

CCHE Agenda
January 11, 2002
Colorado History Museum
Denver, Colorado
1:00 p.m.

I. Approval of Minutes

II. Reports

- A. Chair's Report - Lamm
- B. Commissioners' Reports
- C. Advisory Committee Reports
- D. Public Comment

III. Consent Items

- A. Proposals for New Academic Degree Programs - Samson
 - 1. Master of Arts (M.A.) in Applied Geography at the University of Colorado at Colorado Springs - Samson
 - 2. Proposal for a Bachelor of Arts (B.A.) in Human Development at Metropolitan State College of Denver - Kuepper
- B. Teacher Authorization: Modern Languages: Spanish Concentration, Elementary Teacher Education, Metropolitan State College of Denver - Gettle

IV. Action Items

- A. Quality Indicator System Report FY 2000-01 - Kieft (20 minutes)

V. Items for Discussion and Possible Action

- A. 2001 Report on Newly Approved Degree Programs - Samson (15 Minutes)
- B. Annual Report on Discontinuance of Academic Degrees with Low Program Demand - Samson (30 Minutes)
- C. Teacher Education Report - Derbenwick/Samson (15 minutes)
- D. Governor's Opportunity Scholarship Report and Presentation - Mullen (15 minutes)

VI. Written Reports for Possible Discussion

- A. Diversity Report - Derbenwick
- B. Report on Out-of-State Instruction - Breckel
- C. Report on Capital Construction, Lease Approvals, Cash Funded Capital Projects and SB 209 Report - Adkins
- D. FTE Service Area Exemptions: Approval for State Supported Instruction Outside Community College Service Area Boundaries - Samson
- E. Concept Paper
 - 1. Ph.D. in Computer Science and Information Systems at the University of Colorado at Denver - Samson

F. Capital Assets Subcommittee Report - Johnson

Colorado Commission on Higher Education (CCHE)
January 11, 2002
Agenda Item II, A

TOPIC: CHAIR'S REPORT

PREPARED BY: PEGGY LAMM

This item will be a regular monthly discussion of items that he feels will be of interest to the Commission.

Colorado Commission on Higher Education (CCHE)
January 11, 2002
Agenda Item II, B

TOPIC: COMMISSIONERS' REPORT

PREPARED BY: COMMISSIONERS

This item provides an opportunity for Commissioners to report on their activities of the past month.

Colorado Commission on Higher Education (CCHE)
January 11, 2002
Agenda Item II, C

TOPIC: ADVISORY COMMITTEE REPORTS

PREPARED BY: ADVISORY COMMITTEE MEMBERS

This item provides an opportunity for Commission Advisory Committee members to report on items of interest to the Commission.

Colorado Commission on Higher Education (CCHE)
January 11, 2002
Agenda Item II, D

TOPIC: PUBLIC COMMENT

PREPARED BY: TIM FOSTER

This item provides an opportunity for public comment on any item unrelated to the meeting agenda. A sign-up sheet is provided on the day of the meeting for all persons wishing to address the Commission on issues not on the agenda. Speakers are called in the order in which they sign up. Each participant begins by stating his/her name, address and organization. Participants are asked to keep their comments brief and not repeat what others have said.

TOPIC: PROPOSALS FOR NEW ACADEMIC DEGREE PROGRAMS

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

The Commission considers new proposals for academic degree programs at its June and January meetings. This is intended to provide the Commission an opportunity to see the proposals in a broader context in such matters as the scope of new degree activity in the state system, governing board priorities, and statewide need.

This agenda item presents the academic degree proposals that were submitted to the Commission for action at the January Commission meeting. They include:

1. *M.A. in Applied Geography at the University of Colorado at Colorado Springs*
2. *B.A. in Human Development at Metropolitan State College*

In addition, two degree proposals, that are awaiting consultant reports or further negotiation (Neuroscience Ph.D. at UCB, and Theatre BA/BFA at METRO), will be included in the February Commission agenda.

II. BACKGROUND

Approval by the Commission of a new degree program proposal is a two-stage process. The governing boards submit a concept paper to the Commission that provides an opportunity for the Commission to identify potential state issues prior to developing the full proposal. In contrast, the full proposal includes details about curriculum, financing, capital construction needs, and other implementation details.

The Full Degree Proposal

The full proposal for a new degree program reaches the Commission after undergoing review by, and receiving approval from, the governing board. The request for new degree approval must include:

- A complete degree program proposal as defined by the governing board policy.
- The institution's responses to the peer review comments.
- Tables of enrollment projections, physical capacity estimates, and projected expense and revenue estimates.
- An analysis by the governing board of the potential quality, capacity, and cost-effectiveness of the proposed degree program.

- The governing board's response to the issues identified in the Commission's review of the concept paper.

Graduate degree programs require review by an external consultant. The Commission staff selects and contacts the external consultant after the governing board staff reviews the list of potential reviewers.

Appendix A

STATUTORY AUTHORITY

23-1-107. Duties and powers of the commission with respect to program approval, review, reduction, and discontinuance. (1) The commission shall review and approve, consistent with the role and mission and statewide educational needs, the proposal for any new program before its establishment in an institution. No institution shall establish a new program without first receiving the approval of the commission. As used in this subsection (1), "new program" includes any new curriculum which would lead to a new vocational or academic degree. The commission shall further define what constitutes an academic or vocational program and shall establish criteria or guidelines which define programs and procedures for approval of new academic or vocational program offerings.

**TOPIC: MASTER OF ARTS (M.A.) IN APPLIED GEOGRAPHY AT THE
UNIVERSITY OF COLORADO AT COLORADO SPRINGS**

PREPARED BY: SHARON SAMSON

I. SUMMARY

The Regents of the University of Colorado request approval of a Master of Arts (M.A.) in Applied Geography to be offered at the University of Colorado at Colorado Springs. The degree program, to be housed in the Department of Geography and Environmental Studies, is intended to “provide graduate level education to address community needs through applied geographic knowledge and research,” and will include “integrative skills that link human activity to natural systems,” and provide a “spatial perspective to human and natural processes.”

The program will include both a thesis and non-thesis option, although the latter will also include a substantial research component. Both options will require 30-credits. The proposed degree program will replace, for geography students, the current Master of Basic Science degree. The introduction of the new degree program will provide a more suitable curriculum than is possible with the current program and provide a more recognizable title for the degree. The program will accept its first students in fall of 2002 with an initial enrollment of three students, increasing to twelve in five years. At full implementation, the program is projected to produce four graduates per year.

The proposed program builds on the considerable strengths of the undergraduate program in Geography and Environmental Studies at UCCS, a program recently awarded a CCHE Program of Excellence. Faculty and other resources available are sufficient to provide a quality program. Commission staff and the external reviewer believe that the proposed program is responsive to the needs of the Colorado Springs region. Enrollment and graduation projections appear to be achievable. No major concerns relating to either mission or program duplication were raised by the Commission at the concept paper stage.

The Commission staff recommends approval of the request for a Master of Arts in Applied Geography at the University of Colorado at Colorado Springs.

II. BACKGROUND

The concept paper for the proposed degree program was on the Commission agenda at its meeting of June 7, 2001. The report of the external reviewer is included as Appendix A. The university’s response to several matters raised in that report is Appendix B. The report

was included in its deliberations by the Regents at its meeting of December 2001. At that meeting the proposal was approved and subsequently submitted to the Commission.

The Commission relies substantially on the governing board to assess issues of program quality, capacity of the institution to offer the proposed program, and cost effectiveness. Assurances on these matters are provided in a transmittal letter from the University of Colorado System which is appended as Appendix C.

The overarching goal of the proposed program is “to provide graduate level education to address community needs through applied geographic knowledge and research.” The proposal further points out that the focus of the program will be to “educate professionals to work in the community in both government and private sector employment.” Graduates will have the several “skills and competencies.” These are defined as:

- An understanding of and appreciation for the interactions between the human and natural world.
- Skills to synthesize, analyze, and evaluate diverse social and physical information.
- Ability to conceptualize spatial relationships for problem solving.
- Communication skills to clearly present solutions or recommendations.
- Technical skills to deal with the ever-changing employment landscape.

The program will include coursework, research training, and internships. It will have a thesis and non-thesis option, the latter requiring a research paper “deemed of publishable quality.” Both options require 30 credits for graduation. Students will be able to choose among four tracks:

- Physical systems
- Natural hazards mitigation and policy issues
- Population and society, including urban community development
- Applied uses of Geographic Information Systems (GIS) and remote sensing

Two courses (6 credits) will be required in common of all students. The remaining requirements will be based on the track and option selected. A comprehensive exam will be required of all students.

III. STAFF ANALYSIS

In analyzing the concept paper and the program proposal, the staff considered role and mission, duplication, program need and demand, and quality issues such as curriculum and resources. Both the concept paper and the full proposal were submitted to the other governing boards for peer review.

Role and Mission and Program Duplication

No questions or concerns were raised on these two issues either at the concept paper stage or subsequently. The proposed program is consistent with other offerings at the graduate level at UCCS and is oriented toward the needs of the local area. The development of the proposed self-standing, focused degree out of a popular existing “track” in a more general program is viewed by staff as a logical evolution. The purpose of, and market for, the one other Master’s degree in Geography offered in Colorado is significantly different than for the proposed program.

Program Need and Demand

The proposal describes the relationship between the proposed program and the needs of the Colorado Springs area and, more generally, of the Front Range. It also points out that many of the “world’s premier geodata creators and users are clustered from Colorado Springs to Fort Collins.” Commission staff agree with the external reviewers comment that the proposed program “is designed to be responsive to the workforce needs of the region in which the university is located.” Perhaps the most compelling arguments relate to graduates of the GIS track. People with the sorts of skills to be developed in that track are in demand not only locally but also nationally.

Student demand for the proposed program is judged not only on surveys of students but also based on enrollments of geography students in the Masters of Basic Science (MBS) program, which has been in place for a number of years. These “geography” enrollments have averaged about 30 students. Given the advantage to graduates of having a degree name more closely related to program content, it seems logical that a substantial number of students who would otherwise be in the MBS program will enroll in the M.A. in Applied Geography. The enrollment and graduation projections supplied by the institution (see Appendix D) are based on appropriate methodology and seem attainable.

Program Quality and Resources

The Commission has acknowledged the strength of the undergraduate geography program at UCCS with a “Program of Excellence” award. Commission staff has no reservations about the institution having the resources necessary to offer a quality master’s program as well. The professors who will form the core faculty of the program have an appropriate range of training from strong graduate programs. While the curriculum will be the responsibility of department faculty, the use of community resource people is also seen as a potential program strength. No additional faculty will be required for implementation of the program.

Appendix E shows expense and revenue estimates for the program. Reallocation, a significant part of the budget, represents the gradual reduction of faculty participation in the

existing degree program and assignment to the proposed program as it is implemented. The only surprising thing about the budget would appear to be the inclusion of no funds for equipment acquisition during the first five years of the program implementation.

The curriculum sufficiently represents master's level study in geography as well as providing appropriate course work for the particular focus of this degree program. A considerable range of choices is available to the student with four tracks and a thesis or no-thesis option. The requirement of two core courses is an important lynchpin of the curriculum. Staff believes that while, for particularly well-prepared students, it may be appropriate to waive the requirement for the core course in quantitative methods, the course in geographic methods should be required of all students. With students bringing a wide range of backgrounds to the program, a course which provides an "understanding of the philosophy, research methods, and historical perspective" of geography would seem to provide an essential base from which to begin the program.

The university also has other resources, for example, its GIS lab and new Southern Colorado GeoData Laboratory, that will help support a quality educational experience for students. A key to the "applied" label attached to the degree will be the research and internship opportunities provided. While little detail is given in the proposal about these opportunities, the resources available in the region for research and internships are substantial.

Assessment of student learning and program quality will have several elements. These include exit surveys of graduates, surveys of employers of the graduates, and the regular internal and external program reviews. It should also be noted that each student, in addition to successful completion of course work and a thesis or research paper, will be required to pass a comprehensive examination.

Conclusion

The proposed M.A. in Applied Geography is a logical and useful development out of a popular "track" in an existing graduate program and a strong undergraduate program in Geography and Environmental Studies. It addresses a clearly defined regional need and can be implemented with minimal additional resources.

IV. STAFF RECOMMENDATION

That the Commission approve the request of the Regents of the University of Colorado to offer a Master of Arts degree in Applied Geography at the University of Colorado at Colorado Springs.

Appendix A

**REVIEW
OF THE PROPOSED
MASTER OF ARTS IN APPLIED GEOGRAPHY
UNIVERSITY OF COLORADO AT COLORADO SPRINGS**

NOVEMBER 23, 2001

Prepared by

**William G. Kuepper, Ph.D.
Provosts Emeritus
The University of Wisconsin-Green Bay**

EXECUTIVE SUMMARY

This is a review of the proposal for a Master of Arts (M.A.) in Applied Geography at the University of Colorado at Colorado Springs. The reviewer has a Ph.D. in Geography from the University of Wisconsin-Madison and was a Professor of Urban and Regional Studies and Geography at the University of Wisconsin-Green Bay from which he now holds the title of Provost Emeritus. The review basically follows the guidelines provided by the Colorado Commission on Higher Education.

The goal of the proposed M.A. in Applied Geography is to “provide graduate level education (which addresses) community needs through applied geographical knowledge and research.” The program has a curriculum appropriate to the field of geography and to the particular focuses of the degree. It emphasizes applied research providing both a thesis and non-thesis option and also offers four tracks. The degree will replace, for geography students, the current Master of Basic Science (M.B.S.).

The university has the qualified faculty and other resources necessary to implement and sustain this program at a high quality level.

The primary market for the program are students from the Colorado Springs metropolitan area and the program, particularly in its applied research orientation, is geared to needs of that region. Enrollment projections are appropriate for a viable program at the master’s level.

Although several matters could be addressed more fully in the proposal, it is recommended that the University of Colorado at Colorado Springs be given approval to offer the M.A. in Applied Geography.

I. Introduction

This report is based on a review of the proposal entitled “Master of Arts in Applied Geography in the Department of Geography and Environmental Studies, University of Colorado at Colorado Springs.” The proposal was provided to the reviewer by Dr. Sharon Samson, Director of Academic and Student Affairs, Colorado Commission on Higher Education. The Commission’s “Protocol for External and Peer Review of New Degree Program Proposals” also was used in formulating this report.

II. Quality of the Proposed Program

A. Does the curriculum provide generally-accepted content in the field?

The curriculum follows a traditional pattern of preparation at the master’s level in geography. The curriculum requires coursework, research training, and internships totaling a minimum of 30 semester hours. The program provides both a thesis and non-thesis option although the latter requires a research paper “deemed of publishable quality by the faculty.” The program also offers four tracks: Physical systems; Natural hazards mitigation and policy issues; Population and society, and Applied uses of Geographic Information Systems (GIS) and remote sensing.

Two courses are common to all tracks and options: Geography 500, Quantitative Methods and Geography 501, Seminar: Geographic Research. Because they are central to preparation at the master’s level in geography, it is not clear why the curriculum description includes the language “or equivalent” when stating these two common course requirements. It is also not clear if these are course or experiential equivalents. I believe that these courses should be required of all students in the program. This is especially true of Geography 501, in which the student has the opportunity to learn about the “latest research techniques and questions” from each of the faculty in the department. If equivalents are to be allowed, it would be useful to provide examples of what these equivalents might be.

The remainder of the course requirements for each student would be determined in consultation with a faculty advisor. Up to nine credits can be taken outside of the department, a number I believe is appropriate given the broad nature of geography.

While there are a large number of courses from which to design a program, the selections will be guided substantially by the track the student wishes to pursue. The proposal provides a sample curriculum for each track. Each contains a logical set of courses, and, I suspect, would be followed closely by many students in the track. I would urge the

department to maintain a fairly standard set of requirements within each track, since providing four tracks at the master's level already allows a substantial range of choices.

The coursework available in the program can provide solid training at the master's level. It is, in general, standard fare for an M.S. in geography. Where the program would appear to deviate most distinctly from an M.A. to a Ph.D., and where the program presumably earns its "applied" title, is in the research and internship components. The research component is well articulated in the proposal, although the distinction between the work necessary to produce an acceptable thesis and a publishable paper may not be clear to readers. That distinction should be made clear to students as they determine the option they wish to pursue.

I am puzzled by the absence in the proposal of any descriptions of internships. After a reference on page 11 to internships as one of the ways of achieving the "goals of the program," nothing more is said about them. How and when, for example, would they fit into the course of study? Are they an "add-on" or do they replace some other requirements?

B. How the methods of delivering instruction support and enhance program quality.

The use of classroom, laboratory, and fieldwork seems like an appropriate mix of instructional methodologies. The requirement for a thesis or publishable paper provides a good blend of instruction and research in the program. The department is well equipped to provide the appropriate amount of hands-on instruction, e.g., GIS and cartography laboratories. In addition, the Colorado Springs metropolitan area and the Pikes Peak region provide rich opportunities for field experiences for students in the program.

III. Capacity of the institution to offer the program

A. The eight core faculty in the program have the range of academic preparation and expertise to offer a high quality program. All hold Ph.D.s in geography or a closely related field from strong graduate departments. Including faculty from outside the department and community experts is noteworthy. The process for selection and the review of credentials of community experts to be used on thesis committees is appropriate for maintaining program integrity.

B. The university and the department has sufficient other resources, in my judgment, to offer a high quality master's degree in geography. Since a master's degree with an "emphasis" in geography is already being offered at UCCS, many of the needed resources, i.e., library holding and laboratories, are already in place. Particularly noteworthy are the institution's resources in Geographic Information Systems and the recent addition to the department of the Southern Colorado Geodata Laboratory. Both the GIS lab and the Geodata lab can provide important training as well as employment opportunities for students in the M.S. program. And, I emphasize again, the benefits to the program of

being in a location offering such excellent opportunities for research, field experience, and internships.

C. Regarding program budget, almost all of the expenses are in the faculty assigned to teach in it. Because some of the course work in the program is taken by both graduate and undergraduate students, and because as the new M.S. is being phased in, and the current degree phased out, it is difficult to determine how the 1.4 FTE faculty will be utilized. The methodology, however, for determining the budget for faculty seems appropriate.

I am surprised that no provisions are made for instructional materials and equipment acquisition during the five years covered in the budget projections, no matter what the source of funds may be. Is this to suggest that the institution will bear none of those costs?

If so, I believe that to be an unwise absolving of the university of the responsibility for supporting the program.

IV. Interest and demand by students for a degree in this field

Interest and demand are clearly indicated by the enrollments of Geography and Environmental Studies (GES) students in the current UCCS Master's of Basic Science program. The proposal notes that about one-third of the M.B.S. program's approximately 100 students are from GES.

Designing of the program to relate closely to the interests of the Colorado Springs metropolitan area would suggest that enrollment projections could be supported by that area alone. What is not clear is the importance of the part-time employed student to program enrollment. Will any provisions be made, e.g., evening or weekend courses, to accommodate that potential clientele?

V. Demand and need for graduates in this field

The proposal does a very good job in describing the general employment situation for geography graduates. In my opinion, the proposed M.A. has the potential to add considerable value to the employability of its graduates. The coursework and research training can focus the student on particular types of employment as well as on significant problems and needs of the Colorado Springs area. Close faculty relationships with regional employers will be an important asset in placing students both for research opportunities and future employment. I suspect that some of the students will already be employed in businesses which see advantages in the additional specialized training provided by the program.

VI. Economic impact for Colorado

No particular economic impact is claimed for the proposed program. It is, however, in my view, a program that is designed to be responsive to the workforce needs of the region in which the university is located.

VII. Additional Comments

The M.S. in Applied Geography clearly has advantages in curriculum and name recognition over the current degree. Further, I agree with the contention made in the proposal that there is a sufficient distinction, both in purpose and design, between the proposed degree program and the one already offered at the University of Colorado at Boulder. I urge that UCCS maintain that distinction and not allow the new degree to migrate toward the Masters in Geography offered at Boulder.

Appendix B

Response of External Review

To: VCAA Tom Bellamy
From: Tom Huber, Professor, GES
Subject: Response to Outside Review of MA Proposal
Date: December 11, 2001

The following are the Geography and Environmental Studies responses to the questions raised by the outside reviewer of the proposal for the Master of Arts in Applied Geography degree.

1. The reviewer is confused about what the "or equivalent" means when referring to GES 500 - Statistics class. If a student has taken a graduate class of this type at another institution, our GES 500 would not then be required. It must be an equivalent course from an accredited university or college.

2. The distinction between a thesis and a paper is very basic. A thesis is a major piece of work involving a significant amount of individual research. A paper is the equivalent of a journal article. It may be an extension of a class term project, the result of an independent study course, or a write up of research done in conjunction with a faculty member that is of lesser scope than a thesis.

3. There is no one description of internships because they are all different. Each one would come about through cooperation between an organization in the community or region and the student/advisor. There is no strict requirement for an internship for the student, but we do encourage all of our students to seek out and participate in relevant internships outside of the department. They would normally be for credit and would count for hours toward the degree just like any other course.

4. The 1.4 faculty FTE is only a bookkeeping method for assigning amount of work effort by the department that will be needed for the degree program to function. Since we all teach undergraduate courses and deal with the undergraduate majors, we are just saying that 1.4 FTE out of the total 8 FTE will be dedicated to the masters program.

5. We already take into account (and have for many years) the part-time students. We offer a range of evening courses each semester and have a variety of intense field courses that can be completed during a short, but intense period in the summer. The independent research efforts of the students will be done in accordance with the individual time schedules and research topics of each student.

Appendix C



UNIVERSITY OF COLORADO SYSTEM
Boulder • Colorado Springs • Denver • Health Sciences Center

Office of the Vice President for Academic Affairs and Research

Campus Box 51
Boulder, Colorado 80309-0051
(303) 492-8911
FAX #: (303) 492-0330

MEMORANDUM

TO: Timothy Foster, Executive Director, CCHE

FROM: Jay A. Gershen, Interim Vice President for Academic Affairs and Research

DATE: December 13, 2001

SUBJECT: Quality, Capacity, and Cost Effectiveness of Proposed M.A. in Applied Geography

As part of the process of recommending a degree proposal to the Colorado Commission on Higher Education, the Office of the Vice President for Academic Affairs and Research for the University of Colorado system provides an analysis of the quality, capacity, and cost-effectiveness of full proposals. This memorandum provides that analysis. It is based upon review of the proposals and discussion with the Board of Regents and with involved campus faculty and administrators.

Quality of Proposed Program

The proposed program is an M.A in Applied Geography at the University of Colorado at Colorado Springs. The Geography Department was awarded a "program of excellence" designation last year by the Commission in recognition of its outstanding undergraduate program and strong faculty. The Master's degree offers a few carefully selected tracks of specialization that build upon the recognized strengths of the faculty. The curriculum of the degree provides rigorous training and focuses on: physical systems (hydrologic processes, etc.); natural hazards (e.g. floods) mitigation and policy; population and society, such as urban development; and applied use of Geographic Information Systems (GIS) and remote sensing.

Capacity of Institution to Offer Program

Because of its existing geography track within the Master of Basic Science, the Colorado Springs campus has proven its capacity to offer this degree. The degree program builds upon current coursework. Adequate facilities for coursework and research are in place, enhanced by the Program of Excellence funding which has provided funds to help establish a geodata laboratory that will provide state-of-the-art training and experience for students. In addition, UCCS has a site license for GIS software, a vital

component for its graduate program. Resources to begin the program are in place; and the vice chancellor for academic affairs has pledged to provide any additional resources that might be required.

Cost-Effectiveness of the Program

This degree program builds upon a geography track within the Master of Basic Science program. The faculty, physical facilities, laboratories, and library resources involved are in place. The faculty resources of the department can support both the existing program and the proposed degree. This contributes to the cost-effectiveness of the program. The geodata laboratory will undertake projects

M.A. Applied Geography Analysis

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for local organizations and companies in spatial data analysis. This activity will provide professional level training for the graduate students while generating funds to further support the program.

Economic Impact

No major economic impact is claimed for this proposed new degree. Geography graduate degrees are of use in the region to public and private organizations and businesses. The GIS track, in particular, is in demand. Program graduates should be able to find positions in existing businesses.

Summary

UCCS has provided the Board of Regents and the Vice President for Academic Affairs and Research evidence of its ability to offer the Master of Arts in Applied Geography with appropriate academic rigor and excellent quality; it has provided evidence of its capacity to offer this program and of its cost effectiveness. The system administration and the Board both support the creation of the M.A. in Applied Geography on the Colorado Springs campus.

Appendix D

ENROLLMENT PROJECTIONS

Name of the Program: Master of Arts in Applied Geography
 Name of Institution: University of Colorado, Colorado Springs

DEFINITIONS:

Academic Year is the period beginning July 1 and concluding June 30.
 Headcount projections represent an unduplicated count of those students officially admitted to the program and enrolled at the institution during the academic year.
 Program graduate is defined as a student who finishes all academic program requirements and graduates with a formal award within a particular academic year.

SPECIAL NOTES:

To calculate the annual headcount enrollment, add new enrollees to the previous year headcount and subtract the number who graduated in the preceding year. Adjust by the anticipated attrition rate.
 To calculate FTE, multiply the number of students times the projected number of credit hours students will be typically enrolled in per year and divide by 30.
 The data in each column is the annual unduplicated number of declared program majors. Since this table documents the program demand, course enrollments are not relevant and shall not be included in the headcount or FTE data.

		2002	2003	2004	2005	2006	Full Implementation
1-a	In-state headcount	3	6	7	9	10	10
1-b	Out-of-state Headcount	1	2	2	2	2	2
2	Program headcount	4	8	9	11	12	12
3-a	In-state FTE	1.6	3.2	3.7	4.8	5.3	5.3
3-b	Out-of-state FTE	0.6	1	1.1	1.1	1.1	1.1
4	Program FTE	2.1	4.2	4.8	5.9	6.4	6.4
5	Program Graduates	0	2	2	3	3	4

Appendix E

Budget notes specific to Table 3:

- The department secretary has just been upgraded from an Administrative Assistant III to a Program Assistant I which will help assure quality in the graduate admissions, etc.
- Other operating costs, including capital equipment expenses, will be covered by revenues generated by grant indirect cost recovery and funds generated by the Southern Colorado GeoData Lab.
- Faculty costs are evaluated in the following way. The assumed faculty undergraduate FTE for the department is 7.24 and the graduate FTE is 1.40. The average faculty pay/benefits for the department is \$60,542 for AY 2000-01. The values under faculty are full FTE for the full five-year period because we are still offering the MBS degree and will be teaching all the appropriate graduate courses for the full five years.
- The 1.4 FTE figure comes from using information generated by UCCS Institutional Research for the Communications Department which has a similar program with both undergraduate and graduate courses. Several of our courses are cross-listed as 400/500 level which precludes determining an exact number of graduate vs. undergraduate courses offered in the department.
- The Faculty Operating Expenses in row 1 and \$2,181 (the cost of our departmental secretary for graduate program administration) of the expenses in row 4 are not new expenses. These are already being used for the current MBS program commitments by the department. As we transition to the new MA, the effort going into the MBS will diminish accordingly. The only new funding we need is the \$2,000 for an offload for one faculty to administer the program.
- Because of the above point of clarification, the institutional reallocation of row 18 is not new. These funds are currently being allocated to the MBS program in the department.
- Program administration includes \$2,000 for a one-course offload for one faculty to be the Graduate Coordinator. The remainder of that figure is the portion of the department secretary's salary and benefits that are already devoted to graduate program administration. The current secretary is shared between two departments. We expect this not to change.

- The General Fund: State Support row (#12) is the allocation of funding for instate students. Out of state students get no state allocation.
- The tuition is based on the tuition rates published in the fall 2001 Schedule of Courses for UCCS. Tuition values come from the FTE figures for both instate and out-of-state students as shown in Table 1.
- The contracts and grants of row # 16 are those that we will be bringing in using the Southern Colorado GeoData Laboratory. This lab is currently bringing in between \$5,000 and \$10,000 per year. As the graduate program progresses, we expect that this number will rise and help fund the revenues as indicated.
- Currently, we have 1.4 faculty FTE providing the MBS track in Geography. Over the first 5 years, this FTE will transition to having 1.4 faculty FTE in the Master of Arts in Applied Geography and close to 0 FTE in the MBS program. This means that, for the first year, the \$58,340 reallocation in line 18 is 68.8% of the FTE allocated in our department will be in the new degree and 31.2% will still be in the MBS program. This number decreases steadily until, after year five, the reallocation will be all of the 1.4 faculty FTE from the MBS to the new degree program.

