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COLORADO DEPARTMENT OF  
 **HIGHER  
EDUCATION**

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ACCESS TO HIGH-QUALITY, AFFORDABLE EDUCATION FOR ALL COLORADANS

Performance Contract Review

2002-2010

Colorado School of Mines

Prepared for CCHE Meeting, October 7, 2010

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## Introduction and Purpose of Review

The Colorado School of Mines (CSM) Performance Contract (PC) was negotiated and signed in 2002 by the institution's President and Governing Board Chair and by the Executive Director of the Department of Higher Education (DHE or the Department) and the Chair of the Colorado Commission on Higher Education (CCHE or the Commission). The intent, goals, and sections of the PC were identified in SB01-229 and outlined again in the Colorado Revised Statutes 23-41-104.6, "Performance contract – authorization – operations." Originally, the contract was written to cover the time period of 2002 to 2007 though ultimately it was extended to June 30, 2011 with the first data reporting requirements to start in 2003.

It is important to note, that while the focus of this review is driven by the need to determine if the PC was a useful tool, it is impossible to talk about it without examining actual performance. What we learned about institutional progress on the key indicators defined as state goals is an important part to review, though the substantive intent in examining such progress is to learn how the data and trends were or were not useful to CSM or the Department. How the data were utilized by either the institution or the DHE will be a helpful aspect in determining if the PC was a useful tool.

Since many aspects of the PC are in writing, including legislation and reports from CSM, it was logical to start with a comprehensive examination of all relevant documents. Also, DHE staff were sensitive to limiting any additional burden on CSM or preparation required of it to conduct this review. Dialogue at the October 7, 2010 CCHE meeting will be the opportunity for institutional input.

## Documentation Review for CSM

The following documents were reviewed by DHE staff in their efforts to conduct this review of CSM's PC. Included were:

- SB 01-229 and Senate Joint Resolution 02-024
- C.R.S. 23-41-104.6
- DHE Performance Contract Reporting Guidelines, August 2005
- CSM Performance Contract, signed February 11, 2002
- Performance Contract reports provided by CSM, 2006 and 2010
- SURDS data reports provided by CSM, 2005-2010
- IPEDS reports, 2005-2010
- Budget Data Book reports provided by CSM, 2005-2010
- Communication about the Performance Contract provided by CSM, 2002-2010

## Progress to Date on Specified Goals for CSM

Below is a presentation of the data, both quantitative and qualitative, for the goals established and described in Attachment A of the Performance Contract for CSM, dated February 11, 2002. The goals for CSM are noted in **bold** below. What follows each goal heading is a presentation of the data submitted, showing possible comparison data to SURDS, IPEDS, and/or other DHE data, and other information describing CSM's progress to date.

### **1. STUDENT ENROLLMENT, TRANSFER, RETENTION, AND GRADUATION RATE**

*a. CSM will be a highly selective admission institution. Utilizing the current CCHE admission index, CSM will have an admission index of 110, an admission floor of 100, and an exception "window" of 10% which will be calculated on the number of students admitted, except for up to 20 applicants per year who may be granted a CSM Presidential exemption.*

Prior to the start of the PC, the exception window for CSM was 20% as reflected in the data from 2001, displayed in Figure 1 below. Since 2002, the school has remained a highly selective admission institution with rare use of the window and presidential exemptions.

In 2006, CSM complied with all admission requirements, including maintaining an index of 110 with exceptions limited to 10% of admitted students. Equal treatment of resident and nonresident freshmen and transfer students with respect to admission was also demonstrated during the reporting period. Further, admissions for fall 2003, 2004, and 2005 showed a steady decline in the use of the window for both freshman and transfer students, while nine presidential exemptions were granted for students with index scores below 100 in 2003, two exemptions were granted in 2004, and no exemptions were granted in 2005. Presidential exemptions increased slightly for the years 2006-2009, as indicated in Table 1 below.

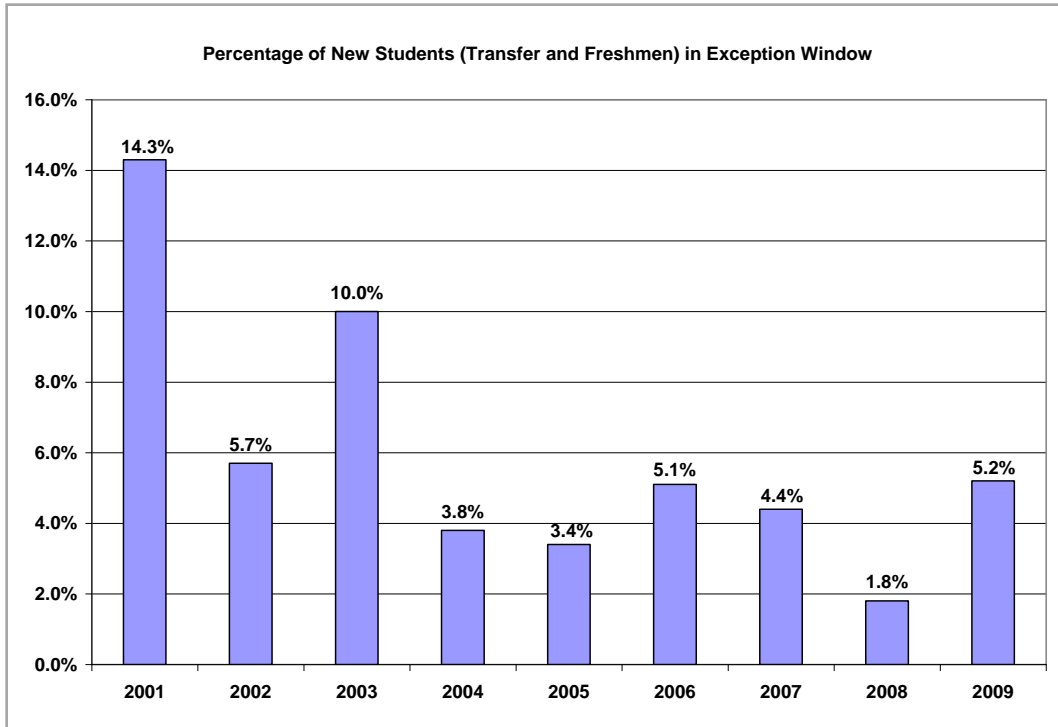


Figure 1. Percentage of New Students in Exception Window

[Data Sources: CSM, Student Information System 2001-06; Banner 2006-09]

Academic Year Beginning Fall	Presidential Exemptions	Academic Year Beginning Fall	Presidential Exemptions
2001	22	2006	3
2002	8	2007	4
2003	9	2008	1
2004	2	2009	5
2005	0		

Table 1. Presidential Exemptions – CSM

[Data Sources: CSM, Student Information System 2001-06; Banner 2006-09]

*b. No more than one-half of the students granted admission utilizing the exception “window” will be nonresident students.*

According to the data provided by CSM, less than half of the students granted admission through the window were nonresidents. Consistently, less than half of the students admitted via the exception window have been nonresidents. See Figure 2 below.

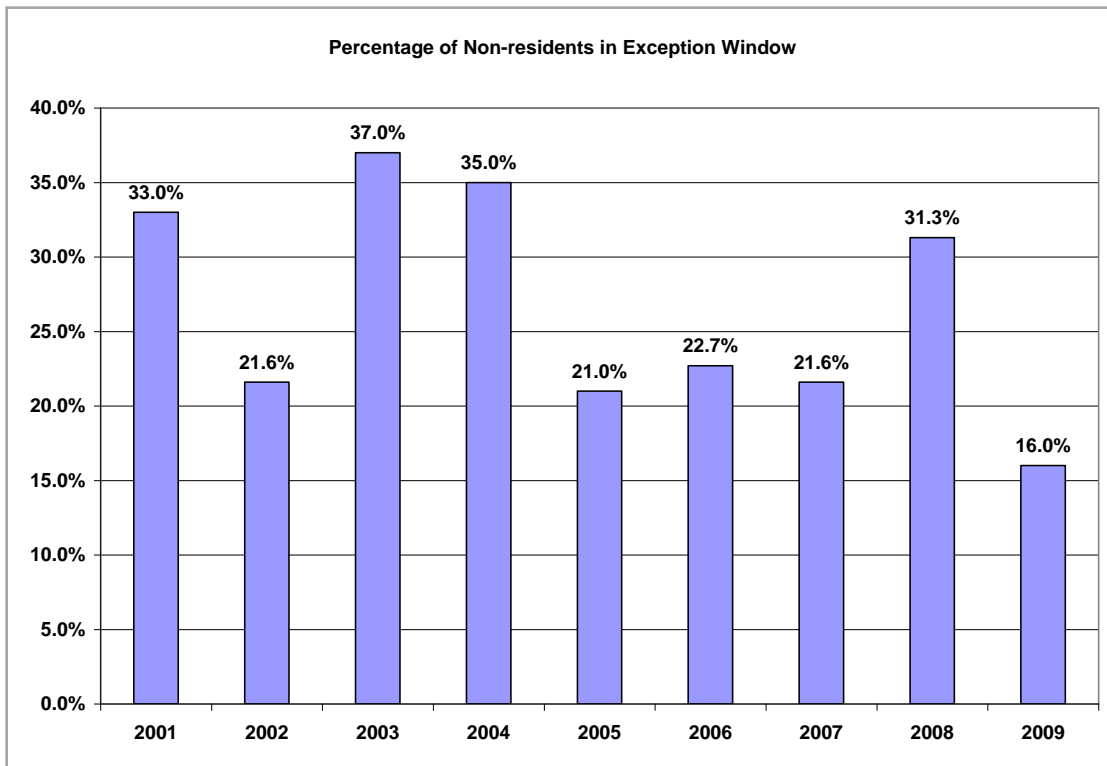


Figure 2. Percentage of Nonresident Students in Exception Window

[Data Sources: CSM, Student Information System 2001-06; Banner 2006-09]

*c. All Colorado high school graduates who meet the minimum admission standards will be admitted.*

CSM has been able to meet this requirement throughout the PC with the exception of a minor modification for fall 2010. The Admissions Office implemented a deadline for applications during the admissions cycle for fall 2010. Qualified prospective students who completed applications prior to this deadline were admitted. Qualified prospective students who completed applications after this deadline were placed on a waiting list. The need to implement the deadline and wait list was driven by capacity limitations that began to impact the quality of the institution. Since fall 2001, enrollment at CSM has increased by 45 percent, and applications have increased 444 percent.

