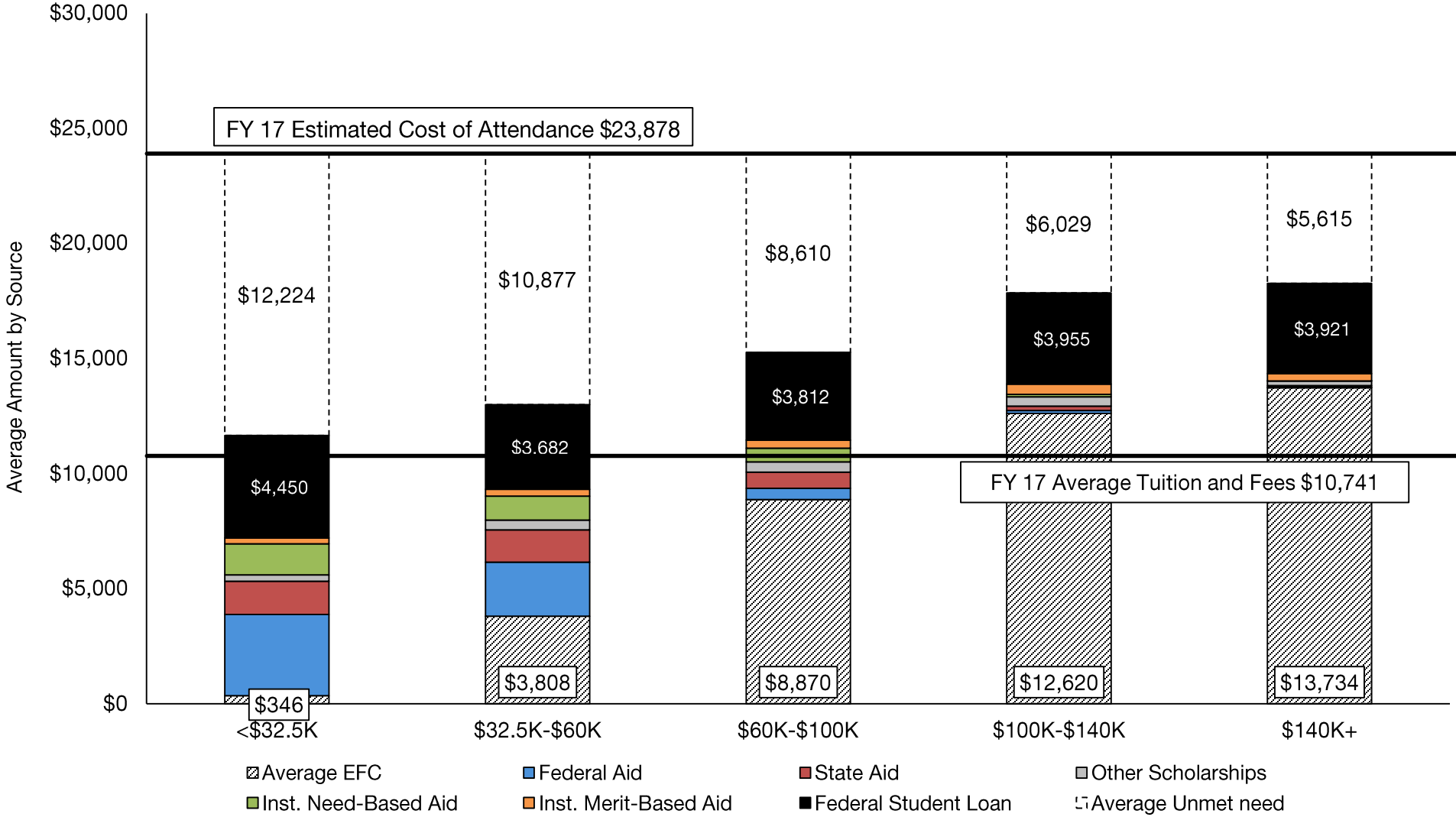


University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

FOUR CAMPUSES UNITED

CU Denver Resident Undergraduate Average Financial Assistance, 2017



University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

FOUR CAMPUSES UNITED

Colorado School of Mines

Largest 1st YR Class in Mines History – 1,325 in Fall17

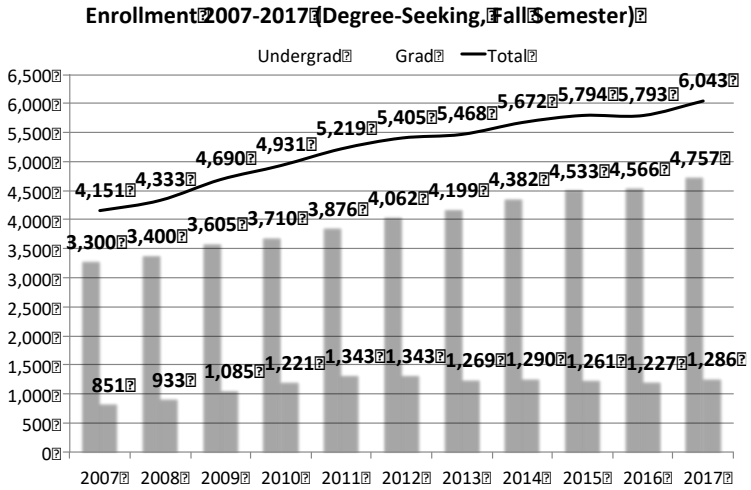
- 1st YR: 31% women, 23% minority/multi-race
- Total Enrollment: 6,043 (UG 4,757 ; Grad 1,286)
  - 46% growth past 10 years; 85% past 15 years

Highest Retention & Grad rates among CO publics

- Freshman persistence: 93%. Five years ago: 89%
- Graduation rates: 62% 4-year; 79% 6-year
  - Five years ago: 46% (4yr) and 67% (6yr)
- *2024 Strategic goals: 75% (4yr) and 85% (6yr)*

Ranked #5 in Nation for ROI – Payscale.com

- Fiscal 2017 graduates employed related to field of study or in graduate school within 3-6 months: 85%(BS); 93%(MS); 96%(PhD)
- Avg salary: $66,648(BS); $76,522(MS); $79,243(PhD)
- 289 companies recruited at Fall 2017 Career Fair



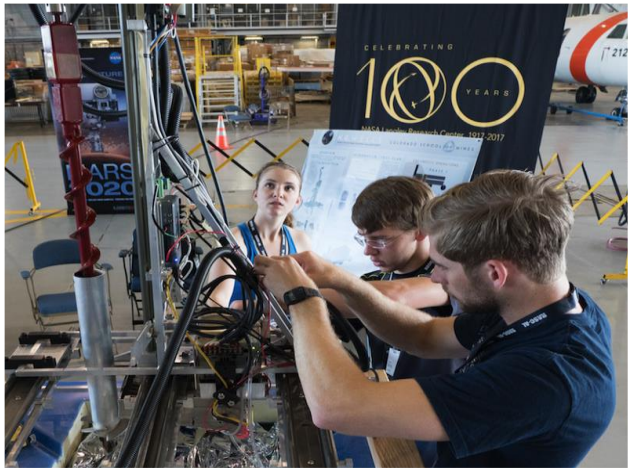
Fall 2017 Career Fair

COLORADOSCHOOLOFMINES
EARTH • ENERGY • ENVIRONMENT

Student Success and Impact

Mines Senior Design Trade Fair Winner: Solar-powered water disinfection system for rural Uganda.

NASA Mars Ice Challenge: 2nd Place



Currently #1 (Fall17)

RMAC Champs: Soccer (M), X-Country (M), Volleyball

NCAA Playoffs: X-Country (M-3rd, W-11th), Soccer (M&W - 3nd Round), Volleyball – 2nd Rnd)

Ethics Bowl National Finals 2018

SpaceX Hyperloop Pod Final Competition: 1 of 24 international teams

ANALYSIS OF THE
ECONOMIC IMPACT AND
RETURN ON INVESTMENT OF EDUCATION

The Economic Value of Northern Colorado Public Colleges and Universities

August 2017

EXECUTIVE SUMMARY

Emsi

Photo Credit: University of Northern Colorado

Aims Community College | Colorado State University | Front Range Community College | University of Northern Colorado

Executive summary

Northern Colorado Public Colleges and Universities (NoCoPCU) create value in a variety of ways. The institutions improve higher education delivery throughout the region and help students increase their employability and potential. The institutions facilitate new research and company developments, generating new dollars and opportunities for Larimer and Weld Counties.

The value of NoCoPCU influences both the lives of students and the regional economy. The institutions serve a range of industries in Larimer and Weld Counties, support regional businesses, and benefit society as a whole in Colorado from an expanded economy and improved quality of life. The benefits created by NoCoPCU extend as far as the state and local government through increased tax revenues and public sector savings.

This study investigates the economic impacts created by NoCoPCU on the business community and the benefits that the institutions generate in return for the investments made by their key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

- **Economic impact analysis**
- **Investment analysis**

All results reflect student and financial data for Fiscal Year (FY) 2015-16.[1] Impacts on the regional business community are reported under the economic impact analysis. Results are measured in terms of income. The return on investment to students, taxpayers, and society are reported under the investment analysis. Both analyses are described more fully in the following sections.

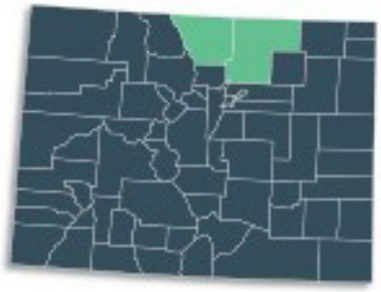
1 Not all institutions were able to provide FY 2015-16 financial data, hence FY 2014-15 financial data was used for those select institutions.

Photo Credit: Colorado State University

Economic impact analysis

NoCoPCU promote economic growth in Larimer and Weld Counties through their direct expenditures and resulting expenditures of students and regional businesses. The institutions serve as employers and buyers of goods and services for their general and research operations, along with their construction activities. Numerous start-up companies have formed through programs and knowledge at NoCoPCU. The institutions' reputation and activities attract students from outside Larimer and Weld Counties, whose expenditures benefit regional vendors. In addition, NoCoPCU are primary sources of education to Larimer and Weld Counties residents and a supplier of trained workers to the regional businesses, increasing overall productivity in the regional workforce.

FIGURE 1: NoCoPCU Service Region, Larimer and Weld Counties



OPERATIONS SPENDING IMPACT

NoCoPCU are important employers in Larimer and Weld Counties. In FY 2015-16, the institutions employed 10,330 full-time and part-time faculty and staff (less research employees). Of these, 75% lived in Larimer and Weld Counties. Total payroll at NoCoPCU was $724.9 million (excluding payroll from research employees), much of which was spent in the region for groceries, eating out, clothing, and other household expenses.

In addition, NoCoPCU are large-scale buyers of goods and services. In FY 2015-16, the institutions spent $261.3 million to cover their expenses for facilities, professional services, and supplies, excluding research expenditures.

NoCoPCU added $676.8 million in income to the region during the analysis year as a result of their day-to-day operations. This figure represents the institutions' payroll, the multiplier effects generated by the spending of the institutions and their employees, and a downward adjustment to account for funding that the institutions received from state and local sources. The $676.8 million in added income is equivalent to supporting 9,986 jobs.

RESEARCH SPENDING IMPACT

Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. In FY 2015-16, NoCoPCU received 129 invention disclosures, filed 147 new US patent applications, and produced 43 licenses.

TABLE 1: Impacts created by NoCoPCU in FY 2015-16

ADDED INCOME	JOBS
$676.8 million	**9,986**
Operations spending impact	
$172.7 million	**2,894**
Research spending impact	
$78.9 million	**1,354**
Construction spending impact	
$35.8 million	**548**
Start-up company impact	
$159.6 million	**2,428**
Student spending impact	
$1.3 billion	**22,467**
Alumni impact	
$2.4 billion	**39,677**
Total impact	

In FY 2015-16, NoCoPCU spent $127.4 million on payroll to support research activities, creating a net total of $172.7 million in added income for the regional economy. This added income is equivalent to supporting 2,894 jobs.

CONSTRUCTION SPENDING IMPACT

NoCoPCU commissioned contractors to build or renovate a number of facilities during the analysis year. The quick infusion of earnings and jobs that occurred in the region economy as a result of this construction spending is only considered short-term due to the one-time nature of construction projects. Nonetheless, the construction spending had a substantial impact on the region economy in FY 2015-16, equal to $78.9 million in added income for Larimer and Weld Counties,which is equivalent to supporting 1,354 jobs.

START-UP COMPANY IMPACT

NoCoPCU create an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of NoCoPCU start-up companies created in the region. Start-up companies, created specifically to license and commercialize NoCoPCU technology or knowledge, have a strong and clearly defined link to NoCoPCU.

In FY 2015-16, NoCoPCU start-up and companies added $35.8 million in income to the Larimer and Weld Counties' economy, which is equivalent to supporting 548 jobs.

Photo Credit: Aims Community College

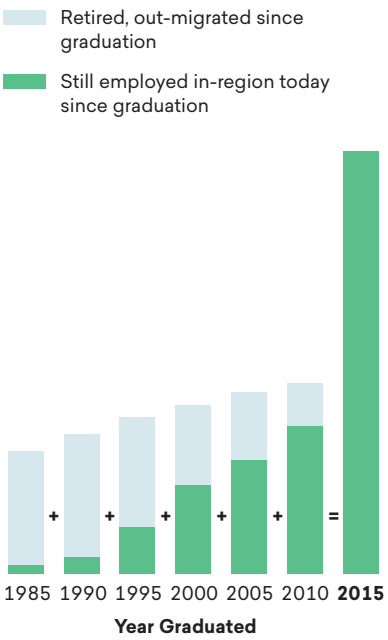
STUDENT SPENDING IMPACT

Around 45% of students attending NoCoPCU originated from outside the region in FY 2015-16. Some of these students relocated to Larimer and Weld Counties. These students would not have come to the region if the institutions did not exist. In addition, a number of in-region students would have left the region for other educational opportunities if not for the existence of NoCoPCU. While attending the institutions, these relocated and retained students spent $341.5 million to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in the region, generating $159.6 million in added income in the regional economy during the analysis year, which is equivalent to supporting 2,428 jobs.

ALUMNI IMPACT

The education and training NoCoPCU provide for region residents results in the greatest impact. Since the institutions were established, students have studied at NoCoPCU and entered the workforce with new skills. Today, hundreds of thousands of former students are employed in Larimer and Weld Counties (Figure 2).

FIGURE 2: NoCoPCU alumni working in-region today



During the analysis year, past and present students of NoCoPCU generated $1.3 billion in added income for the region. This figure represents the higher wages that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses. This $1.3 billion in added income is equivalent to supporting 22,467 jobs.

TOTAL IMPACT

The overall impact of NoCoPCU on the local business community during the analysis year amounted to $2.4 billion in added income, equal to the sum of the operations spending impact, the research spending impact, the construction spending impact, the start-up company impact, the student spending impact, and the alumni impact. The $2.4 billion in added income was equal to approximately 9.6% of the GRP of Larimer and Weld Counties. By comparison, this contribution that the institutions provide on their own is almost twice as large as the entire Health Care & Social Assistance industry in the region.