Appendix E

PROJECTED EXPENSE AND REVENUE ESTIMATES

		ESTIMATED AMOUNT in DOLLARS					
			Year 1	Year 2	Year 3	Year 4	Year 5
	Operating Expenses						
1	Faculty	84,758	84,758	84,758	84,758	84,758	84,758
2	Financial Aid to Specific Program	0	0	0	0	0	0
3	Instructional Materials	0	0	0	0	0	0
4	Program Administration	4,181	4,181	4,181	4,181	4,181	4,181
5	Rent/Lease	0	0	0	0	0	0
6	Other Operating Costs	0	0	0	0	0	0
7	Total Operating Expenses	88,939	88,939	88,939	88,939	88,939	88,939
	Program Start-up Expenses						
8	Equipment Acquisitions	0	0	0	0	0	0
9	Total Program Expenses	88,939	88,939	88,939	88,939	88,939	88,939
	Enrollment Revenue						
12	General Fund: State Support	8,267	16,534	19,118	24,802	27,385	
13	Cash Revenue: Tuition	17,292	31,882	35,385	40,669	42,591	
14	Cash Revenue: Fees	40	80	90	110	120	
	Other Revenue	0	0	0	0	0	
15	Federal Grants	0	0	3,000	6,000	6,000	
16	Corporate Grants/Contracts/Grants	5,000	7,500	10,000	10,000	10,000	
17	Other Fund Sources	0	0	0	0	0	
18	Institutional Reallocation	58,340	32,943	21,346	7,358	2,843	
	Total Program Revenues	88,939	88,939	88,939	88,939	88,939	

TOPIC: PROPOSAL FOR A BACHELOR OF ARTS (B.A.) IN HUMAN DEVELOPMENT AT METROPOLITAN STATE COLLEGE OF DENVER

PREPARED BY: WILLIAM G. KUEPPER

I. SUMMARY

The Trustees of the State Colleges in Colorado have requested Commission approval of a Bachelor of Arts (B.A.) degree in Human Development at Metropolitan State College of Denver (MSCD). The degree program will provide students with the opportunity to “focus on the entire human life span and gain in-depth knowledge about theory, research, and application in human development.” Although the program is designed with four tracks, the primary reason for implementing this degree would be to prepare students to meet the licensure requirements for early childhood education. The degree requirements can be completed in 120 credits for those not seeking licensure and 123 for those who are. The program would accept its first students in fall 2002 with an initial projected headcount enrollment of 25 students, increasing to 55 after five years. When fully implemented the program is projected to graduate 10 students per year.

The proposed program supports the mission of MSCD and does not create unnecessary duplication in the state. Although it will draw enrollment from some existing programs, most notably behavioral science, no degree programs will be eliminated as a result of the introduction of the proposed program.

The Commission raised several issues at the concept paper stage. The issues related to the nature of the program itself have been addressed sufficiently. The others relate to the suitability of the program for preparing students for licensures in Early Childhood Education and Elementary Education will be considered in the teacher authorization approval process. CCHE has completed the content review for early childhood licensure and forwarded the material to the Colorado Department of Education.

The staff recommends approving the request of the Trustees for a B.A. in Human Development at Metropolitan State College of Denver contingent upon teacher education authorization.

II. BACKGROUND

The concept paper for the proposed degree was on the Commission agenda at its meeting of October 5, 2000. Eight concerns were raised by the Commission and these are addressed by

the institution in the full proposal (Appendix A.). The Trustees approved the full proposal at their meeting of October 26, 2001.

The proposed degree program in Human Development is intended to ‘fill a need for the training of qualified teachers as well as preparing students who are interested in careers working with children, their families, and individuals across the life span.’ The proposal lists eight goals of the program:

- promote an understanding of human development across the life span in contexts including families, schools, and social institutions;
- emphasize cognitive development and learning and how these principles can be applied in educational settings;
- teach theories, empirical methods, and analytic tools for evaluating research in human development and cognition, and for finding solutions to educational and social problems;
- stress the integration of theoretical interpretations and empirical findings, which bear upon human development in the life span;
- encourage maximizing the biological potential of the individual throughout the life span;
- foster the understanding of socialization and adjustment to biological and environmental change;
- facilitate the understanding of the roles of the family, the school, and other institutions in development;
- integrate knowledge about personality development and psychological functioning in various cultural settings.

The program design includes four tracks: Early Childhood Education Track, Elementary Education Track, Applied Track, and Graduate School Track. The first two are intended to prepare students for careers in teaching, the Applied Track for other work with children, families, and “individuals across the entire life span,” and the Graduate Track for advanced study in human development.

All students will be required to take 33-34 credits in an “interdisciplinary core, ” plus an additional nine credits in one track. The curriculum will be offered on a schedule permitting students to graduate in four years. The courses in the program will be offered both in the daytime and the evening in order to provide the maximum flexibility to students.

III. STAFF ANALYSIS

In analyzing the concept paper and the program proposal, the staff considered role and mission, program duplication, the need and demand for the program, and quality issues. In this process, any comments or questions raised by other governing boards have been considered.

Role and Mission and Program Duplication

No questions about institutional mission or program duplication were raised by the Commission at the concept paper stage and none have been raised subsequently. The proposed program aligns with MSCD's goal of providing "high quality, accessible enriching education that prepares students for successful careers..." The offering of the curriculum during the day and in the evening will provide maximum access to the program for the non-traditional, part-time student that MSCD is committed to serve.

Colorado State University offers a baccalaureate program in Human Development. The staff sees no problem with excessive duplication if the degree is approved, considering the different student populations that the two institutions serve.

Program Need and Demand

Human Development, although closely related to psychology, is an interdisciplinary field that focuses on learning development. Formerly, MSCD was approved for Early Childhood Education licensure, enrolling 25 or more students per year in several majors. It is anticipated that most students admitted after June 30, 2001 will major in Human Development if they wish to be recommended for licensure in this area. In addition, it is anticipated that some students interested in the developmental area, who otherwise would be majoring in psychology or behavioral science, will enroll in the new program. The enrollment projections are included as Appendix B. Staff believes the projections have been produced using appropriate assumptions and are achievable.

Program Quality and Resources

In assessing program quality and resource issues, Commission staff relies substantially on the governing board. The Trustees have provided, with its letter of transmittal, a staff analysis of the proposed program and the staff recommendation considered by the Trustees when acting upon the proposal (Appendix C).

The curriculum appropriately represents the interdisciplinary nature of Human Development with courses from several disciplines included in the 33-34 credits of required core requirements. The Commission expressed a concern at the concept paper stage about how

the content and methodology from these various disciplines would be integrated. Two courses required of all students would be central to this integration. One (PSY 3280) provides an orientation and overview of Human Development and the second, the Senior Thesis, requires “students to synthesize their learning about development from various perspectives.” Staff views these courses as appropriate responses to the Commission concern, but cautions the faculty that the matter of integration in this interdisciplinary program needs frequent attention as students progress through the curriculum.

Concerns expressed about the purpose and integrity of the applied track can be adequately addressed only after the program is implemented. The required human development core alleviates some of the concern about the integrity of the program in the applied track.

The remaining issues raised at the concept paper stage relate specifically to the suitability of the program in the preparation of students for licensure, which follows a separate authorization process.

Staff believes that the institution has the appropriately trained faculty to implement this program, with the understanding that a new faculty member will be hired in developmental psychology. The Table of Revenue and Expenses (see Appendix D) shows only the incremental costs of the program since virtually all courses required to implement the program are already being offered at the institution. While Commission staff believes sufficient assurances have been provided that necessary faculty resources are available to initiate a quality program, it is requesting Metro to provide a table that compiles the full cost of this degree program.

IV. STAFF RECOMMENDATION

That the Commission approve the request of the Trustees of the State Colleges in Colorado for a Bachelor of Arts degree in Human Development at Metropolitan State College of Denver.

This degree approval does not imply or confer teacher education authorization. These requests will be handled through the separate teacher education approval process, coordinated with the State Board of Education. SBE indicated that they plan to take action in February and forwarded their recommendation to CCHE at that time.

Appendix A

CCHE Issues Identified at Concept Stage Related To Degree Proposal

CCHE Concern 1. The conceptual heart of the program is the human development core or major. It draws on courses from a number of disciplines. What appears to be lacking is courses or other means of integrating the content and methodology from these various disciplines. The full proposal should articulate where and how this integration takes place.

Response: Content integration is a central core of two required courses within the program: PSY 3280, Developmental Methods, and PSY 4960, the Senior Thesis. The first includes an orientation to and overview of the field of human development. The second requires students to synthesize their learning about development from various perspectives. See Section (6) *Description of the Curriculum -- Integration of the Disciplines in the Major*.

CCHE Concern 2. The courses from which a student may choose to complete the nine-credit "Applied Track" requirement are numerous and varied. What purpose does it serve, what integrity is there in that track, and what commonality in perspective or content would exist among students completing it? If it serves a purpose other than expanding the number of courses the student takes in human development or related courses, this should be explained in the proposal.

Response: The courses will enable students to study in more depth topics covered in the required core. The core provides students with a perspective on the diverse approaches of different disciplines to development, and the applied track courses allow students to concentrate on one aspect that is of interest to them. The Applied Track will enhance students' appreciation of the many angles from which human development can be studied. The designers of this program believe that the beauty of the choices in the Applied Track lies in the ability to craft a number of very focused tracks, each reflecting the needs and career choices of the student. Advising will be the critical key to preventing students from merely sampling courses seemingly at random and without focus. See Section (4) *Value to the Student* above.

Concern 8. MSCD currently offers a number of programs for teacher preparation in early childhood and elementary education. The impact on the current array of the proposed program is not articulated in the concept paper, but would be an important element in the Commission's consideration of the full proposal. If the proposed program were approved, which MSCD programs currently leading to licensure would no longer continue to serve that function? For example, would this new degree program replace the behavioral science degree as an elementary education licensure track?

Response: The human development major is not meant to replace the behavioral science degree or any other degree that is currently approved for licensure (English, history, biology,

speech communication [speech, language, and hearing sciences concentration), especially for elementary education licensure. It may impact the use of those degrees by students seeking early childhood education licensure because of the strong support of the early childhood education faculty. However, it is clear from informal feedback received from current students seeking licensure that some would switch from behavioral science to human development if the major is approved. There are currently over 400 behavioral science majors so the loss of 70-100 students will not affect the health of the behavioral science program.

Appendix B

Enrollment Projections

The following premises were used in determining the enrollment projections.

- Persistence and graduation rates of human development majors will be similar to the persistence and graduation rates of psychology and behavioral science majors. Psychology was chosen because the proposed major involves a significant number of psychology courses. Behavioral science was chosen because students can focus on psychology within the behavioral science major, and students who are not interested in the heavy emphasis on research and statistics in the psychology curriculum often major in behavioral science and focus on psychology.
- There will be no out-of-state students. Currently, only 3% of MSCD students are out-of-state. Consequently, the number of out-of-state students involved with the Human Development Program will be negligible.
- MSCD's Early Childhood Education Licensure Program currently enrolls at least 25 students per year. It is anticipated that in the future most, if not all, of these students will major in human development. It is also anticipated that psychology majors who are particularly interested in the developmental area but not necessarily in teacher licensure will switch from psychology to human development. In addition, it is possible that some behavioral science majors who are not interested in teacher licensure will switch to human development. Minimally, the number of new students per year will be close to 30. For the purposes of these calculations, it was assumed that the number of new students each year would rise from 15 in year one to 30 in year five. Assuming some students will switch majors from psychology or behavioral science to human development, it was assumed that 10 students would switch to the program its first year, making the total number of students for the first year 15 + 10 or 25. Finally, it is anticipated that when the program becomes known in the community at large, MSCD will draw additional students who are not currently enrolled at the college.
- The retention/persistence rate of majors from year to year is assumed to be 52% because that is the mean of the average retention rates of psychology majors (51%) and behavioral science majors (53%).
- The percent who graduate each year is assumed to be 17.25, which is the mean of the average graduation rates of psychology (11.5%) and behavioral science (23%)
- On average MSCD students take 16.32 credits per academic year.

The program requires 42-43 credits. If students take 16.32 credits a year and start as first-time students, the first graduates would be in year seven. However, assuming some students will switch from another MSCD major to this major and that some will enter as transfer students, MSCD

estimates that it may have four graduates in the third year of the program.

The above assumptions lead to the following projections. At full implementation there will be approximately 71 majors in the program with approximately 10 graduating each year. This is a conservative estimate.

Program Enrollment Projections

		2002-03	2003-04	2004-05	2005-06	2006-07	Full Implementation
1-a	In-state Headcount	25	31	40	49	55	71
1-b	Out-of-state Headcount						
2	Program Headcount	25	31	40	49	55	71
3-a	In-state FTE	13.6	16.9	21.8	26.6	30.1	38.5
3-b	Out-of state FTE						
4	Program FTE	13.6	16.9	21.8	26.6	30.1	38.5
5	Program Graduates		0	4	8	10	10

Appendix C

AGENDA ITEM: APPROVAL OF A HUMAN DEVELOPMENT MAJOR (B.A.) WITH
TEACHER LICENSURE IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION AT
METROPOLITAN STATE COLLEGE OF DENVER (MSCD)

ISSUE:

Trustee Policy (5.2) states that the addition of new major programs is subject to review and approval by the Board of Trustees. The CCHE process for approval of new academic programs calls for a two-phase process. The first phase is the development of a Concept Paper that describes the proposed program, specifically addressing the relationship of the program to the institutional role and mission, avoiding unnecessary duplication, ensuring that the program fits within state priorities and that there is a bona fide need. The institution may move forward to develop the Program Proposal after Board approval and CCHE review of the Concept Paper. The Board of Trustees approved the MSCD Human Development Concept Paper in June 2000 and the CCHE reviewed it at their October 2000 meeting. The degree program and teacher licensure proposal came to the Academic Affairs Committee for the first reading in September and is being presented in October for review and possible approval. The Human Development Program Proposal with licensure in Early Childhood or Elementary Education will require both Board and CCHE approval prior to implementation.

BACKGROUND:

Board of Trustees Policy requires new program proposals to address twelve specific issues. Those issues and a staff assessment are listed below:

1. Brief abstract describing the proposed program.

See Program Proposal.

2. Description of program goals.

The Proposal fully describes the goals. The goals of this interdisciplinary program are to provide students with the necessary in-depth knowledge of human developmental theory, research and application to successfully work with children and adults of all ages or to pursue graduate study in the area of human development. The program is designed to address Colorado program standards for teacher licensure (CCHE performance-based standards for Colorado teachers, Colorado Model Content Standards) and graduates of the teacher licensure track will be eligible for licensure in early childhood or elementary education.

3. Relationship of program to institutional role and mission and institutional planning and priorities.

The statutory mission of MSCD states, "Metropolitan state college shall provide a limited number of professional programs, educational programs, and traditional arts and sciences." In addition to the statutory mission statement, MSCD's mission is to "provide a high-quality, enriching education that prepares students for successful careers, postgraduate education and lifelong learning in a multicultural, global and technological society." The proposed major fits well within the mission of MSCD.

4. Brief description of the value of the proposed program to the student.

The Human Development program will prepare students to enter their chosen profession with a knowledge base that will enable them to work successfully with people of all ages. A primary value for MSCD students is the flexibility offered by the major's four tracks, which allow students to design a major that best meets their interests or needs. The tracks in Early Childhood Education and Elementary Education will prepare students for teaching careers in early childhood or elementary levels. The Applied Track will prepare students for other careers that provide service to children, families, adults and/or the elderly. The Graduate School Track will prepare students for graduate study in human development. Another value for students is the interdisciplinary nature of the program, which will enable them to more easily change directions in their careers if they so desire.

5. Evidence of bona fide need for program from Concept Paper, and any other sources.

Graduates of the proposed degree program will find employment teaching with early childhood and elementary licensure. The demand for qualified teachers is ongoing and expected to continue. In addition, the Human Development BA would meet increasing mandates for degree requirements for Head Start teachers and Colorado certification requirements for day care center directors. Graduates of the program will also find other careers working with children, their families and individuals across the entire span of life. The graduate school track in the Human Development BA will also provide a viable foundation for graduate study leading to research and academic careers in family studies, developmental psychology, child clinical psychology, applied cognitive development, school psychology, and gerontology.

6. Description of the curriculum of the program, including:

The Human Development BA includes a required interdisciplinary core of 33 to 34 credits, plus nine credits in one of four tracks - the early childhood, elementary education, applied track or the graduate school track – for a total of 42 to 43 credit hours. Courses in the program will be offered day and evening, with sufficient offerings (including summers) to ensure students may complete the degree within four years. (See program proposal for additional detail.)

7. Admission, Transfer, and Graduation Requirements:

There are no specific admission requirements for students entering the proposed major, and students will be subject to all MSCD admissions, transfer and graduation requirements. Transfer articulation will be developed with appropriate community colleges. Graduation requirements are clearly stated in the proposal. (See program proposal.)

8. Program Faculty and Administration:

- a) Listing of faculty participating in program (name, rank, specialization, nature of appointment and degrees earned).

The 17 participating faculty members teaching within the proposed program are appropriately credentialed and have the diversity of academic backgrounds to provide a quality learning experience for students. (See program proposal for full listing.)

- (b) Indication of any new faculty or staff required to implement program and their qualifications.

It is anticipated that a new tenure-track faculty member in developmental psychology will be needed for the proposed program. Because of retirements and resignations, it is not clear whether that position will be a totally new position or a reallocated position from within the Department of Psychology. If an additional position for the Psychology Department is required from the college's faculty lines, then the MSCD administration has committed to the reallocation.

- (c) Description of ethnic and gender composition of faculty and staff in program.

Of the 17 full time faculty who will be delivering the proposed program, 12 are women and six are minorities, including Asian, Hispanic and African-American.

9. Quality Assurance:

- (a) Description of regional or professional accreditation or licensure requirements that helped shape proposed program. Are accreditation and/or licensure going to be sought? (Identify)

The program was designed to meet the Colorado State Board of Education requirements for performance-based teacher preparation programs, Colorado Department of Education program standards for general and elementary programs, National Council for Accreditation of Teacher Education (NCATE) standards for basic teacher education programs and teacher education elementary folio, National Association for the Education of Young Children (NAEYC) guidelines for baccalaureate level early childhood professional programs and Colorado State Day Care Director Licensure standards. The MSCD teacher education program is currently NCATE accredited.

- (b) Have external advisory groups/consultants been used to develop proposal? Describe their use. (Append reports, summaries)

The proposal was developed with the input and support of the Early Childhood Education Community Advisory Board, which includes directors of early childhood programs, principals and other school personnel, and community college faculty teaching in early childhood education. (See Appendix 1 for details.)

- (c) Description of program of assessment of student outcomes that will be utilized.

This program will become part of the MSCD and State Colleges program review process. Student outcomes assessment will be based primarily on written assignments and accounts of lab/field experiences. Program graduates will also be assessed after graduation to determine how well the program prepared them for advanced training and/or careers. Results from student and graduate assessments will be used to annually review and revise the curriculum and program requirements.

- (d) Brief description of results of peer review process by other Governing Boards. (Formal responses appended).

[Not available until peer review process initiated by CCHE]

10. Resource Issues:

- (a) Enrollment projections for first five years in Table 1 of Tech. Appendices of CCHE Policy I-B.

Enrollment projections are included in Section 11 of the proposal and in the appendices. The projections appear to be well thought-out and based on a conservative estimate. At full implementation (after five years), MSCD is projecting at least ten graduates per year and 71 students enrolled in the program.

- (b) Physical estimates for program as outlined in Table 2.

There are no additional physical capacity needs to fully implement this program at the level projected.

- (c) Projected expense and revenue estimates for first five years in Table 3.

The Expense/Revenue Table indicates that the program revenues will be consistently greater than program expenses for the proposed program.

- (d) Discussion of resource impact of program on instructional technology and library resources.

Library resources are currently in place to support the proposed major in Human Development. The campus currently has adequate instructional technology resources to implement and sustain the proposed major.

- (e) Brief narrative on source of resources to fully implement program.

No additional resources will be required to implement the program.

- (f) Brief narrative and explanation of economic impact, if any, of new program.

There will be no direct economic impact for the implementation of this program. Qualified students will be available to fill elementary and early childhood teaching workforce needs.

11. Copy of Concept Paper.

See Attached Concept Paper (Appendix 2).

12. Other relevant information that will help to illuminate the review and approval process.

When the Colorado Commission on Higher Education (CCHE) reviewed the Human Development Concept Paper it raised several issues. The issues related to the degree design and the MSCD responses are as follows:

CCHE Concern 1: The conceptual heart of the program is the human development core or major. It draws on courses from a number of disciplines. What appears to be lacking is courses or other means of integrating the content and methodology from these various disciplines. The full proposal should articulate where and how this integration takes place.

Response: Content integration is a central core of two required courses within the program: PSY 3280, Developmental Methods, and PSY 4960, the Senior Thesis. The first includes an orientation to and overview of the field of human development. The second requires students to synthesize their learning about development from various perspectives. See Section (6) *Description of the Curriculum -- Integration of the Disciplines in the Major*. To address this concern, MSCD has restricted the number of electives for students seeking teacher licensure, a change from the concept paper. More specifically, elementary education students will be required to take three courses linked to content: *Introduction to Statistics for Social and Behavioral Science*, which will increase their knowledge of mathematics; *Motor Learning, and Development*, which will increase their knowledge of science; and *Language Acquisition*, which will add to their depth of knowledge in reading and writing. These courses are among electives listed for early childhood education students.

CCHE Concern 2: The courses from which a student may choose to complete the nine-credit "Applied Track" requirement are numerous and varied. What purpose does it serve, what integrity is there in that track, and what commonality in perspective or content would exist among students completing it? If it serves a purpose other than expanding the number of courses the student takes in human development or related courses, this should be explained in the proposal.

Response: The courses will enable students to study in more depth topics covered in the required core. The core provides students with a perspective on the diverse approaches of different disciplines to development, and the applied track courses allow students to concentrate on one aspect that is of interest to them. The Applied Track will enhance students' appreciation of the many angles from which human development can be studied. The designers of this program believe that the beauty of the choices in the Applied Track lies in the ability to craft a number of very focused tracks, each reflecting the needs and career choices of the student. Advising will be the critical key to preventing students from merely sampling courses seemingly at random and without focus. See Section (4) *Value to the Student* above.

CCHE Concern 8: MSCD currently offers a number of programs for teacher preparation in early childhood and elementary education. The impact on the current array of the proposed program is not

articulated in the concept paper, but would be an important element in the Commission's consideration of the full proposal. If the proposed program were approved, which MSCD programs currently leading to licensure would no longer continue to serve that function? For example, would this new degree program replace the behavioral science degree as an elementary education licensure track?

Response: The human development major is not meant to replace the behavioral science degree or any other degree that is currently approved for licensure (English, history, biology, speech communication), especially for elementary education licensure. It may impact the use of those degrees by students seeking early childhood education licensure because of the strong support of the early childhood education faculty. However, it is clear from informal feedback received from current students seeking licensure that some would switch from behavioral science to human development if the major is approved. There are currently over 400 behavioral science majors so the loss of 70-100 students will not affect the health of the behavioral science program.

RECOMMENDATION:

The Staff recommends that the Academic Affairs Committee approve the proposal for the Human Development (B.A.) degree with Licensure in Elementary or Early Childhood Education at Metropolitan State College of Denver (MSCD) and forward it to the Board of Trustees for its review and possible approval.

Appendix D

Projected Expense and Revenue Estimates

Expenses

Faculty Expenses: Only one additional full-time tenure-track faculty member is needed to staff the program; the annual salary will depend on qualifications and experience, but it is estimated that the initial salary will be \$40,000 - \$45,000 plus benefits. For the purposes of this estimation, \$45,000 plus benefits, or \$53,100 was used. Because the program is interdisciplinary, students will be taking courses already being offered for other purposes. The following method was used to estimate a potential faculty expense. First, the percentage of coursework in the core in the fields of psychology, sociology, biology, and health professions was determined. An estimated student/faculty ratio for the new program -- 25.6 -- was estimated by taking the 5-year (1994-95 to 1998-99) student/faculty ratios for the four disciplines and multiplying each by its corresponding percent of the curriculum. The FTEF that would be needed to offer the program was then determined by dividing the program FTE by the student faculty ratio. That FTEF was then multiplied by the average of faculty salaries of psychology, sociology, health professions, and Letters, Arts and Sciences faculty (\$62,051.78) to determine the faculty expense. Because that expense was less than \$53,100 for the first three years, the higher number, \$53,100 was used until year four.

Financial Aid: The only type of financial aid that counts in this category is Colorado Scholars. The Financial Aid Office has stated that it will probably allocate \$2,000 a year to a new program. This allocation may not occur until the second year. Other aid is available to students, but it is not program specific.

Instructional Materials: The projected budget for administrative and instructional supplies is estimated to be \$1000 per year; this is expected to increase as the program grows.

Program Administration: Administrative stipend is reassigned time of three to six hours for one of the developmental psychology core faculty who will administer the program. This will cost the college \$1950 to \$3900 to hire part-time replacement faculty per semester. The program will be housed in the Psychology Department, which already has two administrative assistants. As the program grows, an additional half-time staff member may have to be hired.

Equipment acquisitions: There are no anticipated expenses for equipment acquisition, rental space, or capital construction.

Library: No additional expenses are anticipated.

Revenue

The General Fund: *State Support Revenue* line was generated by multiplying the in-state FTE by

\$3,400 – the current appropriation. The primary revenue for the program will come from the general fund, based on FTE-S. Cash-funded revenue will come from off-campus courses taught occasionally to make the program more accessible to students. Student fees are charged by MSCD and will provide revenue for computer labs and other student services. There are no federal, state, or private grants used to start up or operate the program.

MSCD charges tuition per credit hour. It was assumed that students in the Human Development Program would be taking eight hours a semester (half of the 16.32 credits that MSCD students take on average each academic year). At the present time a student taking eight hours pays \$589.20 in tuition. *The Cash Revenue: Tuition* was determined by multiplying the program headcount by two times \$590.

(d) Instructional Technology and Library Resources

There are no additional technology or library needs triggered by this proposed major. The Auraria Library, which serves three institutions, has excellent instructional and information-seeking facilities; the monograph and media collections are quite adequate to serve this major. The college is gradually, systematically converting all of its classrooms to SMART capability; this major will have access to those rooms when they are made available to the college instructional program. There are computer labs accessible to students throughout the campus, including the one in the Psychology Department mentioned above.

(e) Source of Resources

See 10a above. Because this program is crafted primarily from existing courses using existing faculty, the college will need no new resources. The revenue from the program will cover the expenses. The Financial Aid Office has stated that it will probably allocate \$2,000 a year to the new program. This allocation probably will not occur until the second year.

Table 3: Revenue and Expenses

		Estimated Amount in Dollars				
		Year 1	Year 2	Year 3	Year 4	Year 5
Operating Expenses:						
1	Faculty	\$ 53,100	\$ 53,100	\$ 53,100	\$ 64,502	\$ 73,143
2	Financial Aid specific to program		\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
3	Instructional Materials	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
4	Program Administration	\$ 3,900	\$ 3,900	\$ 3,900	\$ 3,900	\$ 3,900
5	Rent/Lease					
6	Other Operating Costs					
7	Total Operating Expenses	\$ 58,000	\$ 60,000	\$ 60,000	\$ 71,402	\$ 80,043
Program Start-Up Expenses						
8	Capital Construction					
9	Equipment Acquisitions					
10	Library Acquisitions					
11	Total Program Start-Up Expenses					
TOTAL PROGRAM EXPENSES		\$ 58,000	\$ 60,000	\$ 60,000	\$ 71,402	\$ 80,043
Enrollment Revenue						
12	General Fund: State Support	\$ 46,240	\$ 57,338	\$ 74,206	\$ 90,376	\$ 102,483
13	Cash Revenue: Tuition	\$ 29,500	\$ 36,580	\$ 47,342	\$ 57,658	\$ 65,382
14	Cash Revenue: Fees					
Other Revenue						
15	Federal Grants					
16	Corporate Grants/Donations					
17	Other fund sources*					
18	Institutional Reallocation *					
TOTAL PROGRAM REVENUE		\$ 75,740	\$ 93,918	\$ 121,548	\$ 148,034	\$ 167,865

**TOPIC: TEACHER AUTHORIZATION:
MODERN LANGUAGES: SPANISH CONCENTRATION
ELEMENTARY TEACHER EDUCATION
METROPOLITAN STATE COLLEGE OF DENVER**

PREPARED BY: PATTY GETTLE

I. SUMMARY

Metropolitan State College of Denver (MSCD) has requested teacher education authorization for the Spanish major offered as part of its Modern Languages degree program. MSCD has revised this curriculum to align with the elementary content standards and requests approval for elementary education licensure with bilingual secondary endorsement. CDE has reviewed the professional knowledge curriculum and recommends approval. CCHE staff has reviewed the content and field experience and recommends teacher education authorization for Metropolitan State College of Denver in:

LICENSURE LEVEL

DEGREE PROGRAM

Elementary Education

Modern Languages: Spanish Concentration

II. BACKGROUND

The Commission has reviewed five degree programs offered by Metropolitan State College of Denver and conferred teacher authorization in elementary education for behavioral sciences, English, history, speech communications, and biology. During the February site visit, the teacher education review team reviewed admission standards, counseling and advising, assessment, and field experience. Consequently, the approval process for an additional degree program in elementary education focused on the content analysis – whether the curriculum in this major aligned with K-6 content standards and the field experience.

Prior to forwarding the request to the Commission, the Board of Trustees of the State Colleges in Colorado has reviewed and approved this licensure request for this degree program. The board staff facilitated the curricular changes. In addition, MSCD has developed a 2 plus 2 articulation agreement with Colorado Mountain College to serve paraprofessionals employed in Roaring Fork, Eagle County and Garfield who aspire to become classroom teachers. They are employed at school districts that serve approximately a student population of 25% Hispanic students. The students will complete the first two years of the program at CMC. The paraprofessional students will follow a planned curriculum, enrolling in six credits in fall and spring semesters and 15 credits in the summer.

III. STAFF ANALYSIS

The design of MSCD's Bachelor of Arts degree in Modern Languages: Spanish 38 credit hours in general education, 46 credit hours in professional knowledge, and the Spanish major requires 36 credit hours with six additional credit hours in interdisciplinary topics. This equates to graduation requirements of 126 credits. The curriculum includes 800 hours of field experience in addition to the time these students work as paraprofessionals.

As submitted, the Spanish Concentration curriculum establishes a strong foundation in the Spanish language, both written and spoken with 12 credit hours in written communication skills and nine hours in oral communication skills. This strong language usage component will prepare the student to teach in a bilingual classroom. The emphasis on Spanish and Latin-American literature and culture will further prepare the teacher candidate to work in a bilingual English-Spanish classroom. The breadth of content knowledge required for an elementary teacher is met in the general education courses. While the depth of knowledge in mathematics, science, and language arts is somewhat limited, the field experience and close association with mentor teachers appears to support this program as a legitimate career ladder teacher training project. In addition, CCHE will track the performance of the graduates of the Modern Language degree program on the PLACE content examination for elementary education. A complete content analysis of the Spanish major is attached.