All Colorado high school students who met the following CSM criteria were admitted. Criteria considered in evaluating students for admission include: 1) pattern of course work in high school or college, 2) grades earned in those courses, 3) ACT or SAT scores, 4) rank in class, and 5) other available test scores. No single criterion for admission is used; however, the most important factor is the academic record in high school or college.

The minimum admission requirements for all high school graduates who have not attended a college or university are as follows:

- An applicant must be a graduate of an accredited high school.
- An applicant should rank in the upper third of the graduating class.

- Consideration will be given to applicants below this level on evidence of strong motivation, superior test scores, and recommendation from a principal or counselor.
- Submission of ACT or SAT scores (applicants from U.S and Canada only).
- The following units of secondary work must be completed in grades 9-12:

<b>Course</b>	<b>Units</b>
Algebra	2
Geometry	1
Advanced Mathematics (including Trigonometry)	1
English	4
History or Social Studies	3
Laboratory Science (one unit must be either chemistry or physics)	3
Foreign Language	1
Academic Elective	2

CSM's requirements for high school course work are consistent with the Department's Higher Education Admission Requirements (HEAR) established for spring 2010 high school graduates.

*d. The admission standards for nonresident students will be no lower than the admission standards for Colorado residents.*

According to data reported by CSM, admission requirements identified in the undergraduate catalog were applied equally to both resident and nonresident students; the average index score for freshmen nonresidents was slightly higher than freshmen resident students. Throughout the reporting period of the PC, as displayed in Figure 3 below, average index scores for nonresidents have trended higher than the average scores for Colorado residents. Also, throughout the reporting period of the PC, admission requirements have been applied equally to both resident and nonresident students.

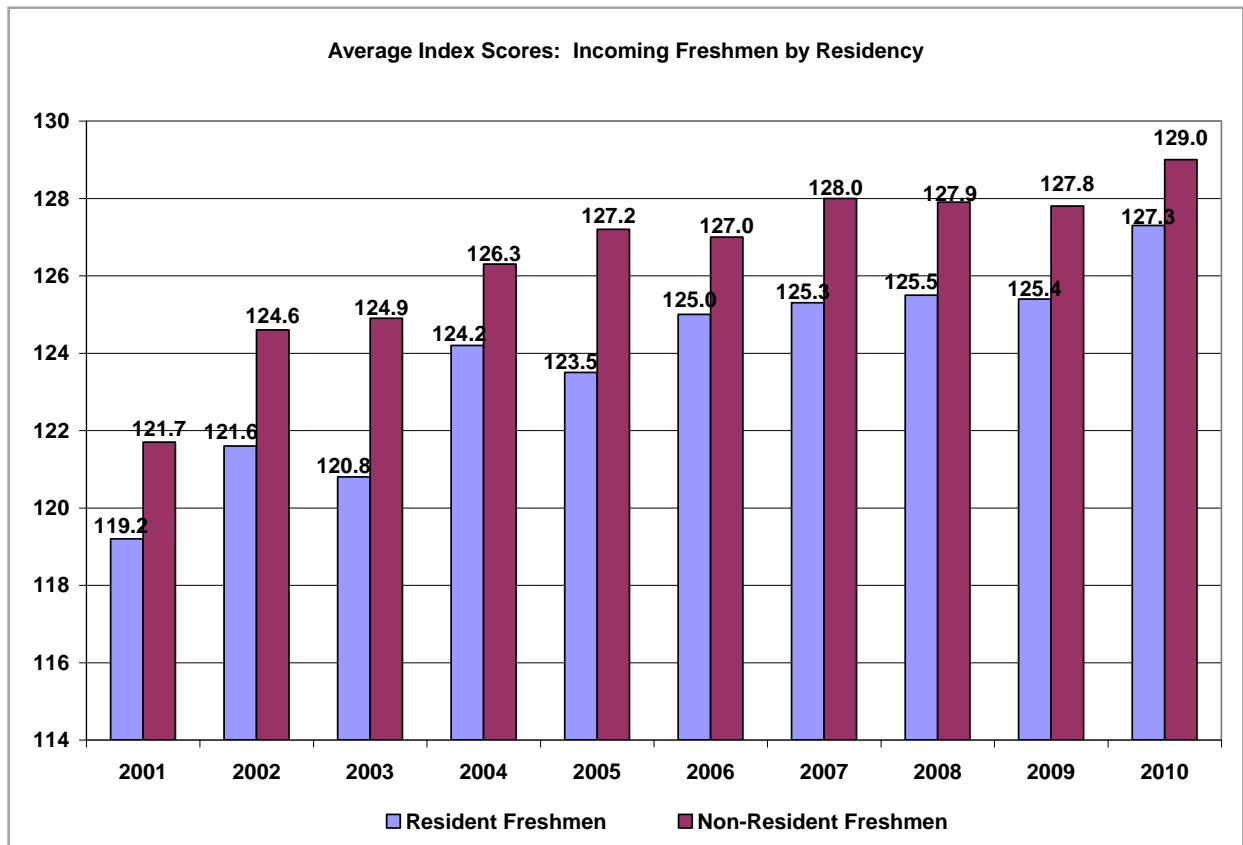


Figure 3. Average Index Scores: Incoming Freshmen by Residency  
 [Data Sources: CSM, Student Information System 2001-06; Banner 2006-09]

*e. CSM will establish minimum transfer admission standards which will be the same for nonresidents and Colorado residents.*

Admission requirements listed in the undergraduate catalog were applied equally to both resident and nonresident transfer students. Most transfer students who completed 12 or more college credits were admitted based on their college GPA. The minimum cumulative GPA for transfer to CSM has fluctuated throughout the PC reporting period from 2.7-2.75 (on a 4.0 point scale).

*f. CSM will maintain current transfer agreements with Red Rocks Community College and will expand transfer agreements to one additional community college by 2004 and will work to expand the transfer agreement to a third community college by 2007.*

CSM established a transfer agreement with Red Rocks Community College in 1999 and continues to maintain and strengthen this partnership. In January 2006, CSM formally established a transfer agreement with Front Range Community College. Since 2002, 216 students from Red Rocks Community College and 29 students from Front Range Community College have transferred into CSM.

A new transfer agreement with Community College of Aurora is being finalized and should be completed by August 2010. The delay was partially caused by CSM changing its undergraduate core curriculum during the past few years. An agreement with Community College of Denver is also in process. In March 2010, CSM appointed two faculty members to manage the maintenance and development of inter-institutional and statewide transfer agreements. CSM is in the process of contacting three additional community colleges to seek interest in developing transfer agreements in 2011.

*g. CSM will maintain at least a 55% five-year graduation rate with a goal of a 60% five-year graduation rate, and will maintain at least a 60% six-year graduation rate with a goal of a 66.67% six-year graduation rate.*

Figure 4 below displays both a five-year and six-year graduation rate for CSM. From the data provided by CSM and DHE’s SURDS data, CSM has met this goal as it has maintained at least a 55% five-year graduation rate. With the exception of the entering class in 1996, CSM has also maintained at least a 60% six-year graduation rate.

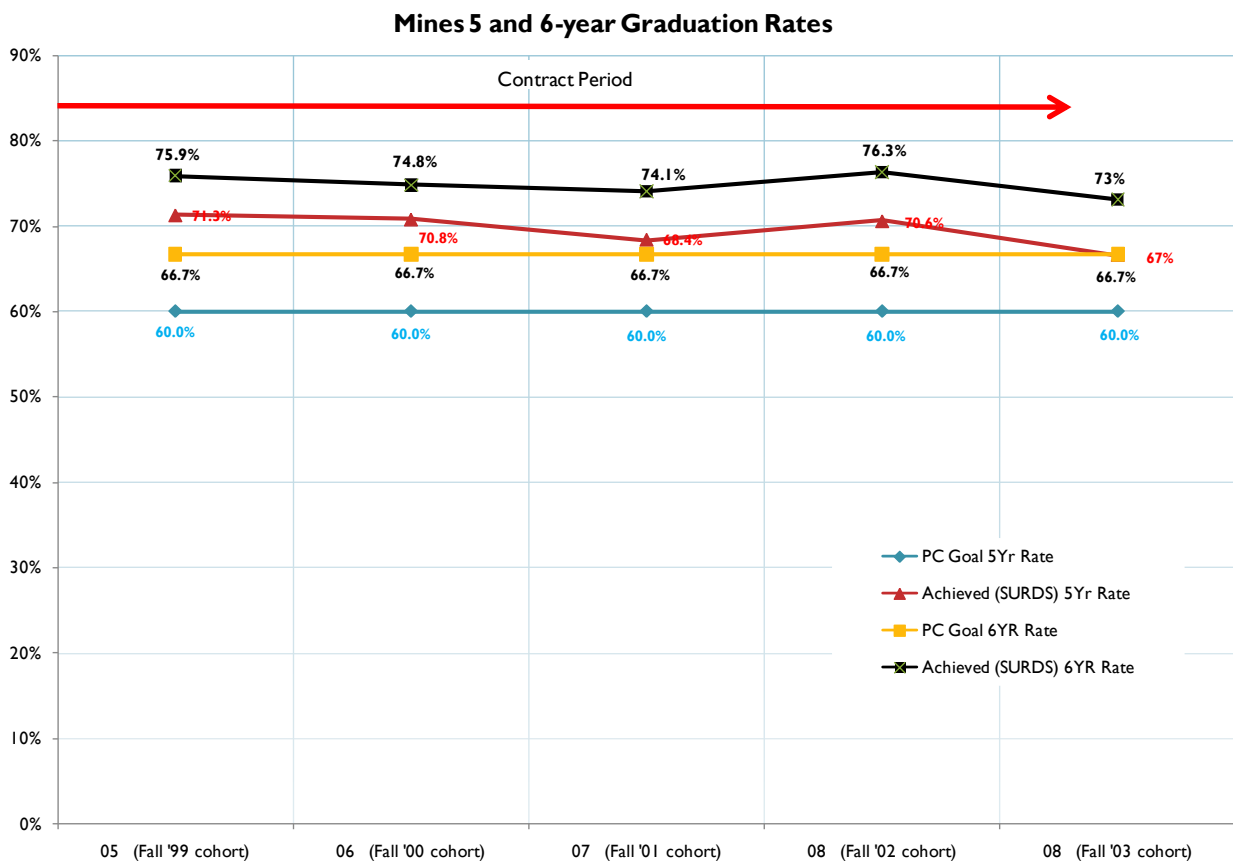


Figure 4. CSM Five- and Six-year Graduation Rates



Note that Figure 5 below begins with the cohort that entered CSM in 1996, the base year for calculating six-year graduation rates for the first year of the PC (2002). Also note that six-year data are not yet available for the 2004 cohort.