The total impact is also expressed in terms of the jobs supported by the added income; they are calculated by jobs-to-sales ratios specific to each industry. Overall, the $2.4 billion impact supports 39,677 jobs.

A portion of the total $2.4 billion is broken out into an industry-by-industry impact ordered by added income. Table 2 outlines the top industries impacted by NoCoPCU. Because industries have different jobs-to-sales ratios, the associated jobs supported by the NoCoPCU impact differ by industry. Nonetheless, these are impacts that would not have been generated without the institutions' presence.

TABLE 2: Top industries impacted by NoCoPCU

TOTAL INCOME (MILLIONS)	JOBS
$326.5	5,015
Professional & Technical Services	
$201.1	2,501
Government, Non-Education	
$186.2	3,003
Construction	
$178.6	4,104
Health Care & Social Assistance	
$159	1,297
Manufacturing	
$1,370.9	23,757
All other industries	
$2,422.1	39,677
Total impact	


Photo Credit: Front Range Community College

Investment analysis

Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile and considered profitable.

NoCoPCU received a total of $1.4 billion in FY 2015-16. Tuition and fees comprised 37% of total revenue, student aid from government sources comprised another 35%, and all other revenue comprised the remaining 28%. This study considers NoCoPCU as an investment from the perspectives of those whom provided these revenues - students, taxpayers, and society. The backdrop for the analysis is the entire Colorado economy.

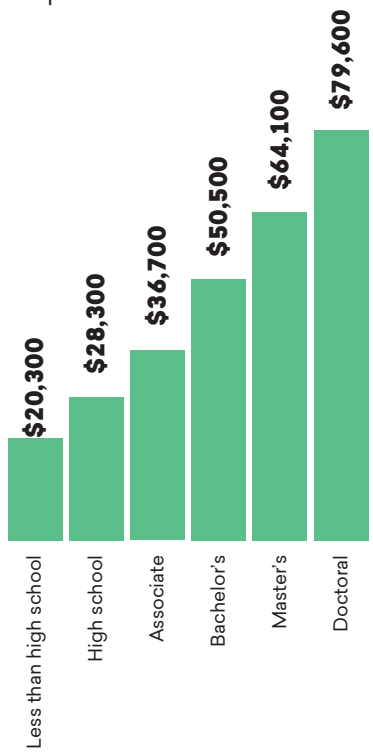
STUDENT PERSPECTIVE

In FY 2015-16, NoCoPCU served 68,145 credit students and 4,737 non-credit students. In order to attend the institutions, students paid for tuition, fees, books, and supplies. They also gave up money that they would have otherwise earned had they been working instead of attending the institutions. The total investment made by NoCoPCU's students in FY 2015-16 amounted to $1 billion, equal to $556.5 million in out-of-pocket expenses plus $480.2 million in forgone time and money.

In return for their investment, NoCoPCU's students will receive a stream of higher future wages that will continue to grow through their working lives. As shown in Figure 3, mean earnings levels at the midpoint of the average-aged worker's career in Colorado increase as people achieve higher levels of education. For example, the average bachelor's degree completer from NoCoPCU will see an increase in earnings of $22,200 each year compared to someone with a high school diploma or equivalent. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately $954,600 in higher earnings.

The present value of the higher future wages that NoCoPCU's students will receive over their working careers is $3.2 billion. Dividing this value by the $1 billion in student costs yields a benefit-cost ratio of 3.1. In other words, for every $1 students invest in NoCoPCU in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of $3.10 in higher future wages. The average annual rate of return for students is 10.9%. This is an impressive return, especially when compared to the 10-year average 7.2% return to the US stock market.

FIGURE 3: Higher earnings by education level at career midpoint in Colorado



Source: Emsi complete employment data.

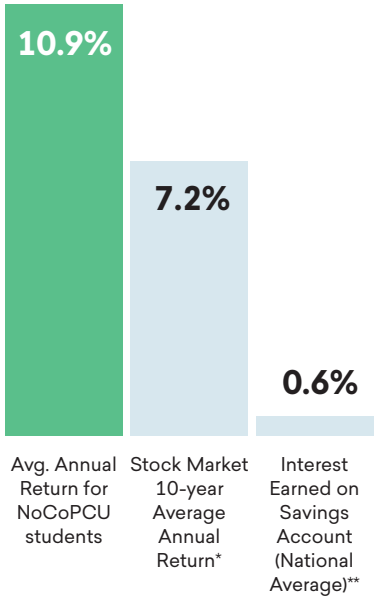
TAXPAYER PERSPECTIVE

The institutions within NoCoPCU generate more in tax revenue than they take. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added income created in the state. As NoCoPCU's students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the FY 2015-16 students' working careers, the state and local government will have collected a present value of $1 billion in added taxes.

Benefits to taxpayers consist of the savings generated by the improved lifestyles of students and the proportionally reduced government expenditures. Education is statistically correlated with a variety of lifestyle changes that generate taxpayer savings across three main categories: 1) health, 2) crime, and 3) unemployment. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement and criminal justice services is reduced (study references are available in the main report). In addition, students are more employable, so the demand for welfare and unemployment benefits, such as earnings assistance and welfare benefits, is reduced. All of these benefits will generate a present value of $305 million in savings to state and local taxpayers.

Total benefits to taxpayers equal $1.3 billion, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of $231.4 million—equal to the funding that NoCoPCU received from the state and local government during the analysis year—yields a benefit-cost ratio of 5.8. This means that for every $1 of public money invested in NoCoPCU, taxpayers receive a cumulative value of $5.80 over the course of the students' working lives. The average annual rate of return is 33.6%, a solid investment that compares favorably with other long-term investments in both the private and public sectors.

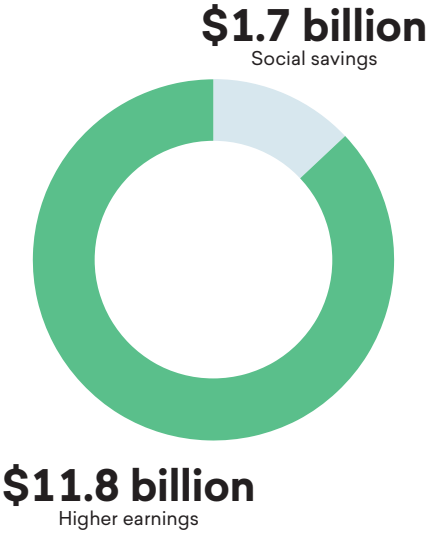
FIGURE 4: Student rate of return



* Forbes' S&P 500, 1994-2014.

** FDIC.gov 12-2016.

FIGURE 5: Present value of higher earnings and social savings in Colorado



SOCIAL PERSPECTIVE

Society as a whole within Colorado benefits from the presence of NoCoPCU in two major ways. The first and largest benefit that society receives is the added income created in the state. As discussed in the previous section, students earn more because of the skills they acquire while attending NoCoPCU. Businesses also earn more because the enhanced skills of students make them more productive. Together, higher student wages and increased business output stimulate increases in income across the state, thereby raising prosperity in Colorado and expanding the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Similar to the taxpayer section above, education is statistically correlated with a variety of lifestyle changes that generate social savings across three main categories: 1) health, 2) crime, and 3) unemployment. Note that these costs are avoided by the consumers, and are distinct from the costs avoided by taxpay-

ers outlined above. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditures and insurance administration, lower victim costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced employer contributions towards unemployment claims. For a list of study references to these statistical benefits, please contact the institutions for a copy of the main report.

Figure 5 shows the present value of the added income and social savings that will occur in Colorado over the working lifetime of the FY 2015-16 student population at NoCoPCU. Added income amounts to a present value of $11.8 billion due to the increased lifetime earnings of students and associated increases in business output. Social savings amount to $1.7 billion, the sum of health, crime, and unemployment savings in Colorado. Altogether, total benefits to society equal $13.5 billion (in present value terms).

Society invested $2.2 billion in NoCoPCU educations during the analysis year. This includes all expenditures by NoCoPCU, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Colorado will receive a cumulative value of $6.30 in benefits, equal to the $13.5 billion in benefits divided by the $2.2 billion in costs. These benefits will occur for as long as NoCoPCU's FY 2015-16 students remain employed in the state workforce.

SUMMARY OF INVESTMENT ANALYSIS RESULTS

Table 4 presents the results of the investment analysis for all three of NoCoPCU's major stakeholder groups—students, society, and taxpayers. As shown, students receive great value for their educational investment. At the same time, the investment made by state and local taxpayers to the institutions creates a wide range of benefits to society and returns more to government budgets than it costs.

TABLE 3: Summary of investment analysis results

	STUDENT PERSPECTIVE	TAXPAYER PERSPECTIVE	SOCIAL PERSPECTIVE
Present value benefits (thousands)	**$3,171,211**	**$1,339,206**	**$13,500,794**
Costs (thousands)	**$1,036,695**	**$231,413**	**$2,151,181**
Net present value (thousands)	**$2,134,516**	**$1,107,793**	**$11,649,613**
Benefit-cost ratio	**3.1**	**5.8**	**6.3**
Rate of return*	**10.9%**	**33.6%**	

* The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that NoCoPCU create value from multiple perspectives. The institutions benefit local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. They enrich the lives of students by raising their lifetime earnings and helping them achieve their individual potential. They benefit state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services. Finally, they benefit society as a whole in Colorado by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.

ABOUT THE STUDY

Data and assumptions used in the study are based on several sources, including the FY 2015-16 academic and financial reports from NoCoPCU, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Emsi's Social Accounting Matrix (SAM) model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact the institutions for a copy of the technical report.

Emsi

Emsi, a CareerBuilder company, is a leading provider of economic impact studies and labor market data to educational institutions, workforce planners, and regional developers in the U.S. and internationally. Since 2000, Emsi has completed over 1,700 economic impact studies for educational institutions in four countries. Visit www.economicmodeling.com for more information about Emsi's products and services.

DEPARTMENT OF HIGHER EDUCATION

FY 2018-19 JOINT BUDGET COMMITTEE HEARING AGENDA

(Day 3 of 3)

Friday, January 5, 2018

9:00 am – 12:00 pm

11:00-11:15 **BREAK**

11:15-11:45 **HISTORY COLORADO**

INTRODUCTIONS AND OPENING COMMENTS

Presenters:

- Steve Turner, Executive Director, History Colorado
- John Bush, Director, Cumbres and Toltec Scenic Railroad

<u>HC1 - History Colorado OIT Payments</u>

1 Discuss the problems HC has been facing with OIT costs and service.

Customer service over the last few months seems to be improving. However, this could mainly be an indication that History Colorado has dedicated more staff time to help find the best solution and to hold OIT more accountable for the services they provide. HC staff has worked to establish a more significant relationship with the leaders of OIT to move projects forward in a timelier manner.

One of the main problems that HC has faced with OIT service is a lack of a clear understanding of OIT processes and procedures for state agencies as well as OIT's understanding the business requirements of History Colorado. Since History Colorado is one of the few agencies that have a public interfacing mission, the OIT processes and procedures do not always lead to solutions that are in line with other cultural institutions offerings. In the past, this has lead to many projects taking more time than anticipated, mainly due to not having the correct people and departments at OIT aware of the project that could help troubleshoot when standard OIT processes and procedures don't align with the needs of History Colorado.

OIT common policy costs have been unpredictable and uncontrollable by the Board in the last few

fiscal years. History Colorado's OIT common policy costs have increased an average of 40% annually since FY 2012-13. Table 1 outlines a history of OIT common policy costs to the organization over the last five fiscal years. The annual changes in cost have also been wildly unpredictable, with swings from a 13.52% reduction in costs in FY 2016-17 to an increase of 91.22% in FY 2014-15.

Table 1: History Colorado's OIT Appropriation FY 2013-14 through FY 2017-18

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
OIT Appropriation	$ 181,968	$ 347,961	$ 395,445	$ 341,974	$ 622,124
Change in OIT costs from previous year	6.55%	91.22%	13.65%	-13.52%	81.92%

The impact of the unpredictable and uncontrollable nature of OIT common policy costs on History Colorado has been a diversion of earned revenue from revenue building programs and projects to common policies. In other words, despite the fact that History Colorado has budgeted for a 4.92% increase in total revenue in the current fiscal year, OIT costs as a percentage of total earned revenue have increased to 4.40% – up from 2.54% in FY 2017 – significantly reducing the amount of revenue the Board has to successfully complete its charge to become a fiscally sound and self-sustaining organization.

As illustrated in the tables below, History Colorado is forecasting OIT common policy costs will continue to increase as a percentage of limited gaming funds, earned revenue and total revenue, even as the Board aggressively invests in revenue earning activities. In FY 2021-22, the year History Colorado's COP payment increases by about $500,000, the forecast shows OIT common policy costs will make-up 7.21% of limited gaming revenue, 17.96% of earned revenue, and 5.14% of total revenue. For comparison, in FY 2015-16 – the year the new Board was appointed and imposed stringent fiscal measures to ensure the agency maintained a balanced budget – OIT costs made-up 3.90% of limited gaming revenue, 10.52% of limited gaming revenue, and 2.92% of total revenue.

Table 2: OIT Costs vs. Limited Gaming

	FY 2014	FY 2015[1]	FY 2016	FY 2017	*FY 2018*	*FY 2019* [2]	*FY 2020* [2]	*FY 2021* [2]	*FY 2022* [2]
OIT Appropriation[3]	$181,968	$347,961	$395,445	$341,974	$622,124	*$460,168*	*$552,202*	*$662,642*	*$795,170*
Limited Gaming (49.9%)	$9,434,371	$9,371,341	$10,185,860	$10,133,879	$10,139,680	*$10,578,800*	*$10,818,320*	*$10,926,503*	*$11,035,768*
OIT Costs as a Percentage of Museum Gaming Revenue	**1.93%**	**3.71%**	**3.90%**	**3.37%**	**6.14%**	***4.35%***	***5.10%***	***6.06%***	***7.21%***
Percent Change of OIT Increase/Decrease	6.55%	91.22%	13.65%	-13.52%	81.92%	*-26.03%*	*20.00%*	*20.00%*	*20.00%*
Dollar Amount Increase/Decrease to OIT Costs	$11,193	$165,993	$47,484	- $53,471	$280,150	*$(161,956)*	*$92,034*	*$110,440*	*$132,528*
Percent Change State Gaming Revenue	2.19%	-0.67%	8.69%	-0.51%	0.66%	*4.33%*	*2.26%*	*1.00%*	*1.00%*

[1] For FY 2014-15, calculations in tables 2 and 4 remove the majority-share balance that was transferred to the minority-share limited gaming fund as a result of SB 15-225. These funds were transferred out of the minority share fund balance in the same fiscal year.

[2] FY 2018-19 and beyond are a forecast for the minority share of limited gaming revenues and its associated earned interest. FY 2018-19 through FY 2019-20 estimates are based on the September 2017 OSPB limited gaming forecast. The forecast for FY 2020-21 and 2021-22 assume a 1% annual increase to limited gaming revenue, as per the historic average.

[3] An annual increase rate of 20% is used to forecast FY 2019-2022 for OIT expenses. History Colorado believes this is a conservative assumption as the four year rolling averages of increases to OIT costs is actually 40%.