IV. STAFF RECOMMENDATION

That the Commission approves teacher education authorization in elementary education for Metropolitan State College of Denver's Modern Languages: Spanish Concentration degree program.

Appendix A

STATUTORY AUTHORITY

(C.R.S. 23-2-121 (2)) On or before July 1, 2000, the Commission shall adopt policies establishing the requirements for teacher preparation programs offered by institutions of higher education. The Commission shall work in cooperation with the State Board of Education in developing requirements for teacher preparation programs.

Attachment A

MSCD MODERN LANGUAGES: SPANISH CONCENTRATION B.A.

Elementary Education

CURRICULUM	Credits
General Education	38
Spanish Major	36
Interdisciplinary	6
Professional Knowledge	46
GRADUATION REQUIREMENTS	126

Students will take 36 hours in Spanish and 6 hours of Hispanic topics

Written Communication Skills (12 credits)

SPA 2320	Spanish Grammar & Composition II	3
SPA 3140	Advanced Composition	3
SPA 4010	Advanced Spanish Writing & Grammar I	3
SPA 4020	Advanced Spanish Writing & Grammar II	3

Oral Communication Skills (9 credits)

SPA 2120	Spanish Reading & Conversation	3
SPA 3110	Advanced Conversation	3
SPA 3150	Spanish Phonetics: Theory & Practice	3

Literature (9 credits)

SPA 3250	Introduction to Literary Studies in Spanish	3
SPA 3400	Survey of Spanish Literature I	3
-OR-		
SPA 3410	Survey of Spanish Literature II	3
SPA 3510	Masterpieces of Latin American Literature	3

Culture (6 credits)

SPA 3200	Culture & Civilization of Spain	3
SPA 3210	Latin-American Culture & Civilization	3
-OR-		
SPA 3220	Folklore & Culture of the Mexican Southwest	3

Hispanic Topics (6 credits)

In addition to the 36 hours, students seeking elementary licensure are required to take six hours of interdisciplinary topics that deal with Colorado history and current issues facing the Hispanic population.

CHS 3100	The Chicana/o Community	3
CHS 1020	History of the Chicana/o in the Southwest: 1810 to Present	3
-OR-		
HIS 1930	History of Indigenous/Hispanic Americans	3

Content Analysis:

The curriculum requirements specified in MSCD's Modern Languages: Spanish Concentration B.A. degree program provides students with the required knowledge, including:

- Ability to write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling. (Freshman Composition: The Essay, Public Speaking.)
- Apply thinking skills to reading, writing, speaking, listening, and viewing (Freshman Composition: Analysis Research, Public Speaking, Spanish Reading and Conversation, Spanish Grammar & Composition II, Advanced Composition).
- Understanding that literature is a record of human experience (Children's Literature, Introduction to Literary Studies in Spanish, Survey of Spanish Literature I & II, Masterpieces of Latin American Literature).
- Knowledge of number systems, algebra, and geometric concepts (Integrated Mathematics I-II).
- Ability to use a variety of tools and techniques to measure, apply the results to problem solving situations, and communicate the reasoning used in the situations (Integrated Mathematics I - II).
- Knowledge of significant events and people in US history and Colorado history (American History I, History of Indigenous / Hispanic Americans, History of the Chicana/o in the Southwest, Folklore & Culture of the Mexican Southwest).
- Understand political institutions and how they change over time (American National Government, Culture & Civilization of Spain, Latin-American Culture & Civilization).
- Ability to analyze present-day issues (American National Government, The Chicana/o Community, Latin-American Culture & Civilization).
- Knowledge of the physical characteristics of places and use this knowledge to define and study regions (Concepts and Connections in Geography, Culture & Civilization of Spain).
- Chemistry and Physics knowledge – understand common properties, forms, and changes in matter and energy (Integrated Natural Science I-II).
- Biology -- Knowledge of the characteristics and structure of living things (Integrated Natural Science I-II).

- Earth and Space Science – understand the composition of the earth, processes that shaped it, fundamental processes of weather, and the solar system (Integrated Natural Science I-II).

MSCD students will have a strong background in the fundamentals of Spanish language, literature and culture.

Conclusion:

MSCD's Modern Languages: Spanish Concentration B.A. degree program provides students seeking elementary education licensure with the appropriate content knowledge.

TOPIC: QUALITY INDICATOR SYSTEM REPORT FY 2000-01

PREPARED BY: RAY KIEFT

I. SUMMARY

Each year, the Commission is to report to the Senate and House Education Committees and the governing boards on the past year's activity related to the Quality Indicator System. The FY 2000-01 report is [attached](#).

Appendix A

STATUTORY AUTHORITY

On or before December 1, 1998, and on or before December 1 of each year thereafter, the commission shall provide to the persons specified in section 23-1-105 (3.7)(a), to the education committees of the house of representatives and the senate, and to each governing board a report of the data collected through the quality indicator system indicating the overall performance of the statewide system of higher education and each governing board's and institution's performance in achieving the statewide expectations and goals. The commission shall also provide copies of the report to other members of the general assembly and members of the public on request. (23-13-105, (5)(a) C.R.S.)

QUALITY INDICATOR SYSTEM REPORT

December 2001

Introduction

In 1996, the Colorado General Assembly passed HB96-1219 – the Higher Education Quality Assurance Act – which outlined the General Assembly's expectations for a quality indicator system for Colorado's state-supported higher education system. During 1997-98, the Colorado Commission on Higher Education (CCHE) implemented HB96-1219, culminating in a report to the General Assembly in December 1998 on the results of the first year's efforts. In the subsequent 1999 legislative session, SB99-229 was enacted. It refined HB96-1219 and identified state goals and institutional actions for a revised Quality Indicator System (QIS).

Beginning with the 1999-2000 academic year and continuing through the present, the state-supported institutions of higher education, governing boards, and CCHE have worked collaboratively to implement SB99-229 and refine the QIS. The indicators comprising the QIS have been utilized as performance measures for the CCHE's performance funding system. (Readers interested in CCHE's performance funding system can find a report detailing the performance funding system on the CCHE's web site).

This QIS report is the third of its kind. Included is a description of the ten indicators, the institutional data for each, as well as the benchmarks for measuring institution performance where applicable.

Background

Colorado is one of thirty-seven states that has implemented some type of quality indicator or performance measurement system for its state-supported institutions of higher education. Similar indicators are utilized by a majority of these states, including Colorado: graduation rates, freshmen retention and persistence rates, passing scores or rates on tests and licensure examinations, faculty teaching workload rates, and undergraduate class size. Colorado's system keeps the overall number of indicators to ten or less (with subcomponents), while many states rely on a larger number of indicators (e.g., Missouri – 24, Wisconsin – 21, Kentucky – 16, Virginia – 14, Washington – 13).

To the extent possible for each Colorado state-supported institution, an individual benchmark is identified where the measure is based on the performance levels of institutions that represent a national comparison group for that college or university (i.e., institutions across the country with similar roles and missions, enrollment size, program array, complexity, etc.). To ensure that each institution has the most relevant comparison group for an indicator, the groupings may differ from indicator to indicator. In some cases, however, the comparison is limited by the availability of national databases and/or reliable data from comparable institutions. In such cases, recent performance of the institution serves as the benchmark, with the expectation that improvement will occur.

Along with the indicators common to other states, Colorado's QIS also has unique features as specified by SB99-229. First and foremost, Colorado's system focuses on undergraduate education. Graduate level education and research are not components of SB99-229, and thus, neither is included explicitly in QIS. This focus of SB99-229 and the subsequent incorporation of it in QIS should not be construed as a devaluing of graduation level education or research by CCHE or the state. Both are important components of Colorado's higher education system and both are supported by CCHE.

Purposes of QIS

Purpose 1: Encouraging Continuous Improvement by Institutions in Achieving High Levels of Performance

In the decade of the 1990s, higher education conscientiously addressed the public expectation for an effective framework to ensure quality and accountability. Colorado's heightened attention to quality and accountability occurred in 1996 with the passage of HB96-1219, known as the Higher Education Quality Assurance Act. This legislation outlined the General Assembly's expectations and goals for higher education. It also urged higher education to "...concentrate on improving both the quality and cost-effectiveness of higher education in the state." (CRS 23-13-102) The QIS reflects this statutory purpose by encouraging state-supported institutions of higher education to strive for continuous improvement in achieving high levels of performance.

Purpose 2: Measuring Institutional Performance and Accountability

Since 1985, Colorado's state-supported institutions of higher education have been involved in accountability reporting vis-à-vis several laws (HB85-1187, HB91-1002, SB93-136, HB94-1110, and HB96-1219). The Higher Education Quality Assurance Act (HB96-1219) was refined in 1999 with the passage of SB99-229. Through this refinement, the General Assembly mandated the establishment of "...a quality indicator system to measure the overall performance of the statewide system of higher education and each governing board's and each institution's performance in achieving the statewide expectations and goals..." (CRS 23-13-105) In establishing the statewide expectations and goals, the General Assembly further expressed its expectation that "...each institution...shall work toward achieving a high quality, efficient, and expeditious undergraduate education..." (CRS 23-13-104(a)) The QIS serves as an accountability reporting process as related to these statewide expectations and goals.

Purpose 3: Determining Funding Recommendations and the Funding Distribution Formula for the Higher Education System

The incorporation of QIS in the CCHE's funding recommendations and distribution formula for the higher education system is specified in statute: "The commission shall make annual systemwide funding recommendations...In making its recommendations, the commission shall consider each governing board's and each institution's level of achievement of the statewide expectations and goals...as measured by data collected through the quality indicator system..." (CRS 23-1-105(2)) and "The commission shall establish...the distribution formula of general fund appropriations...to each governing board under the following principles...To reflect the governing board's and the institution's level of achievement of the statewide expectations and goals...as measured by data from the quality indicator system..." (CRS 23-1-105(3)(d))

Purpose 4: Build Public Support for Increased Funding for Higher Education

A recent survey of Colorado residents identified higher education as having a high level of respect with the institutions of higher education viewed as providing quality educational experiences. However, this high level of regard has not translated into a level of financial support for higher education as measured by higher education's share of the state budget. For several years, higher education staked its financial future on a growing enrollment and inflation as the primary means for keeping higher education's percent of the state budget on pace with the rest of state government. Unfortunately, enrollment growth fell short of expectations. Consequently, higher education lost ground in funding support.

A strategy of building public support for increased funding for higher education is embodied in the utilization of data from QIS in the performance funding system and the *Consumer Guide*. Clear, concise reporting of aspects of higher education that matter intuitively to the public – graduation rates, achievement levels of recent graduates, freshmen retention and persistence rates, class size, overhead costs, credits to degree – the willingness to set high performance expectations and standards (benchmarks), and the openness to compare the performance of Colorado's institutions with the performance of like institutions across the country, these all provide a foundation which can be used to request increased financial support for higher education.

Balance and Limitations Inherent in Any Quality Indicator System

Each state-supported institution of higher education in Colorado has a particular role and mission. Each has an admission selectivity level assigned to it by statute. Each has its own particular set of academic

and student support programs and services. Each has relationships with its local community, region, and the state. Some have national and international relationships. Traditions have shaped each institution. Taken as a whole, each institution has aspects that cannot be adequately taken into account or measured by any system, no matter how sophisticated that system may be when, by design, the system incorporates some amount of uniformity and commonality among the institutions. This is a limitation of any quality indicator or performance measurement system that seeks to include all institutions in some common format and approach. Whatever the quality indicator or performance measurement system employed, it must recognize this limitation and strive to balance the diversity of institutions and their respective differences with the commonality and uniformity inherent in the quality indicator or performance measurement system.

On the other hand, all state-supported institutions should be able to demonstrate good educational and administrative practices in offering their programs, allocating their resources, and being accountable to their students, taxpayers, and the public. As state-supported institutions of higher education that benefit from public funds, state-supported institutions have a special obligation to be accountable to the citizens of the state. This balance also must be achieved by a quality indicator or performance measurement system. It is believed that the quality indicator system reflected in this report strikes this balance by honoring the diversity of Colorado's state-supported institutions of higher education while promoting continuous improvement in their operations through accountability.

Actions Taken or Planned by the Governing Boards and Institutions

This report presents quality indicators, institutional data, and applicable benchmarks without incorporating an evaluative component or outlining new initiatives, remediation, or further inquiry that the data might suggest. HB96-1219 provides such opportunities through a follow-up report due January 30, 2002 that takes that next step. The January report will describe the responsive actions taken or planned by the governing boards and institutions.

QUALITY INDICATORS FOR FY 2001 - 02

Indicator 1A: Baccalaureate Graduation Rates (four-year institutions)

An institution's baccalaureate graduation rate is the single most common indicator used by quality indicator and performance measurement systems across the thirty-seven states that use some form of a quality indicator or performance measurement system. Its inclusion is reflected in the fact that graduation rates are reported nationally by educational organizations, publications (e.g., *US News and World Report*) and other states.

Colorado's QIS mirrors the nation's and other states' utilization of a similar indicator. Four, five, and six-year graduation rates are calculated for each baccalaureate-granting institution based on the nationally accepted definition of a first-time, entering, full-time, degree-seeking student. Students meeting these criteria and beginning at a specified time constitute an entering cohort upon which the measurement is based. A graduation rate for students completing at their original institution is calculated along with a graduation rate from any four-year institution in Colorado's state-supported system of higher education. For the latter measure, students transferring to private institutions in Colorado and to institutions outside Colorado are not counted. Since some institutions have more of a transfer role than others, the graduation rate from any four-year institution in Colorado's state-supported system of high education is meant to recognize this important component of an institution's role and mission.

Benchmark ranges for the indicator measuring graduation rates from the original institution are based on a national comparison group of similar institutions. The benchmark for the indicator measuring graduation rates from any four-year institution in Colorado's state-supported higher education system is based on each institution's recent performance, with the emphasis on improvement from the past year's performance level.

Factors to Keep in Mind When Interpreting Graduation Rates

Following nationally-recognized definitions, the entering cohorts tracked in the QIS graduation, retention, and persistence rate indicators (indicators 1, 2, and 3) are limited to first-time, degree-seeking freshmen who entered the institution in the summer or fall and were enrolled full-time in their first fall term.

Reporting on minority student retention and completion relies on the same criteria. Other undergraduate students new to the institution are excluded from the entering cohorts – freshmen enrolled part-time their first term, non-degree students, and all transfer students. For some institutions, a large percentage of their new undergraduates may be non-degree seeking, transfers, and/or part-time. Once the entry cohort is formed, no students are added, and students are removed only for death, military service, or missionary service. Finally, one also should be mindful that, while a student may have enrolled full-time in the first term, the student may register on either a full- or part-time basis in subsequent terms but continue to be included in the calculations.

Indicators 1B: Three-Year Graduation Rates (two-year institutions)

This indicator is the equivalent indicator for two-year institutions. It measures the three-year graduation rate for first-time, full-time, certificate or associate degree-seeking freshmen who entered a two-year institution in summer or fall 1997 and either graduated from the original institution or another two-year institution in Colorado's state-supported institution of higher education within three years after entry. Individual institution benchmark ranges are based on recent performance with the expectation for improvement from the past year's performance level.

Similar factors should be kept in mind when interpreting these indicators as for the baccalaureate graduation rate indicators. In addition, research shows that when the national or state economy is robust (which both were during the period of time measured by this indicator), enrollments in two-year institutions often stagnate or even decline as students take advantage of increased employment opportunities and delay their higher education careers.

Indicators 2A and 2B: Freshmen Retention and Persistence Rates

These indicators mirror similar indicators used by other states which measure the percentage of first-time, full-time, certificate or degree-seeking freshmen entering in summer or fall 1999 who either completed a program by August 2000, were enrolled in the fall 2000 term at the same institution, or transferred to another Colorado state-supported institution of higher education and enrolled at that institution in the fall 2000 term. Benchmarks for the four-year institutions are based on national comparison groups and also on recent performance of the institution with an expectation for improvement from the past year's level of performance. Benchmarks for the two-year institutions are based on recent performance with an expectation for improvement from the past year's level of performance.

Indicators 3A & 3B: Support and Success of Minority Students

These two indicators take the six-year graduation (from four-year institutions), three-year graduation (from two-year institutions), freshmen retention, and freshmen persistence rate indicators and measure them for first-time, full-time, certificate and degree-seeking freshmen minority students. The same factors must be kept in mind when interpreting these indicators as apply to indicators 1A – 2B.

**QIS Measure 1A: BACCALAUREATE GRADUATION RATES
AFTER FOUR, FIVE, AND SIX YEARS AT
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1994, 1995, and 1996 Cohorts**

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Cumulative % Graduating Four Yrs After Entry From --			Cumulative % Graduating Five Yrs After Entry From --			Cumulative % Graduating Six Yrs After Entry From --			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	Transf Inst	All Inst	Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
University of Colorado Univ Colo - Boulder	1992	3,593	33.5	0.7	34.1	56.1	1.9	58.0	61.1	2.8	63.8		
	1993	3,434	35.3	1.0	36.3	59.0	2.7	61.7	63.7	4.1	67.8		
	1994	3,591	35.6	0.9	36.5	58.8	2.3	61.0	64.4	3.2	67.6	58.4 - 62.4	67.8
	1995	4,165	34.8	0.4	35.2	60.1	2.1	62.2	-	-	-	57.6 - 61.6	61.3
	1996	3,946	38.4	0.7	39.1	-	-	-	-	-	-	35.5 - 39.5	35.8
Univ Colo - Colo Spr	1992	320	9.7	1.9	11.6	23.1	8.8	31.9	27.8	11.6	39.4		
	1993	308	14.9	1.0	15.9	30.8	8.1	39.0	39.3	11.0	50.3		
	1994	328	12.5	1.5	14.0	28.4	7.9	36.3	34.5	9.5	43.9	37.4 - 41.4	50.3
	1995	373	10.7	3.5	14.2	24.9	9.9	34.9	-	-	-	32.9 - 36.9	37.6
	1996	385	18.2	1.8	20.0	-	-	-	-	-	-	18.1 - 22.1	14.2
Univ Colo - Denver	1992	272	10.7	1.8	12.5	27.6	6.6	34.2	34.6	9.6	44.1		
	1993	243	15.6	1.6	17.3	29.6	5.3	35.0	37.9	8.6	46.5		
	1994	265	11.7	2.3	14.0	33.2	6.8	40.0	37.4	10.6	47.9	33.1 - 37.1	46.5
	1995	266	15.4	2.6	18.0	32.3	4.9	37.2	-	-	-	28.1 - 32.1	40.0
	1996	375	14.4	2.1	16.5	-	-	-	-	-	-	12.7 - 16.7	18.0
Univ of Northern Colo	1992	1,458	15.8	1.7	17.5	36.0	6.2	42.2	41.6	8.6	50.2		
	1993	1,704	18.1	1.5	19.5	39.5	5.6	45.1	44.0	7.7	51.7		
	1994	1,609	21.0	1.6	22.6	39.9	5.9	45.8	44.3	9.2	53.4	47.7 - 51.7	51.7
	1995	1,763	22.9	1.8	24.7	40.9	5.5	46.4	-	-	-	44.8 - 48.8	45.8
	1996	1,642	25.0	2.5	27.5	-	-	-	-	-	-	23.2 - 27.2	24.7
State Board of Agriculture Colorado State Univ	1992	2,219	26.0	1.2	27.2	54.6	3.4	58.0	60.5	5.3	65.8		
	1993	2,179	28.1	1.2	29.4	53.8	3.6	57.4	59.8	4.7	64.5		
	1994	2,291	29.1	0.8	29.9	57.0	2.9	59.9	61.9	4.1	66.0	53.4 - 57.4	65.1
	1995	2,568	31.4	1.1	32.5	57.4	3.3	60.7	-	-	-	51.5 - 55.5	59.9
	1996	2,723	31.2	1.2	32.5	-	-	-	-	-	-	30.8 - 34.8	32.5
Fort Lewis Coll	1992	983	8.3	0.9	9.3	20.5	5.8	26.3	24.8	8.6	33.5		
	1993	1,081	8.7	1.2	9.9	23.6	6.9	30.5	28.6	10.4	38.9		
	1994	875	12.3	2.1	14.4	27.5	7.0	34.5	31.1	11.0	42.1	30.1 - 34.1	35.1
	1995	1,010	7.8	2.2	10.0	20.0	6.7	26.7	-	-	-	26.0 - 30.0	31.2
	1996	1,131	9.2	2.0	11.2	-	-	-	-	-	-	12.2 - 16.2	11.2
Univ of Southern Colorado	1992	661	9.2	0.8	10.0	21.2	3.0	24.2	25.3	4.2	29.5		
	1993	682	11.4	1.3	12.8	22.9	4.3	27.1	27.0	5.7	32.7		
	1994	640	9.8	0.8	10.6	23.1	4.8	28.0	27.5	6.1	33.6	30.1 - 34.1	32.7
	1995	590	11.7	0.8	12.5	21.7	5.4	27.1	-	-	-	26.0 - 30.0	28.0
	1996	575	11.8	0.9	12.7	-	-	-	-	-	-	12.2 - 16.2	12.5
State Colleges Adams State Coll	1992	389	13.6	1.8	15.4	26.0	4.1	30.1	30.3	6.2	36.5		
	1993	352	13.9	1.4	15.3	24.4	4.3	28.7	29.0	6.5	35.5		
	1994	437	17.4	2.3	19.7	26.8	5.9	32.7	29.7	8.7	38.4	30.1 - 34.1	36.0
	1995	449	12.2	2.0	14.3	26.5	4.2	30.7	-	-	-	26.0 - 30.0	32.7
	1996	431	15.8	2.1	17.9	-	-	-	-	-	-	12.2 - 16.2	17.0

(continued)

**QIS Measure 1A: BACCALAUREATE GRADUATION RATES
AFTER FOUR, FIVE, AND SIX YEARS AT
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1994, 1995, and 1996 Cohorts**

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Cumulative % Graduating Four Yrs After Entry From --			Cumulative % Graduating Five Yrs After Entry From --			Cumulative % Graduating Six Yrs After Entry From --			Benchmark		
			Orig Inst	Transf		Orig Inst	Transf		Orig Inst	Transf		Orig Inst	All Inst	
				Inst	All Inst		Inst	All Inst		Inst	All Inst			
State Colleges (continued)														
Mesa State Coll	1992	476	5.0	1.3	6.3	13.9	4.8	18.7	19.1	9.2	28.4			
	1993	611	8.0	1.5	9.5	20.0	4.3	24.2	23.2	7.5	30.8			
	1994	662	6.5	1.2	7.7	18.9	4.8	23.7	24.5	7.1	31.6	30.1 - 34.1	30.8	
	1995	667	9.0	2.5	11.5	19.9	7.9	27.9	-	-	-	26.0 - 30.0	23.9	
	1996	630	9.7	2.1	11.7	-	-	-	-	-	-	12.2 - 16.2	11.5	
Metropolitan State Coll of Denver	1992	1,182	3.6	1.3	4.8	12.7	4.6	17.3	19.2	7.7	26.9			
	1993	1,378	3.1	1.0	4.1	12.1	5.3	17.4	19.7	7.7	27.4			
	1994	1,254	4.3	1.3	5.6	12.8	4.8	17.5	19.1	7.0	26.2	20.2 - 24.2	27.4	
	1995	1,239	3.9	0.9	4.8	14.9	4.4	19.3	-	-	-	13.7 - 17.7	17.5	
	1996	1,324	3.9	0.8	4.6	-	-	-	-	-	-	2.8 - 6.8	5.2	
Western State Coll	1992	717	7.5	1.4	8.9	17.4	5.9	23.3	21.8	7.9	29.7			
	1993	599	10.9	1.5	12.4	22.9	6.8	29.7	27.4	8.5	35.9			
	1994	608	10.0	0.8	10.9	22.2	5.1	27.3	28.0	8.2	36.2	30.1 - 34.1	35.9	
	1995	599	10.5	1.8	12.4	23.4	8.2	31.6	-	-	-	26.0 - 30.0	28.5	
	1996	632	12.0	1.7	13.8	-	-	-	-	-	-	12.2 - 16.2	12.4	
Four-Year Inst Total	1992	12,270	19.4	1.1	20.6	38.2	4.0	42.2	43.4	6.0	49.4			
	1993	12,571	20.6	1.2	21.8	39.4	4.5	43.9	44.7	6.4	51.1			
	1994	12,560	22.0	1.2	23.2	41.1	4.2	45.3	46.2	6.2	52.4	n/a	n/a	
	1995	13,689	22.8	1.3	24.0	42.2	4.4	46.6	-	-	-	n/a	n/a	
	1996	13,794	24.1	1.4	25.5	-	-	-	-	-	-	n/a	n/a	

*Base year cohort is 1996 for four-year graduation rate, 1995 for five-year rate, and 1994 for six-year rate; graduate totals based on specified number of academic years plus the following summer.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer.

Source: Cohort and benchmark calculation based on SURDS files and institutional data; g:\QIS\2001\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls

**QIS Measure 1B: GRADUATION RATES AFTER THREE YEARS FROM
 COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
 Fall 1997 Cohort**

Institution	Cohort Entering in Fall --	# Students in Entering Cohort**	Cumulative % Graduating With Cert or Assoc Degree Three Years After Entry			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
Community Colleges of Colorado							
Arapahoe Comm Coll	1995	443	23.0	0.5	23.5	18.8 - 22.8	21.3
	1996	318	18.6	0.6	19.2		
	1997	399	24.1	0.8	24.8		
Colo NW Comm Coll	1995	141	22.0	0.7	22.7	21.0 - 25.0	25.7
	1996	148	23.0	2.7	25.7		
	1997	166	23.5	1.2	24.7		
Comm Coll of Aurora	1995	294	10.5	1.0	11.6	6.9 - 10.9	9.7
	1996	205	7.3	0.5	7.8		
	1997	230	5.7	0.9	6.5		
Comm Coll of Denver	1995	476	12.4	0.0	12.4	14.5 - 18.5	16.5
	1996	418	16.5	0.0	16.5		
	1997	494	12.6	0.4	13.0		
Front Range Comm Coll	1995	938	20.7	1.1	21.7	15.4 - 19.4	18.4
	1996	733	14.1	1.0	15.0		
	1997	966	20.0	0.8	20.8		
Lamar Comm Coll	1995	199	28.6	1.5	30.2	24.2 - 28.2	26.9
	1996	152	23.7	0.0	23.7		
	1997	187	28.9	2.1	31.0		
Morgan Comm Coll	1995	131	63.4	1.5	64.9	55.6 - 59.6	59.5
	1996	85	51.8	2.4	54.1		
	1997	80	23.8	1.3	25.0		
Northeastern Junior Coll	1995	415	44.6	0.5	45.1	41.1 - 45.1	43.9
	1996	473	41.6	1.1	42.7		
	1997	349	38.7	0.6	39.3		
Otero Junior Coll	1995	245	36.7	2.0	38.8	34.1 - 38.1	38.0
	1996	212	35.4	1.9	37.3		
	1997	234	33.3	2.6	35.9		
Pikes Peak Comm Coll	1995	823	10.8	0.0	10.8	8.0 - 12.0	10.2
	1996	736	9.2	0.3	9.5		
	1997	800	12.5	0.5	13.0		
Pueblo Comm Coll	1995	398	21.1	0.0	21.1	15.8 - 19.8	18.0
	1996	297	14.5	0.3	14.8		
	1997	312	12.5	0.3	12.8		
Red Rocks Comm Coll	1995	508	16.7	0.6	17.3	14.1 - 18.1	17.3
	1996	406	15.5	1.7	17.2		
	1997	552	16.7	1.6	18.3		
Trinidad State Jun Coll	1995	400	41.3	0.0	41.3	39.0 - 43.0	41.3
	1996	317	40.7	0.6	41.3		
	1997	309	35.6	0.6	36.2		
Local District Colleges							
Aims Comm Coll	1995	416	23.8	1.0	24.8	19.1 - 23.1	21.9
	1996	458	18.3	0.7	19.0		
	1997	456	21.5	0.9	22.4		
Colo Mountain Coll	1995	471	25.5	1.7	27.2	20.0 - 24.0	23.3
	1996	387	18.6	0.8	19.4		
	1997	517	25.0	1.2	26.1		
Two-Year Inst Total							
	1995	6,298	23.4	0.7	24.1	n/a	n/a
	1996	5,345	20.4	0.8	21.2		
	1997	6,051	20.8	0.9	21.7		

**Base year cohort is 1997 for three-year graduation rate; graduate totals based on specified number of academic years plus the following summer.
 Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer.