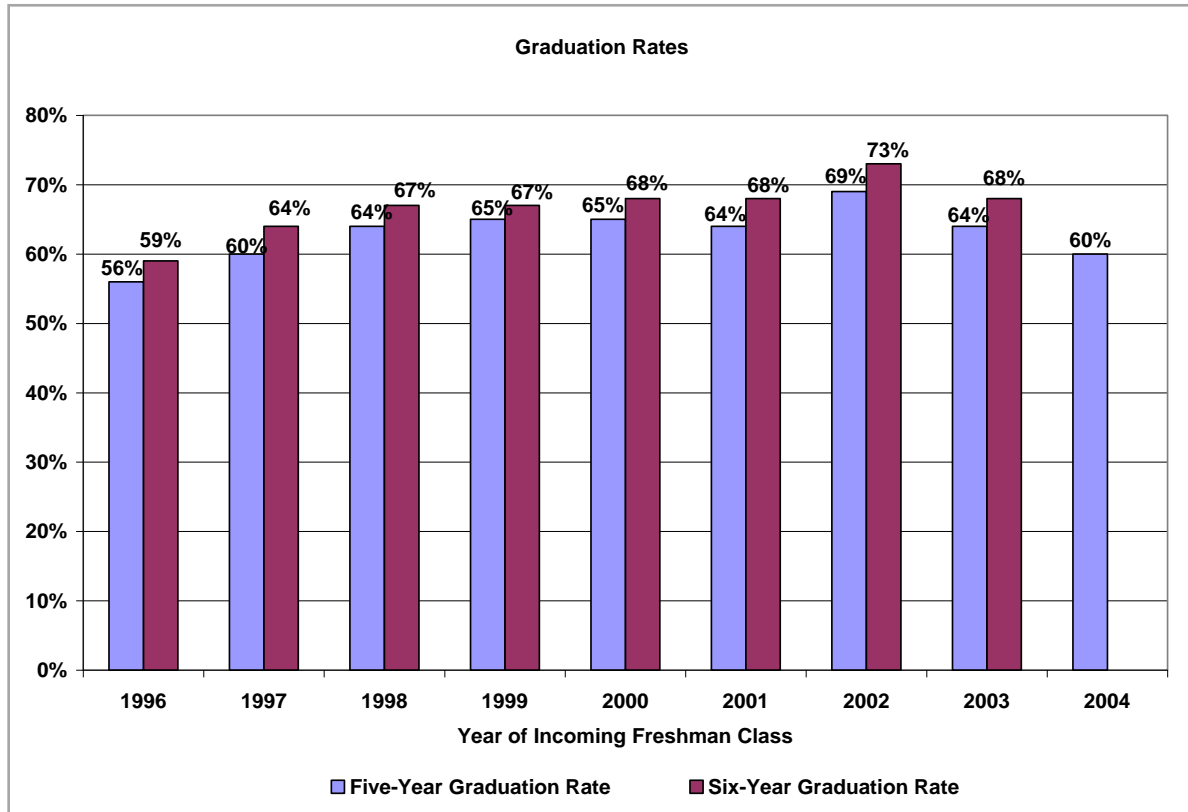


Figure 5. CSM – Graduation Rates

*h. CSM will maintain at least an 80% freshmen retention rate with a goal of a 90% freshmen retention rate.*

Figure 6 below displays data for first-time, full-time (FTFT) freshmen year-to-year retention rates. From CSM's data and DHE's SURDS data, CSM has met the requirement that FTFT be above 80% each year of the contract period. Further, in terms of the stated goal of 90% FTFT freshmen year-to-year retention, the trend data reflect that CSM did meet this goal in the last, most recent year.