Table 3: OIT Costs vs. Earned Revenue

	FY 2014	FY 2015	FY 2016	FY 2017	*FY 2018* [1]	*FY 2019* [1]	*FY 2020* [1]	*FY 2021* [1]	*FY 2022* [1]
OIT Appropriation [2]	$181,968	$347,961	$395,445	$341,974	$622,124	*$460,168*	*$552,202*	*$662,642*	*$795,170*
Earned Revenue from Museum Operations	$3,683,118	$3,751,974	$3,757,736	$3,352,026	*$4,009,975*	*$4,110,224*	*$4,212,980*	*$4,318,304*	*$4,426,262*
OIT Costs as Percentage of Earned Revenue [3]	**4.94%**	**9.27%**	**10.52%**	**10.20%**	***15.51%***	***11.20%***	***13.11%***	***15.34%***	***17.96%***
Percent Change of OIT Increase/Decrease	6.55%	91.22%	13.65%	-13.52%	81.92%	*-26.03%*	*20.00%*	*20.00%*	*20.00%*
Dollar Amount Increase/Decrease to OIT Costs	$11,193	$165,993	$47,484	- $53,471	$280,150	*$(161,956)*	*$92,034*	*$110,440*	*$132,528*
Percent change Earned Revenue	2.73%	1.87%	0.15%	-10.80%	*19.63%*	*2.50%*	*2.50%*	*2.50%*	*2.50%*

[1] FY 2017-18 and beyond are a forecast for Earned Revenue. FY 2017-18 is based on the Board approved budget. The forecast for FY 2018-19 and beyond assume a 2.5% annual increase to earned revenue.

[2] An annual increase rate of 20% is used to forecast FY 2019-2022 for OIT expenses. History Colorado believes this is a conservative assumption as the four year rolling averages of increases to OIT costs is actually 40%.

[3] Earned Revenue from Museum Operations and Majority Cost Allocation

Table 4: OIT Costs vs. Total Revenue

	FY 2014	FY 2015 [1]	FY 2016	FY 2017	*FY 2018* [2]	*FY 2019* [2]	*FY 2020* [2]	*FY 2021* [2]	*FY 2022* [2]
OIT Appropriation [3]	$181,968	$347,961	$395,445	$341,974	$622,124	*$460,168*	*$552,202*	*$662,642*	*$795,170*
Total Revenue [4]	$13,117,489	$13,123,315	$13,943,596	$13,485,905	*$14,149,655*	*$14,689,024*	*$15,031,300*	*$15,244,807*	*$15,462,030*
OIT Costs as a Percentage of Total Revenue	**1.39%**	**2.65%**	**2.92%**	**2.54%**	***4.40%***	***3.13%***	***3.67%***	***4.35%***	***5.14%***
Percent Change of OIT Increase/ Decrease	6.55%	91.22%	13.65%	-13.52%	81.92%	*-26.03%*	*20.00%*	*20.00%*	*20.00%*
Dollar Amount Increase/ Decrease to OIT Costs	$11,193	$165,993	$47,484	- $53,471	$280,150	*$(161,956)*	*$92,034*	*$110,440*	*$132,528*
Percent change Total Revenue	2.24%	0.04%	6.25%	-3.28%	*4.92%*	*3.87%*	*2.33%*	*1.42%*	*1.42%*

[1] FY 2014-15 does not match Table 5; calculations in tables 2 and 4 remove the majority-share balance that was transferred to the minority-share limited gaming fund as a result of SB 15-225. These funds were transferred out of the minority share fund balance in the same fiscal year.

[2] FY 2017-18 revenue and beyond is a forecast. For limited gaming revenue, the September 2017 OSPB forecast is used through FY 2019-20, and for FY 2020-21 and 2021-22, a 1% annual increase is used, as per the historical average. For earned revenue, FY 2017-18 includes the Board approved earned revenue number while FY 2018-19 and beyond assume a 2.5% annual increase to earned revenue.

[3] An annual increase rate of 20% is used to forecast FY 2019-2022 for OIT expenses. History Colorado believes this is a conservative assumption as the four year rolling averages of increases to OIT costs is actually 40%.

[4] State Limited Gaming Revenue and Earned Revenue from Museum Operations

2 Why can't HC migrate over to the IT system being used by the Department of Higher Education (part of the Colorado community college system network)? What statute dictates this?

History Colorado is currently required to use OIT for all of its IT needs as per 24-37.5-105, C.R.S. and 24-37.5-109, C.R.S. Institutions of Higher Education, and by default the Colorado Department of Higher Education, are exempt from this statute as per 24-37.5-102 (4), C.R.S. This enables the institutions and the Department to shop for IT services and products outside of OIT.

Currently, the Department of Higher Education purchases its network capabilities through Front Range Gigapop, which provides reduced-cost, high speed networks for various government, nonprofit, research, and educational participants, including the Colorado School of Mines, City of Boulder, Jefferson County School District and the Colorado Community College System. The network is owned by the participants, which enables them to receive discounted rates. A full list of participants can be found here: http://www.frgp.net/members/.

For all of its other IT needs, the Department of Higher Education has hired an IT specialist and contracts out with third parties, as needed. History Colorado is currently in discussions with the Department of Higher Education to determine the feasibility, cost and timeline of an IT partnership.

History Colorado Attendance and Revenue

3 Discuss History Colorado's overall financial situation, including earned revenue, donations, and gaming revenue. How have expenditures been constrained by revenue limits (actual and spending limits imposed by the Board).

Resulting from a combined effort of its Board of Directors, executive leadership and staff, History Colorado's financial situation has stabilized and has steadily improved during the past two fiscal years. Net financial results from operations (which includes limited gaming funds, enterprise revenue, and an allocation of federal funds) produced improvements in the Department's annual net operating position, from a net deficit of ($513,000) in FY 2015-16 to a net surplus of $7,908 in FY 2016-17.

Looking forward, the Department is committed to a five-year finance and business plan that will enable it to meet future COP obligations and meet its performance plan objectives. In FY 2021-22, the COP payment increases by $503,604 to $3,525,209.

The tables below summarize History Colorado's past financial improvement, as well as its forward-looking objectives.

Table 5: History Colorado Financial Summary and Forecast

					Five Year Plan Forecast			
Revenue:	**2015-16**	**2016-17**	**2017-18 (Pd 4)**	**2017-18 Budget**	***FY 2019***	***FY 2020***	***BY 2021***	***BY 2022***
Gaming Revenue (Minority)	$ 9,762,834	$ 10,185,860	$ 4,592,431	$ 10,133,878	$ 10,578,800	$ 10,858,240	$ 10,858,240	$ 10,858,240
Less: Gaming Revenue Retained for Reserve		(185,860)		(133,878)	(578,800)	(858,240)	(858,240)	(858,240)
Community Museum Revenue	571,719	735,875	477,770	800,000	937,324	1,108,944	1,252,896	1,364,255
Community Museum General Funds	-	-	128,853	1,487,200	1,526,252	1,526,252	1,387,513	1,387,513
Earned Revenue - HCC & Philanthropy	2,802,439	2,566,896	1,038,515	3,209,975	3,988,671	4,591,299	5,250,197	6,203,608
Federal Revenue	1,022,057	588,331	171,411	1,401,925	1,399,935	1,399,935	1,399,935	1,399,935
Indirect Cost Allocations to HC	382,778	382,778	382,778	382,778	382,778	382,778	382,778	382,778
Interest Income	22,311	81,378	19,932	60,000	60,600	61,200	61,800	62,400
Total Revenue:	**14,564,138**	**14,355,258**	**6,811,690**	**17,341,878**	**18,295,560**	**19,070,408**	**19,735,119**	**20,800,489**
Expense:								
Community Museums	1,229,462	1,563,210	756,093	3,243,332	3,361,937	3,508,098	3,533,863	3,650,129
Operating Expense	8,977,159	8,222,820	2,929,172	9,448,711	9,448,711	9,543,198	9,638,630	9,802,926
COP	3,021,830	3,021,415	2,291,777	3,021,835	3,021,860	3,021,543	3,021,605	3,525,209
Maintenance allocated from								

Table 5: History Colorado Financial Summary and Forecast

					Five Year Plan Forecast			
Revenue:	**2015-16**	**2016-17**	**2017-18 (Pd 4)**	**2017-18 Budget**	***FY 2019***	***FY 2020***	***BY 2021***	***BY 2022***
Operations	554,967	508,943	93,554	500,000	600,000	600,000	600,000	600,000
Non-Personnel POTS	639,169	592,917	451,932	908,000	800,000	850,000	850,000	850,000
Indirect Cost Allocations to DHE	164,549	140,168	233,772	190,000	200,000	200,000	200,000	200,000
Internal Grants/Internally Funded Programs	123,262	223,575						
Staff Reduction Expense	331,598							
Miscellaneous	35,378	74,306	15,713	30,000	30,000	30,000	30,000	30,000
Total Expense:	**15,077,374**	**14,347,354**	**6,772,013**	**17,341,878**	**17,462,508**	**17,752,839**	**17,874,098**	**18,658,264**
Net Gain/(Reduction) of Fund Reserves:	**$ (513,236)**	**$ 7,904**	**$ 39,677**	**$ -**	**$ 833,052**	**$ 1,317,569**	**$ 1,861,021**	**$ 2,142,225**

Table 6: History Colorado Gaming Revenue Financial Summary and Forecast

Limited Gaming History	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Gross Gaming Tax Receipts (Previous Year) from DOR	110,083,088.64	116,287,104.48	117,400,688.24				
Gaming Tax Revenue Basis before Allocation	87,342,850.67	103,675,403.61	104,071,668.05				
Gross allocation to History Colorado	24,455,998.19	25,515,680.54	25,385,467.21	26,500,000.00	27,200,000.00	27,200,000.00	27,200,000.00
Distribution to Gaming Cities from History Colorado	4,891,199.64	5,103,136.11	5,077,093.44	5,300,000.00	5,440,000.00	5,440,000.00	5,440,000.00
Net allocation to History Colorado	19,564,798.55	20,412,544.43	20,308,373.77	21,200,000.00	21,760,000.00	21,760,000.00	21,760,000.00
Majority Distribution to the State Historical Fund	9,801,964.07	10,226,684.76	10,174,495.26	10,621,200.00	10,901,760.00	10,901,760.00	10,901,760.00
Minority Distribution to History Colorado	9,762,834.48	10,185,859.67	10,133,878.51	10,578,800.00	10,858,240.00	10,858,240.00	10,858,240.00
Annual Minority Distribution used in Pro-Forma Budget			10,000,000.00	10,000,000.00	10,000,000.00	10,000,000.00	10,000,000.00

As a board-imposed strategy within its financial plan and budget, the minority allocation of History Colorado gaming revenue that supports History Colorado operations is capped at $10 Million for budget and planning purposes, even though actual annual funding has exceeded this amount since FY 2015-16. This is a conservative and prudent approach that improves operations sustainability and restores financial reserves. History Colorado's Board works in collaboration with leadership to construct reasonable budgets prior to final approval and monitor financial results at each board meeting. Like most operating entities, expenditures are obviously constrained by revenue limits, and to the extent that History Colorado is predominantly a cash-funded department, expenditures are more reliant on its ability to meet enterprise revenue and philanthropic goals rather than on board-imposed limits. Recognizing this, revenue generation is a uniquely defined strategic performance initiative in History Colorado's performance plan.

Earned revenue:

Earned revenue is comprised of diversified activities from all History Colorado locations and this revenue is earned from admissions, education programs, fees for services, facility rentals, hosted events, event catering, retail sales, memberships and donations. History Colorado's diversity of revenue sources add to the stability of earned revenue forecasts. For FY2017-18, year-to-date total earned revenue is 10.7% favorable to budget, despite reductions in donation-related revenue. In its annual operating budget, History Colorado is expected to generate approximately $4.01 Million of earned revenue in FY 2017-18, and is on track to meet that target.

Donations:

In July, 2016, History Colorado had 7,499 members. During the first four months of 2016-17, membership totals declined by 410 members to 7,089. This pattern continued in the first four months of 2017-18, where membership was down by an additional 435 members. Combined, there were 997 members lost, year over year. At approximately $75 per membership, lost revenue from memberships was roughly equivalent to $74,775. There were also similar declines in annual fund donations.

During calendar year 2017, Philanthropy at History Colorado has undergone a complete transformation in its leadership, management, staffing and approach. As of January, 2018, Philanthropy will be fully staffed to provide full membership support and to proactively attract new members. Similarly, other team members are focused to extend an appeal for annual fund contributions and to attract more sizeable restricted donations supporting exhibits and initiatives that require targeted funding. Donations that are shown on History Colorado's monthly operating statement do not include restricted donations, but for the Philanthropy team, they are a major subset of total donations to History Colorado; and although year-to-date unrestricted donations are unfavorable by $52,183, restricted donations through October are $320,000 favorable. In addition,

current philanthropic efforts have produced signed gift agreements representing a total value of $1,340,582 to date in FY 2017-18.

4 Discuss visitation trends at the History Colorado Center and the Community Museums.

The table below shows the visitation data for the History Colorado Center. The History Colorado Center attendance trends are tied closely to the introduction of new exhibitions. Since the Governor and General Assembly revised the makeup of History Colorado's Board, the agency put new exhibits on hold. This has resulted in lower attendance numbers in FY 2015-16 and FY 2016-17 at the History Colorado Center. The Board and staff have used this time to plan for the future and have created a five-year plan for new, built in-house exhibits. The plan includes both annual exhibition openings and large scale programs designed to diversify audiences, provide new opportunities for student engagement, and promote the growth of the History Colorado's attendance. The first of these new exhibits,"Backstory", opened in March 2017 and the second, "Zoom In: The Centennial State in 100 Objects", opened in November 2017.

Table 7: History Colorado Center Annual Visitation Data

Fiscal Year	Annual Visitors
2014-15	216,214
2015-16	203,547
2016-17	203,945
2017-18 (first five months)	71,229

The table below shows the visitation data for the Community Museums over the last few years.

Table 8: Community Museum Annual Visitation Data

Fiscal Year	Annual Visitors
2014-15	80,717
2015-16	104,182
2016-17	116,016
2017-18 (first five months)	81,275

The increased visitation at the Community Museums is attributable to strategic community engagement, new exhibits, significantly expanded education programs, and staff innovation and entrepreneurship. Beginning in FY 2017-18, the Community Museums have had an increased investment of General Funds, due to a decision item request. In just a few short months, this investment has made a direct operational difference to the Community Museums, allowing them to

add new staff, correct chronic deficiencies, expand outreach, provide staff training, and support new initiatives.

5 Are you combining advertising campaigns with the Tourism Office? Can this collaboration be expanded?

History Colorado and the Colorado Tourism Office (CTO) have a long history of co-collaboration around the promotion of heritage tourism including partnerships around the Colorado Day celebration and through our website promoting things to do statewide. When the agencies' missions align, History Colorado has partnered with the CTO on social media campaigns, advertising in the state vacation guide and on the CTO website, as well as collaborating with the CTO on ideas around heritage and agritourism supported by History Colorado's preservation activities and community museums. Every year, the relationship is expanded and leveraged to meet the agencies' shared communication goals. History Colorado will continue to work with the CTO in the future to expand the partnership.

<u>Cumbres and Toltec Railroad</u>

6 Provide an update on the Cumbres and Toltec Railroad's financial situation, including the impact of no revenue from New Mexico. How does this affect the railroad's plans for long term fiscal independence and sustainability?