**QIS Measure 2A: RETENTION RATES
ONE YEAR AFTER ENTRY BY
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1999 Cohort**

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Retained One Year After Entry From --			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
University of Colorado							
Univ Colo - Boulder	1997	4,260	84.2	3.6	87.8		
	1998	4,270	84.0	4.1	88.1		
	1999	4,552	83.4	4.2	87.6	81.2 - 85.2	88.1
Univ Colo - Colo Spr	1997	543	62.2	11.4	73.7		
	1998	666	65.3	12.9	78.2		
	1999	684	63.2	10.7	73.8	72.3 - 76.3	78.2
Univ Colo - Denver	1997	439	72.4	10.9	83.4		
	1998	394	67.3	12.4	79.7		
	1999	478	70.3	10.7	81.0	66.5 - 70.5	81.5
Univ of Northern Colo							
	1997	1,908	67.1	13.8	80.9		
	1998	2,169	67.8	14.2	82.0		
	1999	2,293	69.9	12.3	82.3	75.4 - 79.4	82.0
State Board of Agriculture							
Colorado State Univ	1997	2,639	82.0	5.7	87.7		
	1998	3,055	82.5	6.2	88.7		
	1999	3,119	83.1	5.0	88.2	78.5 - 82.5	88.7
Fort Lewis Coll	1997	1,062	51.0	14.5	65.5		
	1998	969	57.9	12.0	69.9		
	1999	998	55.6	12.5	68.1	64.9 - 68.9	69.9
Univ of Southern Colo	1997	584	62.2	10.6	72.8		
	1998	621	61.0	13.5	74.6		
	1999	611	66.1	12.1	78.2	64.9 - 68.9	74.6
State Colleges							
Adams State Coll	1997	420	53.3	14.0	67.4		
	1998	483	57.6	12.4	70.0		
	1999	416	63.2	10.8	74.0	64.9 - 68.9	70.0
Mesa State Coll	1997	706	62.9	10.8	73.7		
	1998	664	60.2	10.2	70.5		
	1999	626	57.7	13.7	71.4	64.9 - 68.9	72.1
Metropolitan State Coll of Denver	1997	1,478	59.1	10.8	70.0		
	1998	1,382	64.3	9.8	74.0		
	1999	1,440	59.9	8.9	68.8	61.7 - 65.7	74.0
Western State Coll	1997	562	52.3	15.5	67.8		
	1998	591	55.7	11.8	67.5		
	1999	557	58.3	14.4	72.7	64.9 - 68.9	67.6
Four-Year Inst Total							
	1997	14,601	71.4	8.7	80.2		
	1998	15,264	72.8	8.8	81.6		
	1999	15,774	73.1	8.2	81.3	n/a	n/a

*Base year cohort is 1999.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer.

Source: Cohort and benchmark calculation based on SURDS files and institutional data; g:\QIS\2001\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls

**QIS Measure 2B: RETENTION RATES ONE YEAR AFTER ENTRY BY
 COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
 Fall 1999 Cohort**

Institution	Base Year** For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Successful One Year After Entry At --			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
Community Colleges of Colorado							
Arapahoe Comm Coll	1997	399	55.4	11.3	66.7	48.5 - 52.5	62.5
	1998	305	45.6	12.8	58.4		
	1999	339	57.8	8.3	66.1		
Colo NW Comm Coll	1997	166	43.4	12.0	55.4	44.5 - 48.5	61.2
	1998	129	46.5	14.7	61.2		
	1999	116	46.6	10.3	56.9		
Comm Coll of Aurora	1997	230	38.3	7.0	45.2	43.8 - 47.8	56.4
	1998	225	45.8	10.7	56.4		
	1999	329	65.0	6.1	71.1		
Comm Coll of Denver	1997	494	47.8	7.9	55.7	50.3 - 54.3	62.3
	1998	493	52.3	9.9	62.3		
	1999	501	48.3	7.8	56.1		
Front Range Comm Coll	1997	966	48.9	12.7	61.6	47.3 - 51.3	60.8
	1998	704	49.3	10.8	60.1		
	1999	836	48.1	10.0	58.1		
Lamar Comm Coll	1997	187	50.3	6.4	56.7	50.3 - 54.3	59.9
	1998	172	52.3	7.6	59.9		
	1999	123	52.8	7.3	60.2		
Morgan Comm Coll	1997	80	47.5	6.3	53.8	58.8 - 62.8	68.6
	1998	51	60.8	7.8	68.6		
	1999	71	50.7	8.5	59.2		
Northeastern Junior Coll	1997	349	59.6	9.7	69.3	55.2 - 59.2	65.5
	1998	332	54.8	6.9	61.7		
	1999	286	55.2	9.1	64.3		
Otero Junior Coll	1997	234	49.6	7.3	56.8	59.1 - 63.1	69.5
	1998	190	61.1	8.4	69.5		
	1999	203	54.2	8.9	63.1		
Pikes Peak Comm Coll	1997	800	43.5	6.0	49.5	41.2 - 45.2	49.0
	1998	909	42.9	5.5	48.4		
	1999	895	41.6	5.1	46.7		
Pueblo Comm Coll	1997	312	49.0	7.7	56.7	55.8 - 59.8	62.2
	1998	386	57.8	4.4	62.2		
	1999	315	49.2	7.6	56.8		
Red Rocks Comm Coll	1997	552	46.9	9.1	56.0	45.7 - 49.9	55.2
	1998	438	47.7	6.6	54.3		
	1999	468	47.9	7.9	55.8		
Trinidad State Jun Coll	1997	309	53.1	5.2	58.3	52.8 - 56.8	59.6
	1998	270	54.8	4.8	59.6		
	1999	278	51.1	5.8	56.8		
Local District Colleges							
Aims Comm Coll	1997	456	50.2	6.6	56.8	44.6 - 48.6	53.2
	1998	458	43.0	6.6	49.6		
	1999	363	57.9	7.2	65.0		
Colo Mountain Coll	1997	517	46.2	11.6	57.8	42.1 - 46.1	57.1
	1998	422	41.9	14.5	56.4		
	1999	383	46.0	9.7	55.6		
Two-Year Inst Total							
	1997	6,051	48.5	8.9	57.4	n/a	n/a
	1998	5,484	48.7	8.4	57.1		
	1999	5,506	50.1	7.8	57.8		

**Base year cohort is 1999; graduate totals based on specified number of academic year(s) plus the following summer.
 Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer.
 Source: Cohort and benchmark calculation based on SURDS files and institutional data; g:\QIS\2001\tables\1B_2B_Grads_3B_3D_Ret_2yr.xls

**QIS Measure 3A: BACCALAUREATE GRADUATION RATES
AFTER SIX YEARS AT
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1994 Minority Cohort**

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Cumulative % Graduating Six Yrs After Entry From --			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
University of Colorado							
Univ Colo - Boulder	1992	639	45.1	3.9	49.0		
	1993	676	49.4	4.7	54.1		
	1994	685	51.4	3.6	55.0	51.2 - 55.2	54.1
Univ Colo - Colo Spr	1992	61	21.3	4.9	26.2		
	1993	41	29.3	4.9	34.1		
	1994	62	32.3	9.7	41.9	30.6 - 34.6	34.1
Univ Colo - Denver	1992	134	33.6	4.5	38.1		
	1993	104	29.8	9.6	39.4		
	1994	121	29.8	5.8	35.5	23.7 - 27.7	39.4
Univ of Northern Colo	1992	283	30.7	5.7	36.4		
	1993	303	32.3	4.6	37.0		
	1994	270	39.6	3.0	42.6	40.4 - 44.4	37.0
State Board of Agriculture							
Colo State Univ	1992	298	49.7	4.4	54.0		
	1993	340	49.7	4.4	54.1		
	1994	332	50.3	4.2	54.5	50.7 - 54.7	54.1
Fort Lewis Coll	1992	176	17.0	1.7	18.8		
	1993	189	22.2	4.8	27.0		
	1994	140	24.3	5.7	30.0	24.8 - 28.8	22.8
Univ of Southern Colo	1992	205	13.7	2.4	16.1		
	1993	200	19.0	5.5	24.5		
	1994	203	21.2	3.0	24.1	24.8 - 28.8	24.5
State Colleges							
Adams State Coll	1992	112	27.7	3.6	31.3		
	1993	95	23.2	4.2	27.4		
	1994	129	22.5	7.8	30.2	24.8 - 28.8	28.4
Mesa State Coll	1992	46	15.2	8.7	23.9		
	1993	74	17.6	10.8	28.4		
	1994	78	23.1	5.1	28.2	24.8 - 28.8	28.4
Metropolitan State Coll of Denver	1992	274	14.6	4.7	19.3		
	1993	372	15.9	2.7	18.5		
	1994	345	12.8	1.4	14.2	14.9 - 18.9	18.9
Western State Coll	1992	54	11.1	11.1	22.2		
	1993	58	17.2	10.3	27.6		
	1994	48	31.3	4.2	35.4	24.8 - 28.8	27.6
Four-Year Inst Total	1992	2,282	31.7	4.3	36.0		
	1993	2,452	33.8	4.9	38.7		
	1994	2,413	35.8	3.9	39.8	n/a	n/a

*Base year cohort is 1994 for six-year rate; graduate totals based on specified number of academic years plus the following summer.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic/minority category.

Source: Cohort and benchmark calculation based on SURDS files and institutional data; g:\QIS\2001\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls

**QIS Measure 3B: GRADUATION RATES AFTER THREE YEARS FROM
 COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
 Fall 1997 Minority Cohort**

Institution	Cohort Entering in Fall --	# Students in Entering Cohort**	Cumulative % Graduating With Cert or Assoc Degree Three Years After Entry From --			Benchmark	
			Orig Inst	Tranf Inst	All Inst	Orig Inst	All Inst
Community Colleges of Colorado							
Arapahoe Comm Coll	1995	59	13.6	0.0	13.6	19.7 - 23.7	21.7
	1996	60	21.7	0.0	21.7		
	1997	59	13.6	3.4	16.9		
Colo NW Comm Coll	1995	7	0.0	14.3	14.3	10.0 - 14.0	16.0
	1996	25	12.0	16.0	28.0		
	1997	23	21.7	0.0	21.7		
Comm Coll of Aurora	1995	114	7.9	0.9	8.8	5.3 - 9.3	8.4
	1996	74	6.8	1.4	8.1		
	1997	88	4.5	1.1	5.7		
Comm Coll of Denver	1995	249	8.4	0.0	8.4	10.9 - 14.9	12.9
	1996	232	12.9	0.0	12.9		
	1997	244	9.4	0.0	9.4		
Front Range Comm Coll	1995	167	18.0	1.2	19.2	12.8 - 16.8	16.1
	1996	138	11.6	1.4	13.0		
	1997	154	16.9	0.0	16.9		
Lamar Comm Coll	1995	47	19.1	0.0	19.1	15.9 - 19.9	17.9
	1996	36	16.7	0.0	16.7		
	1997	52	19.2	1.9	21.2		
Morgan Comm Coll	1995	27	59.3	0.0	59.3	73.0 - 77.0	75.0
	1996	12	75.0	0.0	75.0		
	1997	10	30.0	0.0	30.0		
Northeastern Junior Coll	1995	37	18.9	0.0	18.9	20.0 - 24.0	24.4
	1996	41	22.0	2.4	24.4		
	1997	46	8.7	2.2	10.9		
Otero Junior Coll	1995	88	23.9	1.1	25.0	41.6 - 45.6	44.9
	1996	78	43.6	1.3	44.9		
	1997	79	31.6	1.3	32.9		
Pikes Peak Comm Coll	1995	228	11.0	0.0	11.0	6.4 - 10.4	8.4
	1996	203	5.9	0.0	5.9		
	1997	221	6.8	0.0	6.8		
Pueblo Comm Coll	1995	152	16.4	0.0	16.4	15.1 - 19.1	17.1
	1996	129	17.1	0.0	17.1		
	1997	132	9.8	0.8	10.6		
Red Rocks Comm Coll	1995	77	24.7	0.0	24.7	17.9 - 21.9	20.7
	1996	66	15.2	1.5	16.7		
	1997	90	14.4	2.2	16.7		
Trinidad State Jun Coll	1995	201	38.3	0.0	38.3	34.9 - 38.9	36.9
	1996	135	35.6	0.0	35.6		
	1997	170	28.8	0.0	28.8		
Local District Colleges							
Aims Comm Coll	1995	86	12.8	0.0	12.8	9.7 - 13.7	11.7
	1996	150	10.7	0.0	10.7		
	1997	130	10.8	0.0	10.8		
Colo Mountain Coll	1995	32	18.8	3.1	21.9	23.0 - 27.0	25.0
	1996	44	25.0	0.0	25.0		
	1997	39	28.2	0.0	28.2		
Two-Year Inst Total							
	1995	1,571	18.1	0.4	18.5	n/a	n/a
	1996	1,423	17.1	0.7	17.8		
	1997	1,537	14.5	0.6	15.1		

**Base year cohort is 1997 for three-year graduation rate; graduate totals based on specified number of academic years plus the following summer.

Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic minority category.

**QIS Measure 3C: RETENTION RATES
ONE YEAR AFTER ENTRY BY
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1999 Minority Cohort**

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Retained One Year After Entry From --			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
University of Colorado							
Univ Colo - Boulder	1997	622	80.7	5.9	86.7		
	1998	592	81.1	6.3	87.3		
	1999	602	80.2	4.8	85.0	78.3 - 82.3	87.3
Univ Colo - Colo Spr	1997	99	65.7	9.1	74.7		
	1998	125	68.8	15.2	84.0		
	1999	142	65.5	9.2	74.6	69.6 - 73.6	84.0
Univ Colo - Denver	1997	185	75.7	8.1	83.8		
	1998	166	68.7	10.8	79.5		
	1999	197	69.0	6.6	75.6	63.3 - 67.3	81.6
Univ of Northern Colo	1997	343	64.4	12.0	76.4		
	1998	337	70.6	9.2	79.8		
	1999	364	67.3	11.3	78.6	73.1 - 77.1	79.8
State Board of Agriculture							
Colorado State Univ	1997	332	81.9	6.3	88.3		
	1998	389	81.5	5.1	86.6		
	1999	403	80.4	6.5	86.8	76.0 - 80.0	87.4
Fort Lewis Coll	1997	223	45.7	3.6	49.3		
	1998	202	46.0	5.9	52.0		
	1999	238	51.3	8.0	59.2	63.2 - 67.2	52.0
Univ of Southern Colo	1997	196	66.3	7.7	74.0		
	1998	247	62.3	10.9	73.3		
	1999	216	64.4	12.0	76.4	63.2 - 67.2	73.6
State Colleges							
Adams State Coll	1997	115	60.0	7.8	67.8		
	1998	170	57.6	10.0	67.6		
	1999	111	71.2	7.2	78.4	63.2 - 67.2	67.7
Mesa State Coll	1997	89	58.4	14.6	73.0		
	1998	72	59.7	5.6	65.3		
	1999	85	47.1	15.3	62.4	63.2 - 67.2	69.1
Metropolitan State Coll of Denver	1997	423	57.4	8.3	65.7		
	1998	370	67.3	7.0	74.3		
	1999	371	63.6	5.9	69.5	59.0 - 63.0	74.3
Western State Coll	1997	37	43.2	21.6	64.9		
	1998	41	51.2	22.0	73.2		
	1999	53	60.4	18.9	79.2	63.2 - 67.2	73.2
Four-Year Inst Total	1997	2,664	68.0	7.9	75.9		
	1998	2,711	69.8	8.1	77.9		
	1999	2,782	69.3	7.9	77.2	n/a	n/a

*Base year cohort is 1999.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic/minority category.

Source: Cohort and benchmark calculation based on SURDS files and institutional data; g:\QIS\2001\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls

**QIS Measure 3D: RETENTION RATES ONE YEAR AFTER ENTRY BY
 COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
 Fall 1999 Minority Cohort**

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Successful One Year After Entry By --			Benchmark	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
Community Colleges of Colorado							
Arapahoe Comm Coll	1997	59	47.5	15.3	62.7	45.1 - 49.1	59.0
	1998	47	46.8	8.5	55.3		
	1999	55	61.8	9.1	70.9		
Colo NW Comm Coll	1997	23	30.4	21.7	52.2	28.8 - 32.8	49.2
	1998	13	30.8	15.4	46.2		
	1999	24	45.8	4.2	50.0		
Comm Coll of Aurora	1997	88	33.0	8.0	40.9	47.4 - 51.4	55.6
	1998	81	49.4	6.2	55.6		
	1999	120	62.5	4.2	66.7		
Comm Coll of Denver	1997	244	47.5	4.9	52.5	51.8 - 55.8	62.0
	1998	279	53.8	8.2	62.0		
	1999	229	51.5	3.9	55.5		
Front Range Comm Coll	1997	154	48.1	10.4	58.4	41.7 - 45.7	55.0
	1998	132	39.4	12.1	51.5		
	1999	107	42.1	6.5	48.6		
Lamar Comm Coll	1997	52	44.2	5.8	50.0	45.7 - 49.7	54.5
	1998	44	47.7	6.8	54.5		
	1999	34	52.9	2.9	55.9		
Morgan Comm Coll	1997	10	60.0	10.0	70.0	55.3 - 59.3	62.3
	1998	11	54.5	0.0	54.5		
	1999	9	33.3	11.1	44.4		
Northeastern Junior Coll	1997	46	32.6	15.2	47.8	29.9 - 33.9	46.8
	1998	48	31.3	14.6	45.8		
	1999	43	30.2	14.0	44.2		
Otero Junior Coll	1997	79	50.6	5.1	55.7	69.2 - 73.2	79.7
	1998	59	71.2	8.5	79.7		
	1999	81	44.4	11.1	55.6		
Pikes Peak Comm Coll	1997	221	36.2	5.9	42.1	40.6 - 44.6	46.0
	1998	263	42.6	3.4	46.0		
	1999	306	35.6	4.9	40.5		
Pueblo Comm Coll	1997	132	49.2	3.0	52.3	61.3 - 65.3	67.2
	1998	180	63.3	3.9	67.2		
	1999	145	50.3	6.9	57.2		
Red Rocks Comm Coll	1997	90	50.0	10.0	60.0	43.7 - 47.7	54.1
	1998	58	41.4	6.9	48.3		
	1999	77	49.4	5.2	54.5		
Trinidad State Jun Coll	1997	170	49.4	3.5	52.9	48.0 - 52.0	54.4
	1998	136	50.0	4.4	54.4		
	1999	117	46.2	6.0	52.1		
Local District Colleges							
Aims Comm Coll	1997	130	36.2	5.4	41.5	31.7 - 35.7	38.3
	1998	183	31.1	3.8	35.0		
	1999	77	50.6	10.4	61.0		
Colo Mountain Coll	1997	39	53.8	15.4	69.2	44.9 - 48.9	58.9
	1998	35	40.0	8.6	48.6		
	1999	78	46.2	2.6	48.7		
Two-Year Inst Total							
	1997	1,537	44.2	7.1	51.3	n/a	n/a
	1998	1,569	47.2	6.4	53.7		
	1999	1,502	46.7	6.0	52.7		

**Base year cohort is 1999; graduate totals based on specified number of academic year(s) plus the following summer.
 Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic minority category.

Indicator 4A: Achievement Scores on Licensure, Professional, Graduate School Admission, and other Examinations taken by Baccalaureate Graduates (four-year institutions)

How well institutions have prepared their students is captured, in part, by how well graduating students perform on various comprehensive examinations, tests, and discipline or professional-specific licensure or certification examinations. This indicator is included in most quality indicator or performance measurement systems of other states. Benchmarks are national or statewide passing rates and scores. Passing rates and scores are reported only for institutions with 20 or more test takers over two years.

Indicator 4B : Career and Technical Graduates Employed or Continuing Their Education (two-year institutions)

A significant aspect of the role and mission of the two-year institutions is the provision of trained and skilled employees for the workforce, especially in technical areas. For some students at two-year institutions, this translates into employment immediately following their graduation. For other students, continued education at another institution is required prior to joining or re-entering the workforce. The benchmark is 90%.

Indicator 5: Institutional Support Expenditures per FTE Student

Each institution's operating budget is categorized in accordance with specific reporting requirements. One category – institutional support expenditures – most closely encompasses those expenditures considered to support the administration of the institution. The amount of institutional support expenditures per FTE student serves as a proxy for the level of expenditures for administration, according to the role & mission and enrollment size of the institution. Individual institutional benchmarks are based on performance levels of comparison groups.

Factors to Keep in Mind When Interpreting This Indicator

The expenditure categories used by higher education institutions for the reporting of expenditures allow for differing assignment of functions, depending on the organizational structure of the institution. An expenditure at one institution may be categorized one way, while another institution may assign the expenditure to another category. Both institutions may be correct in their assignment since the particular organizational structure of the institution dictates how the expenditure is categorized. For institutions with numerous delivery sites (e.g., CMC), this indicator should be reviewed in the context associated with administering multiple delivery sites.

Indicator 6: Undergraduate Class Size

The inclusion of undergraduate class size by *US News and World Report* in its annual guide, *America's Best Colleges*, has brought added attention to this indicator which measures the percent of undergraduate class sections having an enrollment less than or greater than certain sizes. For the four-year institutions, the benchmarks are taken from the *US News and World Report's* publication. For the two-year institutions, the benchmarks are based on recent performance with an expectation of improvement from the past year's performance levels.

**QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and
OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1998-99 and FY 1999-2000
(FOUR-YEAR PUBLIC INSTITUTIONS)**

Exam	Institution	University of Colorado			UNC	State Board of Agriculture			State Colleges				Benchmark
		UC - B	CS	UC - D		CSU	FLC	USC	ASC	Mesa	Metro	WSC	
Graduate Record Examinations													
# Scores (10/97 - 9/98)		227	29	57	62	272	27	30	14	22	30	16	561,304
	Verbal	227	29	57	62	272	27	30	14	22	30	16	561,304
	Quantitative	227	29	57	62	272	27	30	14	22	30	16	561,081
	Analytical	227	29	57	62	272	27	30	14	22	30	16	559,173
# Scores (10/98 - 9/99)		229	26	60	75	334	22	23	11	15	18	15	543,649
	Verbal	229	26	60	75	334	22	23	11	15	18	15	543,649
	Quantitative	229	26	59	75	334	22	23	11	15	18	15	543,475
	Analytical	229	26	59	75	334	22	23	11	15	18	15	542,098
# Scores (10/99 - 9/00)		167	24	64	70	278	5	11	1	22	20	12	529,395
	Verbal	167	24	64	70	278	5	11	1	22	20	12	529,395
	Quantitative	167	24	64	70	278	5	11	1	22	20	12	529,312
	Analytical	167	24	64	70	277	5	11	1	22	20	12	528,855
Mean Scores													
Mean Verbal Score	10/97 - 9/98	509	495	467	425	472	479	436	---	---	470	---	428 - 528
Mean Verbal Score	10/98 - 9/99	492	478	459	427	466	*	*	*	*	*	*	426 - 526
Mean Verbal Score	10/99 - 9/00	500	*	450	425	461	*	*	*	*	*	*	426 - 526
Mean Quant Score	10/97 - 9/98	599	512	531	491	574	541	485	*	*	505	*	512 - 612
Mean Quant Score	10/98 - 9/99	605	561	557	489	575	*	*	*	*	*	*	517 - 617
Mean Quant Score	10/99 - 9/00	620	*	529	513	592	*	*	*	*	*	*	522 - 622
Mean Analytical Score	10/97 - 9/98	597	557	552	526	584	541	490	*	*	536	*	515 - 615
Mean Analytical Score	10/98 - 9/99	603	554	554	540	573	*	*	*	*	*	*	514 - 614
Mean Analytical Score	10/99 - 9/00	617	*	560	560	596	*	*	*	*	*	*	515 - 615
<p><i>Test cohort = seniors whose GRE test scores were reported to their respective undergraduate institution during October 1998 - September 2000.</i></p> <p><i>Benchmark: +/- 50 points of three-year national mean scores (10/95 - 9/98 for 1998-99 test takers; 10/96 - 9/99 for 1999-2000 test takers). Source: Educational Testing Service</i></p> <p><i>Notes: 1) ETS provides requires a minimum of 25 scores to calculate a mean.</i></p> <p><i>2) Due to some examinees receiving no score, the total number of scores may differ for each measure of the general test.</i></p>													
Uniform Certified Public Accountant Examination													
# Test Takers (5/99 - 11/00)		194	62	220	154	239	118	24	68	92	287	24	1,733
# Passing Test Takers (5/99 - 11/00)		51	14	61	28	53	24	9	10	21	65	3	395
% Passing Test Takers (5/98 - 11/99)		30.5	37.9	23.4	19.7	24.9	20.7	24.2	20.3	26.7	20.2	31.8	24.0
% Passing Test Takers (5/99 - 11/00)		26.3	22.6	27.7	18.2	22.2	20.3	37.5	14.7	22.8	22.6	12.5	22.8
<p><i>Test cohort = Beginning with test results for 2000, first-time and reexamination candidates without advanced degree reported; testing period from May 1999 through November 2000.</i></p> <p><i>Benchmark: CO Average Pass Rate (5/99 - 11/00); Source: CO Dept of Regulatory Agencies, State Board of Accountancy</i></p>													

(Continued)

**QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and
OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1998-99 and FY 1999-2000
(FOUR-YEAR PUBLIC INSTITUTIONS)**

Exam	Institution	University of Colorado			UNC	State Board of Agriculture			State Colleges				Benchmark
		UC - B	UC - CS	UC - D		CSU	FLC	USC	ASC	Mesa	Metro	WSC	
National Council Licensure Examination for Registered Nurses (NCLEX-RN)													
# Test Takers (7/99 - 6/01)		---	157	---	125	---	---	39	---	49	---	---	1,545
# Passing Test Takers (7/99 - 6/01)		---	144	---	108	---	---	31	---	46	---	---	1,330
% Passing Test Takers (7/98 - 6/00)		---	93.8	---	85.6	---	---	85.7	---	91.8	---	---	86.0
% Passing Test Takers (7/99 - 6/01)		---	91.7	---	86.4	---	---	79.5	---	93.9	---	---	86.1
<i>Test cohort = first-time registered nurse candidates tested July 1999 - June 2001; UCCS data include Beth-EI College of Nursing candidates. Benchmark: CO Average Pass Rate (7/98 - 6/00); Source: CO Dept of Regulatory Agencies, State Board of Nursing</i>													
Fundamentals of Engineering Examination													
# Test Takers (10/99 - 4/01)		219	---	222	---	---	---	---	---	---	---	---	45,153
# Passing Test Takers (10/99 - 4/01)		180	---	136	---	---	---	---	---	---	---	---	35,898
% Passing Test Takers (10/98 - 4/00)		84.5	---	62.8	---	---	---	---	---	---	---	---	80.3
% Passing Test Takers (10/99 - 4/01)		82.2	---	61.3	---	---	---	---	---	---	---	---	79.5
<i>Test cohort = first-time candidates tested October 1999 - April 2001. Benchmark: US Average Pass Rate for accredited institutions (10/98 - 4/00); Source: National Council of Examiners for Engineering and Surveying</i>													
Program for Licensing Assessments for Colorado Educators (PLACE)													
Elementary Education													
# Test Takers (10/99 - 5/01)		199	58	---	350	7	125	157	151	91	341	40	1,519
# Passing (10/99 - 5/01)		192	54	---	295	*	113	102	96	73	268	37	1,237
% Passing (10/98 - 5/00)		93.9	91.1	---	87.1	89.3	95.7	64.3	70.8	83.5	80.6	82.2	83.1
% Passing (10/99 - 5/01)		96.5	93.1	---	84.3	*	90.4	65.0	63.6	80.2	78.6	92.5	81.4
Social Studies													
# Test Takers (10/99 - 5/01)		40	10	---	81	79	33	55	27	16	93	22	456
# Passing (10/99 - 5/01)		31	*	---	40	53	19	19	9	*	42	11	249
% Passing (10/98 - 5/00)		72.7	*	---	59.7	66.0	81.3	40.0	*	*	49.3	*	60.2
% Passing (10/99 - 5/01)		77.5	*	---	49.4	67.1	57.6	34.5	33.3	*	45.2	50.0	54.6
English													
# Test Takers (10/99 - 5/01)		54	5	---	50	64	26	43	21	24	51	8	346
# Passing (10/99 - 5/01)		45	*	---	33	52	22	13	8	15	44	*	243
% Passing (10/98 - 5/00)		85.0	*	---	79.5	86.3	88.2	28.1	50.0	65.2	66.1	*	71.1
% Passing (10/99 - 5/01)		83.3	*	---	66.0	81.3	84.6	30.2	38.1	62.5	86.3	*	70.2
Science													
# Test Takers (10/99 - 5/01)		33	7	---	40	81	13	22	13	23	37	11	280
# Passing (10/99 - 5/01)		31	*	---	29	66	*	11	*	19	26	11	222
% Passing (10/98 - 5/00)		90.9	*	---	90.0	85.7	*	58.6	*	68.0	77.5	*	81.3
% Passing (10/99 - 5/01)		93.9	*	---	72.5	81.5	*	50.0	*	82.6	70.3	100.0	79.3
Physical Education													
# Test Takers (10/99 - 5/01)		1	---	---	64	39	6	28	28	18	21	12	217
# Passing (10/99 - 5/01)		*	---	---	44	34	*	18	15	*	17	*	163
% Passing (10/98 - 5/00)		---	---	---	79.7	91.1	*	55.2	*	*	*	*	79.9
% Passing (10/99 - 5/01)		*	---	---	68.8	87.2	*	64.3	53.6	*	81.0	*	75.1

(Continued)

**QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and
OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1998-99 and FY 1999-2000
(FOUR-YEAR PUBLIC INSTITUTIONS)**