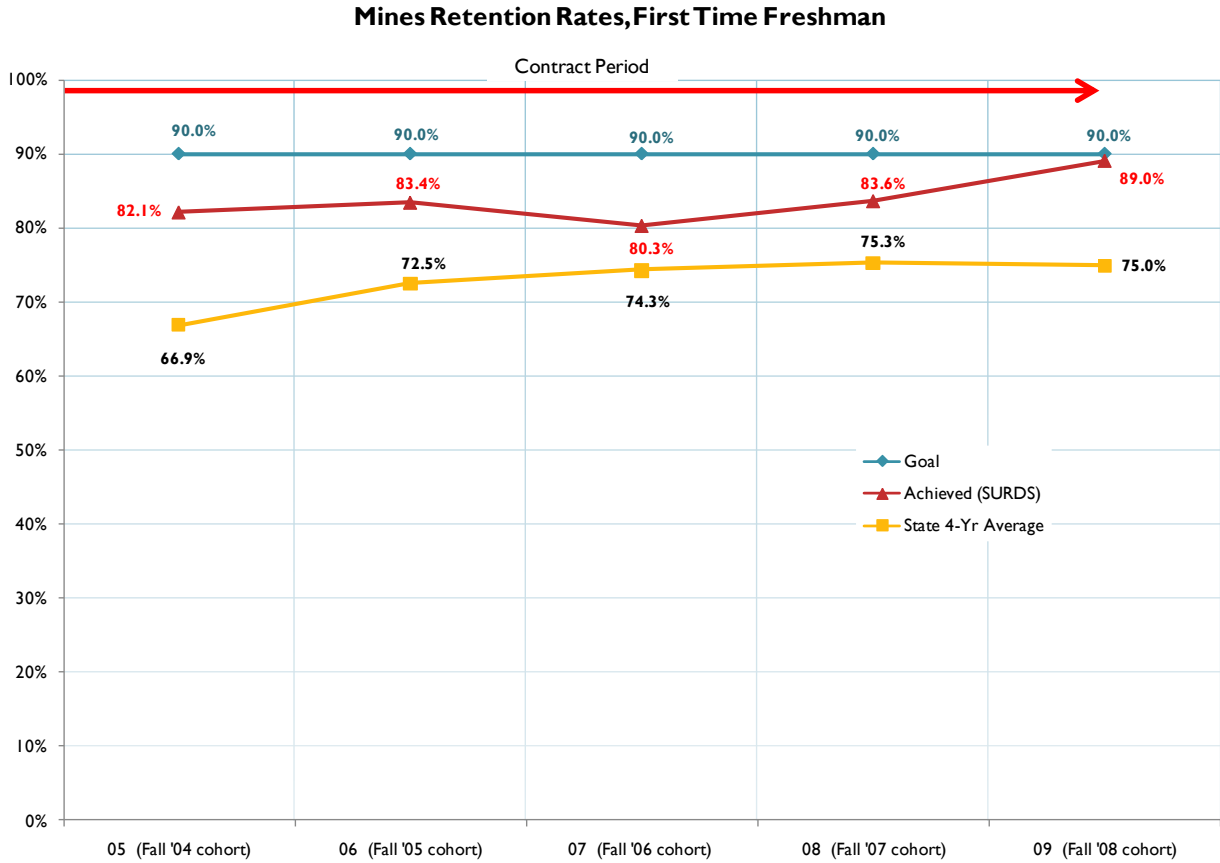


Figure 6. CSM – Retention Rates, First-Time Freshman

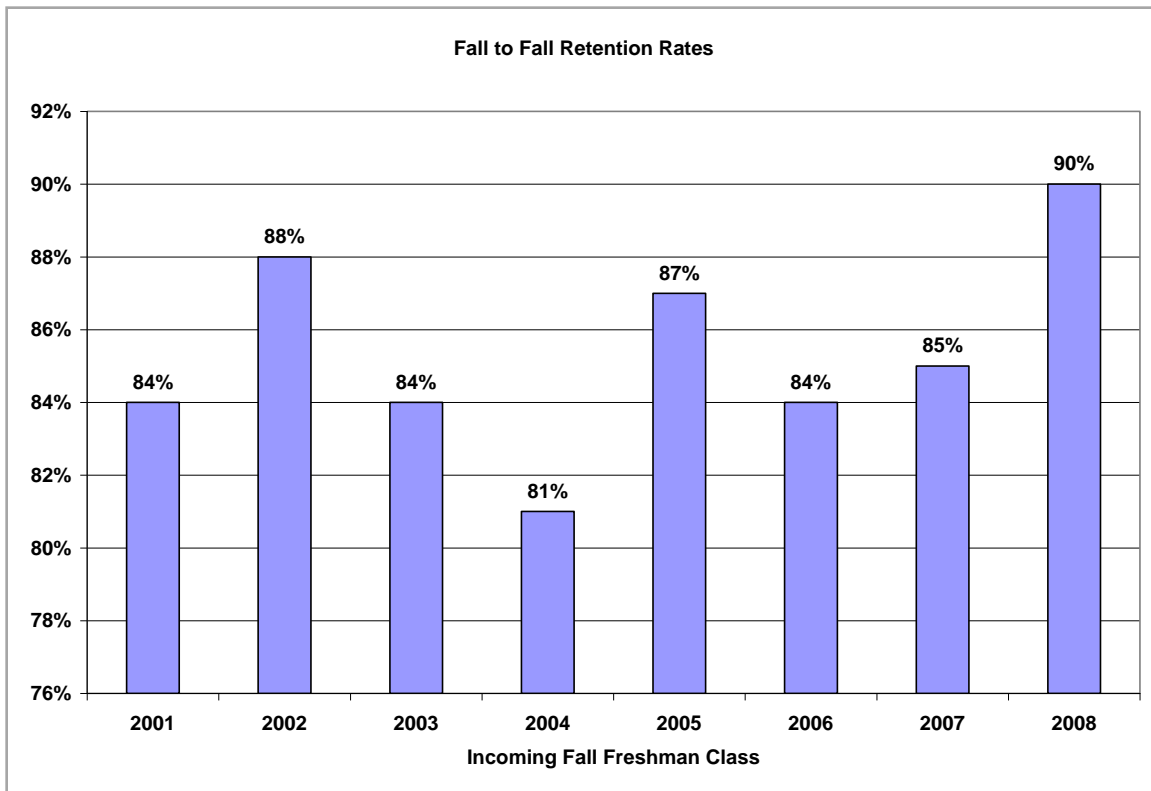


Figure 7. CSM – Fall-to-Fall Retention Rates  
 [Data Source: CSM Graduation and Persistence Reports]

**2. PROGRAMS SPECIFICALLY DESIGNED TO ASSIST STUDENTS IN ACHIEVING THEIR ACADEMIC GOAL**

*a. CSM will maintain its freshmen-mentoring program consisting of one mentor per 10-12 students.*

According to data reported by CSM, CSM has maintained and expanded the freshmen mentoring program during the course of the PC. This program is facilitated through the freshman success seminar (CSM 101, 0.5 credit hour course). Originally, each section of CSM 101 had one faculty or staff instructor/mentor per 11 students. Later, an upper-class student “peer mentor” was added so that each section was taught by a faculty and student mentor. A 2-year pilot effort to address programmatic and curricular changes began in 2009. This pilot program further expanded mentorship so that currently, CSM 101 is taught by a faculty or staff instructor/mentor and two peer mentors, per 25 students. In addition, each student is assigned a first-year faculty advisor who works in conjunction with a specific CSM 101 section. The institutional curriculum committee will consider the effectiveness of changes next year.

*b. CSM will continue career awareness programs beginning at the freshmen level.*

Career Day, informational interviews, resume writing, and career investigation are presented in CSM 101. Beginning with the first semester of attendance at CSM, students are required to do the

following: attend Career Day; write a resume and upload it into DiggerNet, the campus online job posting and employer search system; formulate academic and career goals and present their short-term and long-term goals critically in essay form. They are strongly encouraged to attend a “How to Use DiggerNet” workshop, presentations on various academic majors, and employer-lead career workshops.

*c. CSM will continue specific programs to assist students. These may include: Honors, EPICS, Tutoring, Field Sessions, Counseling, Student Activities, and International Students Program.*

According to CSM, all of these programs continue to be in place. Information about these programs is available through the undergraduate student bulletin, the CSM website, and the freshman success seminar. Several programs have expanded, including: Academic Services and Counseling/Health/Wellness Services. Additional educational programming enhancements have been added, particularly in the area of academic minors. Previously, the McBride Honors Program (<http://mcbride.mines.edu/McBride>) was the primary distinctive minor offering at CSM. Examples of new programs developed in the past eight years include: Bioengineering and Life Sciences (BELS); the Energy Minor; and the Humanitarian Engineering Minor.

*d. Changes to any of these above-mentioned programs will be discussed with CCHE prior to any changes being implemented.*

The philosophy of the programs at CSM designed to assist students has not changed during the life of the PC. Additional services and programs have been added as illustrated above.

### **3. STUDENT PERFORMANCE ON NATIONAL EXAMINATIONS**

*a. CSM will annually administer the Fundamentals of Engineering examination after undertaking efforts to increase student participation in this examination. A passing rate of at least 90% will be the goal.*

Overall pass rates continue to be strong on the Fundamentals of Engineering (FE) assessment; they are at or above the 90% rate required in the PC and well above national averages. However, in two out of six reporting terms, the FE scores were below the goal of a 90% pass rate. Considerable analysis was done on the FE test data and specific subject areas within the test were identified as areas needing further attention. Efforts to increase student participation in the exam were successful. The percentage of eligible students taking the exam has increased in recent years. Further, senior students within one year of graduation from an ABET-accredited program within the United States may take the FE exam during their final year. At CSM, students enrolled in Chemistry, Mathematics, and Economics are not eligible to take the exam. Participation from 1996 to 2004 averaged 58%, while 72% of the eligible students at CSM took the two most recent exams.

With the drop in the pass rate of CSM students that occurred in October 2005 (77%), the school conducted a study to determine the cause. The decrease in the CSM pass rate was found to be due

to an increased level of difficulty in the exam questions along with changes in the exam composition. Since 2005, faculty have worked to prepare students for what is essentially a different test than what was previously being administered. Pass rates have increased accordingly, ranging from a low of 83% to a high of 91% with last fall's (2009) administration of the exam.

It is worth noting that CSM pass rates have tracked an average of 11 percentage points higher than national pass rates regardless of year-to-year changes in performance. Specifically, between October 1996 and April 2005, the national pass rate was 80.2% and the CSM pass rate was 91.5%. Between October 2005 and October 2008, the national pass rate was 73.4% and the CSM pass rate was 84.9%. This consistent level of performance above the national pass rate is an indicator of the quality of the exam preparation, as well as the academic programs in engineering at CSM.

*b. CSM will encourage appropriate graduating students to participate in the Graduate Record Examination. CSM and CCHE will jointly determine appropriate score levels for measuring institutional performance.*

The number of students taking the Graduate Record Exam (GRE) has increased from 44 in 2000-01 to 93 in 2008-09. The orange line in Figure 8 below indicates average national scores on the verbal component of the GRE, while the green line indicates average national scores on the quantitative portion of the test. CSM average scores remain above the national average.

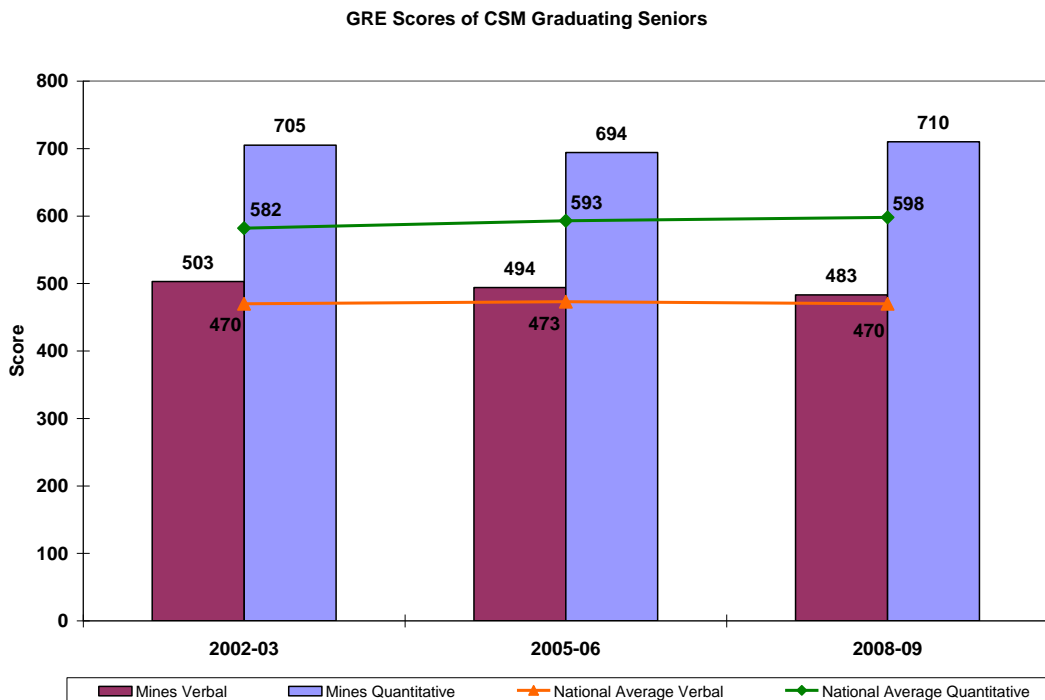


Figure 8: GRE Scores of CSM Graduating Seniors  
 [Data Source: Graduate Record Examination Summary Statistics Report]

*c. CSM will investigate the use of major field tests and examinations for graduating students in non-engineering fields and report on its investigation to CCHE. For those major field test and examinations selected by CSM, CSM and CCHE will jointly agree to appropriate passing rates and/or score levels for measuring institutional performance*

To date, no examination comparable to the Fundamentals of Engineering, besides the GRE, has been found for non-engineering majors.

*d. The results of all national tests and examinations will be made available to CCHE.*

Results are provided through CSM's PC reports and as requested by CCHE.

#### **4. STUDENT SATISFACTION**

*Every year, CSM will administer either a senior student exit survey or a survey of alumni. Consistent with the schedule of its primary professional accreditation organization (ABET), CSM will administer a nationally normed student satisfaction survey (e.g., Noel-Levitz). To the extent possible, these surveys will be by individual degree program. The results of the surveys will be made available to CCHE as part of the ABET accreditation review process.*

CSM utilizes the National Survey of Student Engagement (NSSE) as its national student satisfaction survey, and has done so since spring 2003. The second and third administration of this survey occurred in 2006 and 2009, providing an opportunity to assess change from the initial 2003 baseline data. The decision to have a three-year cycle for the NSSE was due in part to staffing, and a desire to become proficient with its administration since it was a very new instrument at the time the PC began. Going forward, CSM plans to implement NSSE annually. The survey was chosen because it broadly addresses student satisfaction, as well as institutional effectiveness – areas central to all of CSM's academic programs, especially the ABET (Accrediting Board of Engineering and Technology) accredited programs. Data from the first administration of the NSSE were used to compare CSM to peer institutions (in terms of academic intensity), and also to inform CSM administrators regarding institutional changes, including infrastructure, campus culture and climate, and issues regarding institutional curriculum.