The financial status of the Cumbres & Toltec Scenic Railroad is strong; in all major respects it is in a better position when compared to a year ago and when compared with its budget for FY 2017-18. The railroad has produced an operating profit for the fourth successive year after surviving losses over the preceding 43 years of state ownership.

The consequence of appropriations from New Mexico being less than requested over the past five years primarily affects the capital upgrade program of the railroad and this will delay its planned long term fiscal independence and sustainability. A secondary impact is on the separate Commission operating account that, after 5 years of NM underfunding, shows a cumulative deficit of $497,000. This deficit has been covered out of railroad net operating income reserves.

In short, the Commission and railroad are carefully managing the current situation while continuing to work toward long term fiscal self-sustainability.

ADDENDUM: OTHER QUESTIONS FOR WHICH SOLELY WRITTEN RESPONSES ARE REQUESTED - HISTORY COLORADO ONLY (SEE SEPARATE LIST FOR GOVERNING BOARDS)

7 Provide a list of any legislation that the Department has: (a) not implemented, or (b) partially implemented. Explain why the Department has not implemented or has only partially implemented the legislation on this list. Please explain any problems the Department is having implementing any legislation and any suggestions you have to modify legislation.

History Colorado has implemented all enacted legislation to date. HB17-1317 was a permissive bill that allowed History Colorado to sell real property the agency owns on the former Lowry Air Force base and keep the revenue for capital construction and controlled maintenance at its community museums. As of the JBC Hearing date, History Colorado has not sold the Lowry property.

8 Does the Department have any HIGH PRIORITY OUTSTANDING recommendations as identified in the "Annual Report: Status of Outstanding Audit Recommendations" that was published by the State Auditor's Office and dated June 30, 2017 (link below)? What is the Department doing to resolve the HIGH PRIORITY OUTSTANDING recommendations? Please indicate where in the Department's budget request actions taken towards resolving HIGH PRIORITY OUTSTANDING recommendations can be found.

http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2017

No, History Colorado has no outstanding audit recommendations as of June 30, 2017.

9 If the Department receives federal funds of any type, please respond to the following:

a. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the Department is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the Department by the federal government during FFY 2017-18 or 2018-19.

History Colorado is not aware of any sanctions that may be issued against the agency by the federal government in FFY 2017-18 or 2018-19.

b. Are you expecting any changes in federal funding with the passage of the FFY 2017-18 or 2018-19 federal budget? If yes, in which programs, and what is the match requirement for each

program?

Colorado's portion of the FFY 2017 Federal Historic Preservation Fund appropriation is $905,125. That same amount has been approved as part of the FY 2018 Department of Interior Appropriations bill as well. If there is a FFY 2018 spending bill, it is highly likely that the Federal Historic Preservation Fund will be funded at the current level. History Colorado currently has a cash match of 44% for this program.

The passage of the Tax Cuts and Jobs Act includes the historic preservation tax credit. It preserved the historic preservation tax credit at 20% but required it to be spread over five years at 4% per year. This change does not impact federal funding for History Colorado.

In addition, the recent passage of the Tax Cuts and Jobs Act does repeal tax credit bonds, but only those issued after December 31, 2017. Therefore, Certificate of Participation bonds for the History Colorado Center – which used the 2008 Build America Bond program – are not affected.

c. Does the Department have a contingency plan if federal funds are eliminated?

The agency would have to move payroll and operating costs over to the minority share of gaming funds if federal funds were eliminated. If there were vacancies at the time, the agency would not fill the position until funding allows. Also, the agency would look to increase earned revenue by adjusting file search, class and workshop fees to minimize the effect of any federal fund cuts. This would be done by assessing other Western state preservation offices and aligning fees with the market trends.

10 Is the Department spending money on public awareness campaigns? If so, please describe these campaigns, the goal of the messaging, the cost of the campaign, and distinguish between paid media and earned media. Further, please describe any metrics regarding effectiveness and whether the Department is working with other state or federal departments to coordinate the campaign?

History Colorado does not target marketing funds at advocacy or issue awareness. The agency does however participate in marketing campaigns to draw visitors to its museums, participate in its programs, enjoy its school tours, shop at its gift shops, rent its facilities, and join as members.

History Colorado evaluates its resource allocation, staff time, facility use, and paid advertising based on how well the opportunity aligns with its mission and advances its institutional goals. Each opportunity is different and depending on the audience and desired outcomes, the agency will employ a mix of paid, earned, shared and owned media.

The effective metrics the agency uses are specific to the goals of the communication. For program and exhibition marketing campaigns, staff looks at number of attendees or visitors to the program or museum. For effectiveness of market campaigns to promote the agency's rental properties, the agency evaluates catering and room rental revenue. The cultivation costs of adding a new member are considered when evaluating the ROI and the ultimate success of membership campaigns. History Colorado utilizes digital analytics when evaluating its earned, shared and owned outreach.

The agency works closely with many state agencies and programs, including the Colorado Tourism Office, the Department of Agriculture, the Governor's Wine Board, Colorado Department of Local Affairs, institutions of higher education, the Governor's Mansion, and the Quarterly Forum supporting our shared communications around tourism, historic preservation, education, internships and job opportunities, buy Colorado and engaging in creating a better Colorado.

The Community Museums do not engage in public awareness campaigns. All of its marketing efforts are directed at getting visitors and residents to attend the museums, participate in community museum programs, enjoy school tours, and rent community museum facilities.

11 Based on the Department's most recent available record, what is the FTE vacancy and turnover rate by department and by division? To what does the Department attribute this turnover/vacancy? Do the statewide compensation policies administered by the Department of Personnel help or hinder in addressing vacancy or turnover issues?

Please see the table below for data on History Colorado's turnover rate. The rates represent the percentage of total turnover at History Colorado that occurred in each division. Statewide policies are for classified employees and the policies help retain classified employees. 98% of History Colorado's employees are non-classified, and therefore do not fall under these policies As these turnover rates are low, History Colorado attributes the turnovers to normal changes in staffing, such as staff leaving for new opportunities and for personal reasons.

Table 9: FY 2016-17 History Colorado Turnover

Division	Turnover Rate
Community Museums	2%
Development	2%
OAHP	2%
Education	1%
Facilities	3%
Collections and Library	4%
State Historical Fund	1%
Marketing	1%
TOTAL History Colorado	16.64%

12 Please provide an update on the Department's status, concerns, and plans of action for increasing levels of cybersecurity, including existing programs and resources. How does the Department work with the Chief Information Security Office (CISO) in the Office of Information Technology (OIT)? Have your information technology infrastructure and policies been audited for cybersecurity capabilities? If so, was the audit completed by the legislative auditor or an outside entity? Do you have dedicated cybersecurity personnel? How do your cybersecurity staff interact with the CISO in OIT? What unique security issues does your Department have? Do you handle private or sensitive data? What unique cybersecurity processes or tools do you use to protect this data?

The Office of Information Security, under the leadership of the state CISO provides security governance, security architecture, risk management, compliance assessment support, and security operations functions for History Colorado. Therefore, this department does not have dedicated cybersecurity personnel.

The Office of Information Security has input into the 5-year plans for each Department, and has worked to prioritize projects benefiting each Department, such as: the Enterprise Firewall Refresh project, new quarterly security awareness training, two-step verification, and an enterprise security log collection and correlation engine.

Additionally, the Office of Information Security, within OIT, produces a quarterly risk report card, in which they measure risk for each Department, and have specific goals set, for reducing risk.

Annually, the CISO develops an enterprise information security plan, utilizing input from the Governor's goals, the 5 year plans for each department, and the OIT playbook. The information security plan includes communication and information resources that support the operations and assets of each department.

The Office of Information security, within the Office of Information Technology (OIT) implements enterprise-wide security controls, meant to secure sensitive data for each department. Some of these controls are: ensuring encryption is in place to secure data in transmission, utilizing Zix to encrypt sensitive data in email, implementing specific configuration and technologies to encrypt data in storage. Additionally, OIT has implemented two-step verification to add a layer of protection to email, contacts, and data stored within G-Suite. Each department implements additional procedures, such as training, data retention and access control policies, implemented at a department level to further protect and secure sensitive data. These local security procedures augment technical controls implemented by OIT to enhance the department's continued security health.

OIT supports all of the audits that occur for each department. OIT maintains a register of outstanding technology recommendations for each department, and works individually with the

department to prioritize and secure funding to implement the recommendations. In addition to performing remediation, OIT continues to implement controls and improve processes in an attempt to proactively (rather than reactively) improve security.

13 What impact do the SMART Act and Lean processes have on your budget requests? Could they be used more effectively?

History Colorado recently updated its SMART Act Performance Plan with new goals and metrics. Prior to November 1, 2017, History Colorado did not have metrics with which to measure its goals. With the new SMART Act goals in place, History Colorado expects the goals and the Lean process to have a much larger impact on its budget requests.

While the agency was updating its Performance Plan, it was also working on its FY 2018-19 budget request for a General Fund Decision Item to help History Colorado pay for its unexpected increased expenses from OIT common policies. One of History Colorado's goals in its Performance Plan is to increase earned revenue by $2.5 million over five years so that it can pay for an increase to its COP payment in 2022 and pay for increases to common policies. As the budget request was being built, this goal was at the forefront in terms of what the agency hopes to accomplish with the FY 2018-19 budget request. Much of the request's narrative is framed in the context of increasing earned revenues to ensure long-term sustainability, as per the agency's Master Plan.

The agency is currently working to get Lean training for key staff to implement changes to process to help it become more effective, efficient and customer service oriented. History Colorado anticipates the SMART Act and its Performance Plan will increasingly drive operational and budgetary decisions in the future.

14 Does your Department use evidence-based analysis as a foundation for your budget request? If so, please provide a definition for your use of "evidence-based," indicate which programs are "evidence-based," and describe the evidence used to support these programs.

Yes, the Education division uses "evidence-based analysis" as a foundation for budget requests for all of its programs. The Education division defines "evidence-based analysis" as using available research and data to make decisions about programming, and to create budget projections.

The following are examples of the way the Education division utilizes available research.

- *School Programs: Research about the state of K-12 education in Colorado is utilized to develop programs that fill an important need in social studies classrooms.*

- *Adult Programming : The Tours and Trek Summit is essentially audience research where the division gathers its members together as a focus group to help inform the tour locations for the following year.*
- *Other: The division also collects a variety of data on its programs from year-to-year including expenses, revenue, attendance, and geographical distribution of participants. The division currently has six years of consistent data about its programs that help it identify trends and make budget projections. The division also conducts a cost-benefit analysis for every program that it introduces. They not only think about how it serves the State, but also about its fiscal sustainability and return on investment. Finally, program results are routinely tracked with customer surveys that confirm whether the program is achieving the desired results.*

In addition, History Colorado's Intergovernmental Compliance Unit reviews between 1,500 and 1,700 new projects with federal involvement annually. When a project comes to this unit from a federal agency for Section 106 Review, the agency has thirty (30) days to respond. The Compliance Unit's staffing levels are based on reviewing all projects it receives within the thirty (30) days. This staffing analysis comes from years of working on these projects and the time it takes to properly analyze the effects on historic properties. While projects vary significantly in time required to process based on type, size, known information about historic and archaeological properties in that specific area and the quantity and quality of information provided by the federal agency, experience over time has allowed us to determine the staffing levels required to process this volume in the required time period.

History Colorado's Information Management Unit maintains extensive statistics on the number of requests that are received for information from our database system and the cost of uploading and compiling requested information. Pricing for the these services is well below the cost of providing them and the agency is currently using matrices, which it has developed and tracked for a number of years, to more closely align fees with the cost of providing services. The Office of the State Archaeologists is in part, a permitting office. These permits are currently issued with no fee structure. History Colorado will be implementing a fee structure based on the cost of preparing and recording these permits to cover a portion of the expense in the future. See below for details on the number of staff and details about permitting and record pulling from these Units within the agency.

- *HPF funded Staff: 11.5 FTE*
- *Matching Share Staff (Federal Funded): 5.5 FTE*
- *Bureau of Land Management / Bureau of Reclamation grant funded staff: 1.0 FTE*
- *Site file search requests: 1,827*
- *Requests for additional technical assistance: 5,000*
- *Document imaging*
    - *NR/SR: 5,000*
    - *Site forms: 30,000*

    - *Compass: 21,000 unique log-ins to the system*
    - *164,520 unique visitors to the OAHP website*
- *S106 and State Register: 1750 new projects initiated*
- *Cultural Resource Forms:*
    - *2,601 were processed*
    - *2,638 documents received*
    - *457 were processed*
    - *419 were digitized*
- *State Archaeological and Paleontological Permits: 115*
- *PAAC (program for archaeological avocational certification) participants: 350*
- *State Repository Curation Agreements: 30*
- *National Register/State Register Nominations: 60*

15 Please identify how many rules you have promulgated in the past two years (FYs 2015-16 and 2016-17). With respect to these rules, have you done any cost-benefit analyses pursuant to Section 24-4-103 (2.5), C.R.S., regulatory analyses pursuant to Section 24-4-103 (4.5), C.R.S., or any other similar analysis? Have you conducted a cost-benefit analysis of the Department's rules as a whole? If so, please provide an overview of each analysis.

The only rules promulgated in the past two years by History Colorado come from the Office of Archeology and Historic Preservation in the form of 8 CCR 1504-7, Section 9 (see Appendix A). They are a revision of previous rules for the curation of collections in locations other than State owned facilities. The rules were revised to improve clarity and ensure proper care of State owned collections not in possession of the State, which is a result of capacity issues at State owned facilities. No cost-benefit analysis was conducted, as this was a clarification of existing rules.

16 Describe the expected fiscal impact of proposed changes to PERA made by both the Governor's Office and the PERA Board of Directors. In addition to direct budgetary impacts, please describe any anticipated secondary impacts of an increase in employee contribution rates. For instance, does the Department anticipate a need to increase employee salaries to compensate for the increase in PERA contributions?

As History Colorado is a cash-funded agency, any increase to the employer contribution would require History Colorado to be cautious in its budget planning. As History Colorado's primary source of funding, gaming funds, is fairly stagnant, the agency would have to increase earned revenues to meet the 2% PERA Board of Directors recommended increase to employer contributions. Over the past two years of salary survey and merit pay increases, History Colorado was not able to give these

increases to its non-classified employees, which make up about 98% staff. The agency would continue to not give salary survey and merit pay increases, and adjust its operating budget as required, if it was not able to earn enough revenue to cover the recommended employer contribution increase.

As History Colorado has not been in a financial position to give its staff salary survey and merit pay increases to its staff in the last two fiscal years, it is unlikely the agency would be able to increase staff salaries to make up the increase to employee PERA contributions recommended by both the Governor and the PERA Board of Directors. These increases in contributions would be especially hard on History Colorado employees as they would effectively be a pay cut on top of two years of no cost of living adjustments.

17 Senate Bill 17-267 required Departments, other than Education and Transportation, that submit budgets to OSPB to propose a budget that is 2.0 percent below the total funds budget in FY 2017-18. Please highlight the following regarding the 2.0 percent reduction:

- Where these reductions can be found in the Department's request;
- What programs are impacted by the reduction; and
- Total amount of the reduction.