Exam	Institution	University of Colorado			UNC	State Board of Agriculture				State Colleges				Benchmark
		UC - B	CS	UC - D		CSU	FLC	USC	ASC	Mesa	Metro	WSC		
Program for Licensing Assessments for Colorado Educators (PLACE) -- continued														
Mathematics														
	# Test Takers (10/99 - 5/01)	8	2	---	31	34	5	7	6	9	29	2	133	
	# Passing (10/99 - 5/01)	*	*	---	23	21	*	*	*	*	15	*	87	
	% Passing (10/98 - 5/00)	*	*	---	60.0	67.4	*	*	*	*	65.7	*	68.8	
	% Passing (10/99 - 5/01)	*	*	---	74.2	61.8	*	*	*	*	51.7	*	65.4	
Art														
	# Test Takers (10/99 - 5/01)	5	---	---	14	46	6	1	4	4	30	17	127	
	# Passing (10/99 - 5/01)	*	---	---	*	37	*	*	*	*	22	*	91	
	% Passing (10/98 - 5/00)	*	---	---	*	51.9	*	---	*	*	76.9	*	62.7	
	% Passing (10/99 - 5/01)	*	---	---	*	80.4	*	*	*	*	73.3	*	71.7	
Music														
	# Test Takers (10/99 - 5/01)	18	---	---	40	33	7	12	7	2	14	4	137	
	# Passing (10/98 - 5/00)	*	---	---	29	19	*	*	*	*	*	*	89	
	% Passing (10/98 - 5/00)	*	---	---	76.3	65.5	*	*	*	*	*	*	67.9	
	% Passing (10/99 - 5/01)	---	---	---	75.0	75.8	*	*	*	*	*	*	71.5	
Early Childhood Education														
	# Test Takers (10/99 - 5/01)	---	---	---	1	1	15	---	1	2	72	---	92	
	# Passing (10/99 - 5/01)	---	---	---	*	*	*	---	*	*	41	---	56	
	% Passing (10/98 - 5/00)	---	---	---	*	*	*	---	---	*	70.2	---	70.3	
	% Passing (10/99 - 5/01)	---	---	---	*	*	*	---	---	*	56.9	---	60.9	
English as a Second Language														
	# Test Takers (10/99 - 5/01)	1	---	---	32	2	10	---	3	---	---	---	48	
	# Passing (10/99 - 5/01)	*	---	---	16	*	*	---	*	---	---	---	23	
	% Passing (10/98 - 5/00)	---	---	---	50.0	*	---	---	---	---	*	---	50.0	
	% Passing (10/99 - 5/01)	*	---	---	50.0	*	*	---	*	---	---	---	47.9	
Bilingual Education														
	# Test Takers (10/99 - 5/01)	3	---	---	40	1	4	---	1	---	12	---	61	
	# Passing (10/99 - 5/01)	*	---	---	24	*	*	---	*	---	*	---	40	
	% Passing (10/98 - 5/00)	*	---	---	73.5	---	---	---	---	---	*	---	71.4	
	% Passing (10/99 - 5/01)	*	---	---	60.0	*	*	---	*	---	*	---	65.6	
Business Education														
	# Test Takers (10/99 - 5/01)	---	---	---	---	39	3	---	13	---	1	1	57	
	# Passing (10/99 - 5/01)	---	---	---	---	16	*	---	*	---	*	*	20	
	% Passing (10/98 - 5/00)	---	---	---	---	52.9	*	---	*	---	---	---	50.0	
	% Passing (10/99 - 5/01)	---	---	---	---	41.0	*	---	*	---	*	*	35.1	
Moderate Needs														
	# Test Takers (10/99 - 5/01)	3	8	---	8	8	---	---	15	---	22	10	74	
	# Passing (10/99 - 5/01)	*	*	---	*	*	---	---	*	---	21	*	61	
	% Passing (10/98 - 5/00)	---	---	---	*	*	---	---	---	---	93.5	*	94.7	
	% Passing (10/99 - 5/01)	*	*	---	*	*	---	---	*	---	95.5	*	82.4	

(Continued)

**QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and
OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1998-99 and FY 1999-2000
(FOUR-YEAR PUBLIC INSTITUTIONS)**

Exam	Institution	University of Colorado				State Board of Agriculture			State Colleges				Benchmark
		UC - B	CS	UC - D	UNC	CSU	FLC	USC	ASC	Mesa	Metro	WSC	
Program for Licensing Assessments for Colorado Educators (PLACE) -- continued													
Spanish													
	# Test Takers (10/99 - 5/01)	8	1	---	15	20	8	16	2	---	7	7	80
	# Passing (10/98 - 5/00)	*	*	---	*	*	*	*	*	---	*	*	49
	# Passing (10/99 - 5/01)	*	*	---	*	10	*	*	*	---	*	*	40
	% Passing (10/98 - 5/00)	*	*	---	*	*	*	*	*	---	*	*	60.5
	% Passing (10/99 - 5/01)	*	*	---	*	50	*	*	*	---	*	*	50.0
Agriculture													
	# Test Takers (10/99 - 5/01)	---	---	---	---	26	---	---	---	---	---	---	26
	# Passing (10/98 - 5/00)	---	---	---	---	20	---	---	---	---	---	---	20
	# Passing (10/99 - 5/01)	---	---	---	---	13	---	---	---	---	---	---	13
	% Passing (10/98 - 5/00)	---	---	---	---	66.7	---	---	---	---	---	---	66.7
	% Passing (10/99 - 5/01)	---	---	---	---	50.0	---	---	---	---	---	---	50.0

An asterisk () indicates that the institution offers the content area, but fewer than 20 students were tested in that institution's content area over the two-year reporting cycle. Test cohort = first-time candidates tested October 1998 - April 2000. Pass rates are reported only for those content areas having 20 or more test takers over the two-year cycle. Benchmark: CO Average Pass Rate (10/99 - 5/01). Source: Calculated from institutional reports. Benchmark and institution entries based on test takers and passers in all content areas at all institutions. Content areas not having at least 20 test takers stated wide are not included in table. Source: Institution Files.*

**QIS Measure 4B: CAREER AND TECHNICAL GRADUATES EMPLOYED
OR CONTINUING POST-SECONDARY EDUCATION AT
COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
FY1999 - 2000**

Institution	# FY 1999-2000 Certificate and AAS Graduate Respondents	# Employed	# Employed and Continuing Their Education	# Continuing Their Education	Total # Employed or Continuing Their Education	% Employed or Continuing Their Education	Benchmark
Community Colleges of Colorado							
Arapahoe Comm Coll	277	227	16	13	256	92.4%	90%
Comm Coll of Aurora	103	68	30	2	100	97.1%	90%
Comm Coll of Denver	189	108	55	18	181	95.8%	90%
Colo NW Comm Coll	51	39	7	4	50	98.0%	90%
Front Range Comm Coll	479	294	134	23	451	94.2%	90%
Lamar Comm Coll	39	37	0	1	38	97.4%	90%
Morgan Comm Coll	133	79	35	12	126	94.7%	90%
Northeastern Junior Coll	142	112	9	19	140	98.6%	90%
Otero Junior Coll	150	97	29	19	145	96.7%	90%
Pueblo Comm Coll	270	190	47	16	253	93.7%	90%
Pikes Peak Comm Coll	289	185	70	19	274	94.8%	90%
Red Rocks Comm Coll	70	34	16	9	59	84.3%	90%
Trinidad State Junior Coll	335	222	59	30	311	92.8%	90%
TOTAL	2,527	1,692	507	185	2,384	94.3%	90%
Local District Colleges							
Aims Comm Coll	158	76	57	10	143	90.5%	90%
Colo Mountain Coll	218	136	67	5	208	95.4%	90%
TOTAL	376	212	124	15	351	93.4%	90%

Sources: Community Colleges of Colorado System Office (VE 135) and Local District Colleges' files.

**QIS Measure 5: INSTITUTIONAL SUPPORT EXPENDITURES
PER FULL-TIME EQUIVALENT STUDENT**

Institution	Institutional Support Expenditures (1)	Total Student FTE (2)	Institutional Support Expenditures per Student FTE [= Col 1 / Col 2] (3)	Benchmark --Comparison Group Average of Institutional Support Expenditures per Student FTE (4)
University of Colorado				
UC - Boulder	\$27,178,173	24,617	\$1,104	\$1,758
UC - Colo Springs	\$4,949,701	5,044	\$981	\$1,420
UC - Denver	\$12,343,335	8,786	\$1,405	\$1,345
U of Northern Colo	\$7,611,620	10,723	\$710	\$1,408
State Board of Agriculture				
Colo State U	\$30,723,108	22,286	\$1,379	\$1,720
Fort Lewis C	\$3,713,965	4,139	\$897	\$1,320
U of Southern Colo	\$2,575,922	4,230	\$609	\$1,115
State Colleges				
Adams SC	\$2,552,213	4,025	\$634	\$1,320
Mesa SC	\$2,525,146	4,120	\$613	\$1,246
Metropolitan SC of Denver	\$10,545,090	12,212	\$864	\$1,491
Western SC	\$2,371,699	2,348	\$1,010	\$1,332
Community Colleges of Colorado				
Arapahoe Comm Coll	\$3,502,420	3,708	\$945	\$1,293
Colo NW Comm Coll	\$1,939,588	794	\$2,443	\$1,483
Comm Coll of Aurora	\$1,887,756	2,249	\$839	\$1,216
Comm Coll of Denver	\$3,387,438	3,352	\$1,011	\$1,265
Front Range Comm Coll	\$6,284,595	6,596	\$953	\$1,147
Lamar Comm Coll	\$1,037,669	659	\$1,575	\$1,567
Morgan Comm Coll	\$1,190,026	778	\$1,530	\$1,542
Northeastern Junior Coll	\$1,958,056	2,025	\$967	\$1,238
Otero Junior Coll	\$919,510	910	\$1,010	\$1,574
Pikes Peak Comm Coll	\$4,898,351	5,221	\$938	\$1,144
Pueblo Comm Coll	\$3,370,212	2,678	\$1,258	\$1,214
Red Rocks Comm Coll	\$3,201,948	3,651	\$877	\$1,275
Trinidad State Junior Coll	\$1,986,886	1,276	\$1,557	\$1,416
Local District Colleges				
Aims Comm Coll	\$4,418,578	3,768	\$1,173	\$1,407
Colorado Mountain Coll	\$5,515,357	3,625	\$1,521	\$1,427

Source: NCHEMS Data

**QIS Measure 6: CLASS SIZE COMPARISONS FOR
COLORADO PUBLIC FOUR-YEAR INSTITUTIONS
Fall Term 1999**

Institution	Total # of Sections	Number of Sections with Student Enrollment of --		Percent of Sections with Student Enrollment of --		Benchmarks**	
		<20	≥50	<20	≥50	<20	≥50
University of Colorado							
Univ Colo - Boulder	2,733	1,239	404	45.3%	14.8%	39%	14%
Univ Colo - Colo Spr	772	209	80	27.1%	10.4%	41%	6%
Univ Colo - Denver	730	280	101	38.4%	13.8%	45%	10%
Univ of Northern Colo	1,293	339	226	26.2%	17.5%	45%	10%
State Board of Agriculture							
Colo State Univ	2,442	891	446	36.5%	18.3%	39%	14%
Fort Lewis Coll	904	485	48	53.7%	5.3%	50%	3%
Univ of Southern Colo	585	242	49	41.4%	8.4%	41%	6%
State Colleges of Colo							
Adams State Coll	632	258	19	40.8%	3.0%	50%	3%
Mesa State Coll	1,388	848	60	61.1%	4.3%	50%	3%
Metro State Coll of Denver	2,028	829	107	40.9%	5.3%	41%	4%
Western State Coll	536	246	14	45.9%	2.6%	50%	3%
Total Public Four-Year Inst	14,043	5,866	1,554	41.8%	11.1%	n/a	n/a

Source: Institution reporting in 1999 - 2000 Common Data Set, Part I-3.

**Benchmarks calculated from national data published by *U.S. News and World Report*, September 2000; institutional peers and benchmarks based on public sector, Carnegie classification, and institutional undergraduate enrollment.

**QIS Measure 6: CLASS SIZE COMPARISONS FOR
COLORADO PUBLIC TWO-YEAR INSTITUTIONS
Fall Term 1999**

Institution	Class Sizes for Fall Term --	Total # of Sections	Number of Sections with Student Enrollment of --		Percent of Sections with Student Enrollment of --		Benchmarks	
			≤15	≥35	≤15	≥35	≤15	≥35
Community Colleges of Colorado								
Arapahoe Comm Coll	1997	1,087	577	20	53.1%	1.8%		
	1998	1,019	561	24	55.1%	2.4%		
	1999	1,054	583	25	55.3%	2.4%	55.1%	2.1%
Comm Coll of Aurora	1997	498	224	0	45.0%	0.0%		
	1998	534	294	1	55.1%	0.2%		
	1999	491	235	1	47.9%	0.2%	55.1%	0.1%
Comm Coll of Denver	1997	815	467	27	57.3%	3.3%		
	1998	810	470	18	58.0%	2.2%		
	1999	856	481	14	56.2%	1.6%	58.0%	2.2%
Colo NW Comm Coll	1997	753	506	53	67.2%	7.0%		
	1998	779	556	64	71.4%	8.2%		
	1999	756	550	50	72.8%	6.6%	71.4%	7.6%
Front Range Comm Coll	1997	1,458	626	63	42.9%	4.3%		
	1998	1,540	698	50	45.3%	3.2%		
	1999	1,668	759	40	45.5%	2.4%	45.3%	3.2%
Lamar Comm Coll	1997	253	184	6	72.7%	2.4%		
	1998	255	181	6	71.0%	2.4%		
	1999	237	171	1	72.2%	0.4%	71.9%	2.4%
Morgan Comm Coll	1997	340	293	4	86.2%	1.2%		
	1998	348	313	1	89.9%	0.3%		
	1999	363	302	2	83.2%	0.6%	89.9%	0.3%
Northeastern Junior Coll	1997	628	404	39	64.3%	6.2%		
	1998	554	342	30	61.7%	5.4%		
	1999	653	428	28	65.5%	4.3%	63.0%	5.4%
Otero Junior Coll	1997	228	123	19	53.9%	8.3%		
	1998	245	139	15	56.7%	6.1%		
	1999	292	177	15	60.6%	5.1%	56.7%	6.1%
Pikes Peak Comm Coll	1997	1,546	916	6	59.2%	0.4%		
	1998	1,612	968	8	60.0%	0.5%		
	1999	1,663	987	11	59.4%	0.7%	60.0%	0.4%
Pueblo Comm Coll	1997	1,100	724	17	65.8%	1.5%		
	1998	1,163	822	10	70.7%	0.9%		
	1999	1,117	770	10	68.9%	0.9%	70.7%	0.9%
Red Rocks Comm Coll	1997	1,224	740	46	60.5%	3.8%		
	1998	1,270	755	50	59.4%	3.9%		
	1999	1,912	1,424	23	74.5%	1.2%	60.0%	3.8%
Trinidad State Jun Coll	1997	713	580	14	81.3%	2.0%		
	1998	700	584	5	83.4%	0.7%		
	1999	663	573	7	86.4%	1.1%	83.4%	0.7%
Local District Colleges								
Aims Comm Coll	1997	1,210	883	17	73.0%	1.4%		
	1998	1,243	939	13	75.5%	1.0%		
	1999	1,282	943	20	73.6%	1.6%	75.5%	1.2%
Colo Mountain Coll	1997	1,694	1,289	13	76.1%	0.8%		
	1998	1,666	1,198	12	71.9%	0.7%		
	1999	1,813	1,378	19	76.0%	1.0%	74.0%	0.7%
Total Public Two-Year Inst	1997	13,547	8,536	344	63.0%	2.5%		
	1998	13,738	8,820	307	64.2%	2.2%		
	1999	14,820	9,761	266	65.9%	1.8%	n/a	n/a

Source: Institution reporting in 1999 - 2000 Common Data Set, Part I-3.

Indicator 7: Number of Credits Required for Degree

The feasibility of completing a degree program in four years (baccalaureate degree) or two years (Associate of Arts or Associate of Science degree) is utmost on the minds of many students and parents as they consider the time and financial commitments associated with their educational plans and careers. Certainly, students can elect to take longer than two or four years to complete their chosen degree program. Personal circumstances, work obligations, family responsibilities, financial wherewithal, etc. may not allow any other alternative but to exceed two or four years in completing their educational objectives. Nevertheless, it is important that institutions make it possible for students wishing to complete their chosen degree program within a two or four-year time frame to be able to do so.

Historically and traditionally, Associate of Arts and Associate of Science degree programs have required no more than 60 credits and baccalaureate degree programs no more than 120 credits. Exceptions to this general rule exist for legitimate reasons, such as accreditation requirements and professional association curriculum standards. Such exceptions, however, apply to a limited number of degree programs.

The percentage of all Associate of Arts and Associate of Science degree programs requiring no more than 60 credits and the percentage of all baccalaureate degree programs requiring no more than 120 credits are the bases of this indicator. A benchmark of 100% applies.

Indicator 8: Faculty Teaching Workload

The average number of hours per week devoted to organized class meetings by full-time faculty constitutes this indicator. Organized class meetings include lectures and seminars, laboratories, field instruction, studios, and on-line delivery of courses. The hours per week that are measured do not include class preparation time, grading, student advising, or individualized instruction such as independent study or supervision of dissertations, thesis, internships, cooperative education, and student teaching.

Because no recent national or comparison group data is available on faculty teaching workload, no benchmark is used. It is expected that comparable data more current in nature will be available for use in future QIS reports.

Indicators 9 & 10: Indicators Selected by the Institution

No common set of quality indicators captures the diversity and unique aspects of Colorado's twenty-eight state-supported institutions of higher education. In recognition of the diversity of the overall system and the individuality of each institution, two-institution-specific indicators were identified by each institution which the institution felt best demonstrated its efforts to promote and enhance quality, efficiency or expediency at the undergraduate level. Like the indicators, benchmarks also were chosen by the institution.

QIS Measure 7: NUMBER OF CREDIT HOURS REQUIRED FOR UNDERGRADUATE DEGREE AT
 COLORADO PUBLIC HIGHER EDUCATION INSTITUTIONS
 Fall 2001**

Institution	Total # Degree Programs*	# Degree Programs Exceeding Limit Due to Accreditation or Professional Association Guidelines	Total # Programs Subject to 60 or 120 Credit Hour Limits	# Degree Programs Within Credit Hour Limits (baccalaureate = 120 hours; associate = 60 hours)	# Degree Programs Exceeding Limit Unrelated to Accreditation or Professional Association Guidelines	Benchmark (= 100% of Total Programs Subject to Credit Hour Limits)
University of Colorado						
UC - Boulder	63	16	47	47	0	47
UC - Colo Springs	25	5	20	20	0	20
UC - Denver	32	4	28	28	0	28
U of Northern Colo	37	2	35	35	0	35
State Board of Agriculture						
Colo State U	66	9	57	57	0	57
Fort Lewis C	25	1	24	24	0	24
U of Southern Colo	29	6	23	23	0	23
State Colleges						
Adams SC	18	0	18	18	0	18
Mesa SC	19	0	19	19	0	19
Metropolitan SC of Denver	55	7	48	48	0	48
Western SC	22	0	22	22	0	22
Community Colleges of Colorado						
Arapahoe Comm Coll	2	0	2	2	0	2
Colo NW Comm Coll	2	0	2	2	0	2
Comm Coll of Aurora	2	0	2	2	0	2
Comm Coll of Denver	2	0	2	2	0	2
Front Range Comm Coll	2	0	2	2	0	2
Lamar Comm Coll	2	0	2	2	0	2
Morgan Comm Coll	2	0	2	2	0	2
Northeastern Junior Coll	2	0	2	2	0	2
Otero Junior Coll	2	0	2	2	0	2
Pikes Peak Comm Coll	2	0	2	2	0	2
Pueblo Comm Coll	2	0	2	2	0	2
Red Rocks Comm Coll	2	0	2	2	0	2
Trinidad State Junior Coll	2	0	2	2	0	2
Local District Colleges						
Aims Comm Coll	2	0	2	2	0	2
Colo Mountain Coll	2	0	2	2	0	2

**QIS analyses were limited to baccalaureate programs at four-year institutions and the Associate of Arts and Associate of Science degrees at two-year institutions.
 Source: Institutional files.

**QIS Measure 8: FACULTY INSTRUCTIONAL WORKLOAD AT
 COLORADO PUBLIC HIGHER EDUCATION INSTITUTIONS
 Academic Year 2000 - 2001**

Institution	Type A (Group) Instruction Avg. Weekly Teaching Hours per Instructor Category*--				Faculty FTE Total	Total Full-time Faculty FTE	Type B (Individualized Instruction) Enrollments for All Full-time Faculty Categories	Type B (Individualized Instruction)
	Tenured Faculty FTE	Tenure-Track Faculty FTE	Other** Full-time Faculty FTE	Full-time Faculty FTE				Avg. Student Enrollment per Full- time Faculty FTE
University of Colorado								
UC - Boulder	5.0	5.7	12.2	995.0	6.4	7,763	7.8	
UC - Colo Springs	11.9	12.3	12.9	156.0	12.3	2,107	13.5	
UC - Denver	8.4	9.2	11.7	315.0	9.3	2,872	9.1	
U of Northern Colo	10.4	11.3	13.6	416.0	11.2	4,212	10.1	
State Board of Agriculture								
Colo State U	8.8	9.0	15.6	828.0	9.7	8,002	9.7	
Fort Lewis C	13.6	12.8	12.2	166.8	13.2	874	5.2	
U of Southern Colo	10.2	10.6	10.2	154.0	10.3	416	2.7	
State Colleges								
Adams SC	14.1	13.0	8.1	115.0	12.3	730	6.3	
Mesa SC	19.0	17.8	21.5	191.8	19.2	2,796	14.6	
Metropolitan SC of Denver	11.7	12.9	14.6	398.7	12.7	6,466	16.2	
Western SC	12.7	12.5	---	89.0	12.6	725	8.1	
Community Colleges of Colorado								
Arapahoe Comm Coll				93.0	13.9	2,532	27.2	
Colo NW Comm Coll				55.9	9.9	462	8.3	
Comm Coll of Aurora				35.4	16.9	16	0.5	
Comm Coll of Denver				84.5	21.8	134	1.6	
Front Range Comm Coll				123.0	14.9	234	1.9	
Lamar Comm Coll				21.6	20.3	3	0.1	
Morgan Comm Coll				34.3	20.9	126	3.7	
Northeastern Junior Coll				51.3	25.4	187	3.6	
Otero Junior Coll				31.0	21.2	0	0.0	
Pikes Peak Comm Coll				122.4	20.0	510	4.2	
Pueblo Comm Coll				69.5	16.1	328	4.7	
Red Rocks Comm Coll				71.3	15.9	1,548	21.7	
Trinidad State Junior Coll				52.5	18.5	101	1.9	
Local District Colleges								
Aims Comm Coll				109.0	25.5	311	2.9	
Colo Mountain Coll				75.0	19.7	304	4.1	

*Full-time equivalent (FTE) faculty totals represent state-funded (or general funded) instruction in fall and spring terms. Faculty time paid for by contracts, grants, or extended studies fees excluded from totals.

**Based on faculty who are neither tenured or tenure-track but have the expectation of an on-going appointment and are full-time as defined by the institution.

Notes: (1) Average measures for group and individual instruction should not be combined. Group instruction is measured in contact hours while individualized instruction is based on student headcount.

(2) Type A instruction involves direct contact of faculty with students and includes the following: lecture, lab, recitation/discussion/seminar, audit, private instruction, physical education/recreation activity, studio, and field instruction.

(3) Type B instruction encompasses distance education and a variety of individualized faculty/student relationships such as independent study, master's thesis/doctoral dissertation, student teaching, co-ops, internships, and practica.

QIS Measures 9 and 10: Institution-specific Indicators

Governing Board/ Institution	Indicator #9	Indicator #10
Regents - University of Colorado System		
UCB	<p>Indicator: Undergraduate Participation in Special Academic Opportunities.</p> <p>Measure: Percent participating in special academic opportunities, of calendar year 2000 bachelors degree recipients who entered CU-Boulder as full-time fall freshmen.</p> <p>Benchmark: Maintain the participation level at or above 67%.</p> <p>Results: 79% of calendar year 2000 bachelors recipients who had entered as freshmen (N=2858) had participated in at least one special opportunity. This exceeds the benchmark and institution's long-term goal. The four most popular programs each garnered participation by over 15% of the 2000 graduates: honors courses (16%), credit internships (19%), study abroad (25%), and first-year residential academic programs (20%). We are especially pleased that 25% of graduates entering as freshmen had studied abroad, for this program is probably our most intense. Comparable overall (unduplicated) participation figures from other institutions are not available. Informal comparisons with estimates published in the Best Colleges issue of U.S. News and World Report show that CU-Boulder has much higher rates of participation in study abroad and honors than do other public AAU institutions that reported.</p>	<p>Indicator: State appropriations for undergraduate programs, per resident bachelor's degree.</p> <p>Measure: State appropriations for undergraduate programs per bachelor's degree awarded to resident students, both for a single fiscal year (FY1999-2000). "State appropriations" means funds from state tax dollars and excludes tuition.</p> <p>Benchmark: AAU public average.</p> <p>Results (all figures rounded to the nearest \$100):</p> <ul style="list-style-type: none"> ◆ CU-Boulder: \$23,900 in state appropriations for undergraduate programs per resident bachelor's degree ◆ AAU publics <ul style="list-style-type: none"> ◆ Average \$71,500, median \$71,200, N = 33 ◆ The result for CU-Boulder is approximately one third the AAU average or median ◆ CU-Boulder is 33rd of 33 schools (Data not available for the 34th US AAU public, Rutgers)
UCCS	<p>Indicator: Student Academic Quality.</p> <p>a. Increased Academic Quality of Students.</p> <p>Measure: Average CCHE admission index scores for admitted freshmen will be at least 101.</p> <p>Result: Average Index score of admitted freshmen has increased from 104.8 to 105.2 from Fall 2000 to Fall 2001.</p> <p>b. Increased Use of Transfer Window.</p> <p>Measure: Use of up to one-quarter of allowable "window" undergraduate transfers for a fall semester.</p> <p>Result: For Fall 2001, less than one-quarter of the allowable "window" admits for under-graduate transfers were used (3% of all admitted).</p> <p>c. Increase Number of Colorado Residents Enrolled at UCCS.</p> <p>Measure: The number of undergraduate students who are Colorado residents enrolled at UCCS compared with the previous fall semester.</p>	<p>Indicator: Academic Program Quality.</p> <p>Measure: Percent of professional programs that have current specialized accreditation of those eligible to apply for such status compared to similar programs at CCHE designated peer institutions for UCCS. UCCS professional programs include: business, education, engineering, nursing, public administration, and other appropriate programs.</p> <p>Result: All of CU-Colorado Springs professional programs have specialized accreditation. Only 76% of similar programs at peer institutions are accredited, indicating that UCCS offers high quality professional programs tailored to serving the business, industry, government, education, and health care sectors compared to like institutions nationally.</p>

Governing Board/ Institution	Indicator #9	Indicator #10
	<p>Result: CU-Colorado Springs enrolled 153 more Colorado undergraduate residents in Fall 2001 than were enrolled in Fall 2000.</p> <p>d. Increase Number of Ethnic Minority Students Enrolled at UCCS.</p> <p>Measure: The number of undergraduate students reporting as African-American, Asian-American/Pacific Islander, Latino/Chicano or Native American/American Indian in Fall 2001 compared with the previous fall semester, indicating that UCCS is attracting more ethnic minority students while increasing the academic quality of students.</p> <p>Result: UCCS enrolled 23 more ethnic minority undergraduate students in Fall 2001 than were enrolled in Fall 2000.</p>	
UCD	<p>Measure: Percent of employed bachelor's degree recipients (1 year after graduation) indicating that program of study helped get or keep job.</p> <p>Benchmark = 75%</p> <p>Results: FY 98-99: 85.8% FY 99-00: 81.9%</p>	<p>Measure: Percent of degree recipients indicating that program of study met their educational goals.</p> <p>Benchmark = 95%</p> <p>Results: FY 98-99: 98% FY 99-00: 98%</p>
Board of Trustees - University of Northern Colorado		
	<p>Indicator: After Graduation Performance.</p> <p>Measure: Percent of undergraduate student degree recipients who are employed and/or engaged in further study one year after graduation.</p> <p>Benchmark: 95% placed rate based on UNC annual survey of graduates</p> <p>Results: 97.6% of UNC graduates are employed or attending graduate school based on response rate of 51.8%.</p>	<p>Indicator: Student Evaluation of Instructional Quality.</p> <p>Measure: Student response to questions regarding instructional effectiveness.</p> <p>Benchmark: National average for students completing Noel-Levitz Student Satisfaction Inventory in Spring 2001.</p> <p>Results: UNC students expressed greater satisfaction with instructional effectiveness than did national group of four-year public institutions.</p>
State Board of Agriculture – Colorado State University System		
CSU	<p>Indicator: First-year seminars to enhance academic performance and student retention.</p> <p>Benchmark: CSU will be in the top quartile when compared to national peer institutions in terms of requiring all first-year students to complete a 2-3 credit first-year seminar during the first 45 credits of their college careers.</p> <p>Results: CSU continues to be the only institution among 19 peer institutions to require a first year seminar. This past year, 237 sections averaging 17 students enabled over 4,000 students to enroll.</p>	<p>Indicator: Service-learning to enhance students' sense of civic engagement, educational success, and development of life skills.</p> <p>Benchmark: CSU will be above the median in volunteerism and service-learning activities compared national comparison of peer institutions in Campus Compact.</p> <p>Results: CSU has more than twice the number of courses with a service-learning component than peer institutions and ranks well above the 17th percentile in students involved.</p>