Across all years, freshmen rated their experience at CSM more positively than seniors did, but all scores were within the "good" rating. Both subgroups rated their experiences lower in 2006 in comparison to students surveyed in 2003 and 2009. In comparison to Carnegie peers, freshmen CSM students rated their experience higher in all years, with the most significant difference in 2009. Seniors at CSM rated their experience as slightly better than seniors at Carnegie peer institutions in all years but 2006. All group scores fell within the "probably yes" category in answer to whether they would choose CSM again. Freshmen reported the strongest level of confidence in their decision to attend CSM in 2009, which was also significantly stronger than their Carnegie peers for that year. Seniors also reported a higher level of confidence in having chosen CSM in 2009 compared to previous years, although their confidence was lower in comparison to Carnegie peers across all years of the survey.

The STAMATS, Inc. survey was also administered. In 2004-05, a CSM community-wide survey was conducted to determine the opinions various audiences have of CSM, including strengths and weaknesses. Alumni were a significant population (1656) among those surveyed. Eighty-five percent rated the school as “good to excellent.”

In 2009, another survey of alumni was conducted: The Electronic Alumni Survey – Miller Group Worldwide, LLC – 2009. One question in the survey asked “What is your overall regard for the Colorado School of Mines?” Seventy-five percent of respondents who were also members of the Alumni Association reported very positive regard, while 58% of non-members of the Alumni Association reported very positive regard.

Overall, these data presented important feedback to CSM regarding student satisfaction and alumni perceptions of the institution. Students and alumni regard the institution mostly in a positive light, but there are opportunities for improvement. Some recent projects that are focused on improving the student experience at CSM include: The First Year Experience Project, Creation of a Residential Campus, and Academic Improvements (including the revision of CSM’s core curriculum).

## **5. STUDENT PERFORMANCE AFTER GRADUATION**

*Twice every six years, a survey of employers will be conducted regarding their assessment of the quality of CSM graduates and programs. The results of this survey will be made available to CCHE.*

A combined recruiter/employer survey was conducted in 2003-04. Employer ratings of “knowledge in the student’s field” and “general knowledge” were all positive; particularly strong ratings were given in “knowledge in the student’s field.” The six areas of knowledge in the student’s field all showed scores of strong or better. Responses in the five areas of general knowledge were a little lower with all responses showing an above average to strong score. The results were especially useful for CSM officials, as the skills assessed in the survey parallel the skill sets evaluated by ABET. The results provided support for the accreditation process during spring 2006. An institutionally-administered employer survey is scheduled for 2010.

The Engineering Division conducted a survey of employers for the purposes of ABET accreditation last spring (2009). Employers were asked to rate CSM engineering students on a variety of objectives compared to graduates at the same level of experience from other institutions. CSM students were rated better than students from other programs in several areas, but seemed to have particularly strong ratings in the application of their knowledge of math, science, and engineering, as well as in identifying, formulating, and solving engineering problems.

Finally, the CSM Career Center recently began to gather employer perceptions of student preparation from Career Fair recruiters. In response to the statement, “Students are academically prepared for the needs of our company,” employers’ average ratings of CSM students were 4.39 out of 5 (fall 2009) and 4.44 out of 5 (spring 2010).

Overall and across several surveys, it is clear that employers generally regard CSM students and their academic preparation as high quality.

## **6. ASSESSMENT OF THE QUALITY OF ACADEMIC PROGRAMS**

*a. CSM will maintain accreditation by ABET. CCHE will support efforts to maintain ABET accreditation. CSM staff will request that ABET agree that CCHE staff may observe the ABET accreditation process. The results of ABET reviews will be available to CCHE upon request.*

CSM renewed their ABET accreditation in 2001 and 2006. The next ABET accreditation visit is scheduled for 2012. The new program in Chemical and Biochemical Engineering had an accreditation visit in 2009. CSM will learn the outcome of that visit in August 2010.

*b. At least every three years, each academic program will be reviewed by an External Visiting Committee. CSM will notify CCHE of these reviews and provide the opportunity for a CCHE staff person to be an observer of the review. Reports of these reviews and the response of the CSM Board of Trustees will be made available to CCHE.*

Since the last PC report from CSM, the following programs have been reviewed: Physics, Library, Geophysics, Chemical Engineering, Mining Engineering, Geology and Geological Engineering, Metallurgy and Materials Engineering, Economics and Business, Environmental Science and Engineering, and the Material Science Program.

As of August 2010, future scheduled visits include: Chemistry and Geochemistry, Petroleum Engineering, Chemical Engineering, Economics and Business, Engineering, Mathematics and Computer Science, and Liberal Arts & International Studies.

*c. At least 90% of bachelor degree recipients will either enroll in graduate school or be placed in a job directly related to their course of study within one year of graduation. Graduates entering military service will be considered as being placed. During times of national economic downturns, achievement of this level of placement may not be possible.*

Placement/outcome rates have met or exceeded 90% for all years of the PC, even in times of economic downturn. Placement/outcome rates represent four factors: employment rate; graduate and professional school rate; international students returning to their home countries; and those graduates not seeking employment.



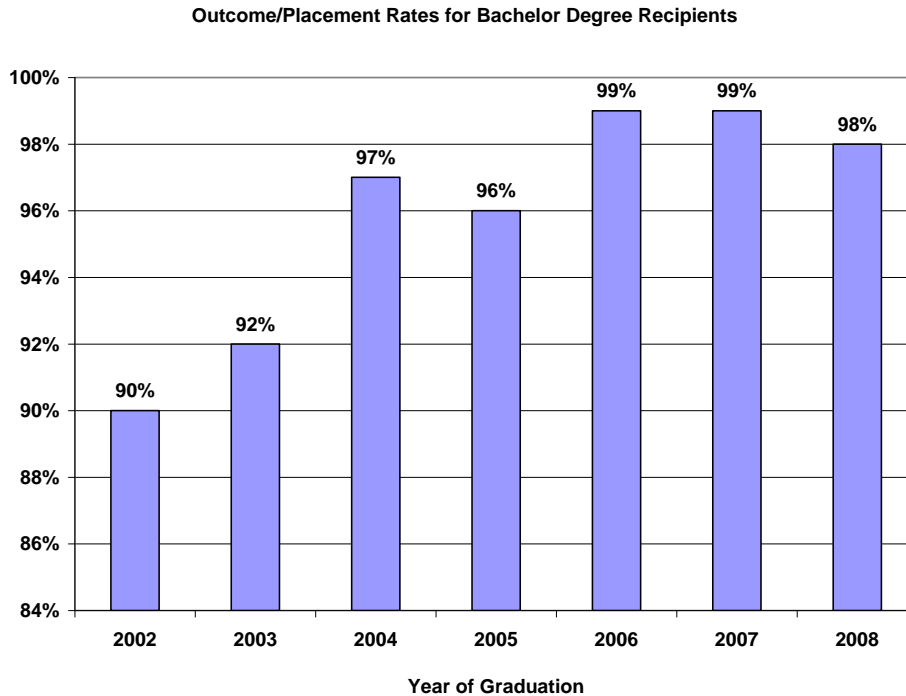


Figure 9. Outcome/Placement Rates for Bachelor Degree Recipients  
 [Data Source: Career Center Annual Reports]

*d. CSM will survey recruiters who come to the CSM campus regarding their perspective of the quality of CSM academic programs. The results of this survey will be made available to CCHE as part of the ABET accreditation review process.*

Survey data have been highlighted previously in Section 5 of this PC report.

## **7. 120 CREDIT LIMITATIONS FOR ACADEMIC DEGREE PROGRAMS**

*CSM will be exempted from 120 credit limitations for those academic degree programs where accreditation standards and requirements result in graduation requirements exceeding 120 credits.*

CSM continues to evaluate its curriculum to maintain relevance and quality while also ensuring efficiency for students to complete degree requirements. Since 2002, CSM has reduced credit hour requirements for each of its bachelors of science degrees, including hour reductions in degree requirements for: Chemical Engineering (by 3 hours), Chemistry (by 4 hours), and 13 additional degree programs which have all been reduced significantly (in required credit hours).

## **8. GENERAL EDUCATION COURSE COMPETENCIES (HB 1263)**

*CSM will participate in general education course competencies as outlined in HB 1263.*

CSM participates in general education guaranteed transfer courses (gtPathways). Two courses from CSM were added in January 2004, in addition to those established in 2003 for a total of seven

courses by 2006: Calculus for Scientists and Engineers I, II and III; Physics I and II; and Chemistry I and II.

Additionally, CSM was an active participant in the creation of the Statewide Engineering Articulation Agreement in 2003, as well as the revision in 2009. Also, two CSM faculty were appointed recently to manage the development and maintenance of specific inter-institutional articulation agreements and represent CSM at state-wide articulation meetings as well as on the GE 25 Council.

## **9. FACILITIES MASTER PLAN AND CAPITAL CONSTRUCTION**

*Prior to July 1, 2003, CSM will provide CCHE with a facilities master plan. Once the Master Plan has been reviewed and approved by CCHE, all CSM self-funded capital construction projects included in the approved Master Plan will be authorized to proceed after CSM Board of Trustees review and approval.*

A previous master plan was completed and approved by CCHE and can be accessed at <http://www.is.mines.edu/plant> under Planning and Construction and Campus Master Plan. Currently, a new master plan is under development. Presuming approval by CSM's Board of Trustees in September 2010, the new plan will be in place shortly thereafter.