History Colorado cut a total of $252,126 from its budget request for FY 2018-19, a 0.72% reduction from its FY 2017-18 budget of $34,662,258. These cuts were made to History Colorado's program lines that contain FTE, as History Colorado did not give on-going salary survey or merit pay salary increases to its non-classified employees in FY 2017-18. In addition, the History Colorado Center COP payment appropriation was higher than the agency's actual payment for FY 2017-18. History Colorado reduced the History Colorado COP payment line item by $99,953 to reflect the accurate amount of the payment in FY 2018-19.

History Colorado also submitted proposed and not recommended cuts to OSPB to meet the 2.0% cut requirement. The chart below details both the recommended and implemented cuts and the not recommended and not implemented cuts.

Table 10: History Colorado Proposed and Implemented Cuts

Long Bill Line Item		Total	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Comments
Salary Survey	FY 2018 Appropriation	$114,472	$0	$105,562	$0	$8,910	On-going: History Colorado did not allocate

Long Bill Line Item		Total	General Fund	Cash Funds	Reappropriated Funds	Federal Funds	Comments
	Implemented Cut	($108,342)	$0	($99,432)	$0	($8,910)	Salary Survey to its non-classified employees. Calculation includes total Salary Survey less amount distributed to classified staff ($6,130)
	Remaining Appropriation	$6,130	$0	$6,130	$0	$0	
Merit Pay	FY 2018 Appropriation	$46,458	$0	$42,893	$0	$3,565	On-going: History Colorado did not allocate Merit Pay to its non-classified employees. Calculation includes total Merit Pay less amount distributed to classified staff ($2,627)
	Implemented Cut	($43,831)	$0	($40,266)	$0	($3,565)	
	Remaining Appropriation	$2,627	$0	$2,627	$0	$0	
Lease Purchase of Colorado History Museum	FY 2018 Appropriation	$3,121,813	$0	$3,121,813	$0	$0	On-going: Appropriation in Long Bill was over the amount needed to pay the COP. Spending authority has been reduced as part of base building adjustments.
	Implemented Cut	($99,953)	$0	($99,953)	$0	$0	
	Remaining Appropriation	$3,021,860	$0	$3,021,860	$0	$0	
Total Implemented Cuts		**($252,126)**	**$0**	**($239,651)**	**$0**	**($12,475)**	

Table 11: History Colorado Proposed and NOT Recommended Cuts

Long Bill Line Item		Total	General Fund	Cash Funds	Re-appropriated Funds	Federal Funds	Comments
Lease Purchase of Colorado History Museum	FY 2018 Appropriation	$1,477,450	$0	$1,477,450	$0	$0	On-going: A 2% cut to spending authority was proposed and not recommended. It would have required History Colorado to put off maintenance projects at the Community Museums and History Colorado Center. History Colorado has a back-log of deferred maintenance and this cut will further exacerbate the problem.
	Proposed and Not Recommended Cut	($29,549)	$0	($29,549)	$0	$0	
	Remaining Appropriation	$1,447,901	$0	$1,447,901	$0	$0	
History Colorado Center	FY 2018 Appropriation	$4,611,859	$0	$4,537,882	$0	$79,977	On-going cut: A 7% cut to spending authority was proposed and not recommended. It would require History Colorado to make cuts to its education and programming, including reducing the number of programs and lectures offered to the public. To revamp its revenue building plan to ensure its future sustainability and success. Based on the Board of Directors' most recent five-year pro forma, History Colorado will utilize most of this spending authority in the next five years.
	Proposed and Not Recommended Cut	($333,334)	$0	($333,334)	$0	$0	
	Remaining Appropriation	$4,278,525	$0	$4,204,548	$0	$73,977	

Long Bill Line Item		Total	General Fund	Cash Funds	Re-appropriated Funds	Federal Funds	Comments
Community Museums	FY 2018 Appropriation	$2,948,601	$1,461,401	$1,487,200	$0	$0	On-going cut: A 2% cut to cash spending authority was proposed and not recommended. It would be a reverse in policy from the Community Museum Decision Item that was funded by the Governor and General Assembly in FY 2018-19. This decision item requested General Funds so that the Community Museums could boost their earned revenue and utilize their spending authority. The Decision Item forecasts the Community Museums will utilize this spending authority within the next five years.
	Proposed and Not Recommended Cut	($29,744)	$0	($29,744)	$0	$0	
	Remaining Appropriation	$2,918,857	$1,461,401	$1,457,456	$0	$0	
TOTAL TIER TWO PROPOSED and NOT RECOMMENDED CUTS		($442,021)	$0	($440,075)	($1,946)	$0	

18 Please provide the following information for the Department's custodial funds and continuously appropriated funds:

- Name of the fund;
- Amount of funds received;
- Whether the revenues are one-time or multi-year;
- Current cash fund balance;
- Source(s) of the funds;
- A list of FY 2015-16 and FY 2016-17 expenditures from these funds;
- Expected uses of the funds in FY 2017-18 and FY 2018-19; and
- Legal authorization and restrictions/limitations on the Department's use of these funds

Table 12: Summary of History Colorado's Custodial Funds

Name of Fund	FY16 Beginning Fund Balance	FY16 Revenue	FY16 Expenditures	FY16 Ending Fund Balance	FY17 Revenue	FY17 Expenditures	FY17 Ending Fund Balance	Whether the revenues are one-time or multi-year	Sources of the funds	Expected uses of the funds in FY2017-18 and FY 2018-19	Legal authorization and restrictions/limitations on the Departments use of these funds
7230 Hall Historical Marker	$ 7,642	$376	$52	$7,965	$27,094	$ 48	$35,011	The revenue sources may be either one-time or multi-year gifts, grants, and donations depending on what the donor wishes	Gifts, Grants and Donations	In 2017-18 and 2018-19, donations of moneys, securities, or other property to the Hall Historical Marker Fund may be used to add, restore or replace historical markers in locations throughout the state of Colorado, or for direct administrative expense; and may further be designated for specific use at the discretion of the donor.	**C.R.S. 24-80-207** Donations of moneys, securities, or other property may be made to and for the sole use of any one or more of the departments or bureaus of the society, and donations so made shall be kept in a separate fund for the use of such department. **C.R.S. 24-80-208** Donations made with the provision that the interest or income only therefrom shall be used by the society, if accepted, shall be received by the society, and the intent of the donor with reference to the same shall be observed and carried out, and the principal of said gift, if money, and such other funds as are available shall be invested by the state treasurer as state custodian of those funds, and the interest or income therefrom shall be available for the society for the purposes given.

7240 History Colorado Unrestricted Donations	196,622	1,833	13,617	184,837	2,138	167	186,808	The revenue sources may be either one-time or multi-year gifts, grants, and donations depending on what the donor wishes.	Gifts, Grants and Donations	In FY 2017-18 and FY 2018-19, any use of Fund 7240 would generally be expected for exhibits development, improvements to facilities, acquisition of assets, or designated administrative initiatives for the benefit of History Colorado, and as approved by the History Colorado Board of Directors.	**C.R.S. 24-80-207 (See above)**
7250 History Colorado Restricted Donations	1,499,834	387,168	409,734	1,477,268	895,111	810,719	1,561,660	The revenue sources may be either one-time or multi-year gifts, grants, and donations depending on what the donor wishes.	Gifts, Grants and Donations	In FY 2017-18 and FY 2018-19, restricted donations will be used in accordance with the donor's intent.	**C.R.S. 24-80-207 (See above)** **C.R.S. 24-80-208 (See above)**

Table 13: Summary of Expenses from History Colorado's Custodial Funds

Name of Fund	Expenditures/Expected Use	FY 2015-16	FY 2016-17
7230 Hall Historical Marker	Record interest expense from Treasury	$52	$48
	7230 Total:	**$52**	**$48**
7240 History Colorado Unrestricted Donations	Record interest expense from Treasury	$246	$167
	Approved Administrative Expenditures	$13,371	
	7240 Total:	**$13,617**	**$167**
7250 History Colorado Restricted Donations	Capital Campaign-eligible expense (Exhibits & Facilities)	$61,564	$2,947
	Community Museum Programs, Excluding Ute Museum	$107,724	$152,514
	Ute Indian Museum Expansion Project and Programs	$15,209	$345,371
	Collections and Archives	$73,979	$65,458
	Education Programs & Events	$42,357	$50,371
	Facilities and Capital Improvements	$32,995	
	Historic Preservation	$4,169	$92,056
	Tribal Consultations		$18,329
	Exhibit Development	$32,297	$59,658
	Volunteer Programs	$1,930	
	Fundraising	$4,175	$8,850
	Marketing & Communication	$28,663	$10,125
	Foundation Expenses	$94	$3,597
	Administrative/Other	$4,579	$1,443
	7250 Total:	**$409,734**	**$810,719**

19 What is the Department's process for engaging in (or disputing) federal land, environmental, jurisdictional, and/or water policy issues? How do you coordinate with other departments, the Governor's Office, local governments, and/or citizens?

The Office of Archeology and Historic Preservation (OAHP) works with Federal Agencies through the mandate of the National Historic Preservation Act of 1966. Commonly referred to as "Section 106 Review," in reference to that section of the original act, now 54 U.S.C. 306108, the section requires OAHP, as Colorado's State Historic Preservation Office, to consult with Federal Agencies on any "proposed federal or federally assisted undertaking to "take into account the effect of the undertaking on any historic property." The process is detailed in 36 C.F.R. Part 800. The Federal Agency is also required to consult with Indian Tribes and local governments in this process as well. Section 106 reviews may request jurisdictional clarification, but do not provide opinions as to jurisdiction. Section 106 processes address environmental concerns only as connected to historic properties. Historic properties can be buildings, structures (bridges, water towers, etc.), objects (statues, monuments, etc.), sites (parks, battlefields, areas of archaeological importance, etc.), and districts (a collection of buildings, structures, objects and sites). OAHP reviews over 3,000 projects annually with 30% of these located on federally owned properties.

The Facilities Division has also interacted with the Federal Government on its Lebanon Dam/Devil's Gate Station Cistern capital construction project. History Colorado worked in conjunction with the State Attorney General's office and the Division of Water Resources to get a permit for its Lebanon Dam project from the Army Corps of Engineers. After two years of negotiations with the Army Corps of Engineers, staff changes at the Corps resulted in the permit being denied. Most of the meetings were in-person and did not include follow-up emails to record the decisions made between the State and the Corps. As a result of this experience, History Colorado is now keeping written records of any communications with the Federal Government, to avoid a future upheaval of plans when staff at the Federal level changes.

DEPARTMENT OF HIGHER EDUCATION

Historical Society

HISTORICAL, PREHISTORICAL, AND ARCHAEOLOGICAL RESOURCES

8 CCR 1504-7

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

SECTION 1. Statement of basis and purpose

The Historical, Prehistorical, and Archaeological Resources Act of 1973 (CRS 24-80-401 to 410) created the office of the state archaeologist (OSAC) in the State Historical Society of Colorado to coordinate, encourage, and preserve the full understanding of Colorado's archaeological and paleontological resources for the benefit of Colorado's citizens. The 1973 Act gave the office and the society explicit authority to promulgate rules and regulations defining how the duties prescribed by the Act were to be carried out. The 1990 Act enumerates the types of entities that are "political subdivisions" of the state, adds a new duty for the state archaeologist in regard to out-of-state loans of resources belonging to the state of Colorado, stipulates that the society shall undertake certain powers when requested to do so, and adds a new statutory section, part 13, pertaining to unmarked human graves. The state archaeologist is authorized to adopt rules and regulations to implement part 13 in accordance with the State Administrative Procedures Act (CRS 24-4-101ff).

These regulations are being promulgated to implement the duties of the office of the state archaeologist, and to advise the public as to the standards and requirements for archaeological and paleontological work in Colorado.

SECTION 2. Definitions

As used in these regulations,

A. "The Act" means the Historical, Prehistorical, and Archaeological Resources Act of 1973 (CRS 24-80-401 to 411, and 24-80-1301 to 1305);

B. "Ancillary samples" are organic or inorganic specimens, other than human remains or artifacts, gathered by scientists for the purpose of analysis to provide information on past environments, diets, chronology, or material source areas. Ancillary samples may include, but are not limited to, charcoal, wood, soil, coprolites, and floral or faunal specimens.

C. "Archaeological resources" means all sites, deposits, structures, or objects which are at least 100 years of age and which provide information pertaining to the historical or prehistorical culture of people within the boundaries of the state of Colorado;

D. "Artifacts" are portable items made, used, or transported by humans;

E. "Curation" means permanent maintenance, storage, preservation, documentation, and the ability to retrieve from storage collected archaeological, historical, prehistorical, and paleontological specimens and records;

F. "Excavation" means subsurface sampling or removal of specimens by hand or with mechanized equipment, including test excavation;

G. "File search" means an examination of the automated inventory of historical and archaeological sites maintained at the State Historical Society of Colorado for the area in which work is proposed to be conducted;

H. "Fossil" means the remains or traces of an organism or assemblage of organisms preserved by natural processes in or on the earth's crust, exclusive of organisms that have been buried in recent times. Materials such as oil and gas, coal, oil shale, bitumen, lignite, asphaltum, tar sands, phosphate, limestone, diatomaceous earth, uranium, and vanadium, while they may be of biologic origin, are not here considered fossils;

I. "Funerary objects" means objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later.

J. "Historical" means older than 50 years of age and during the period that written records have been used to document events in Colorado.

K. "Historical resources" means all sites, deposits, structures, buildings, or objects which provide information pertaining to the culture of people during the historical period;

L. "Investigation" means the scientific study of archaeological or paleontological resources.

M. "Museum" means a scientific or educational institution that agrees to permanently curate archaeological or paleontological materials collected under the authorization of a permit issued by the society, including specimens, documents, and photographs (Section 9 of these regulations);

N. "Paleontological resources" means fossils and other remains of prehistoric animals, plants, insects, and other objects of natural history within Colorado that do not show evidence of human association;

O. "Permit" means a written authorization issued by the society that allows the investigation, excavation, gathering, or removal of historical, archaeological or paleontological resources from lands within the state of Colorado;

P. "Prehistorical" means before the period that written records were used to document events in Colorado. Prehistorical resources may be archaeological or paleontological;

Q. "The society" means the State Historical Society of Colorado;

R. "State archaeologist" means the individual appointed by the board of directors of the State Historical Society of Colorado to carry out the duties prescribed in the Act;

S. "State monument" means any historic or prehistoric structure, deposit, site or other object of scientific or historic interest situated on lands owned by the state of Colorado and duly designated by the governor as such;

T. "Survey" means the search for, inventorying of, and documentation of archaeological or paleontological resources in the field by non-destructive means in accordance with established standards for the purpose of recording such remains on official Colorado inventory forms, and of preparing reports that meet guidelines published by the society.

SECTION 3. Objectives and duties of the state archaeologist

The state archaeologist's duties are to fulfill the objectives of the Act particularly those outlined in part 405 of the Act. This work will **be** performed to the standards required of permittees in these regulations.

SECTION 4. The permit system

Anyone desiring to perform archaeological or paleontological survey or excavation on any lands owned by the state of Colorado must obtain a permit from the society. Any state agency wishing to perform such work on state land must obtain a permit in the same manner as private applicants. Permits are issued by the society through the office of the state archaeologist on behalf of the society.