Governing Board/ Institution	Indicator #9	Indicator #10
FLC	<p>Indicator: Quality in Diversity Education</p> <p>Measures: Results from the national ACT Outcomes Survey documents the effectiveness of respect for diversity throughout the FLC experience. FLC will exceed the national average for students.</p> <p>Results: 1) College's contribution to:</p> <ul style="list-style-type: none"> a. becoming a more effective member in a multicultural society (% indicating "very great" or "great") National avg: 35.4% FLC avg. 58.9% b. becoming more willing to consider opposing points of view (% indicating "very great" or "great") National avg: 45.4% FLC avg. 57.7% c. interacting well with people from cultures other than my own (% indicating "very great" or "great") National avg: 42.8% FLC avg. 49.4% <p>2) Students' view of required courses outside his/her major that broadens awareness of diversity among people, their values and cultures (% indicating "strongly agree" or "agree") National avg: 63.2 FLC avg. 74.1%</p>	<p>Indicator: Transfer Rates Including Non-Colorado Institutions</p> <p>Measure: Transferring, both in and out, is a large component of student enrollment activity at Fort Lewis College. On average, 37% of graduates enter FLC as transfer students. Historically, about one-third of new freshmen entering the College come from out-of-state. Surveys have shown that in addition to academic reputation and low student-faculty ratios, major factors in choosing FLC are the spectacular beauty of southwestern Colorado and the myriad recreational opportunities available. In addition, many Native American students are motivated to enroll because of the tuition waiver. Almost half (48%) of all minority freshmen in the 1994 cohort were non-resident Native American students on tuition waiver. Many of these students eventually return to their home states to continue enrollment in higher education.</p> <p>Benchmark: FLC performance for non-residents who continue their education in other states will equal or exceed the percent of residents who continue in Colorado.</p> <p>Results: For the 1994 freshmen cohort, 40% of students (348/874) showed subsequent enrollment in other colleges and universities. Among resident students, 39% successfully transferred as compared to 41% of non-resident students who successfully transferred. Almost two-thirds of transfers were within Colorado and 38% were to out-of-state institutions. Among freshmen entering as residents who subsequently transferred out, 86% transferred within Colorado. This is in stark contrast to those who entered FLC as non-residents, where 88% subsequently enrolled in out-of-state institutions.</p>
USC	<p>Indicator: Minority graduation rate for the FY 2000-2001.</p> <p>Measure: The graduation rates are calculated based on the degrees file submitted to CCHE for FY 1998-1999 to FY 2000-2001.</p> <p>Results: The proportion of USC minority graduates receiving a baccalaureate degree in FY1998-99 was 27.8%; for FY 2000-01, the percentage rose to 29.3%. Because the percentages of Hispanic students enrolled exceed 25% for the last two years that have made USC a Hispanic Serving Institution (HSI).</p>	<p>Indicator: The number of publicly available computer workstations to students at USC shall meet or exceed the national average for 4 year public colleges and universities.</p> <p>Benchmark: Comparable national or state standards.</p> <p>Measure: Ratio of computers available for general student use to student headcount.</p> <p>Results: According to <i>Campus Computing 2000: 11th Annual Survey of Computing and Information Technology in Higher Education</i> by Kenneth Green, 4-year public universities average 15.36 students per workstation and 4-year public colleges average 13.83 students for each workstation. At USC, the ratio of students to workstations for fall 2000 was 7.9:1 and was an improvement from the fall 1999 ratio of 8.46:1.</p>

Governing Board/ Institution	Indicator #9	Indicator #10
Board of Trustees - State College System		
ASC	<p>Indicator: Progress in providing educational access to their students, relative to their particular role and mission and geographic location.</p> <p>Measures:</p> <ol style="list-style-type: none"> Tuition/fees below \$2,369 (median 00-01 tuition/fees for CO public, 4-yr). Maintain or show an increase in access to courses at off-campus sites and at non-traditional times. <p>Results:</p> <ol style="list-style-type: none"> Tuition/fees are below the median at \$2,186 Maintained or increased student access 	<p>Indicator: Measure the academic, intellectual and social experiences will be used to measure the success of college in providing personal attention to students. These questions are:</p> <ol style="list-style-type: none"> Worked with other students on projects during class Talked about career plans with a faculty member or advisor Worked with a faculty member on a research project Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.) <p>Measure: Meet or exceed the national average scores on questions dealing with personal attention & faculty interaction with students from the 2000 National Study on Student Engagement (NSSE).</p> <p>Results: Met or exceeded the national average scores.</p>
MSC	<p>Indicator: Progress in providing educational access to their students, relative to their particular role and mission and geographic location.</p> <p>Measures:</p> <ol style="list-style-type: none"> Tuition/fees below \$2,369 (median 00-01 tuition/fees for CO public, 4-yr) Maintain or show an increase in access to courses at off-campus sites and at non-traditional times. <p>Results:</p> <ol style="list-style-type: none"> Tuition/fees are below the median at \$2,187 Increased student access 	<p>Indicator: Student participation in a co-curricular experience (internship, practica, field-experience, structured research project, etc.) as part of their education.</p> <p>Measure: Exceed the average of previous two years in percent of graduates with co-curricular experience (60%)</p> <p>Results: Exceeded the average percent by 12%</p>
MSCD	<p>Indicator: Provide students with opportunities to integrate real world experiences with academic coursework.</p> <p>Measure: Meet or exceed the 99-00 percent of MSCD graduates with workplace experience (41%).</p> <p>Results: Exceeded the benchmark at 43%</p>	<p>Indicator: Students' satisfaction with the institution's commitment to part-time and/or evening students, older and returning learners, commuters, under-represented populations and students with disabilities.</p> <p>Measure: Meet or exceed the national average score on the fall 2000 Noel-Levitz Student Satisfaction Survey, Responsiveness to Diverse Populations</p> <p>Results: Exceeded the national average score (4.88) at 5.07.</p>
WSC	<p>Indicator: Progress in providing educational access to their students, relative to their particular role and mission and geographic location.</p> <p>Measures:</p> <ol style="list-style-type: none"> Tuition/fees below \$2,369 (median 00-01 tuition/fees for CO public, 4-yr) Maintain or show an increase in access to courses with alternative delivery components (--- in 99-00) 	<p>Indicator: Improve the Western State student experience to better meet student needs.</p> <p>Measure: Meet or exceed the national average score on the fall 2001 ACT Student Satisfaction Survey regarding academic, administrative and student services and programs.</p> <p>Results: Exceeded the national average score (3.89) at 4.22 (statistically significant @ .001)</p>

Governing Board/ Institution	Indicator #9	Indicator #10
NJC	Measure: Percent of course sections in off-campus locations other than state owned facilities. System Benchmark: 18.0 Results: 27.0	Measure: Service area participation rates. System Benchmark: 3.3 Results: 16.0
OJC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 92.0 Results: 97.0	Measure: Service area participation rates. System Benchmark: 3.3 Results: 8.41
PPCC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 92.0 Results: 98.7	Measure: Percent of course sections offered in nontraditional formats. System Benchmark: 30.0 Results: 54.8
PCC	Measure: Percent of course sections offered at nontraditional times and percent of course sections offered in nontraditional formats. System Benchmark: 84.4 Results: 88.2	Measure: Percent of minority students compared to availability in service area. System Benchmark: 1.01 Results: 1.33
RRCC	Measure: Percent of minority students compared to availability in service area. System Benchmark: 1.01 Results: 2.00	Measure: Percent of course sections offered at nontraditional times and percent of course sections offered in nontraditional formats. System Benchmark: 66.0 Results: 75.3
TSJC	Measure: Percent minority faculty, executive, and other professional staff vs. statewide availability; minority clerical, technical, skilled craft and maintenance staff vs. service area availability. System Benchmark: 1.01 (for each category) Results: Minority faculty 2.44 Minority staff 1.14	Measure: Percent minority students vs. availability in service area. System Benchmark: 1.01 Results: 1.09
Local District Colleges		
Aims CC	Measure: Providing Instructional Alternatives for Students. Indicators for fall 2000 are non-traditional times, places, blocks, learning and delivery modes. Results: (by number of course sections delivered) Non-traditional Times: 235 Non-traditional Places: 316 Other Scheduling Modes (block): 130 Other Learning Modes (self-paced): 22 Electronic Delivery: 97	Measure: Articulation and Collaboration Throughout the Service Area. Indicators include articulation agreements (2000-01), collaboration in high schools, and collaboration in workplace. Results: Articulation Agreements: 39 Advanced Study Courses: 33 CJT Sessions: 66

Governing Board/ Institution	Indicator #9	Indicator #10
	Total Options: 484 Delivery Off-Site: 316	Total Courses: 99 Total Students: 2,372
CMC	<p>Participation Rate</p> <p>Measure: Participation rate is defined as the number of in-district students, 18 and older, at Colorado Mountain College (unduplicated headcount), divided by the number of residents, 18 and older, in the College District and service area (based on 1990 census). Because of Colorado Mountain College's commitment to student access, and its locations of Campuses throughout the District, the goal for CMC's participation rate is at least 150% of the statewide average participation rate.</p> <p>Statewide Benchmark: 2.7%</p> <p>Results: CMC Rate: 10.4%</p> <p>Because CMC's commitment to access for residents of its communities remains strong, the College has selected the following goal as one of our Quality Action Projects through the North Central Association Academic Quality Improvement Project.</p>	<p>Success of Developmental Studies Students</p> <p>Part of Colorado Mountain College's long-term commitment to access is preparing students who are not yet ready to enter college-level courses by providing learners basic skills including basic literacy, adult high school and GED programs, and personal skills courses.</p> <p>Three rates are calculated for this indicator: percentage of students completing goals in beginning-level ESL programs, percentage of students completing goals in beginning-level ABE programs, and percentage of students enrolled in a GED program who earn the GED.</p> <p>Benchmark: The goal for each of these rates is 110% of the state average.</p> <p>Results:</p> <p>Completion of Beginning-Level ESL Programs: Statewide Rate: 24% CMC Rate: 70%</p> <p>Completion of Beginning-Level ABE Programs: Statewide Rate: 32% CMC Rate: 69%</p> <p>Percentage of Student Enrolled in GED Who Earn the GED: Statewide Rate: 62% CMC Rate: 69%</p>

TOPIC: 2001 REPORT ON NEWLY APPROVED DEGREE PROGRAMS

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

The Commission's Master Plan states that its goal is a market responsive higher education system. Responsiveness includes adapting the degree program mix by identifying unmet need and closing degree programs that no longer are in high demand. The two activities complement each other in the fact that they allow governing boards and institutions to redirect resources to new programs. Excluding vocational certificates and two-year degree programs, the Commission approved 15 degree programs in 2001. A total of 41 new baccalaureate and graduate degree programs were approved in the last five years.

The Annual Report on Newly Approved Degree Programs monitors the implementation of the new academic programs. It compares the projected enrollment and graduation numbers originally provided by the proposing institution with the actual enrollment and graduation data of the degree program. If a degree program meets its projections during its first five years, its approval status moves from provisional to full approval. The *2002 Report* provides information on all academic degree programs that the Commission has approved within the last five years or that are still operating with provisional status. Enrollment and graduation data are available for those programs that were implemented prior to or during FY 2000-01.

In contrast, the annual Report on Low Demand Programs includes only four-year degree programs that have full program approval. The Commission delegates the authority to the governing boards for monitoring and taking action on degree programs that have been operating five years or more. Reviewing newly approved degree programs until they are fully implemented is part of the Commission's statutory approval responsibility.

In the *2002 Report*, the staff analysis specifically examines the performance of four programs ([Attachment A](#)) that were implemented in 1996-97, including:

- Cell and Molecular Biology (M.S.) Colorado State University
- Cell and Molecular Biology (Ph.D.) Colorado State University
- Theatre Arts (B.A.) Fort Lewis College
- Engineering (M.E.) University of Colorado at Denver

Staff recommends that the Commission grant full approval status to CSU's Cell and Molecular Biology Ph.D. degree, FLC's Theatre Arts B.A. degree, and UCD's M.E. in Engineering. If the Commission adopts the recommendation, the degree programs will no longer be included in the annual Report on Newly Approved Degree Programs, but will be included in CCHE's annual Low Demand Program Report.

II. BACKGROUND

State law requires the Colorado Commission on Higher Education to approve proposals for new academic degree programs before they are established. In accordance with CCHE policy, the proposing institution provides five-year enrollment and completion projections. The Commission relies on these projections as an accurate assessment of program demand. As part of its degree approval responsibilities, the Commission monitors the enrollment and graduation performance of recently approved programs. In consultation with the Academic Council, CCHE has revised the provisions of the *Policy and Procedures for the Approval of New Academic Programs in State-Supported Institutions of Higher Education in Colorado* as well as the *Review Policy and Procedures for Newly Approved Academic Degree Programs*. As revised, each policy strengthens the role of governing boards and requires them to assume greater responsibility for program review decisions.

The Commission provisionally approves degree programs subject to their demonstrated ability to meet projections. As part of the approval process, it informs the governing board that the Commission will monitor the program's implementation each year and publish the data. The degree program data are available for the degree programs that were implemented prior to, or during, AY 2000-01.

III. STAFF ANALYSIS

Currently 41 degree programs are in the post-approval review phase, including four in 1995-96, seven in 1996-97, eight in 1997-98, two in 1998-99, nine in 1999-00, and 15 in 2000-01 ([Attachment B](#)). At the time of the approval, the governing board provided enrollment and graduation projections to justify the claim that significant need exists in Colorado for the state to support the proposed degree. There is one exception in the approval history – UCCS did not provide projections when it requested approval for the Electrical Engineering Ph.D. degree program.

The Commission approved four new academic degree programs that admitted the first cohort of students in 1996-97 and therefore, have been operating for five years. According to CCHE policy, these degree programs are subject to Commission review in January 2002.

Cell and Molecular Biology (M.S.) at Colorado State University

Colorado State University's M.S. degree in Cell and Molecular Biology has steady enrollment. However, the graduation numbers are below the state benchmarks for the masters' degree program. Possibly students pursuing this field of study are heavily research oriented and interested in a doctoral track only. Staff has asked CSU to explain what action if any it has taken during the past year to increase the graduation numbers or if the assumption that Cell and Molecular Biology students are interested in doctoral degrees only.

Staff will prepare a recommendation for the M.S. degree for the February agenda following the Commission testimony and discussion.

Cell and Molecular Biology (Ph.D.) at Colorado State University

Colorado State University's Ph.D. degree in Cell and Molecular Biology has steady enrollment and its graduation rate is sufficient to meet CCHE's benchmark for doctoral degree programs. However, the graduation numbers are below the state benchmarks for the masters' degree program.

Staff recommend granting the Ph.D. degree program full approval.

Theatre Arts (B.A.) at Fort Lewis College

The Theatre Arts B.A. degree at Fort Lewis College has achieved its enrollment and graduation projections. It is typical that a small college would not graduate students during a particular academic year. However, FLC may need to exercise one of its exemptions under low demand program policy if the number of the Theatre graduates remains below 10.

Staff recommend granting this degree program full approval.

Master of Engineering (M.E.) at University of Colorado at Denver

The ME program at the University of Colorado at Denver has achieved its graduation projections. In the past, UCD has not fully reported the number of students enrolled in the ME program, spurring questions last year about the relationship between graduates and enrolled students. In 2001, UCD corrected this internal problem and the enrollment data are in line with the original projections.

Staff recommend granting this degree program full approval.

Summary

The governing boards will receive a letter from the Commission indicating the status of its institution's degree programs at the conclusion of the five-year implementation period. The letters will also identify degree programs that are in the second, third, and fourth year of implementation which are performing below the original projections. The letter will remind the governing board that the data are what the institution has reported to CCHE and verified as accurate and complete.

In keeping with CCHE's protocol, the Commission formally notifies the governing boards through the agenda item of those degree programs approaching the five-year review point. The Commission expects governing boards to take appropriate action, if necessary, before

the Commission 2003 Review of Newly Approved Degree Programs. The following seven programs will be in the final year of the follow-up next year:

- University of Colorado at Boulder – East Asian Language M.A.
- University of Colorado at Boulder – Kinesiology Ph.D.
- University of Colorado at Colorado Springs – Computer Science Ph.D.
- University of Colorado at Colorado Springs – Electrical Engineering Ph.D.
- University of Colorado at Denver – Design & Planning Ph.D.
- University of Colorado at Health Sciences Center – Clinical Science Ph.D.
- Western State College - Art B.F.A.

Several of these graduate programs have not achieved their projected enrollment or graduation numbers in the past four years, including UCCS Computer Science Ph.D., UCD Design & Planning Ph.D., and UCHSC Clinical Science Ph.D. It also has concerns with the declining enrollment in Electrical Engineering Ph.D. offered by UCCS. It has no concerns with UCB's East Asian Language MA program, Kinesiology Ph.D. or the BFA in Art offered by WSC.

IV. STAFF RECOMMENDATION

That the Commission approve full degree approval for the following degree programs:

- **Colorado State University Cell and Molecular Biology (Ph.D.)**
- **Fort Lewis College Theatre Arts (B.A.)**
- **University of Colorado at Denver Engineering (M.E.)**

Appendix A

STATUTORY AUTHORITY

23-1-107. Duties and powers of the commission with respect to program approval, review, reduction, and discontinuance. (1) The commission shall review and approve, consistent with the institutional role and mission and the statewide expectations and goals, the proposal for any new program before its establishment in any institution.

23-1-108 (8). The Commission shall prescribe uniform academic reporting policies and procedures to which the governing boards shall adhere.

**DEGREE PROGRAM APPROVAL REPORT
NEWLY APPROVED DEGREE PROGRAMS 1996-2001**

INST	PROGRAM	ACTIVIITY STATUS	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001
CSU	Electrical Engineering 14.1001 02 MEE	Projected Enrollment					5	12
		Actual Enrollment					19	13
		Projected Grads					0	0
		Actual Grads					0	4
CSU	Environmental Engineering 14.1401 B.S.	Projected Enrollment				25	35	45
		Actual Enrollment				12	28	34
		Projected Grads				5	7	9
		Actual Grads				0	2	3
UCB	Astronomy 40.0201 B.A.	Projected Enrollment						15
		Actual Enrollment						22
		Projected Grads						0
		Actual Grads						0
UCB	East Asian Language and Literature 16.0399 M.A.	Projected Enrollment			7	15	18	22
		Actual Enrollment			25	26	32	31
		Projected Grads			0	0	2	3
		Actual Grads			4	9	6	10
UCB	Environmental Engineering 14.1401 B.A.	Projected Enrollment				31	42	50
		Actual Enrollment				9	40	31
		Projected Grads				5	8	10
		Actual Grads				0	2	1
UCB	Environmental Studies 03.0102 M.S.	Projected Enrollment						5
		Actual Enrollment						0
		Projected Grads						0
		Actual Grads						0
UCB	Kinesiology 31.0505 Ph.D.	Projected Enrollment			3	6	9	12
		Actual Enrollment			8	12	19	14
		Projected Grads			0	0	0	2
		Actual Grads			0	3	0	9
UCB	Women's Studies 05.0207 B.A.	Projected Enrollment				60	60	60
		Actual Enrollment				49	42	38
		Projected Grads				0	8	15
		Actual Grads				19	19	20
UCCS	Computer Engineering 14.0901 B.S.	Projected Enrollment						27
		Actual Enrollment						1
		Projected Grads						0
		Actual Grads						0
UCCS	Computer Science 11.0101 Ph.D.	Projected Enrollment			10	20	26	34
		Actual Enrollment			0	6	8	1
		Projected Grads			0	0	2	3
		Actual Grads			2	0	1	0

UCCS	Electrical Engineering 14.1001 Ph.D	Projected Enrollment				
		Actual Enrollment	27	20	24	14
		Projected Grads				
		Actual Grads	3	2	4	3
UCCS	Mechanical Engineering 14.1901 B.S.	Projected Enrollment		36	68	108
		Actual Enrollment		22	66	70
		Projected Grads		0	0	5
		Actual Grads		0	0	3
UCCS	Mechanical Engineering 14.1901 M.S.	Projected Enrollment		10	17	27
		Actual Enrollment		3	10	14
		Projected Grads		0	0	2
		Actual Grads		0	0	1
UCD	Communication 09.0101 B.A.	Projected Enrollment		66	66	66
		Actual Enrollment		344	364	319
		Projected Grads		54	54	54
		Actual Grads		65	69	82
UCD	Design and Planning 04.0401 Ph.D.	Projected Enrollment	5	13	17	21
		Actual Enrollment	5	14	22	20
		Projected Grads	0	0	0	3
		Actual Grads	0	0	0	0
UCD	Psychology 42.1101 B.S.	Projected Enrollment		30	45	53
		Actual Enrollment		0	0	57
		Projected Grads		5	7	8
		Actual Grads		11	11	16
UCD	School Psychology 42.1701 Ed.S	Projected Enrollment			10	25
		Actual Enrollment			0	9
		Projected Grads			0	10
		Actual Grads			0	0
UCD	B.A Theatre 50.0501 B.A.	Projected Enrollment		39	39	40
		Actual Enrollment		85	95	64
		Projected Grads		12	12	12
		Actual Grads		0	3	3
UCHSC	Clinical Science 51.1401 Ph.D.	Projected Enrollment	3	7	11	16
		Actual Enrollment	2	1	2	10
		Projected Grads	0	0	0	2
		Actual Grads	0	0	0	1
WSC	B.F.A Art 50.0702	Projected Enrollment	90	97	104	112
		Actual Enrollment	7	19	36	50
		Projected Grads	15	23	26	25
		Actual Grads	3	8	11	15

DEGREE PROGRAM APPROVAL REPORT
NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITY STATUS	Yr 1 2001	Yr 2 2002	Yr 3 2003	Yr 4 2004	Yr 5 2005
ASC	Interdisciplinary Studies 30.9999 B.A.	Projected Enrollment	289	297	306	317	327
		Projected Grads	0	51	52	54	56
CSM	Engineering & Technology Mgmt 14. M.E.	Projected Enrollment	16	21	27	34	40
		Projected Grads	19	26	32	40	47
CSU	Master of Engineering 14.0101 M.E.	Projected Enrollment	5	7	11	14	15
		Projected Grads	0	0	8	12	14
CSU	Computer Engineering 14.0901 B.S.	Projected Enrollment	133	113	158	184	202
		Projected Grads	22	27	32	37	40
CSU	Electrical & Computer Engr. 14.0901 M.E.	Projected Enrollment	2	4.8	9.6	12.4	13.6
		Projected Grads	0	0	5	7	12
CSU	Mechanical Engineering 14.1901 M.E.	Projected Enrollment	3.2	4.8	7.6	10	10.8
		Projected Grads	0	0	5	8	9
FLC	Interdisciplinary Studies 30.9999 B.A.	Projected Enrollment	30	31	32	33	34
		Projected Grads	28	29	30	31	32
MESA	Computer Information Systems 52.1201 B.A.	Projected Enrollment	56	60	62	65	69
		Projected Grads	20	22	24	26	28
UNC	Applied Science B.A.S.	Projected Enrollment	20	36	46	54	54
		Projected Grads	0	16	16	24	24
UNC	Applied Technology B.A.T.	Projected Enrollment	20	36	46	54	54
		Projected Grads	0	16	16	24	24

UNC	Liberal Arts	Projected Enrollment					
	B.A.	Projected Grads					
USC	Liberal Arts	Projected Enrollment	177	183	192	204	218
	24.0101	Projected Grads	0	21	51	55	60
	B.A.						
WSC	Environmental Studies	Projected Enrollment	25	39	54	63	65
		Projected Grads	0	2	3	10	12
	B.A.						
WSC	Interdisciplinary Studies	Projected Enrollment	36	67	90	103	110
	30.9999	Projected Grads	0	0	2	4	9
	B.A.						
WSC	Computer Information Science	Projected Enrollment	28	52	65	78	78
	52.1201	Projected Grads	0	3	5	9	11
	B.A.						

TOPIC: 2002 ANNUAL REPORT ON DISCONTINUANCE OF ACADEMIC DEGREES WITH LOW PROGRAM DEMAND

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

This agenda item presents the data on low-demand degree programs, i.e., those that failed to meet the minimum graduation benchmarks as defined in policy. The low-demand review does not include degree programs that the Commission has approved in the last five years. These are reviewed separately under the Newly Approved Review Policy.

In 2001, the low demand review identified six degree programs that were operating below the benchmarks. The Commission remanded the following degree programs for governing board review: CSM's Chemistry BS (met benchmark in 2001), UCCS's Economics BA (met benchmark in 2001), UCCS's Allied Health BS, USC's Foreign Language program, USC's Recreation (closed in 2001) and USC's Electronics Engineering Technology. Under CCHE policy, the governing boards need to intervene appropriately and take final action on these programs prior to April 2003. Only three low demand programs remanded in 2001 are unresolved at this time. This agenda item also monitors the progress of programs that were granted short-term extensions.

In 2002, the low demand review identified 17 degree programs that are operating below the benchmarks (Attachment A), including:

- Undergraduate degree programs that fail to graduate at least 10 students in the current year or a total of 20 students in the past three years. Each institution may exempt up to five undergraduate degree programs that are central to the institution's role and mission (Attachment B).
- Masters' degree programs that fail to graduate at least three students in the current year or a total of five in the past three years.
- Doctoral programs that fail to graduate at least one student in the current year or a total of three in the past three years.

The staff recommends that the Commission remand 17 degree programs to the respective governing boards to review and take action prior to April 2004.

II. BACKGROUND

In accordance with the General Assembly's 85-1187 directives, CCHE is charged with ensuring access to public education and guarding against unnecessary duplication. It accomplishes this responsibility through its degree approval process and the annual discontinuance review. Under CCHE's Discontinuance Policy, adopted in 1996,

baccalaureate degree programs that do not graduate 10 students in the current year, masters' degree programs that graduate less than three each year and doctoral degree programs that do not graduate at least one student each year are subject to discontinuance. The policy does allow for a minimal number of exemptions for undergraduate degree programs.

At the crux of the policy are the appropriate roles for a coordinating board and the governing boards in program discontinuance. The Commission's position is that some degree programs may provide the perception of access but that one or fewer graduates per year may indicate that the degree program does not truly serve students. While there may be many reasons for this, it is the governing board's responsibility to resolve the problem or discontinue the program.

At the April 2000 meeting the Commission modified the language defining exemptions. This change was adopted to allow Metro to protect its African American Studies degree program and give it time to reallocate resources or consider other options. The current policy language pertaining to qualified exemptions reads "that a degree program must graduate at least three graduates in the past three years to qualify as an exemption." Formerly, the institution needed to graduate at least one student per year to exercise exemption privileges for a particular degree. Several institutions testified in support of this change because it allowed the governing boards additional latitude when selecting which degree programs will be exempt. The Commission adopted this policy revision unanimously in April 2000. UNC and METRO both used the new language to exempt a degree program in May.

At the August 2000 Commission meeting, the Commission approved several additional revisions to the *Policy and Procedures for the Discontinuance of Academic Degrees with Low Program Demand*. The discontinuance action in April was the first time in 11 years that CCHE policy requires explicit governing board action. The revisions responded to the governing boards' call for clarity and specificity on certain policy points that become apparent when the boards attempted to implement the Discontinuance Policy. In summary, the revised policy (1) strengthens the role of the governing board in assuming the primary responsibility for discontinuing programs; (2) clarifies the explicit criteria for exempting low demand degree programs (i.e., central to role and mission and student access), (3) sets the exemption limit at five, but states the Commission's preference regarding a maximum of three exemptions for large institutions, (4) defines the appeals process to limit appeals to short-term extensions for programs in which the governing board is actively involved and intervention is occurring, and (5) affirms that the Commission retains the ultimate responsibility if a governing board chooses not to make the final exemption selection.

III. ANALYSIS

Attachment A provides the recent enrollment and graduation numbers for degree programs that are operating below CCHE benchmarks, excluding those exempted by governing board action in 2001. In general, degree programs that the governing boards exempted last year continue to operate below the low demand benchmark. Nineteen additional degree programs have been identified as low demand this year. Commission remands the degree programs to

the respective governing boards to review and take action prior to April 2004.

In general, physics degree programs continue to show low demand. Although several institutions have protected physics degrees by exempting them, low enrollment characterizes all physics degrees, except CSU and UCB, which offer viable Physics degree programs with relatively strong graduation at all degree levels.

- ASC exercised four exemptions in 2000. It requested a one-year extension for Geology and closed Physics. Mathematics graduation numbers declined significantly in 2001. ASC is considering a redesign of the Mathematics curriculum.
- CSM graduation in two graduate science degree programs has dipped below the benchmark with Chemistry graduating one person and Physics graduating none in 2001. The doctoral degree programs in Geochemistry and Geological Engineering did not graduate any students in 2001.
- CSU exercised four exemptions in 2000. It successfully merged several agriculture degree programs. However Botany (BS) is operating below its benchmark.
- FLC exercised four exemptions in 2000. Music and Theatre are operating below the benchmark.
- MESA has exercised no exemptions.
- METRO exempted four undergraduate degree programs. In addition, it merged Spanish with Modern Languages degree program and Music Performance with the Music degree program. The Modern Language degree graduated 44 students – above the benchmark. The Music degree graduated five students in 2001 – below the benchmark.
- UCB exercised five undergraduate exemptions. In addition, one undergraduate and two graduate degree programs are operating below their respective benchmarks, including Communications MA that has a two-year extension. It graduated two students in 2001. Comparative Literature graduated a single person in 2001.
- UCCS consolidated Applied Mathematics and Mathematics into a single undergraduate degree program. Allied Health triggered a review in 2001, and continues to operate below the benchmark with no graduates. Economics graduated 10 students in 2001 and is operating at the benchmark.
- UCD exercised four exemptions.
- UNC exercised four exemptions. In addition, two degrees – Physics (BA) and School Psychology (MA) -- appear to be operating below the benchmark. .
- USC exercised two exemptions and closed one low performing degree program -- Recreation. The Electronic Engineering Technology and Foreign Languages programs triggered a review in 2001 and continue to operate below the benchmark.
- WSC exercised three exemptions and requested two extensions. Mathematics, an exempt program, graduated 20 students in the past three years and now meets the benchmark. Chemistry graduated three students in 2001 and Physics graduated one. They have not met the benchmark.