CSM provided a facilities master plan to the CCHE as required by this section. However, substantial statutory changes were implemented by the General Assembly in the years since this requirement. Specifically, HB08-1205, SB09-290, SB10-094, and SB10-003 have all adjusted the capital assets statute in different ways.

The Department staff and CSM capital assets staff maintain communication on state and cash funded projects in accordance with current statutory requirements. CSM complies with statutory and CCHE policy on capital matters.

## **10. INCREASING FINANCIAL SUPPORT**

*a. During the five-year term of this performance agreement, CSM will strive to increase the size of its endowment to a level that brings CSM to be one of the top ten public higher education institutions with an endowment measured by endowment dollars per SFTE.*

According to the data provided by CSM, the 2006 fundraising campaign raised \$132 million in new gifts and commitments, of which \$61 million was designated for endowment. The school and the CSM Foundation are in the early stages of preparation for its next fundraising campaign in which significantly increasing the school's endowment will be a major priority.

Further, CSM indicates, that despite the increase of new gifts, the CSM endowment per SFTE ranks 25<sup>th</sup> among public institutions. A number of factors contributed to not reaching the goal of being in the top ten. First and foremost is that institutions ranked above CSM are also actively raising

endowment dollars. Secondly, during this period the school experienced a 47% increase in SFTE which impacted the calculation of CSM's ratio.

Data on endowments per SFTE are provided to the IPEDS database maintained by the US Department of Education. CSM has annually supplied the relevant information to this entity. CSM has made substantial progress in growing their per SFTE endowment during the contract period.

*b. During the five-year term of this performance agreement, annual sponsored research at CSM will increase. During times of economic downturns, this goal may not be achieved.*

As noted in Figure 10 below, research awards and expenditures have steadily increased since 2001, with a more dramatic rise in FY 2008 and FY 2009. Since 2001, research awards have increased 84%, and expenditures have increased 75%.

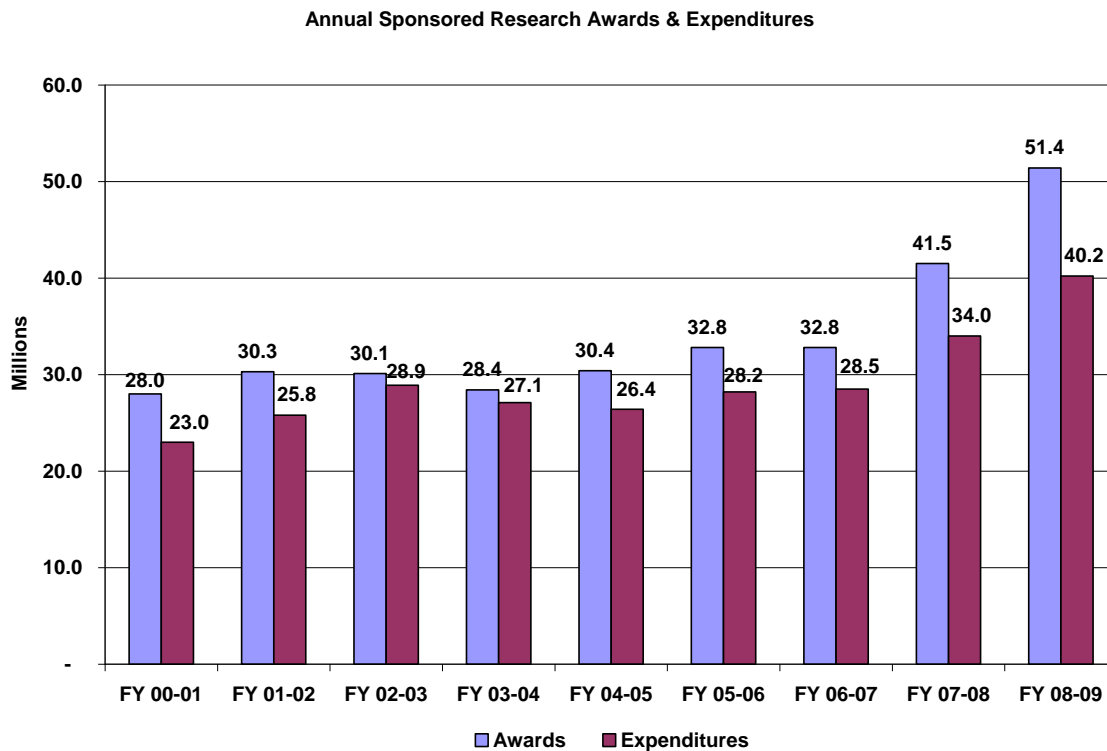


Figure 10: Annual Sponsored Research Awards & Expenditures  
 [Data Source: CSM Office of Research Administration]

There has been a significant economic downturn and slow recovery since 2008 that has impacted the ability of CSM to complete this goal but the annual Budget Data Book (BDB) shows that sponsored research has increased. CSM is considered to have satisfied this goal despite the economic downturn.

*c. During FY 2002-03, for graduate students at CSM, each 27 credit hours generated will be counted as one SFTE. The graduate SFTE used for the initial conversion from 30 credits to 27 credits will be the FY 2000-01 graduate SFTE.*

Beginning in summer 2002, this change had been implemented through the enrollment reports to CCHE. In July 2009, DHE staff requested that CSM's calculation return to 30 credit hours as one SFTE in order to allow for their data collection system to operate without significant modifications. CSM agreed to this change provided that 27 credit hours be used for any funding calculations during the contract period.

There was no data reporting requirement for this section. This section is an internal calculation done by CSM. The Department continues to utilize 30 credit hours as the basis for one SFTE to provide consistent comparisons with other state institutions.

## **11. COMMITMENT TO STUDENT FINANCIAL AID**

*a. CSM will continue to increase financial aid for all students.*

Through the budget process, the Trustees have approved increases specifically for financial aid. This money is allocated for grants and scholarships from CSM's E&G funds.

On the macro level, data on financial aid are reported in the annual BDB. On the micro level, institutions report financial aid to the Department in other formats. CSM has made substantial efforts to increase financial aid available for all students despite the economic downturn and limitations of state funding. According to data reported in the SURDS financial aid files, the institutional aid paid by CSM has more than doubled from FY 2002 through FY 2009.

*b. Unless there is a significant decrease in State and Federal funding of financial aid, CSM will maintain the level of funding for financial aid for students at no lower than the FY 2001-02 level of \$8,850,000.*

CSM has made substantial efforts to increase financial aid available for all students despite the economic downturn and limitations of state funding. According to data provided by CSM, it has more than doubled the financial aid made to all students from FY2002 through FY2009. Financial aid awards have exceeded \$8,850,000 each year of the PC.

*c. CSM will increase the level of financial aid for resident students during each year of the term of this performance agreement consistent with the annual level of increase in resident tuition and state financial support.*

As previously noted, CSM has made substantial efforts to increase financial aid available for all students despite the economic downturn and limitations of state funding. CSM has increased the financial aid made to all students from FY 2002 through FY 2009. Standard CSM practice requires 15% of the tuition revenue increase be dedicated to financial aid. CSM has complied with the 15% policy during the course of the PC, and in most years allocated additional funding to financial aid

for students. CSM has used this policy to increase expenditures in financial aid for resident students in line with the annual tuition rate increases.

**12. BLOCK GRANT OF GENERAL FUND AND RELATIONSHIP TO RESIDENT ENROLLMENT**

*The level of the block grant of general fund to CSM will not change, except for annual inflationary adjustments as measured by the Denver-Boulder CPI, as long as CSM’s resident SFTE remains within a range of +/- 2% of CSM’s FY 2001-02 resident SFTE. If resident SFTE for any fiscal year of the term of this performance agreement increases or decreases more than 2%, the level of the block grant of general fund to CSM will be renegotiated by CSM and CCHE and communicated to the JBC.*

When Senate Bill 189 passed in 2004, state funding for higher education in Colorado changed dramatically. The legislation created the College Opportunity Fund and Fee for Service agreements as the primary methods by which colleges and universities would receive state financial support. At that time, the section in statute which had established the block grant referenced in Item 12 was repealed. Annual funding increases are developed by examining a number of criteria, particularly the NCHEMS funding analysis. The Department attempts to honor this provision; however, the past two fiscal years have primarily focused on cuts to base funding levels. The Department will continue to strive to fulfill this provision when funding sources are adequate to permit funding increases.

**13. TUITION RATES**

*a. The CSM Board of Trustees may recommend an annual increase in the resident rate of tuition up to but not exceeding twice the rate of Denver-Boulder Consumer Price Index. CSM will provide to CCHE, the JBC, and the Education Committees its recommendation for the resident rate of tuition by February 15 of each year of the term of this performance agreement.*

The Board of Trustees submitted their recommendations for resident tuition rates by February 15 each year of the PC.

The Bureau of Labor Statistics (BLS), a division of the US Department of Labor, regularly releases data on the Consumer Price Index (CPI) for the Denver-Boulder-Greeley statistical area. This information is provided below from 2004 through 2009. The Department annually collects the Tuition and Fee Survey from all institutions. CSM has annually supplied all information requested.