The permit system may apply to lands belonging to political subdivisions of the state or to private landowners, at the request of the owner and the concurrence of the state archaeologist, except that the excavation of any unmarked human burial older than 100 years regardless of ethnic affiliation shall require a permit if such burial is situated within any nonfederal land in Colorado.

Four classes of permits are issued:

A. Survey only (archaeology or paleontology)

"Survey only" permits authorize the search for, inventorying of and documentation of archaeological or paleontological resources in the field by non-destructive means in accordance with established standards for the purpose of recording such remains on official Colorado inventory forms and of preparing reports that meet guidelines published by the society. No specimens are authorized to be collected, except artifacts exposed on the surface of the ground. Such permits may be statewide in scope, and are issued for a period of one year or less.

B. Non-collection survey only (archaeology or paleontology)

"Non-collection survey" permits authorize the search for, inventorying of and documentation of archaeological or paleontological resources in the field by non-destructive means in accordance with established standards for the purpose of recording such remains on official Colorado inventory forms and of preparing reports. Absolutely no specimens, artifacts, or fossils are authorized to be collected. Such permits may be statewide in scope, and are issued for a period of one year or less.

C. Survey and test excavation (archaeology or paleontology)

"Survey and test excavation" permits authorize limited excavation of noncontiguous units (totaling less than 10 square meters), gathering and removal of specimens, sufficient to evaluate the cultural significance of identified archaeological or paleontological properties. Such permits may be statewide in scope, and are issued for a period of 14 months or less.

D. Excavation (archaeology or paleontology)

"Excavation" permits authorize subsurface investigations of a specified historical, archaeological or paleontological resource(s), or an unmarked human burial, in accordance with a research design or statement of objectives that has been approved for the specific resources) described in the application, and may be issued for a period not to exceed 14 months.

SECTION 5. Permit application

Application for a permit to investigate, excavate, gather, or remove archaeological or paleontological resources must be made on the official application form (Exhibit 1), and must include the following information:

A. For "survey" and "survey and test excavation" permits:

1. Name(s) of principal investigator and project archaeologists or project paleontologists;

2. Institutional affiliation and mailing address;

3. Location where work will be performed;

4. Vita(e) of principal investigator and project archaeologist(s) or project paleontologist(s);

5. Agreement with an approved museum (as defined in Section 9) for curation of specimens, documents, photographs and other materials and records resulting from the proposed work. This agreement must be dated within five years of the date of the permit application.

B. For "non-collection survey only" permits

1. Name(s) of principal investigator and project archaeologists or project paleontologists;

2. Institutional affiliation and mailing address;

3. Location where work will be performed;

4. Vita(e) of principal investigator and project archaeologists) or project paleontologist(s);

C. For "excavation" permits, the following information is required:

1. Name(s) of Principal Investigator and Project Archaeologist or Project Paleontologist;

2. Institutional affiliation and mailing address;

3. Location where work will be performed, and name, address, and telephone number of landowner;

4. Vita(e) of principal investigator and project archaeologist or project paleontologist, with documentation of completed professional projects.

5. Agreement with an approved museum (as defined in Section 9) for curation of specimens, documents, photographs and other materials and records resulting from the proposed work. This agreement must be dated within five years of the date of the permit application.

6. Research design for proposed excavation.

D. Qualifications of applicants for archaeological permits. Applicants for permits to conduct archaeological work must meet the following minimum qualifications, as documented in the application:

1. Principal investigator:

a) Graduate degree in anthropology or archaeology or history with demonstrated experience in Colorado prehistoric or historic archaeology, or in related topical, geographic or cultural areas; and

b) At least one year of full-time professional experience or equivalent specialized training in archaeological research, administration or management; and

c) At least four months of supervised field and analytic experience in general North American archaeology; and

d) Demonstrated ability to carry research to completion.

2. Project Archaeologist:

a) Bachelor's degree in Anthropology or Archaeology; and

b) At least six months of full-time professional experience or equivalent specialized training in archaeological research, administration or management; and

c) At least four months of supervised field and analytic experience in general North American archaeology; and

d) Demonstrated experience in Colorado prehistoric or historic archaeology, or in related topical, geographic or cultural areas.

E. Qualifications of applicants for paleontological permits Applicants for permits to conduct paleontological work must meet the following minimum qualifications as documented in the application:

1. Principal investigator;

a) Graduate degree in geology, zoology, paleobotany, botany, or related fields, with demonstrated experience in the vertebrate or invertebrate paleontology of Colorado or related topical or geographical areas; or

b) At least one year of full-time professional experience or equivalent specialized training in paleontological research, administration, or management; and

c) At least four months of supervised field and analytic experience in general North American paleontology; and

d) Demonstrated ability to carry research to completion.

2. Project paleontologist:

a) Bachelor's degree in geology, zoology, paleobotany, botany, or related fields, and

b) At least six months of full-time professional experience or equivalent specialized training in paleontological research, administration or management; and

c) At least four months' supervised paleontological field experience in North America; and

d) Demonstrated experience in Colorado paleontology or related areas.

F. Waiver of qualifications

Applicants who do not meet the minimum qualifications listed in Section 5C or 5D may apply for a waiver. Such written application for waiver must include the following information:

1. Current (less than three years old) curriculum vitae of individual applying for waiver;

2. A statement of the reasons why the applicant believes he/she is qualified to undertake the proposed work;

3. Written examples of similar or related work.

G. Oath. The applicant shall sign an oath attesting that information provided on the application is true, in accordance with CRS 24-4-104(13)(a).

SECTION 6. Permit issuance and denial

A. Application and permit schedule

The society through the state archaeologist will review complete applications within 10 working days of receipt and immediately notify the applicant of the results of the review by mail.

B. Criteria for issuance

Applications must be complete. The applicant is responsible for the completeness and quality of information submitted.

C. Criteria for permit denial

1. The society through the state archaeologist may deny a permit to an applicant:

a. If he/she does not meet the qualifications outlined above;

b. If he/she gives false information on the application;

c. If he/she gives fails to adhere to any of the terms and conditions of prior permits;

d. If he/she has previously been denied a federal permit for work on the same project;

e. If he/she has been convicted of a violation of the Act;

f. If he/she has a record of violating any law applicable to archaeological or paleontological resources protection. Violation of said law shall include civil sanctions as well as criminal conviction (which shall include a plea of nolo contendere or acceptance of a deferred sentence);

g. If he/she has a record of unacceptable reports;

h. If he/she submits a research design or documentation plan that does not meet the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register 48(190). September 29, 1983);

i. If he/she has not arranged for funding sufficient to complete the proposed work;

j. If the landowner or land manager objects; or

k. For other just cause.

2. The society through the state archaeologist will provide an applicant who is denied a permit a written explanation of the reasons for the denial. The applicant, within 60 days, may request a hearing before the president of the society or an administrative law judge pursuant to CRS 24-4-105. The society will notify the applicant of the time and place of the hearing at least 20 days prior to said hearing.

SECTION 7. Permit terms and conditions

Permits are issued subject to the following terms and conditions:

A. Permittees must adhere to the following standards for survey work carried out on state lands:

1. All areas in which ground disturbance is anticipated will be surveyed for cultural resources.

2. Routine survey work for well pads, highways, and other specific projects will adhere to the following standards:

a. A minimum of 10 acres will be investigated for each well pad location.

b. Linear projects will be investigated by spacing surveyors no wider than 30 meters apart.

c. A minimum of 70 percent ground visibility is required for all projects surveyed with snow cover.

3. All archaeological permittees must perform a file search at the society or pay the society to do so prior to beginning field work.

4. All newly documented historical, prehistorical and archaeological resources will be recorded on standard Colorado inventory forms, available from the society.

5. Permittees will obtain an official Colorado site number, based on the Smithsonian trinomial system, from the society for each newly documented historical, prehistorical or archaeological resource.

6. Original, typed inventory forms and photographs must be submitted for review and acceptance by the society within three months of resource discovery.

B. All archaeological or paleontological excavation under a permit issued by the society shall be undertaken with an objective of increasing knowledge.

1. Recovered specimens, except human remains and associated funerary objects, shall be preserved, either on the site or in museums, open to the public and available to qualified students. The permit shall specify the name of the museum in which the recovered materials shall be deposited.

2. Permittees shall take measures to assure the security of the excavation project site.

3. Excavated human remains and associated funerary objects may be retained by the permitted archaeologist for a period not to exceed one year from the date of disinterment, for the purpose of study. Studies should be completed as soon as possible. At the end of the one-year study period, the state archaeologist shall receive the remains and confer with the Colorado Commission of Indian Affairs regarding disposition. A permittee's request for an extension of time shall be addressed in writing to the Colorado Commission of Indian Affairs, with a copy provided to the state archaeologist.

C. A copy of an approved permit must be in the possession of the permittee at all times when on state land. An individual named on the permit must be present at all times. Permittees shall not begin work exceeding $10m^2$ on any site until a permit for that site has been issued, nor shall a permittee excavate human remains until a permit specifically authorizing this has been issued.

D. Permittees must obtain separate permission to enter on state lands from the state agency which administers said land, including but not limited to the State Land Board and its current lessee(s) if any, the Division of Wildlife, and the Division of Parks and Outdoor Recreation.

E. Permittees must file all required reports in a timely manner (as defined in Section 7.J. and 7.K.)

F. Permittees shall not be released from requirements of a permit until all outstanding obligations have been satisfied, whether or not the term of the permit has expired.

G. All issued permits will become part of the public record.

H. Any permit may be suspended by the society through the state archaeologist at any time if there is evidence that the activity authorized by the permit is being unlawfully or improperly conducted, if any of the criteria for permit denial applies, or if the permit holder does not honor the conditions of the permit.

1. Permits may be suspended or revoked in accordance with the procedures outlined in the State Administrative Procedures Act, CRS 24-4-104 and 105.

2. When a permit is revoked, all recovered materials, catalogues, maps, field notes, and other records necessary to identify the same shall be surrendered immediately to the society.

I. Permittees must allow inspection of excavation projects and recovered materials by the state archaeologist or his/her designee.

J. Reports required

1. The permittee shall submit an end-of-year report detailing activities conducted under the permit during the previous calendar year. This end-of-year report is required by December 31, and shall include the following:

a. A bibliography of reports on all projects conducted partially or wholly on state lands, and on projects conducted on private land under state permit. Each bibliographic entry shall indicate the county in which field work took place.

b. A listing of all sites and isolated finds recorded on state lands; a catalog of all materials collected on state lands and the name of the repository in which the materials are curated.

c. A brief summary of work in progress.

2. The permittee shall submit report(s) detailing the results of investigations on state land, and on private land under state permit.

   a. Preliminary report

      A preliminary or progress report is required by December 31 of the year in which the investigations begin, and annually thereafter for multi-year projects.

   b. Final report

      A final report must be submitted within three years after the conclusion of field work. Final reports should meet the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register 48(190), September 29, 1983).

3. All reports will be reviewed by the state archaeologist, or his/her staff designee, who will notify the permittee in writing of the acceptance or rejection of the report. End-of-year reports and preliminary reports will be reviewed by January 31; final reports will be reviewed within 90 days of receipt. Rejected reports will be returned to the permittee for correction and resubmission. The society through the state archaeologist will consider reporting requirements not satisfied until all reports are accepted.

4. Should a permittee challenge the rejection of a report, the society through the state archaeologist shall convene an advisory peer panel to review the report in questions, shall take into account the panel's recommendations, and shall provide the permittee with written results of the peer review. After such review, the society through the state archaeologist has the option of upholding or altering a previous determination, and shall notify the permittee accordingly.

5. Within 60 days, subsequent to the notice specified above, a permittee may request a hearing before the society or an administrative law judge, as provided in Section 24-4-105.

K. Permit calendar and duration

1. The usual duration of “Survey only” and “Survey and Test Excavation” permits will be from March 1 through February 28 (29) of the following year; however, applicants may apply for permits at: any time. All such permits will expire on February 28 (29). Excavation permits may be issued at any time for a period not to exceed 14 months.

2. All permittees shall submit the required reports on work conducted under permit by December 31. No permittee who has failed to submit a report, or whose report has been rejected, shall receive a new permit until conditions of the prior permit have been met.

3. On January 31, the society through the state archaeologist shall notify all permittees as to whether reports have been received and, if so, whether they have been accepted. Permittees whose reports are rejected shall be notified of a deadline for resubmission.

L. The state of Colorado, including its agencies and employees, shall be held harmless for any and all events, deeds or mishaps resulting from the activities of the permittee, regardless of whether or not they arise from operations authorized under the permit.

M. Permit infraction

1. Failure to adhere to any of the terms and conditions specified in Section 7 is cause for revoking the permit at any time.

2. Permits will be suspended or revoked in accordance with CRS 24-4-104.

3. No revocation shall be lawful unless the society has given the permittee notice in writing of facts or conduct that may warrant such action, afforded the permittee opportunity to submit written data, views, and arguments with respect to such facts or conduct, and, except in cases of deliberate and willful violation, given the permittee a reasonable opportunity to comply with all lawful requirements.

SECTION 8. Violations

A. The society may obtain a temporary restraining order and/or an injunction against an individual, corporation, unincorporated association, partnership, proprietorship, or governmental entity that appears to be committing a misdemeanor on public land, as defined in 24-80-409.

B. In the event that any materials are surrendered or forfeited to the society pursuant to part 409 of the Act, the society shall secure for law enforcement officials all said materials so as to guarantee their condition as of the time of their receipt by the society.

SECTION 9. Curation of collections in approved museums

A. The state of Colorado holds title to all historical, prehistorical and archaeological materials collected from areas owned by the state or any of its political subdivisions.

B. While the society is the official trustee of the State of Colorado (CRS 24-80-202), the society wishes to advance a collaborative partnership with county and local museums or curatorial repositories, (a curatorial repository is a permanent, nonprofit educational or research oriented agency or institution, having professionally trained on-site staff, that provides housing and collections care in-perpetuity), to ensure long-term preservation and interpretation of these items. These institutions help to preserve, interpret and promote the natural and cultural inheritance of humanity in Colorado and work in close collaboration with the communities from which their collections originate as well as those they serve. Such an arrangement with the State is advantageous to everyone in Colorado.

C. All materials, except human remains and associated funerary objects, collected from state lands or political subdivisions must be curated in a museum, unless a reputable museum, university, college or other recognized scientific or educational institution can assure permanent preservation on the site.

1. Historical, archaeological, prehistorical, and paleontological collections made under permit may include ceramic, lithic, glass, metal, faunal, floral, and synthetic materials, as well as documents, photographs, organic samples (such as coprolites or soil samples), fossils (vertebrates, invertebrates, paleobotanical, ichnofossils, and associated rock or sediment samples), and human remains and associated funerary objects.

2. Permittees proposing to transport collections out of Colorado must secure a loan agreement between an out-of-state facility and a permanent approved on-site institution, reputable in-state museum, or curatorial repository, subject to the approval of the society, except that ancillary samples may be transported and analyzed without such a loan agreement. Out-of-state analysis of human remains and associated funerary objects is subject to the approval of the society.

3. Proposed analysis of artifacts or fossils which would cause their destruction or damage, such as trace-element analysis of materials, may be performed only with the written consent of the society through the state archaeologist, who shall consider whether such artifacts are unique or duplicated in state-owned collections. The society will supply notification of consent to the affected museum within thirty days.