Exemptions are reserved for undergraduate degree programs that are central to an institution's role and mission. An institution is limited to five exemptions. Once exempt, the governing board need take no further action unless it wishes to replace a currently exempt degree program with another. The enrollment in these degree programs is often very cyclic

so often an exempt degree program will meet the benchmark in a particular year but retain its exempt status to protect it from future fluctuations. Other than closing an exempt degree program, the governing boards did not notify CCHE of any changes to its exemption list. Furthermore, it is the Commission's intent that large institutions should move to three or less exemptions. All governing boards are moving in this direction.

The Commission approves graduate degree programs based on strong market demand and academic recognition in a field or discipline. Consequently, low demand graduate degree programs are not eligible for exemptions. Instead most governing boards have merged low demand graduate programs, -- interpreting the graduation data as changing market patterns, possible over-specialization, or a combination of both factors. Governing boards tend to close low demand health and science graduate degree programs since they require significant resources to offer a quality program in these areas.

The following chart depicts the number of current exemptions and the number of degree programs operating below the policy benchmarks.

		Operating Below Benchmark			
	UG Exemptions	Bachelors	Masters	Ph.D	Total
ASC	4	2	0		6
CSM	2		2	2	6
CSU	4	1			5
FLC	4	2			6
MESA	0	0			0
METRO	4	1			5
UCB	5	1	1		7
UCCS	2	1			3
UCD	4				4
UCHSC	0	0	0		0
UNC	4	1	1		6
USC	3	3	0		6
WSC	4	2			6

Two-Year Extensions

The Commission granted several extensions, including two two-year extensions. The extension for ASC's Geology degree program expires at this time. The extension rationale indicated that eleven students would graduate in 1999-2000. Eight students have graduated.

The Regents of the University of Colorado filed an appeal for a two-year extension for: UCB Communication (M.A.) in 2000. The Regents requested the extension because it believed that three students would graduate in 2000. It contended that it would be possible to determine if sufficient interest exists to justify continuing the degree program at the end of the extension. It did not graduate the 3 students necessary to meet the benchmark in 2001. It requested a second extension in 2001 for two additional years.

IV. STAFF RECOMMENDATION

The following staff recommendation is presented as a matter of public notice. **That the Commission notify the respective governing boards of the need to take action on the following low-demand degree programs by April 2004, including:**

ASC	Geology
	Mathematics
CSM	Chemistry (MS)
	Physics (MS)
	Geological Engineering (Ph.D)
	Geochemistry (Ph.D)
CSU	Botany (BS)
FLC	Music (BA)
	Theatre (BA)
METRO	Music/Music Performance (BA/BFA)
UCB	Distributed Studies (BA)
	Comparative Literature (MA)
UCCS	Allied Health (action by 2003)
UNC	Physics (BA)
	School Psychology (MA)
USC	Electronics Engineering Tech (BS) (action by 2003)
	Foreign Language (action by 2003)
	Mathematics (BS)
WSC	Chemistry (BS)
	Physics (BS)¹

Appendix A

STATUTORY AUTHORITY

C.R.S. 23-1-107 (2) reads:

- a) The commission shall establish, after consultation with the governing boards of institutions, policies and criteria for the discontinuance of academic or vocational programs. The commission shall direct the respective governing boards of institutions, including the board of regents of the university of Colorado, to discontinue an academic or vocational degree program area, as program area is defined in commission policies.
- b) The governing board of a state-supported institution of higher education directed to discontinue an academic or vocational degree program area pursuant to this subsection (2) shall have not more than four years to discontinue graduate and baccalaureate programs and not more than two years to discontinue associate programs following the commission's directive to phase out said program area.
- c) If the commission directs the governing board of an institution to discontinue an academic or vocational degree program area, and the governing board refuses to do so, the commission may require such governing board to remit to the general fund any moneys appropriated for such program area.
- 3) Each governing board of the state-supported institutions of higher education shall submit to the commission a plan describing the procedures and schedule for periodic program reviews and evaluation of each academic program at each institution consistent with the role and mission of each institution. The information to be provided to the commission shall include, but shall not be limited to, the procedures for using internal and external evaluators, the sequence of such reviews, and the anticipated use of the evaluations.
- 4) Prior to the discontinuance of a program, the governing boards of state institutions of higher education are directed, subject to commission approval, to develop appropriate early retirement, professional retraining, and other programs to assist faculty members who may be displaced as a result of discontinued programs.
- 5) The commission shall assure that each institution has an orderly process for the phase-out of the programs.

Attachment A

Table 1: List of Non-Exempt Degree Programs Operating Below Benchmark in 2001

		1999	2000	2001
ASC	Geology ²	2	8	5
	Mathematics	3	9	2
CSM	Chemistry (MS)	2	0	1
	Physics (MS)	3	0	0
	Geological Engineering (Ph.D)	1	0	0
	Geochemistry (Ph.D)	0	1	0
CSU	Botany (BS)	11	3	4
FLC	Music	8	6	1
	Theatre	3	0	5
MESA	Selected Studies	1	0	0
METRO	Music/Music Performance (BA)	2	1	5
UCB	Distributed Studies (BA)	5	5	3
	Communication (MA) ³	1	1	2
	Comparative Literature (MA)	1	1	1
UCCS	Allied Health	0	0	0
UCD	School Psychology (MA)	0	0	0
UCHSC	All degree programs operating above benchmarks			
UNC	Physics (BA)	3	10	3
	School Psychology (MA)	0	0	0
USC	Electronics Engineering Tech (BS)	4	6	6
	Foreign Language	3	6	4
	Mathematics (BS)	6	5	5
WSC	Chemistry (BS)	0	4	3
	Physics (BS) ⁴	2	2	1

² Two-Year Extension – granted 2000, expires 2002

³ Two Year Extension – granted 2001, expires 2002

⁴ Extension, granted in 2000, expires in 2003

Attachment B

Table 2: List of Degree Programs Exempted by Governing Board
 (The exempted degree programs listed in bold meet the benchmark in 2001).

		1999	2000	2001
ASC	Chemistry (BA/BS)	6	7	5
	Music (BA)	4	3	7
	Spanish (BA)	5	0	2
	Speech-Theatre (BA)	1	3	5
CSM	Geological Engineering (PE)	0	2	2
	Geophysical Engineering (PE)	0	7	13
CSU	Bio-Agricultural Science (BS)	7	3	6
	Bio-resource/Agricultural Engineering (BS)	8	13	6
	Consumer & Family Studies (BS)	7	9	3
	Engineering Science (BS)	5	4	7
FLC	Economics (BA)	1	1	3
	Philosophy (BA)	4	5	5
	Physics (BA)	2	4	1
	Southwest Studies (BA)	4	10	3
METRO	African American Studies (BA)	0	1	2
	Chicano Studies (BA)	4	7	5
	Modern Languages (BA) ⁵	6	4	3
	Physics (BA/BS)	1	2	3
	Surveying and Mapping (BS)	2	3	2
UCB	Asian Studies (BA)	6	7	6
	Dance (BA/BFA)	7	9	14
	Italian (BA)	6	5	7
	Linguistics (BA)	4	11	9
	Russian Studies (BA)	8	9	8
UCCS	Applied Mathematics (BS)	5	8	0
	Physics (BS)	6	4	5
	Spanish (BA)	6	8	5
UCD	French (BA)	6	2	9
	German (BA)	4	1	5
	Geology (BS)	6	4	8
	Physics (BS)	2	6	5

⁵ Spanish and Modern Languages merged.

		1999	2000	2001
UNC	Black Studies (BA)	0	2	2
	French (BA)	3	0	2
	German (BA)	7	7	8
	Mexican American Studies (BA)	7	5	3
USC	Business Economics (BS/BA)	0	1	1
	History (BA)	7	8	15
	Physics (BS)	1	1	3
WSC	Economics (BA)	6	7	16
	Mathematics (BA)	7	9	4
	Music (BA)	3	7	4
	Spanish (BA)	3	13	11

TOPIC: TEACHER EDUCATION REPORT

PREPARED BY: MICHELLE DERBENWICK/SHARON SAMSON

I. SUMMARY

Colorado statute (22-60.5-116.5) requires that the Commission report annually to the house and senate education committees on the performance, quality, and effectiveness of these redesigned teacher education programs. This first annual report, due January 2002, updates the education committees on the implementation of the SB 99-154, including:

- Overview of the number of approved teacher education programs and the quality criteria for approving these degrees.
- Design of the teacher education performance model and next steps to improve the reliability and validity of the primary performance indicators, including potentially using another content test in lieu of the PLACE content area assessment and developing the first-and-third year survey to align with the statutory performance measures.
- Baseline information from the first year of Teacher Education SURDS data collection (teacher pipeline, low enrollment programs, and institutions with students in unapproved programs).

In accordance with statute, all pre-existing teacher education programs sunset on June 30, 2001. All prospective teachers are admitted into the newly approved teacher education programs beginning July 1, 2001. The Commission approved 404 initial licensure teacher education programs last June. A list of approved programs is included in Appendix B.

The following highlights several key findings in the Legislative Report:

1. Licensure areas with the highest numbers expected to graduate include Elementary, Secondary-English Language Arts and Special Education. Licensure areas with low numbers expected to graduate are Secondary- Agriculture, Secondary-Business and Marketing, Secondary-Drama, Secondary-Family and Consumer Studies, and Secondary-Technology. This high/low enrollment pattern is consistent with past years' licensure applications.
2. The data indicates that the number of students able to enter the teaching field has not diminished but is probably about the same as before implementation of SB 99-154. In addition, approximately half of the teacher education programs approved by CCHE in June 2001 had no students enrolled during FY 2001.
3. The preliminary design of the performance model depends on a valid measure of content knowledge. The state of Colorado currently uses the PLACE (Professional

Licensing Assessment for Colorado Educators), written by National Evaluation Systems (NES).

The inability to confirm PLACE test item validity, coupled with the slow response time of the PLACE vendor, will substantively delay the implementation of the performance model. This will require CCHE to take one of the following actions:

- a. Require an alternative content assessment since the information available at this time does not substantiate the PLACE content examinations as a valid measure of student content knowledge.
 - b. Ask the State Board of Education to require the current vendor to develop and implement a true content assessment by fall 2002.
4. CCHE administrated a pilot survey of first and third year teachers, which demonstrated that a survey can provide reliable data to use as a performance indicator. Formerly, the response rate was too low. The CCHE telephone pilot first and third year teacher survey achieved a 49% response rate, almost twice that of the mailed survey administered by CDE, despite the fact that the CCHE survey ended prematurely due to events of September 11.
 5. The first and third year survey design will be a priority in the development of the performance model this year. Administration of a redesigned survey is planned for Spring 2002, when K-12 schools are still in session. The pilot highlighted methodological issues, standards not well covered by the questions, repetitive questions, and vague or commonly misinterpreted questions. In order to use the results from a first and third year teacher survey in a performance model, several steps need to be taken to ensure a valid and reliable measurement tool and process, including: (1) better definition of the universe of first and third year teachers, (2) question redesign with the input from a technical committee, and (3) preliminary field testing to identify weak or vague questions. The upcoming year is the last to establish a baseline for teachers coming out of "old" teacher education programs, so it is critical that the methodology and interpretation be valid, reliable, and accurate.

II. BACKGROUND

The first cohort of students in redesigned teacher education programs was formally admitted to and subsequently enrolled in Teacher Education Programs during FY 2001. The first graduates from this cohort will be those who completed one-year post-baccalaureate programs during FY 2001 and applied for licensure in Spring 2001. Students in the first year of redesigned programs were reported in a SURDS teacher education file designed to include indicators for a performance model. Although analysis of the data at this point is limited to pipeline information, over the next few years, the data will enable tracking of students through the pipeline and performance aspects of teacher education programs and students. Prior to this reporting system, only self-reported data was available.

III. STAFF ANALYSIS

The legislature posed several policy questions when they adopted SB 99-194, including:

1. How many teacher candidates are being prepared in different licensure areas by Colorado Teacher Preparation Programs?
2. How do these teacher candidates perform while enrolled in the Teacher Preparation Program?
3. How do these teacher candidates perform in the K-12 classroom post graduation from the various Teacher Preparation Programs?

The first question is answered by tracking the teacher education pipeline. Data collected this year enabled CCHE to establish a baseline for enrollment in the Commission-approved teacher education programs and are included in this report. Prior to this time, only self-reported data was available. Self-reported summary data is difficult to use in a supply and demand analysis because it is unreliable.

The second and third questions are at the heart of the performance model in development by CCHE. A content assessment (i.e., the PLACE acts as a measure of teacher candidate content knowledge (quality of college preparation), and the first and third year survey acts as a measure of teacher performance in the K-12 classroom (i.e., quality of degree program and quality of field experience).

A. The Teacher Education Pipeline.

The overarching driver of Colorado's teacher education reform initiative is quality. While confident in the quality of the approved programs, the Commission expressed interest in knowing if the approved degree programs provided sufficient opportunities for training teachers in all licensure areas. An analysis of the expected completion of candidates in the first teacher education cohort indicates that elementary education teachers comprise 50 percent of the students in the pipeline with 730 expected to enter the teaching corps by 2003. From the state shortage perspective, high numbers of students are pursuing special education and secondary science licensure with approximately 200 projected to complete special education and 100 to complete secondary science licensure.

The data indicates that the number of students able to enter the teaching field has not diminished but is probably about the same as before implementation of SB 99-154. In addition, approximately half of the teacher education programs approved by CCHE in June 2001 had no students enrolled during FY 2001.

Table 1 summarizes the analysis of expected completion of candidates. The numbers of teachers expected to graduate from the first teacher education cohort in teacher education programs that meet the statutory standards for each licensure area are included. These

numbers include only those students admitted into and subsequently enrolled in the new teacher education programs approved as meeting the quality indicators specified in statute. The graduation projections in Table 1 exclude any students who were admitted into teacher preparation programs prior to June 30, 2000.

Based on previous years' data, it is estimated that the total number reported in Table 1 represents approximately half of the students in the teacher preparation pipeline. In addition, the reported number of students expected to graduate from teacher education in FY 2002 and 2003 are considerably lower than actual numbers will be, due to the fact that the FY2001 data will be increased by sophomore students pursuing teacher candidacy but not fully admitted in 2000-01, students transferring into teacher education from community colleges, and post-baccalaureate students entering in fall 2001.

Findings from the pipeline analysis are as follows:

- Licensure areas with the highest numbers expected to graduate include Elementary, Secondary-English Language Arts and Special Education.
- Licensure areas with low numbers expected to graduate are Secondary- Agriculture, Secondary-Business and Marketing, Secondary-Drama, Secondary-Family and Consumer Studies, and Secondary-Technology.
- The high/low enrollment pattern is consistent with past reports compiled by the Colorado Department of Education.
- Assuming the total number reported in Table 1 represents approximately half of the students in the teacher preparation pipeline, the number of students projected to graduate in 2002 with licenses in special education, secondary science, and secondary math appears stronger than and roughly equivalent to numbers licensed in past years, respectively. This positive growth may be attributable to the LIFT program.

TABLE 1. PIPELINE: NUMBER OF TEACHERS EXPECTED TO GRADUATE FROM THE FIRST COHORT IN REDESIGNED TEACHER EDUCATION PROGRAMS BY LICENSURE AREA

Licensure Area	Completed		Projected Completion			Total
	Undergrad	Post	Undergrad	Post	Undergrad	
	2001	2001	2002	2002	2003	
Early Childhood	0	0	17	4	9	30
Elementary	40	108	259	140	183	730
Early Adolescence (Middle School)	0	0	9	4	5	18
Secondary-Agriculture and Renewable Natural Resources	0	0	0	2	2	4
Secondary-Business/Marketing Education	0	1	0	1	0	2
Secondary-Drama	0	0	4	1	1	6
Secondary-Consumer and Family Studies	1	0	0	0	3	4
Secondary-Foreign Language	1	1	5	7	4	18
Secondary-English Language Arts	4	10	42	23	24	103
Secondary-Mathematics	1	3	30	8	12	54
Secondary-Science	1	15	33	31	13	93
Secondary-Social Studies	2	13	50	25	28	118
Secondary-Technology	0	0	1	1	1	3
Special Education	0	4	7	174	6	191
K-12: Art	0	0	20	8	8	36
K-12: Music	1	1	27	6	13	48
K-12: Physical Education	0	0	47	7	21	75
TOTAL	51	156	551	442	333	1,533
TOTAL EACH YEAR	207		993		333	1,533

COMPLETED FY 2001= ALL STUDENTS REPORTED AS COMPLETED REDESIGNED PROGRAMS (POST-BACCALAUREATES, SENIORS, AND ONE JUNIOR)

EXPECTED FY 2002= ALL STUDENTS ENROLLED AS POST-BACCALAUREATES AND SENIORS IN FY 2001 WHO DID NOT COMPLETE IN FY 2001, JUNIORS ENROLLED IN BOTH FALL AND SPRING FY 2001

EXPECTED FY 2003= ALL STUDENTS ENROLLED AS JUNIORS IN EITHER FALL OR SPRING FY 2001, ALL STUDENTS ENROLLED AS SOPHOMORES IN BOTH SPRING AND FALL FY 2001

Enrollment in redesigned teacher education programs by institution during FY 2001.

From a policy perspective, it is informative to know which institutions and which degree programs are attracting and training the largest number of teacher candidates. Table 2 includes FY 2001 headcount enrollment in the redesigned teacher education programs for each institution. The numbers reflect students enrolled in teacher preparation during at least one term in FY 2001. Because these numbers include freshmen and sophomores, the total number enrolled is not the same as the total projected graduates in Table 1.

- Colorado's institutions with the highest undergraduate enrollment in redesigned teacher preparation programs include University of Northern Colorado, Metropolitan State College of Denver, Colorado State University, Colorado Christian University,

and Adams State College. UNC prepares one-third of elementary education candidates in the state.

- Colorado's institutions with the highest post-baccalaureate enrollment in new teacher preparation programs include University of Colorado at Denver and University of Colorado at Colorado Springs.

TABLE 2. TEACHER EDUCATION REDESIGNED PROGRAM ENROLLMENT HEADCOUNT

Based on enrollment during at least one term in FY 2001.

Institution	Number of enrolled students		
	Undergraduate	Post-baccalaureate	Total
ASC	79	0	79
CC	5	0	5
CCU	98	10	108
CSU	107	64	171
DU	9	91	100
FLC	40	22	62
MESA	41	2	43
METRO	214	49	263
REGIS	56	44	100
UCB	49	9	58
UCCS	7	147	154
UCD	0	157	157
UNC	440	80	520
USC	58	12	70
WSC	20	8	28
TOTAL	1,223	695	1,918

Institutions with the highest enrollment in redesigned teacher education programs by licensure area during FY 2001.

Table 3 includes institutions that have the most students enrolled in redesigned teacher education programs for each licensure area. Asterisks identify LIFT-designated shortage areas.

- Four institutions have the largest enrollment across all licensure areas.
- University of Northern Colorado and Colorado State University have the highest enrollments for 15 of the 17-licensure areas represented in new teacher education programs.
- The three shortage areas -- mathematics, science, and special education -- have high enrollments at University of Northern Colorado (19 students), Colorado State University (30), and University of Colorado at Colorado Springs (103), respectively.

TABLE 3. PIPELINE: INSTITUTIONS WITH THE HIGHEST NUMBER OF ENROLLED STUDENTS PER LICENSURE AREA
Based on enrollment during at least one term in FY2001.

Licensure Area	Institution	Number of Students
Early Childhood	Metro	24
Elementary	UNC	224
Middle School	UNC	11
Secondary-Agriculture	CSU	4
Secondary-Business	CSU	5
Secondary-Drama	UNC	7
Secondary-Family and Consumer Studies	CSU	7
Secondary-Foreign Language	CSU	12
Secondary-Language Arts	UNC	28
Secondary-Mathematics*	UNC	19
Secondary-Science*	CSU	30
Secondary-Social Studies	UNC	41
Secondary-Technical	CSU	4
Special Education*	UCCS	103
K-12: Art	CSU	21
K-12: Music	UNC	32
K-12: Physical Education	UNC	51

*LIFT identified shortage area

Undergraduate Students Enrolled in Sunset/Discontinued Programs in FY 2001.

Appendix A-1 includes a table of the students enrolled during FY 2001 in programs that were sunset July 1, 2001. Most institutions have advised these students to change their majors to approved programs, and some institutions are working with CCHE to develop plans under filed advising plans. These plans apply to students admitted during 2000-01 only. If an institution is not included in Appendix 1, all students who applied to teacher education at that institution after June 30, 2000 were enrolled in approved programs during FY2001. In general, students who are advised into the new programs will graduate quicker because of the 4-year program design.

Approved Program and Licensure Area Combinations with No Enrollment in FY 2001.

Appendix A-2 includes a table of the undergraduate programs approved at each institution in which no teacher education students enrolled during FY 2001. It is premature to draw any conclusions about student interest in pursuing these degrees because some may have applied for admission into teacher education programs during fall 2001 or spring 2002. These data will appear reported in next year's report.

However, if this pattern persists, these degree programs will not have performance data or appear in the performance model. Their approval status will be vulnerable when the institution's teacher education programs are reviewed in the next cycle.

B. The Performance Model.

Performance in the College Classroom: The PLACE.

The preliminary design of the performance model depends on a valid measure of content knowledge. The state of Colorado currently uses the PLACE (Professional Licensing Assessment for Colorado Educators), written by National Evaluation Systems (NES). In 2000, the General Assembly eliminated three PLACE assessments (i.e., basic skills, general education, and pedagogy) since alternative assessment tests provided more valid performance data. The elimination of an exam in these areas reduced the testing burden on students since often they needed to take duplicative tests, measuring the same knowledge areas. The legislature maintained a content test because the legislative vision of a strong teacher education program is based on content knowledge.

In general, the secondary PLACE content tests appear to be valid measures of the content that an entry-level educator should have. On the other hand, some critical content tests, including Elementary Education, English, and Early Childhood, measure knowledge of pedagogy. This fact is supported by sample questions, the training manuals that are vague in their description of the purpose of the test, and feedback from students. The material itself does not contend that the PLACE content exams measure content only. For example, sample questions available for the elementary education content test are 20% content and 80% pedagogy. NES representatives acknowledged in recent meetings with CCHE staff that the elementary licensure test commingles pedagogical knowledge with content items. The deans of education indicated that this weakness is found in other content tests in addition to the three listed above.

CCHE requested validity and reliability information on the test in May 2001. This month, NES indicated that it plans to publish a technical report in May 2002 that may address questions regarding validity and reliability. They have agreed to cooperate in furnishing required information to CCHE staff, although the turn-around for CCHE receipt of information from NES has been very slow over the past four months.

Other issues that affect using the PLACE test scores as a performance indicator include:

- The infrequent administrations and lengthy turn-around for results inhibit institutions in implementing the new performance model that stipulates content assessment before student teaching.
- Little study material is available to teacher candidates, which may result in the need for several retakes, and high expenses to candidates.
- Reciprocity with other states is sacrificed when using an assessment only recognized in Colorado. K-12 content standards among states are similar, and it would be possible to use a nationally recognized test for the majority of the Colorado Model Content standards.

- Validity for low demand exams, such as agriculture, is difficult to achieve. Using a nationally administered content assessment would alleviate this problem.
- Other testing organizations have affiliated with the national accrediting organizations -- NCATE and TEAC -- that are requiring performance-based standards. NES has not indicated any motion in this direction.

The inability to confirm PLACE test item validity, coupled with the slow response time with this vendor, will substantively delay the implementation of the performance model. CCHE is considering two options:

- 1) Requiring a second content assessment since the information available at this time does not substantiate the PLACE content examinations as a valid measure of student content knowledge.
- 2) Asking the State Board of Education to require the current vendor to develop and implement a true content assessment by fall 2002.

CCHE staff have identified a viable alternative -- Educational Testing Service's PRAXIS II -- the content exams that are used by most other states.

Performance in the K-12 Classroom: The First and Third Year Teacher Survey.

The first and third year survey results measured the performance of students who graduated in 1997 and 2000.

In April 2001, the Colorado Department of Education published results from its first and third year survey. Because the teacher address data was unavailable the preceding spring, the survey was mailed to 2nd and 4th year teachers in fall 2000, with several follow-up mailings. Because the overall response rate from teachers was too low (25%) to be valid for performance modeling, the Colorado Commission on Higher Education piloted a telephone survey to determine if telephone data collection would elicit a higher response rate. The CCHE telephone pilot achieved a 49% response rate, almost twice that of the mailed survey, despite the fact that CCHE took on the task of administering the telephone survey in the summer of 2001, some large school districts were unable to provide names and numbers of first and third year teachers, and the survey was cut short in the first week of September due to the September 11 events. The contractor believes that the 49% response will increase if the survey is conducted during the spring, and the questions are focused and limited to a 20-minute interview time.

Limitations of the pilot survey:

The legislative intent of a first and third year survey is to measure content knowledge and mastery of teaching skills once a teacher has taught a full year in a K-12 classroom. However, neither the mailed or telephone survey verified the degree program that the student completed. This omission will be corrected in the next implementation, but limits

the ability to correlate degree program with classroom performance with this year's survey results.

The 50% response rate appears to provide sufficient data for developing institutional performance measures. However, several consecutive years of data will be required to construct performance measures at the program and licensure level. This methodology is similar to the one that William Sanders is developing for Tennessee, requiring three years of data to measure CSAP performance.

The pilot telephone survey results clearly indicate ambiguity in the vocabulary, ambiguity in phrasing within questions, and non-comparable scales. This is characteristic of a pilot survey that is designed to test feasibility. CCHE staff, in consultation with the Teacher Education Technical Advisory Committee will address these issues as it redesigns the survey for the spring administration.

Observations

Survey redesign is necessary in order to clearly connect questions to performance indicators. However, a few observations can be made from the results of the 2001 survey. These observations are not generalizable because the data is not representative of the first and third year teacher population.

- A higher percentage of first year teachers feel better prepared than third year teachers. A variety of factors may affect this perception, including the experience level of third year teachers. Prior to the next survey administration, CCHE will modify the survey so that the third year responses will be more informative.
- When asked if the content preparation was adequate in general, a high percentage of elementary education teachers responded positively (74%). When questioned about content knowledge in specific, the teachers rated their preparation lower, ranging from 46% to 71%, indicating that these central questions need validation prior to the next administration.
- Secondary teacher surveys contained only one question about content preparation. This will be redesigned in consultation with the Teacher Education Technical Advisory Committee.
- Questions about specific mastery of teaching skills cross-validated the responses to skill preparation in general. This portion of the survey seems to adequately collect the desired information.
- Teachers responding to the survey felt more confident about their preparation in teaching skills than in content knowledge.

The pilot highlighted methodological issues, standards not well covered by the questions, repetitive questions, and vague or commonly misinterpreted questions. In order to use the results from a first and third year teacher survey in a performance model, several steps need to be taken to ensure a valid and reliable measurement tool and process, including: (1) better definition of the universe of first and third year teachers, (2) question redesign with the input from a technical committee, and (3) preliminary field testing to identify weak or vague questions. The upcoming year is the last to establish a baseline for teachers coming out of “old” teacher education programs, so it is critical that the methodology and interpretation be valid, reliable, and accurate. The first and third year survey design will be a priority in the development of the performance model.

Appendix A. Students admitted into and subsequently enrolled in non-approved Teacher Education Programs during FY2001.

TABLE A-1. UNDERGRADUATE STUDENTS ADMITTED INTO AND SUBSEQUENTLY ENROLLED IN SUNSET/DISCONTINUED PROGRAMS IN FY 2001.

Institution	Licensure Area	Program	Number of Students enrolled:				Inst. Total
			Fall only	Spring only	Fall and Spring	Total	
CC	Elementary	Multicultural Studies 050299	0	1	0	1	3
		English 230101	0	1	0	1	
		Psychology 420101	0	1	0	1	
CSU	K-12: Physical Education	Physical Education 131314	10	3	0	13	13
DU	Elementary	Communication 090101	0	0	1	1	6
		Religious Studies 389999	0	0	1	1	
		Psychology 420101	0	0	4	4	
FLC	Elementary	Spanish 160905	0	0	1	1	19
		Humanities 240103	0	6	4	10	
		Biology 260101	0	3	1	4	
		Undeclared 999999	0	2	0	2	
	Early Childhood	Humanities 240103	0	1	0	1	
	Language Arts	Humanities 240103	0	1	0	1	
Metro	Elementary	Chicano Studies 050203	0	0	1	1	40
		Foreign Languages 160101	0	4	6	10	
		Environmental Science 260699	0	0	1	1	
		Mathematics 270101	0	1	2	3	
		Psychology 420101	0	2	7	9	
		Anthropology 450201	0	0	1	1	
		Political Science 451001	0	0	1	1	
		Sociology 451101	0	1	2	3	
	Early Childhood	Foreign Languages 160101	0	0	2	2	
		Psychology 420101	0	0	4	4	
	Special Education	Foreign Languages 160101	0	0	1	1	
		Psychology 420101	0	0	2	2	
	Speech	Speech 231001	0	1	1	2	
UCB	Elementary	Natural Resources 030101	0	1	0	1	14
		African American Studies 050201	0	1	0	1	
		Spanish 160905	0	1	0	1	
		Sociology 451101	0	4	0	4	
		Dance 500301	0	1	0	1	
		Fine Arts 500701	0	3	0	3	
	Secondary Science	Biology/Anatomy 260402	0	1	0	1	
	Secondary Social Studies	Sociology 451101	0	2	0	2	
UCD	Special Education	Special Education 131001	0	1	0	1	2
	Elementary	Elementary Education 131202	0	1	0	1	
UNC	Special Education	Communication 090101	0	1	0	1	

TABLE A-1. UNDERGRADUATE STUDENTS ADMITTED INTO AND SUBSEQUENTLY ENROLLED IN SUNSET/DISCONTINUED PROGRAMS IN FY 2001.