	2004	2005	2006	2007	2008	2009
<b>CPI</b>	187.0	190.9	197.7	202.0	209.9	208.5
<b>Change</b>	0.10%	2.10%	3.60%	2.20%	3.90%	-0.65%

Table 2. CSM – Consumer Price Index

	<b>FY 2005-06 Tuition (30 CHRS)</b>	<b>FY 2006-07 Tuition (30 CHRS)</b>	<b>FY 2007-08 Tuition (30 CHRS)</b>	<b>FY 2008-09 Tuition (30 CHRS)</b>	<b>FY 2009-10 Tuition (30 CHRS)</b>
<b>Resident</b>	\$7,248	\$7,852	\$8,959	\$9,810	\$10,590
<b>% Increase over prior year</b>	14.4%	8.3%	14.1%	9.5%	8.0%

Table 3. CSM – Tuition (Resident)

	<b>FY 2005-06 Fees (30 CHRS)</b>	<b>FY 2006-07 Fees (30 CHRS)</b>	<b>FY 2007-08 Fees (30 CHRS)</b>	<b>FY 2008-09 Fees (30 CHRS)</b>	<b>FY 2009-10 Fees (30 CHRS)</b>
<b>Resident</b>	\$896	\$983	\$1,286	\$1,429	\$1,654

Table 4. CSM – Fees

CSM continues to utilize a single tuition rate for resident undergraduate students instead of tuition differentials. The Governing Board has been in annual contact with the Department and the Joint Budget Committee (JBC) regarding tuition spending authority. As can be seen, CSM has regularly exceeded the specified “twice the rate” CPI rate; however, the JBC and the Governor have annually specified in the Long Bill by what percentage Governing Boards may raise their tuition. It is regularly above CPI. Therefore, while CSM is deemed to not be in compliance with the terms of the PC, they are in compliance with statutory restrictions placed upon them by the JBC.

*b. The CSM Board of Trustees may recommend annually a nonresident rate of tuition. This recommendation shall be made to CCHE, the JBC, and the Education Committees by February 15 of each year of the term of this performance agreement.*

The Board of Trustees has submitted their recommendations for nonresident tuition rates by February 15 each year of the PC. The Department annually collects the Tuition and Fee Survey from all institutions. CSM has annually supplied all information requested.

	<b>FY 2005-06 Tuition (30 CHRS)</b>	<b>FY 2006-07 Tuition (30 CHRS)</b>	<b>FY 2007-08 Tuition (30 CHRS)</b>	<b>FY 2008-09 Tuition (30 CHRS)</b>	<b>FY 2009-10 Tuition (30 CHRS)</b>
<b>Nonresident</b>	\$19,830	\$20,340	\$21,750	\$23,820	\$24,750
<b>% Increase over prior year</b>	3.1%	2.6%	6.9%	9.5%	3.9%

Table 5. Tuition – Nonresident

CSM continues to utilize a single tuition rate for nonresident undergraduate students instead of tuition differentials. The Governing Board has been in annual contact with the Department and the JBC regarding tuition spending authority. The Governing Board is therefore considered to be in

compliance. Specialized fees are the same for resident and nonresident students; they are outlined in the Tuition and Fee Survey and align with CCHE policy.

**14. CREATION, MODIFICATION, OR ELIMINATION OF ACADEMIC DEGREE PROGRAMS**

*a. For any new academic degree program, CSM will provide to CCHE a copy of the discussion paper given to the CSM Board of Trustees for the meeting when the proposal is first discussed, but not acted upon by the Board. CCHE may respond to the discussion paper before the next regularly scheduled meeting of the CSM Board of Trustees at which time the proposal will be scheduled for action by the Board of Trustees. CCHE's response will be limited to the proposed program's consistency with the role and mission of CSM. No new academic degree program will be approved or implemented if CCHE determines the program is inconsistent with CSM's role and mission. CSM will report to CCHE any proposed modification in existing academic degree programs at the time that the proposed modification is presented to the CSM Board of Trustees for initial discussion. CCHE may respond to the proposed modification before the next regularly scheduled meeting of the CSM Board of Trustees at which time the proposed modification will be scheduled for action by the Board of Trustees. No program modification will be approved or implemented if CCHE determines that the changes are inconsistent with CSM's role and mission.*

Several new degrees designated as Professional Masters (and one Ph.D. program) were established and put in place during 2002-2007, including: Petroleum Reservoir Systems – Professional Master's; Environmental Geochemistry – Professional Master's; Mineral Exploration and Mining Geosciences – Professional Master's; International Political Economy of Resources – Professional Master's; Hydrology – Master of Science and Ph.D. Since 2007, two additional programs were added: Chemical and Biochemical Engineering – Undergraduate Bachelor of Science, and Nuclear Engineering – Master of Science and Ph.D. All new programs were reviewed by CCHE and found to be within the institution's role and mission.

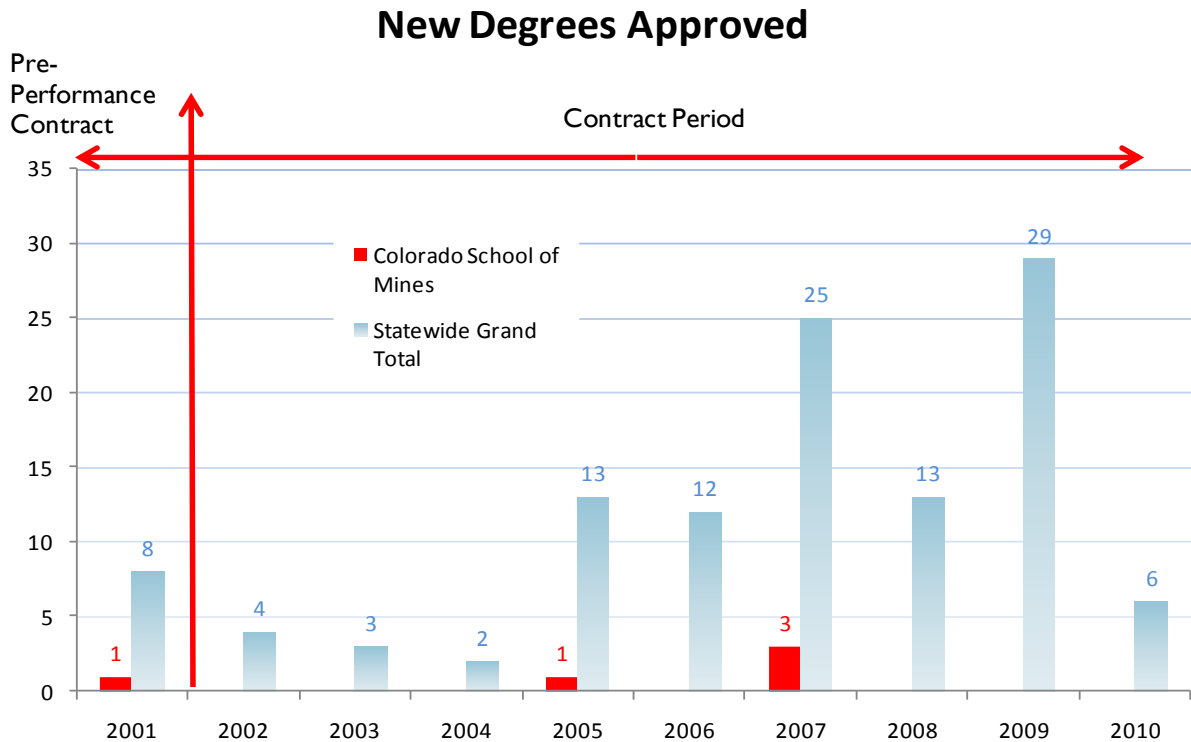


Figure 11. CSM – New Degrees Approved

#### 15. QUALITY ASSURANCE ACT (QIS)

*CSM and CCHE are committed to accountability and to providing the public with information regarding the performance of CSM. Although, CSM is exempt from the requirements associated with the Quality Assurance Act (QIS), CSM will furnish, upon request from CCHE, information and data to assure public accountability including information for such matters as the Consumer Guide (e.g., graduation rates, retention rates, persistence rates, test and examination scores and passing rates, etc.).*

Requested information was supplied to the CCHE.

#### 16. ADVISORY BOARD

*The President of CSM and the CSM Board of Trustees may nominate members to serve on an advisory board to the CSM Board of Trustees.*

The President and Board of Trustees worked with a 16-member Advisory Board from 2003 through 2007. In 2008, the CSM Foundation reorganized its governance and the decision was made to expand the Foundation Board to serve similar purposes to that of the Advisory Board. The current Foundation Board includes 20 governors and one honorary governor. Board membership can be found here: <http://giving.mines.edu/s/840/giveindex.aspx?sid=840&gid=1&pgid=592>.



## **PERFORMANCE GOAL ACHIEVEMENT**

Though not included as one of the 16 areas of the CSM PC, the issue of funding has been presented for all of the prior PC Review Reports. Figure 12 below displays the data for state support to all IHEs over the last ten years. Figure 13 displays the data for state support to CSM over the last ten years. It is clear that total support, including the additional ARRA funds, has exceeded the 2003-2005 funding levels.