4. State, County and local agencies or research/educational institutions wishing to ensure collections care of artifacts or specimens permanently on-site (or within close proximity to the origin of the excavated materials) must either be approved through a request to serve as an approved museum or curatorial repository as specified in Section 9 (I) of this chapter or through execution of a special held-in-trust collections agreement with the society.

D. Reburial or repatriation of human remains may supersede their placement in an approved museum.

E. Collections from state or political subdivision lands obtained from an issued permit in accordance with CRS 24-4-104 must be curated in an approved reputable Colorado museum or curatorial repository. The relationship between the society and another reputable Colorado museum or a curatorial repository is an express trust. Title and ownership of these collections is not transferred and the society has the authority to transfer and approve stewardship of the collections through an on-site held-in-trust collections agreement or through the approval of a reputable museum or curatorial repository as outlined in Section 9 (I) of this chapter.

F. Collections recovered from lands owned or controlled by the state or any of its political subdivisions shall be deposited at an approved museum, curatorial repository, an approved on-site agency, or institution within six months after submission of the permittee's final report. Collections made from permitted archaeological or paleontological projects occurring over multiple years should not be deposited with different museums or curatorial repositories unless an approved museum, curatorial repository, on-site agency or institution, lacks expertise or environmental conditions necessary to ensure the collection's long-term preservation.

G. Responsibilities and requirements of approved museums or curatorial repositories

Museums and curatorial repositories must be open to the public. They must agree to provide curation of archaeological or paleontological resources in a systematic and accessible manner, and to make them available free of charge for study by qualified students and researchers.

1. Provide a copy and maintain a current and active fine art or other commercial insurance policy or if the museum or curatorial repository whose collections are primarily owned or overseen by a governmental entity, acknowledge that the state collection and any associated state property are covered for liability from any loss or damage.

2. If accepting collections from outside researchers, institutions issuing curation or similarly worded "intent-to-curate" agreements to third-party permitted researchers must first have their template agreement language approved by the state archaeologist or his/her staff designee to avoid confusion that the collections have state of Colorado title.

3. Within ten working days refer to the state archaeologist of Colorado all requests (written and oral) for transfer or repatriation of the state collection (or any part thereof).

4. Maintain separately all written and digital descriptive information associated with the curated state collection, including field notes, site forms and reports in a safe and secure manner.

5. Do not release to any third-party any precise information relating to the exact physical location of a prehistoric site (locale) from which the state collection (or any part thereof) derives, except to qualified researchers or after obtaining from the state archaeologist of Colorado prior written permission. If there are questions as to releasing this information, approved museums or curatorial repositories will consult with the state archaeologist of Colorado.

6. In accordance with these regulations, be open and subject to inspection by the state archaeologist or his/her designee at least once every three years.

7. Accept state collections from permitted work for their specific regional or local area guided by these current rules and procedures and the approved museum's or curatorial repository's collection management policy.

8. Annually report back to the state archaeologist or his/her designee any changes to the state's collection condition or insurance policy changes, loan agreement status and any other tracking requirement methods adopted by the society and the office of the state archaeologist.

9. Properly maintain any State of Colorado property (shelving, cabinetry etc.) in its possession associated with the care of the state collection.

10. Maintain the collection within inert and acid-free storage or packaging.

11. With the exception of approved repatriation, not sell, transfer, assign, pledge, encumber, discard, or otherwise dispose of the state collection (or any part thereof) or any associated State of Colorado property in its possession without written and signed permission from the state archaeologist.

12. Have an established collections management policy and emergency management plan.

13. Within five calendar days of the discovery of any loss or theft of, deterioration or damage to, destruction of the state collection (or any part thereof), or any State of Colorado items of property used to support and care for a state collection in the museum's or curatorial repository's possession, the museum or repository will provide to the society written notification of the circumstances surrounding the loss, theft, deterioration, damage, or destruction, and will report to the state archaeologist or his/her designee those actions taken to stabilize the collection, or State of Colorado items or property, and to correct any deficiencies in the physical plant or operating procedures that may have contributed to the loss, theft, deterioration, damage, or destruction.

14. Other than routine, small and simple paleontological specimen or artifact mending repairs, any planned actions that involve major repair or restoration beyond basic re-attachment of the state collection (or any part thereof) or any other State of Colorado property associated with the state collection must be approved of in advance after consultation with the state archaeologist.

15. The society (in co-ordination with other reputable museums, nonprofit or governmental educational institutions) reserves the right to take custody of state collections in the care of an approved museum, curatorial repository, on-site agency or institution through a loan agreement for temporary exhibit purposes.

H. Approved Uses

1. Approved museums or curatorial repositories and the society may fully exhibit and charge reasonable nondiscriminatory admission fees, comparable to fees charged at similar facilities to view these items prepared for interpretive display (either for permanent, temporary or travelling exhibition purposes). Additionally, approved museums or curatorial repositories and the society may photograph and nondestructively study the state collection (or any part thereof) on the museum or curatorial repository's premises, subject to the museum or repository's own collections management policies and in accordance with these regulations. Physical reproduction of any state collection item(s) must be approved of in advance by the state archaeologist.

2. State paleontological resources curated at an approved museum or curatorial repository may be cleaned, treated, stabilized and prepared for research, exhibition or loan transportation purposes under standard professional best practices for natural history collections.

3. A held-in-trust state collection may be loaned out by an approved museum or curatorial repository to other institutions and organizations (including for temporary exhibition or study by the society) by securing a loan agreement between the other facilities provided notice of the arrangement is sent to the state archaeologist for tracking purposes. The director of the approved museum or curatorial repository is responsible for all loan transactions of state collections and for ensuring that appropriate and timely administration of the loans is conducted. Relocation inventories must be conducted and included as part of the written loan agreement. Other loan conditions must be addressed in the Collections Management Policy of the curatorial facility that is loaning the material. The loan and transportation of the state collection must be insured for liability purposes through securing a commercial fine art or other insurance policy or be adequately covered by governmental self insurance to fulfill any damage or loss incident. Collections that are not inventoried or cataloged shall not be loaned. Commercial use of loaned collections is prohibited without written consent from the society. Ancillary samples may be transported and analyzed without a formal loan agreement; however, the museum or curatorial repository will provide to the society two copies of any publications, reports, and other documents prepared by researchers studying ancillary samples.

4. All exhibits, reproductions, and studies will credit the state archaeologist of Colorado as follows: "Courtesy of History Colorado, Office of the State Archaeologist." The museum or curatorial repository will provide to the society two copies of any publications, reports, and other documents prepared by museum or curatorial repository staff studying or exhibiting the state collection (or any part thereof).

5. Approved museums or curatorial repositories and the society may charge a competitive deposit fee for the collections and reasonable administrative processing fees for "curation" or similarly worded "intent-to-curate" agreements with permittees. Permitted researchers that deliver collections not according to the state archaeologist's current Submission Guidelines for State-Owned Archaeological Collections and these regulations may be subject to corrective hourly labor rate fees plus the cost of supplies by the state approved museum or curatorial repository.

I. Procedures for approving museums

1. Any institution wishing to serve as a museum for collections from state lands (or any subdivision of state lands) or collected as a result of work carried out under a permit issued under authority of this Act shall apply to the society through the state archaeologist for approval.

2. The museum or curatorial repository shall fill out a *Request to Serve as an Approved Museum or Curatorial Repository for Held-in-Trust Collections* form, signed by the director of the institution and must evidence reputable status with any of the following credentials (or their equivalent successor museum program/designations):

    a. Received from the American Association for State and Local History (AASLH) silver or gold certificates by participating in the Standards and Excellence Program for History Organizations (StEPs) in the stewardship of collections section within the last five years.

    b. Show evidence of participation in the Museum Assessment Program in the area of collections stewardship from the American Alliance of Museums within the last five years.

    c. Received Core Documents Verification from the American Alliance of Museums within the last five years.

    d. Received and maintain formal Accreditation status from the American Alliance of Museums.

    e. Considered a designated Federal Repository for curating federally-owned and administered archaeological or paleontological collections under the requirements of Federal Regulations 36 CFR 79.

3. Provide proof to the state archaeologist of a fine art or other appropriate umbrella insurance policy that will adequately cover the care for the state collection from any one claim or aggregate claim arising from a damage or a loss incident. With the insurance policy documents, the society and the approved museum or curatorial repository should be shown as co-beneficiaries (or additionally insured).

    a. If the museum or curatorial repository's collections are primarily owned or overseen by a Colorado governmental entity (considered a "public entity" within the meaning of the Colorado Governmental Immunity Act, CRS 24-10-101, et seq.), the museum or curatorial repository must indicate to the state archaeologist that they are self insured in lieu of the fine art or other umbrella insurance policy requirement stated above. If self insured, it is understood that the public entity of the approved museum or curatorial repository will ensure liability to the state collections under its care arising from a damage or a loss incident.

    b. In the event of a loss incident, a liability assessment of the value of the collection shall be determined by mutual agreement with the society as the sum of the estimated current fair market value and the estimated costs of replacing the scientific and educational information from the lost artifacts or specimen. A determination of these replacement costs may include, but are not limited to: (a) research design development; (b) fieldwork; (c) laboratory analysis; (d) curation; (e) reports or educational materials; and (f) lost visitor services or experience. In some cases, it may be appropriate for the estimated cost of replacement value to be peer reviewed by archaeologists or paleontologists with appropriate expertise and with no conflicts of interest.

4. If the museum or the curatorial repository curates collections from permitted researchers outside of their approved institution, provide a template copy of a “curation” or similarly worded “intent-to-curate” agreement for approval by the state archaeologist or his/her designee. The agreement form must clearly acknowledge that title to the artifacts or specimens as well as all associated reports, original field notes, maps, drawings, photographs etc., resulting from the investigations to be curated remains solely with the State of Colorado.

5. Approval of a museum or a curatorial repository shall be effective for a period of five years, after which time, the curatorial facility may apply for renewal through the procedures in this chapter.

6. The completed documentation shall be reviewed by the state archaeologist or his/her designee within 30 days of receipt. If clarification or additional information is requested by the society, the facility shall have 30 days to furnish the information required.

7. The museum or curatorial repository may discontinue accepting new collections from outside researchers by amending their agreement upon renewal to serve as an approved facility. Once approval of a museum or a curatorial repository has been granted however, the express trust arrangement with the State of Colorado continues and is perpetual for any of the existing collections under the institution’s stewardship.

8. The society has sole discretion to approve or not approve a museum's or curatorial repository’s application.

9. Approval may be withdrawn by the society through the state archaeologist if deficiencies in collections care and non-compliance to these regulations appear. Approval will be suspended or revoked in accordance with CRS 24-4-104.

10. Under the authority of CRS 24-80-407, the society may exercise the right to enter into agreement with museums, curatorial repositories, or other public or private entities to fulfill the State’s needs for held-in-trust state collections concordant to these rules and regulations.

11. For each deposited historical, prehistorical, archaeological or paleontological state collection, the approved museum or curatorial repository will sign and acknowledge an official deposit receipt form with a simple inventory list of items accepted for permanent curation by the facility, a copy of which will be forwarded to the state archaeologist or his/her designee.

J. Continuance of pre-approved museums and repositories

1. Previously approved non-expiring museums and curatorial repositories shall honor existing "intent to curate" or similarly worded executed curation agreements with third-party researchers (permittees) up to five years after the effective date of these revised rules unless individual contractual agreements expire within five years. Notice from an approved museum or curatorial repository for continuing the acceptance of collections from previously dated permittee agreements must be given to the state archaeologist of Colorado or his/her designee within 30 days after the expiration date for renewal of approved status. The notice shall be made through the *Request to Serve as an Approved Museum or Curatorial Repository for Held-in-Trust Collections* form and the museum or repository must list the number and names of all outstanding agreements along with their expiration dates. Extended approval of these previously approved museums or curatorial repositories shall then be made for a period of up to five years based on furthest dated agreement and shall not extend beyond five years following the effective date of these adopted and revised rules.

2. Museums or curatorial repositories that hold in custody held-in-trust state collections that were collected as a result of CRS 24-04-104 that decide not to become a newly approved museum or curatorial repository under these revised rules should nonetheless attempt to provide the highest possible level of care to the existing state collections currently maintained in their facilities. At a minimum, a level of care that prevents deterioration of, damage to or loss of items in the state collection should be maintained.

3. Within five years of the effective date of the adoption of these revised rules, previously approved non-renewing museums or curatorial repositories should either submit a plan for the state archaeologist of Colorado's approval regarding the continued care and management of the state collection or plan for the transfer of the state collections to a museum or curatorial repository approved under the revised 8CCR 1504-7 Section 9 (I) of this chapter.

K. Responsibilities of permittee submitting collection

1. In choosing a museum, permittees should attempt to keep the collection in its area of origin and to keep materials from the same site and the same project together. Permittees should confer with staff of the selected museum and have a written agreement whose template language was approved by the state archaeologist or his/her designee as specified in Section I (4) of this chapter prior to collecting materials in the field.

2. Permittees should follow the guidance of museum staff in regard to collecting procedures. The permittee should adhere to any specific methods of labeling, packaging, and shipment required by the museum and the state archaeologist's current Submission Guidelines for State-Owned Archaeological Collections. All collections must be placed and delivered within inert and acid-free packaging.

3. The permittee is responsible for returning to the office of the state archaeologist a fully signed official state deposit receipt form by the approved museum, curatorial repository, on-site agency, or institution and the office of the state archaeologist of Colorado. The form must be accompanied by a simple inventory list of items accepted by the approved facility for permanent curation.

SECTION 10. Obligations of state agencies with respect to state activities.

A. Any archaeological or paleontological survey or excavation performed by a state agency on lands owned by the state of Colorado or its political subdivisions shall be subject to the permit system described in these regulations.

B. Consultation requirements.

1. Project proponents who anticipate applying for state funding assistance or entitlements of use may request the society's determinations regarding the project's potential effects on archaeological or historic resources in advance of, or simultaneously with, submittal of their applications. The society shall respond to such request within 10 business days.

2. In the event that any location of proposed state action includes properties listed on or nominated for the State Register of Historic Places, the state agency initiating the action shall request a determination of effect on such properties from the society pursuant to Section 24-80.1-104 CRS

3. In the event that historical, prehistorical or archaeological resources are discovered in the course of an agency action, the agency and/or project proponent(s) should refrain from knowingly damaging such resources and should notify the society.

a. To knowingly disturb historical, prehistorical or archaeological resources on public land is a misdemeanor; to knowingly disturb human remains on public or private lands is also a misdemeanor.

b. On private lands subject to state actions, the landowner or project proponent(s) should make reasonable efforts to avoid or minimize harm to newly discovered historical, prehistorical or archaeological resources. The landowner or project proponent(s) should notify the funding or permitting agency and the society as soon as possible after such a discovery. The agency, society, and landowner or project proponent(s) shall jointly develop a plan for the evaluation and treatment of the resource.

c. In the event that an adverse effect is anticipated, the agency, landowner, and project proponent(s) may enter into an agreement with the society on how to mitigate the effect.