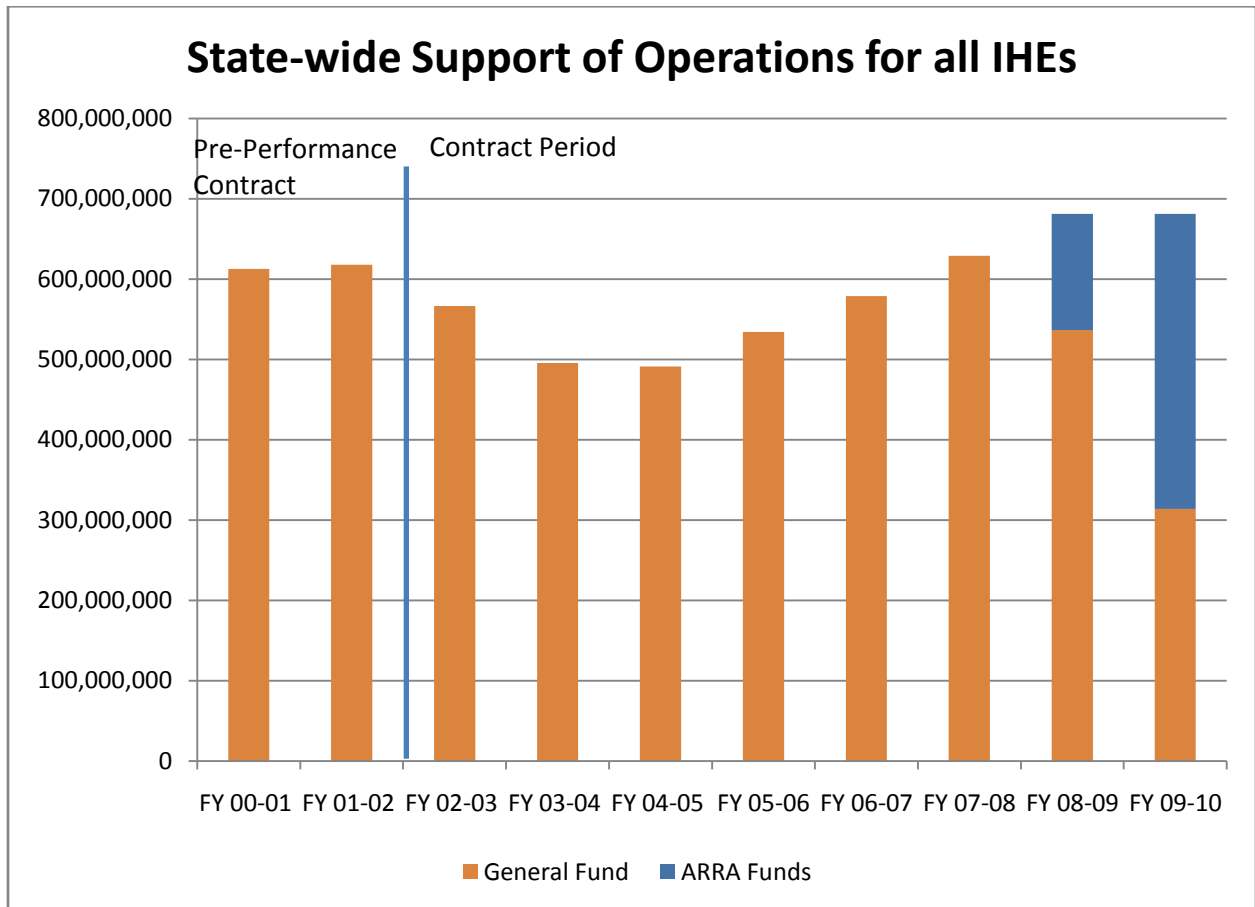


Figure 12. State-wide Support of Operations for All IHEs

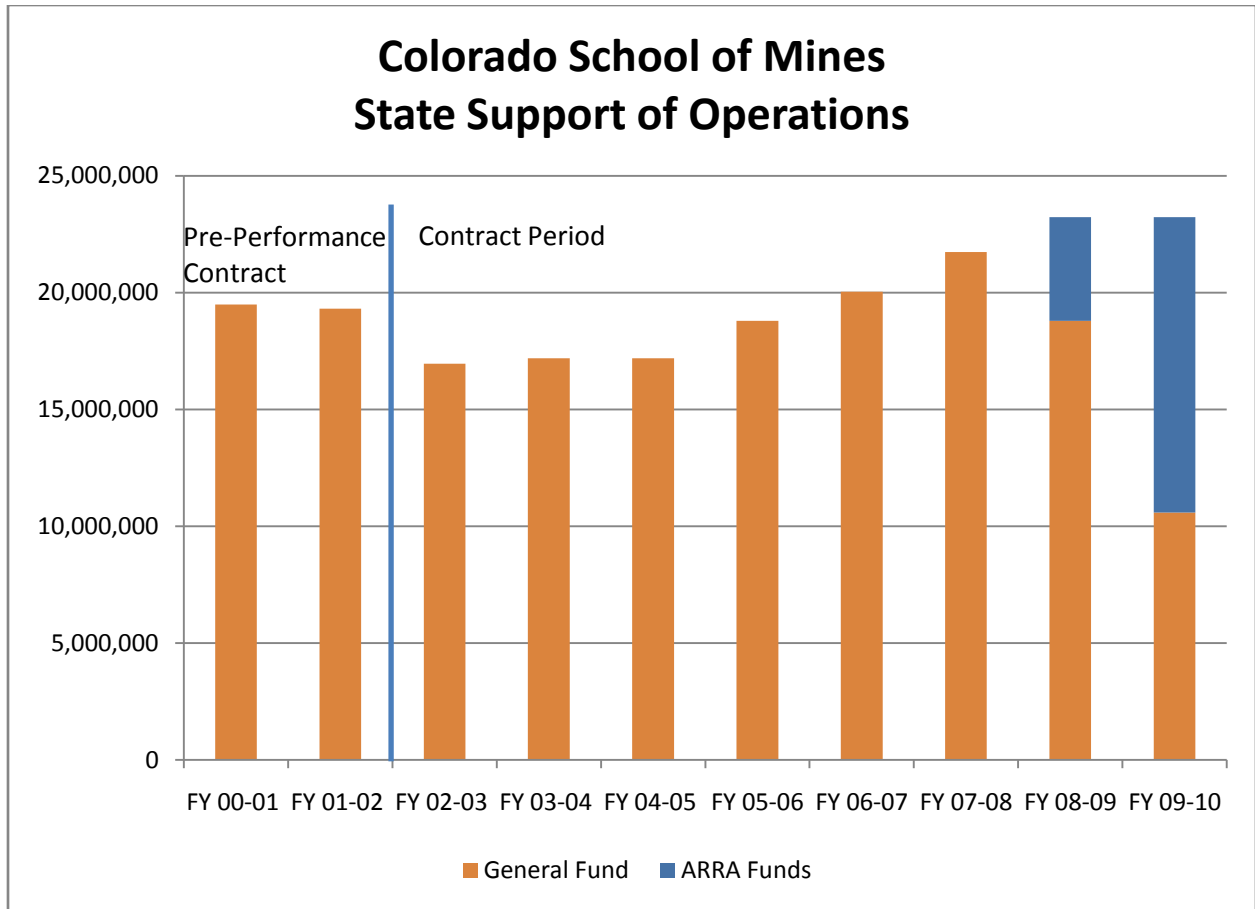


Figure 13. Financial Support to CSM, Ten-year Trend

Further, in Figure 14 below, the financial support disaggregated by Resident FTE is displayed which again reflects a funding level above the 2003-04 level and above the statewide funding per Resident FTE.

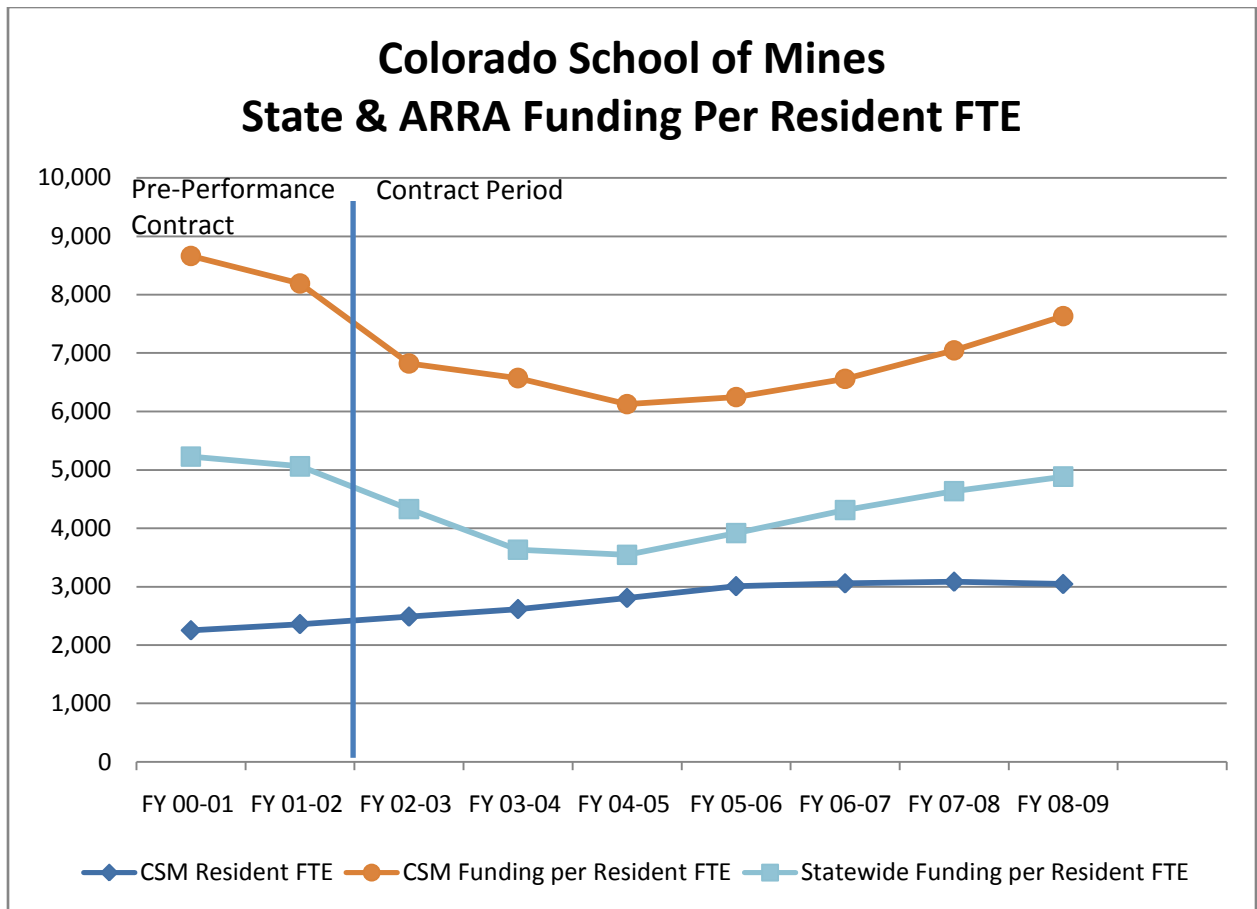


Figure 14. Financial Support to CSM, per Resident FTE, Ten-year Trend

The annual reports provided by CSM along with other DHE data have been reviewed and presented in this report. Each of the items that were identified in the Performance Contract has been addressed with this review.