SECTION 11. Lands not owned by the state of Colorado

Upon the request of any municipality, county, or governmental agency, the state archaeologist shall undertake the powers provided for in Sections 24-80-405 to 24-80-407 of the Act, with respect to historical, prehistorical, or archaeological resources on private or public lands, owned by the entity so requesting, within the boundaries of Colorado. Upon the request of any corporation or private individual, the state archaeologist may at his/her discretion undertake these powers with respect to archaeological or paleontological resources on private lands, except that the excavation of unmarked human burials requires a permit on all nonfederal lands in Colorado.

A. Costs and logistics shall be negotiated between the requesting person and the society.

B. When such a request has been made to the state archaeologist, and the society through the state archaeologist has agreed to undertake such powers, these regulations govern the exercise of those powers.

C. At the request of the landowner, such sites may be marked with a sign identifying them as places protected by the Act and which require a permit for investigation, excavation, gathering or removal.

D. The society may enter into agreements pursuant to Section 24-80-407 of the Act.

SECTION 12. Use of federal funds by the office of the state archaeologist

The office of the state archaeologist is authorized to accept and, through the department of administration and the society, to use, disburse, and administer federal funds derived from grants or contracts in support of the Act, and in accordance with the specific terms of the grant or contract and applicable federal and state fiscal rules.

SECTION 13. Unmarked human graves

A. On all nonfederal lands in Colorado, the discovery of unmarked human graves more than 100 years old shall cause the procedures defined in part 13 of the Act to take effect. Disinterment of human remains from such graves will require an excavation permit as provided for in Sections 4 through 8 of these regulations.

B. Upon notification of suspected human skeletal remains, the coroner, sheriff, police chief and/or land managing agency official shall coordinate their actions and share information.

C. Whenever possible, on-site inquiries under 24-80-1302(2) shall proceed in a manner which does not remove the human skeletal remains from the ground.

D. In the event that the Colorado Bureau of Investigation (C.B.I.) is requested to determine the forensic value of skeletal remains, C.B.I. shall report its findings to the county coroner, who shall notify the state archaeologist if the remains are human but of no forensic value.

E. Any concerned individual may notify the state archaeologist of a discovery, but it is the coroner's responsibility to determine forensic value.

F. Upon notification that human remains are Native American, the state archaeologist or his/her designee should determine the wishes of the landowner and the commission, and document this consultation with an official form to be signed by the concerned parties. The landowner's desires regarding his ability to protect the remains in situ, arrangements for exhumation when appropriate, and ultimate disposition shall be documented.

G. Pursuant to 24-80-1302(4)(e), the physical anthropological study of human remains shall be conducted by a qualified physical anthropologist with credentials comparable to those required for principal investigators, as set forth in Section 5 of these regulations.

H. The provisions of 24-80-1303 allow an anthropologist to expedite his/her work by arranging for the necessary permit in advance. In the case of planned anthropological investigations, a person applying for a permit under provisions of 24-80-1303 must agree to bear the costs of scientific study of human remains as a condition of such permit.

I. The criminal violation specified in 24-80-1303(1) pertains to knowingly disturbing unmarked human burials as defined in 24-80-1301, and not to inadvertent actions affecting human remains.

J. The state archaeologist, in consultation with the Colorado Commission of Indian Affairs, will determine if, when, and how Native American human remains and associated funerary objects collected under state permit are reinterred or repatriated in keeping with CRS 24-80-1302 and 1304 and the federal Native American Graves Protection and Repatriation Act (P.L. 101-601, 104 Stat. 3048).

Editor's Notes

History

Section 9 eff. 08/01/2017.

HISTORY COLORADO JBC HEARING

JANUARY 5, 2017

STEVE TURNER AIA, EXECUTIVE DIRECTOR

HISTORY COLORADO'S FINANCIAL SITUATION

Earned Revenue, Donations, and Gaming

HISTORY COLORADO FINANCIAL SUMMARY AND FORECAST
REVENUE

					Five Year Plan Forecast			
Revenue:	**2015-16**	**2016-17**	**2017-18 (Pd 4)**	**2017-18 Budget**	***FY 2019***	***FY 2020***	***BY 2021***	***BY 2022***
Gaming Revenue (Minority)	$ 9,762,834	$ 10,185,860	$ 4,592,431	$ 10,133,878	$ 10,578,800	$ 10,858,240	$ 10,858,240	$ 10,858,240
Less: Gaming Revenue Retained for Reserve		(185,860)		(133,878)	(578,800)	(858,240)	(858,240)	(858,240)
Community Museum Revenue	571,719	735,875	477,770	800,000	937,324	1,108,944	1,252,896	1,364,255
Community Museum General Funds	-	-	128,853	1,487,200	1,526,252	1,526,252	1,387,513	1,387,513
Earned Revenue - HCC & Philanthropy	2,802,439	2,566,896	1,038,515	3,209,975	3,988,671	4,591,299	5,250,197	6,203,608
Federal Revenue	1,022,057	588,331	171,411	1,401,925	1,399,935	1,399,935	1,399,935	1,399,935
Indirect Cost Allocations to HC	382,778	382,778	382,778	382,778	382,778	382,778	382,778	382,778
Interest Income	22,311	81,378	19,932	60,000	60,600	61,200	61,800	62,400
Total Revenue:	14,564,138	14,355,258	6,811,690	17,341,878	18,295,560	19,070,408	19,735,119	20,800,489

HISTORY COLORADO FINANCIAL SUMMARY AND FORECAST
EXPENDITURES AND CHANGES TO RESERVES

					Five Year Plan Forecast			
Expense:	**2015-16**	**2016-17**	**2017-18 (Pd 4)**	**2017-18 Budget**	***FY 2019***	***FY 2020***	***BY 2021***	***BY 2022***
Community Museums	1,229,462	1,563,210	756,093	3,243,332	3,361,937	3,508,098	3,533,863	3,650,129
Operating Expense	8,977,159	8,222,820	2,929,172	9,448,711	9,448,711	9,543,198	9,638,630	9,802,926
COP	3,021,830	3,021,415	2,291,777	3,021,835	3,021,860	3,021,543	3,021,605	3,525,209
Operations	554,967	508,943	93,554	500,000	600,000	600,000	600,000	600,000
Non-Personnel POTS	639,169	592,917	451,932	908,000	800,000	850,000	850,000	850,000
Indirect Cost Allocations to DHE	164,549	140,168	233,772	190,000	200,000	200,000	200,000	200,000
Programs	123,262	223,575						
Staff Reduction Expense	331,598							
Miscellaneous	35,378	74,306	15,713	30,000	30,000	30,000	30,000	30,000
Total Expense:	15,077,374	14,347,354	6,772,013	17,341,878	17,462,508	17,752,839	17,874,098	18,658,264
Net Gain/(Reduction) of Fund Reserves:	**$ (513,236)**	**$ 7,904**	**$ 39,677**	**$ -**	**$ 833,052**	**$ 1,317,569**	**$ 1,861,021**	**$ 2,142,225**

HISTORY COLORADO'S VISITATION TRENDS

History Colorado Center and Community Museums

HISTORY COLORADO VISITATION TRENDS

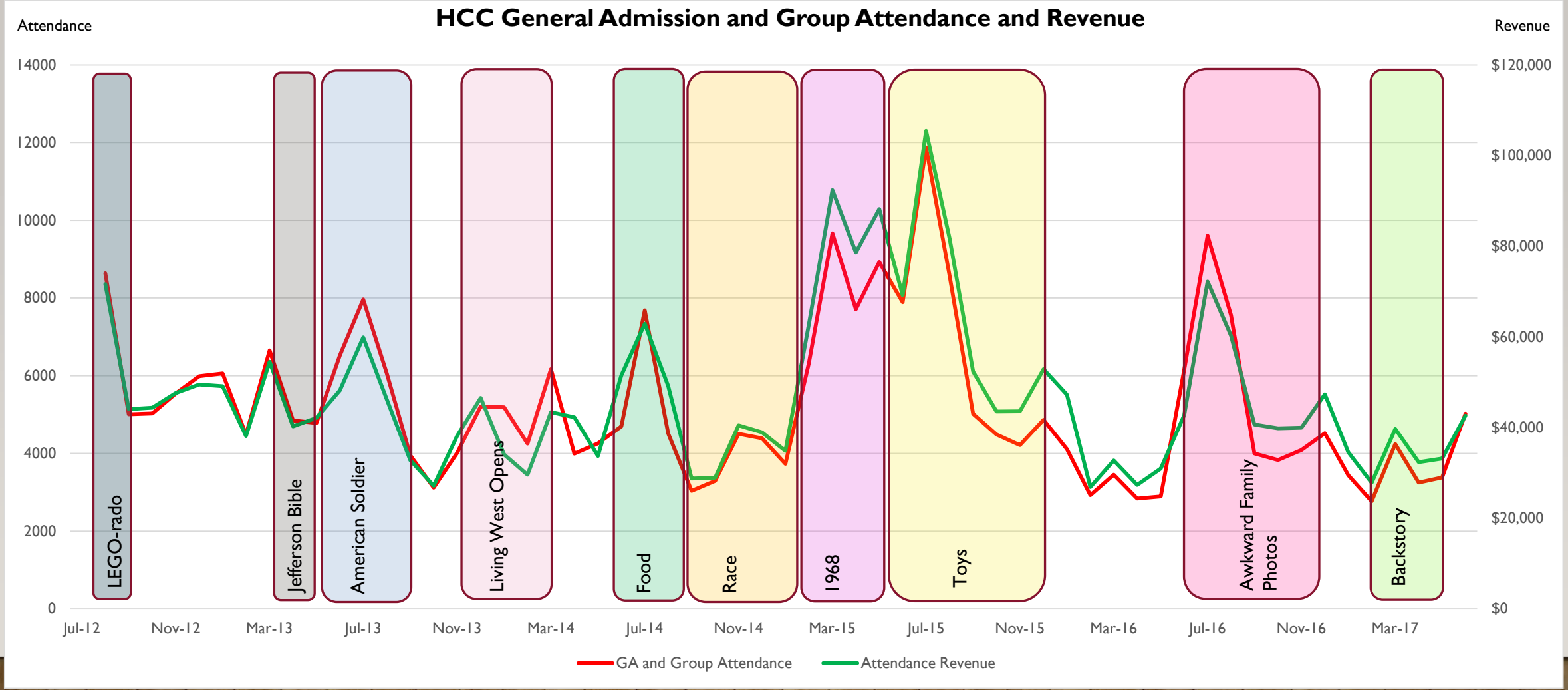
History Colorado Center

Fiscal Year	Annual Visitors
2014-15	216,214
2015-16	203,547
2016-17	203,945
2017-18 (through Nov.)	71,229

Community Museums

Fiscal Year	Annual Visitors
2014-15	80,717
2015-16	104,182
2016-17	116,016
2017-18 (through Nov.)	81,275

HISTORY COLORADO CENTER GENERAL ADMISSION, GROUP ATTENDANCE AND REVENUE BY EXHIBIT



HISTORY COLORADO FIVE-YEAR EXHIBITS PLAN

Significant Exhibit Projects by Year*

(See the following pages for overviews of each exhibit.)

Location	Type	2017	2018	2019	2020	2021
History Colorado Center	Marquee (Major Exhibitions)	Backstory	Baseball	Colorado Sound	Horse Power	Mesa Verde
		Zoom In: 100 Objects	Liquid Gold (Beer)	Ute II	American Dem	The Land We Love
		-	-	Society to Match (II)	Sand Creek**	Cash Crops?
	Beacon (Supporting Exhibits: Colorado Stories, Visual Histories, etc)	El Movimiento	Building Denver	Diorama Showcase	Student History Lab	Mining Revamp
		Society to Match (I)	Artifact Showcase	Rock Photos	Skiing Revamp	
	Enhancements		Atrium Refresh			
Community Museums		Ute Indian Museum	Borderlands I - EPHM	Borderlands II - FtG		
		Ft Vasquez Refresh		Borderlands III - THM		
		Women in WWI - BEH		Suffrage - BEH		
Ute STEM Grant Project			Wikiup	Plants & Garden		
			Beading	Travelling Exhibit		

HISTORY COLORADO'S DECISION ITEM

Sustainability from Recovery of OIT Costs

HISTORY COLORADO DECISION ITEM: OIT COSTS

- History Colorado's OIT Common Policies costs have increased significantly over time with an average annual increase of over 40%.

History Colorado's OIT Appropriation FY 2013-14 through FY 2017-18					
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
OIT Appropriation	$ 181,968	$ 347,961	$ 395,445	$ 341,974	$ 622,124
Change in OIT costs from previous year	6.55%	91.22%	13.65%	-13.52%	81.92%

HISTORY COLORADO DECISION ITEM: OIT COSTS VS. TOTAL REVENUE

	FY 2014	FY 2015 [1]	FY 2016	FY 2017	*FY 2018* [2]	*FY 2019* [2]	*FY 2020* [2]	*FY 2021* [2]	*FY 2022* [2]
OIT Appropriation [3]	$181,968	$347,961	$395,445	$341,974	$622,124	*$460,168*	*$552,202*	*$662,642*	*$795,170*
Total Revenue [4]	$13,117,489	$13,123,315	$13,943,596	$13,485,905	*$14,149,655*	*$14,689,024*	*$15,031,300*	*$15,244,807*	*$15,462,030*
OIT Costs as a Percentage of Total Revenue	**1.39%**	**2.65%**	**2.92%**	**2.54%**	***4.40%***	***3.13%***	***3.67%***	***4.35%***	***5.14%***
Percent Change of OIT Increase/ Decrease	6.55%	91.22%	13.65%	-13.52%	81.92%	*-26.03%*	*20.00%*	*20.00%*	*20.00%*
Dollar Amount Increase/ Decrease to OIT Costs	$11,193	$165,993	$47,484	- $53,471	$280,150	*$(161,956)*	*$92,034*	*$110,440*	*$132,528*
Percent change Total Revenue	**2.24%**	**0.04%**	**6.25%**	**-3.28%**	***4.92%***	***3.87%***	***2.33%***	***1.42%***	***1.42%***

[1] FY 2014-15 does not match Table 5; calculations in tables 2 and 4 remove the majority-share balance that was transferred to the minority-share limited gaming fund as a result of SB 15-225. These funds were transferred out of the minority share fund balance in the same fiscal year.

[2] FY 2017-18 revenue and beyond is a forecast. For limited gaming revenue, the September 2017 OSPB forecast is used through FY 2019-20, and for FY 2020-21 and 2021-22, a 1% annual increase is used, as per the historical average. For earned revenue, FY 2017-18 includes the Board approved earned revenue number while FY 2018-19 and beyond assume a 2.5% annual increase to earned revenue.

[3] An annual increase rate of 20% is used to forecast FY 2019-2022 for OIT expenses. History Colorado believes this is a conservative assumption as the four year rolling averages of increases to OIT costs is actually 40%.

[4] State Limited Gaming Revenue and Earned Revenue from Museum Operations

HISTORY COLORADO DECISION ITEM: REQUEST

Baseline (FY 2014-15) OIT Costs	$347,961
FY 2018-19 OIT Costs	$460,168
Amount Requested FY 2018-19	**$112,207**
Baseline (FY 2014-15) OIT Costs	$347,961
Estimated FY 2019-20 OIT Costs	$552,202
Estimated Request FY 2019-20 and on-going	**$204,241**

HISTORY COLORADO DECISION ITEM: IMPACT

Minority Share Reserve Fund Balance Comparison: With and Without Decision Item