Institution	Licensure Area	Program	Number of Students enrolled:				Inst. Total	
			Fall only	Spring only	Fall and Spring	Total		
UNC	Special Education	Psychology 420101	0	7	2	9	172	
		History 450801	0	0	1	1		
		Sociology 451101	1	0	0	1		
	Elementary	African-American Studies 050201	0	1	0	1		
		Communication 090101	0	10	6	16		
		German 160501	0	1	0	1		
		French 160901	0	1	0	1		
		Spanish 160905	0	10	8	18		
		Liberal Arts 230101	0	6	7	13		
		Mathematics 270101	0	6	6	12		
		Earth Sciences 400703	0	2	0	2		
		Physics 400801	0	1	0	1		
		Psychology 420101	3	18	12	33		
		Social Sciences 450101	2	20	21	43		
		Geography 450701	0	0	1	1		
		History 450801	0	2	1	3		
		Sociology 451101	0	8	6	14		
		K-12: Music	Music, General 500901	0	0	1		1
		WSC	Elementary	Spanish 160905	0	1		0
Psychology 420101	0			2	0	2		

Appendix A-2. Approved Teacher Education Programs with No Enrollment

**TABLE A-2. APPROVED PROGRAM AND LICENSURE AREA COMBINATIONS WITH NO ENROLLMENT DURING FY 2001
 (based on unduplicated headcount of enrolled and completed status students)**

Institution	Licensure Area	Program	Undergrads in other programs in same licensure area?	Post-baccs/grads in same licensure area?
ASC	K-12: Art	Art	no	no
	K-12: Music	Music Education	no	no
	Science Secondary	Biology	no	no
		Chemistry		
		Geology		
	Early Childhood	Interdisciplinary	no	no
	Mathematics Secondary	Mathematics	no	no
	Foreign Language Secondary	Spanish	no	no
Language Arts Secondary	Speech	yes	no	
CC	Art Secondary	Art	no	no
	Science Secondary	Biology	no	no
		Chemistry		
		Geology		
		Physics		
	Foreign Language Secondary	Classics	no	no
		French		
		German		
		Japanese		
		Spanish		
	Social Studies Secondary	History	no	no
Music Secondary	Music	no	no	
Elementary	Liberal Arts	yes	no	
Mathematics Secondary	Mathematics	no	no	
CCU	NONE- all programs had enrollment		n/a	n/a
CSU	Foreign Language Secondary	French	yes	yes
	Science Secondary	Geology	yes	yes
	Early Childhood	Human Development	no	no
	Language Arts Secondary	Speech Communications	yes	yes
DU	Elementary	Liberal Arts	yes	yes
	Foreign Language Secondary	French	no	yes
		German		
		Russian		
		Spanish		
	Language Arts Secondary	Drama	yes	yes
	Mathematics Secondary	Mathematics	no	yes
Science Secondary	General Science	no	yes	
Social Studies Secondary	History	no	yes	

**TABLE A-2. APPROVED PROGRAM AND LICENSURE AREA COMBINATIONS WITH NO ENROLLMENT DURING FY 2001
 (based on unduplicated headcount of enrolled and completed status students)**

Institution	Licensure Area	Program	Undergrads in other programs in same licensure area?	Post-baccs/grads in same licensure area?
DU	Special Education	Special Education	no	no
FLC	Elementary	Interdisciplinary	yes	yes
	Early Childhood	Interdisciplinary	yes	yes
	Science Secondary	Chemistry	yes	yes
		Geology		
		Physics		
	Social Studies Secondary	History	yes	yes
Foreign Language Secondary	Spanish	no	no	
MESA	Science Secondary	Physical Science: Geology	yes	no
		Physical Science: Physics		
		Environmental Science and Technology		
METRO	Early Childhood	Biology	yes	yes
		English		
		History		
	Special Education	Speech Communications	yes	yes
	Science Secondary	Chemistry	yes	yes
		Environmental Science		
	Social Studies Secondary	Chicano Studies	yes	yes
		Economics		
		Political Science		
REGIS (COLLEGE)	Elementary	Biology	yes	no
		Chemistry		
		Communication		
		Computer Science		
		Economics		
		English		
		Environmental Studies		
		Fine Arts		
		French		
		History		
		Mathematics		
		Philosophy		
		Psychology		
		Religious Studies		
	Spanish			
	Business Secondary	Business	no	no
	Science Secondary	Chemistry	yes	no
Interdivisional studies				
Language Arts Secondary	English	no	no	

**TABLE A-2. APPROVED PROGRAM AND LICENSURE AREA COMBINATIONS WITH NO ENROLLMENT DURING FY 2001
 (based on unduplicated headcount of enrolled and completed status students)**

Institution	Licensure Area	Program	Undergrads in other programs in same licensure area?	Post-baccs/grads in same licensure area?
REGIS (COLLEGE)	Foreign Language Secondary	French	no	no
		Spanish		
	Social Studies Secondary	History	yes	no
		Interdivisional		
		Political Science		
REGIS (Univ.)	Special Education	Interdisciplinary	yes	no
	Middle School	Biological Sciences	yes	yes
		Chemistry		
		Communications		
		Earth Sciences		
		French		
		Geography		
		German		
		History		
		Mathematics		
		Physics		
		Spanish		
		Theatre Arts		
	Science Secondary	Biological Sciences	no	yes
		Chemistry		
		Earth Sciences		
		Physics		
	Language Arts Secondary	Communications	no	yes
		English		
		Theatre Arts		
	Foreign Language Secondary	French	no	no
		German		
		Spanish		
	Mathematics Secondary	Mathematics	no	no
	K-12: Art	Fine Arts: Art	no	no
	K-12: Music	Fine Arts: Music	no	yes
	Social Studies Secondary	Geography	yes	yes
		History		
UCB	Elementary	American Studies	yes	yes
		Anthropology		
		Astronomy		
		Biology		
		Chemistry		
		Economics		

**TABLE A-2. APPROVED PROGRAM AND LICENSURE AREA COMBINATIONS WITH NO ENROLLMENT DURING FY 2001
 (based on unduplicated headcount of enrolled and completed status students)**

Institution	Licensure Area	Program	Undergrads in other programs in same licensure area?	Post-baccs/grads in same licensure area?
UCB	Elementary	Geography	yes	yes
		Geology		
		History		
		Humanities		
		Linguistics		
		Mathematics		
		Physics		
		Political Science		
	Language Arts Secondary	Communications	yes	no
		Humanities		
		Linguistics		
	Foreign Language Secondary	Classics	yes	yes
		German		
		Italian		
		Japanese		
		Russian		
		Spanish		
	Science Secondary	Astronomy	yes	yes
		Biology		
		Chemistry		
	Social Studies Secondary	American Studies	yes	yes
Anthropology				
Economics				
Geography				
International Relations				
Political Science				
UCCS	Special Education	Biology	no	yes
		Chemistry		
		English		
		History		
		Mathematics		
		Physics		
		Spanish		
	Elementary	Biology	yes	yes
		English		
		Geography		
		Mathematics		
		Spanish		
	Mathematics Secondary	Mathematics	no	yes

**TABLE A-2. APPROVED PROGRAM AND LICENSURE AREA COMBINATIONS WITH NO ENROLLMENT DURING FY 2001
 (based on unduplicated headcount of enrolled and completed status students)**

Institution	Licensure Area	Program	Undergrads in other programs in same licensure area?	Post-baccs/grads in same licensure area?
UCCS	Science Secondary	Biology	no	yes
		Chemistry		
		Physics		
	Social Studies Secondary	History	no	yes
	Foreign Language Secondary	Spanish	no	no
UCD	NONE- all programs are post-baccalaureate and have enrollment			
UNC	Special Education	Interdisciplinary	yes	yes
	Early Childhood	Interdisciplinary	no	no
	Middle School	Biological Sciences	yes	yes
		Chemistry		
		Communications		
		Earth Sciences		
		English		
		French		
		Geography		
		Physics		
		Spanish		
	Theatre Arts			
	Foreign Language Secondary	French	yes	no
German				
Science Secondary	Physics	yes	yes	
USC	Science Secondary	Biology	no	yes
		Chemistry		
		Physics		
	Social Studies Secondary	Political Science	yes	yes
WSC	Special Education	Interdisciplinary	no	yes
	Elementary	Geology	yes	yes
		Interdisciplinary		
		Mathematics		
	Language Arts Secondary	English	no	no
	Foreign Language Secondary	Spanish	no	no
	Science Secondary	Chemistry	yes	yes
		Geology		
		Physics		
	Social Studies Secondary	Economics	yes	no
Political Science				

Appendix B. Teacher Education Programs Approved by CCHE

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
ASC	Post-bach	Business Secondary	
		Elementary	
		Elementary/Early Childhood	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts (Speech)	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Undergrad	Business Secondary
	Elementary		Interdisciplinary Studies
	Elementary/Early Childhood		Interdisciplinary Studies
	Foreign Language Secondary		Spanish
	K-12: Art		Art
	K-12: Music		Music Education
	K-12: Physical Education		Exercise, Physiology and Leisure
	Language Arts Secondary		English
	Language Arts Secondary		Speech and Theatre
	Mathematics Secondary		Mathematics
	Science Secondary	Biology	
Science Secondary	Chemistry		
Science Secondary	Geology		
Social Studies Secondary	History and Government		
CC	Post-bach	Art Secondary	
		Elementary	
		Foreign Language Secondary	
		Language Arts Secondary	
		Mathematics Secondary	
		Music Secondary	
		Science Secondary	
		Social Studies Secondary	
	Undergrad	Art Secondary	Art
		Elementary	Liberal Arts & Sciences
		Foreign Language Secondary	Classics
		Foreign Language Secondary	French
		Foreign Language Secondary	German
		Foreign Language Secondary	Japanese
		Foreign Language Secondary	Spanish
		Foreign Language Secondary	Spanish
		Language Arts Secondary	English

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
CC	Undergrad	Mathematics Secondary	Mathematics
		Music Secondary	Music
		Science Secondary	Biology
		Science Secondary	Chemistry
		Science Secondary	Geology
		Science Secondary	Physics
		Social Studies Secondary	History
CCU	Post-bach	Elementary	
		K-12: Music	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
	Undergrad	Elementary	Liberal Arts
		K-12: Music	Music
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	General Science
		Social Studies Secondary	History
CSU	Post-bach	Agriculture Secondary	
		Business Secondary	
		Elementary/Early Childhood	
		Family & Consumer Secondary	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Technical Secondary	
		Undergrad	
	Business Secondary		Business Administration
	Elementary/Early Childhood		Human Development & Family Stud.
	Family & Consumer Secondary		Consumer and Family Studies
	Foreign Language Secondary		French
	Foreign Language Secondary		German
	Foreign Language Secondary		Spanish
	K-12: Art		Art
	K-12: Music		Music
	Language Arts Secondary		English
	Language Arts Secondary	Speech Communication	
Mathematics Secondary	Mathematics		
Science Secondary	Biology		

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
CSU	Undergrad	Science Secondary	Chemistry
		Science Secondary	Geology
		Science Secondary	Natural Sciences
		Science Secondary	Physics
		Social Studies Secondary	History
		Social Studies Secondary	Liberal Arts
		Technical Secondary	Technology Education and Training
DU	Post-bach	Elementary	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		Language Arts Secondary	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Special Education	
	Undergrad	Elementary	Liberal Arts
		Foreign Language Secondary	French
		Foreign Language Secondary	German
		Foreign Language Secondary	Russian
		Foreign Language Secondary	Spanish
		K-12: Art	Art
		K-12: Music	Music
		Language Arts Secondary	Drama
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
Science Secondary	General Science		
Social Studies Secondary	History		
Special Education	Special Education		
FLC	Post-bach	Elementary	
		Elementary/Early Childhood	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
	Undergrad	Elementary	Interdisciplinary Studies

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
FLC	Undergrad	Elementary/Early Childhood	Interdisciplinary Studies
		Foreign Language Secondary	Spanish
		K-12: Art	Art
		K-12: Music	Music Education
		K-12: Physical Education	Exercise Science
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
		Science Secondary	Chemistry
		Science Secondary	Geology
		Science Secondary	Physics
		Social Studies Secondary	History
		Social Studies Secondary	Humanities
MESA	Post-bach	Elementary	
		Elementary/Early Childhood	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Undergrad	Elementary
	Elementary/Early Childhood		Liberal Arts
	K-12: Art		Fine and Performing Arts (Art Education)
	K-12: Music		Fine and Performing Arts (Music Education)
	K-12: Physical Education		Human Performance and Wellness
	Language Arts Secondary		English
	Mathematics Secondary		Mathematics
	Science Secondary		Biological Sciences
	Science Secondary		Environmental Science and Technology
	Science Secondary		Physical Science Geology with Earth Science
	Science Secondary	Physical Sciences: Physics	
Social Studies Secondary	History		
METRO	Post-bach	Early Childhood	
		Elementary	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS					
Institution	Level	Licensure Area	Program		
METRO	Post-bach	Special Education			
	Undergrad	Early Childhood	Behavioral Sciences		
		Early Childhood	Biology		
		Early Childhood	English		
		Early Childhood	History		
		Early Childhood	Speech Communications		
		Elementary	Behavioral Sciences		
		Elementary	Biology		
		Elementary	English		
		Elementary	History		
		Elementary	Speech Communications		
		Foreign Language Secondary	Modern Language		
		K-12: Art	Art		
		K-12: Music	Music		
		K-12: Physical Education	Human Performance & Sport		
		Language Arts Secondary	English		
		Mathematics Secondary	Mathematics		
		Science Secondary	Biology		
		Science Secondary	Chemistry		
		Science Secondary	Environmental Science		
		Social Studies Secondary	Behavioral Sciences		
		Social Studies Secondary	Chicano Studies		
		Social Studies Secondary	Economics		
		Social Studies Secondary	History		
		Social Studies Secondary	Political Science		
		Special Education	Behavioral Science		
		Special Education	Speech Communications		
		REGIS C	Post-bach	Business Secondary	
				Elementary	
	Foreign Language Secondary				
Language Arts Secondary					
Mathematics Secondary					
Science Secondary					
Social Studies Secondary					
Undergrad	Business Secondary		Business		
	Elementary		Biology		
	Elementary		Chemistry		
	Elementary		Communications		
	Elementary		Computer Science		
	Elementary		Economics		
	Elementary		English		
	Elementary		Env. Studies & Human Ecology		
	Elementary		Fine Arts: Visual Arts		
	Elementary		French		

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
REGIS C	Undergrad	Elementary	History
		Elementary	Mathematics
		Elementary	Philosophy
		Elementary	Psychology
		Elementary	Religious Studies
		Elementary	Sociology
		Elementary	Spanish
		Foreign Language Secondary	French
		Foreign Language Secondary	Spanish
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
		Science Secondary	Chemistry
		Science Secondary	Interdivisional Studies
		Social Studies Education	Economics
		Social Studies Education	History
		Social Studies Education	Interdivisional (Hist., Pol Sci., Econ)
		Social Studies Education	Political Science
REGIS U	Post-bach	Elementary	
		Elementary/Early Childhood	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		Language Arts Secondary	
		Mathematics Secondary	
		Middle School	
		Science Secondary	
		Social Studies Secondary	
		Special Education	
		Undergrad	
	Elementary/Early Childhood		Liberal Studies
	Foreign Language Secondary		French
	Foreign Language Secondary		German
	Foreign Language Secondary		Spanish
	K-12: Art		Fine Arts: Art
	K-12: Music		Fine Arts: Music
	Language Arts Secondary		Communication (Speech)
	Language Arts Secondary		English
	Language Arts Secondary		Theatre Arts
Mathematics Secondary	Mathematics		
Middle School	Biological Sciences		
Middle School	Chemistry		
Middle School	Communication (Speech)		
Middle School	Earth Sciences		

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
REGIS U	Undergrad	Middle School	English
		Middle School	French
		Middle School	Geography
		Middle School	German
		Middle School	History
		Middle School	Mathematics
		Middle School	Physics
		Middle School	Social Sciences
		Middle School	Spanish
		Middle School	Theatre Arts
		Science Secondary	Biological Sciences
		Science Secondary	Chemistry
		Science Secondary	Earth Sciences
		Science Secondary	Physics
		Social Studies Secondary	Geography
		Social Studies Secondary	History
		Social Studies Secondary	Social Sciences
Special Education	Interdisciplinary Studies		
UCB	Post-bach	Elementary	
		Foreign Language Secondary	
		K-12: Music	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
	Undergrad	Elementary	American Studies
		Elementary	Anthropology
		Elementary	Astronomy
		Elementary	Biology (Distributive Studies)
		Elementary	Chemistry (Distributive Studies)
		Elementary	Communications
		Elementary	Economics
		Elementary	English
		Elementary	Geography
		Elementary	Geology (Distributive Studies)
		Elementary	History
		Elementary	Humanities
		Elementary	Linguistics
		Elementary	Mathematics
		Elementary	Physics
		Elementary	Political Science
Elementary	Psychology		
Foreign Language Secondary	Classics (Latin)		
Foreign Language Secondary	French		

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
UCB	Undergrad	Foreign Language Secondary	German
		Foreign Language Secondary	Italian
		Foreign Language Secondary	Japanese
		Foreign Language Secondary	Russian
		Foreign Language Secondary	Spanish
		K-12: Music	Music
		K-12: Music	Music Education
		Language Arts Secondary	Communications
		Language Arts Secondary	English
		Language Arts Secondary	Humanities
		Language Arts Secondary	Linguistics
		Mathematics Secondary	Mathematics
		Science Secondary	Astronomy
		Science Secondary	Biology EPO
		Science Secondary	Chemistry
		Science Secondary	Physics
		Social Studies Secondary	American Studies
		Social Studies Secondary	Anthropology
		Social Studies Secondary	Economics
		Social Studies Secondary	Geography
		Social Studies Secondary	History
Social Studies Secondary	International Affairs		
Social Studies Secondary	Political Science		
UCCS	Post-bach	Elementary	
		Foreign Language Secondary	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Special Education	
	Undergrad	Elementary	Biology
		Elementary	English
		Elementary	Geography and Env. Studies
		Elementary	History
		Elementary	Mathematics
		Elementary	Spanish
		Foreign Language Secondary	Spanish
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
		Science Secondary	Chemistry
		Science Secondary	Physics
Social Studies Secondary	History		
Special Education (History)	History		

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
UCCS	Undergrad	Special Education (Language Arts)	English
		Special Education (Mathematics)	Mathematics
		Special Education (Science)	Biology
		Special Education (Science)	Chemistry
		Special Education (Science)	Physics
		Special Education (Spanish)	Spanish
UCD	Post-bach	Elementary	
		Foreign Language Secondary	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Special Education	
UNC	Post-bach	Drama Secondary	
		Elementary	
		Elementary/Early Childhood	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	
		Middle School	
		Science Secondary	
		Social Studies Secondary	
		Special Education	
	Undergrad	Drama Secondary	Theatre Arts
		Elementary	Interdisciplinary Studies
		Elementary/Early Childhood	Interdisciplinary Studies
		Foreign Language Secondary	French
		Foreign Language Secondary	German
		Foreign Language Secondary	Spanish
		K-12: Art	Visual Arts
		K-12: Music	Music Education
		K-12: Physical Education	Kinesiology
		Language Arts Secondary	Communication Speech
Language Arts Secondary	English		
Mathematics Secondary	Mathematics		
Middle School	Biological Sciences		
Middle School	Chemistry		
Middle School	Communication Speech		
Middle School	Earth Sciences		
Middle School	English		
Middle School	French		

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
UNC	Undergrad	Middle School	Geography
		Middle School	German
		Middle School	History
		Middle School	Mathematics
		Middle School	Physics
		Middle School	Social Sciences
		Middle School	Spanish
		Middle School	Theatre Arts
		Science Secondary	Biological Sciences
		Science Secondary	Chemistry
		Science Secondary	Earth Sciences
		Science Secondary	Physics
		Social Studies Secondary	Geography
		Social Studies Secondary	History
		Social Studies Secondary	Social Sciences
Special Education	Interdisciplinary Studies		
USC	Post-bach	Elementary	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
	Social Studies Secondary		
	Undergrad	Elementary	Liberal Studies
		Foreign Language Secondary	Spanish
		K-12: Art	Art
		K-12: Music	Music
		K-12: Physical Education	Physical Education
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
		Science Secondary	Chemistry
		Science Secondary	Physics
		Social Studies Secondary	History
Social Studies Secondary		Political Science	
WSC	Post-bach	Elementary	
		Foreign Language Secondary	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	

TABLE B-1. CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
WSC	Post-bach	Science Secondary	
		Social Studies Secondary	
		Special Education Endorsement	
	Undergrad	Elementary	Biology
		Elementary	English
		Elementary	Geology
		Elementary	Interdisciplinary Studies
		Elementary	Mathematics
		Foreign Language Secondary	Spanish
		K-12: Art	Art
		K-12: Music	Music Education
		K-12: Physical Education	Kinesiology
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Music Secondary	Music
		Science Secondary	Biology
		Science Secondary	Chemistry
		Science Secondary	Geology
		Science Secondary	Physics
		Social Studies Secondary	Economics
		Social Studies Secondary	History
		Social Studies Secondary	Political Science
		Special Education	Interdisciplinary Studies

TOPIC: THE GOVERNOR'S OPPORTUNITY SCHOLARSHIP REPORT

PREPARED BY: BRIDGET MULLEN

I. SUMMARY

The [attached report](#) is a summary of the first two years of the Governor's Opportunity Scholarship Program. Since its inception in 1999, Colorado awarded more than 700 Governor's Opportunity Scholarships (GOS), and this report reflects the success of the recipients.

II. BACKGROUND

Governor Owens and the Colorado Commission on Higher Education established the Governor's Opportunity Scholarship in 1999 with the purpose of getting more of Colorado's low-income students to attend a postsecondary institution.

COLORADO COMMISSION ON
 **HIGHER
EDUCATION**

ACCESS TO HIGH-QUALITY, AFFORDABLE EDUCATION FOR ALL COLORADANS

THE GOVERNOR'S OPPORTUNITY SCHOLARSHIP
RESULTS FROM THE FIRST TWO YEARS
JANUARY 2002

1380 Lawrence Street, Suite 1200 • Denver, Colorado 80204 • (303) 866-2723
TIMOTHY E. FOSTER, EXECUTIVE DIRECTOR

THE GOVERNOR'S OPPORTUNITY SCHOLARSHIP

Despite the economic prosperity of recent years that has brought unprecedented wealth to the state and to many families, Colorado's low-income students continue to confront significant financial barriers that limit their ability to access and stay in college. As a result, the college entry and completion rates of low-income students in Colorado continue to lag well behind their middle-income and upper-income peers. Nationally, the college participation rate of students from families earning below \$25,000 lags 32 percentage points behind those families earning above \$75,000. The difference is even greater in Colorado. Under-participation and lack of degree completion continues to take its toll on the lifetime earnings of today's low-income students. In turn, these factors also impact the economic productivity and prosperity of the state.

In order to address the current opportunity gap and avoid a potential access crisis in the future, the Colorado Commission on Higher Education developed the Governor's Opportunity Scholarship program. The Governor and the Commission, with the support of the General Assembly and the state's institutions of higher education, are addressing the access issue by focusing its commitment to low-income families by providing financial assistance to residents who otherwise would not be able to attend college.

Access to Higher Education in Colorado

The Governor's Opportunity Scholarships has allowed more than 700 Coloradans to attend institutions of higher learning since 1999. The program is designed to assist students who would not otherwise seek post-secondary educational opportunities. An important part of the program is to track the progress of the scholarship recipients. The purpose of this report is to provide progress information and to suggest ways to improve the program in future years.

National data suggest a strong relationship between educational attainment levels and income. People who live in households in the United States with increasing income levels have higher educational levels and people in households with decreasing incomes have lower educational attainment levels. In 2000, according to the US Census Bureau, the average income for a high school graduate was \$27,975, while a college graduate earned 85% more at \$51,644.

Table 1: Average Annual Income for Persons 25 Years and Over by Educational Attainment

Educational Attainment	Average Annual Income (2000)
High School Graduate	\$27,975
Some College	\$33,948
Associates Degree	\$35,105
Bachelor's Degree	\$51,644
Master's Degree	\$61,302
Ph.D.	\$80,225
Professional Degree	\$95,176

Source: United States Census Bureau, Income Tables via the Internet

College Participation Rates

College participation rates are strong indicators of a state's economic vitality. Although Colorado ranks first in the number of residents with baccalaureate degrees, Colorado's low-income students have a lower college participation rate than the national average of 25%. In Colorado, only 17% of low-income students go on to college. Colorado's growing economy will not benefit low-income residents unless enrollment patterns change.

Table 2: Estimated Chance for College by Family Income Quartile (2000)

Income Quartile	Chance for College	Chance for Completion by Age 24
Top	75%	52%
Third	69%	25%
Second	56%	14%
Bottom	35%	7%

Source: Tom Mortenson, Post-secondary Education OPPORTUNITY, October 2001

To increase college participation among low-income students, the Governor along with the Colorado Commission on Higher Education developed a new financial aid program, known as the Governor's Opportunity Scholarship (GOS), in August 1999. The GOS provides assistance to a limited number of low-income students who are able to attend institutions of higher learning at no cost. The purpose of the program is to provide financial and counseling support to low-income students by giving them an opportunity to attend institutions of higher learning. From a policy perspective, the program is designed to change enrollment and graduation patterns and at the same time extend greater economic stability to low-income

Coloradans. State and federal financial assistance has been focused on Colorado residents who are least likely to attend college because of financial barriers. During the program's first two years, 31 public and private institutions provided assistance to more than 700 students at a cost of \$4 million in state grant assistance.

Parameters of the Governor's Opportunity Scholarship Program

Recipients of the GOS are first-time freshmen with significant financial need. According to the Free Application for Student Aid (FAFSA) these students come from families with incomes of less than \$26,000. The recipients attend community colleges, vocational schools, and various public and private four-year Colorado institutions. Participating institutions actively assisted applicants in completing admissions and financial aid forms.

Students are often the first in their families to attend higher education. Recipients received both academic and financial assistance for 2 or 4 years depending on the type of degree or certificate program in which the student enrolls. Institutions also provided academic support systems, which included tutoring, study groups, academic counseling and peer mentoring to ensure student retention and academic performance.

Financial assistance is renewed as long as the student maintains academic eligibility at the institution, enrolls full-time, and continues to meet the institution's policy regarding satisfactory academic progress for hours completed. Each institution offered a self-help component of work-study and excluded loans from the student's financial aid package. The students are tracked throughout their post-secondary career to determine the effect of the GOS and to measure the academic performance and retention rates.

GOS Student Progress

This report reflects the progress of students from the first two years of the program. Seven hundred and thirty eight GOS recipients have enrolled in Colorado institutions of higher education since the fall semester, 1999. Each recipient received, at a minimum, a federal Pell Grant, a work-study award and a GOS. The average GOS award during FY 2000 was \$3,100 per semester. Recipients are measured in cohorts. A cohort consists of GOS students who enroll as a first-time, full-time student in a specific semester. As of Spring 2001, four cohorts make up the

current GOS student population. Cohort 1 began in fall 1999, cohort 2 in Spring 2000, cohort 3 in Fall 2000 and cohort 4 in Spring 2001. Cohorts 1 and 3 comprise ninety-two percent of the total GOS population. Data for cohort 5 (fall 2001) are not yet available.

Sixty-two percent of GOS students are female. Half come from urban/suburban counties in Colorado while 44% are from a rural county. Although minority status was not a requirement for the GOS award, the population is diverse. Nearly half of the GOS students are from an ethnic origin other than White, non-Hispanic compared to the state's 75% White, non-Hispanic population. Table 3 reports the ethnic breakdown of the GOS population and for the state's population.

Table 3: Ethnic Breakdown of GOS Population and the State of Colorado

Ethnic Origin	Cohort 1 Fall 1999	Cohort 2 Spring 2000	Cohort 3 Fall 2000	Cohort 4 Spring 2001	Total GOS	Colorado Population (2000)
White, Non-Hispanic	41%	47%	53%	27%	48%	75%
Hispanic	39%	36%	25%	36%	31%	17%
Black, Non-Hispanic	7%	7%	8%	0%	7%	4%
Asian/Pacific Islander	3%	3%	7%	0%	5%	2%
American Indian/Alaskan Native	3%	5%	2%	0%	3%	1%
Unknown/Not Reported	7%	2%	5%	36%	6%	1%
Total Number of Students	279	58	390	11	738	N/A
% Non-White	52%	51%	42%	36%	46%	N/A

Source: The Colorado Commission on Higher Education and The U.S. Census Bureau (2000)

Ninety-six percent of recipients enrolled at public institutions. The majority enrolled at a public four-year institution. Table 4 shows the distribution of GOS students among two and four year, public and private, institutions.

Table 4: Distribution of Governor's Opportunity Scholarship Recipients

Institution Type	Cohort 1 Fall 1999	Cohort 2 Spring 2000	Cohort 3 Fall 2000	Cohort 4 Spring 2001	Total GOS
Public Two-Year	39%	53%	35%	45%	38%
Public Four-Year	57%	47%	61%	55%	68%
Private Two-Year	0%	0%	0%	0%	0%
Private Four-Year	4%	0%	4%	0%	4%

Source: The Colorado Commission on Higher Education, SURDS Enrollment and Undergraduate Application Files.

Academic progress and retention rates are important indicators in measuring student success. GOS students are required to maintain full-time status. Full-time is defined as 12 credit hours per semester. Table 5 presents cumulative credit hours completed through spring semester 2001 by each cohort. In Spring 2001, each cohort exceeded the minimum requirement of full-time enrollment. As an example, cohort 1, at the end of the Spring 2001 term, completed, on average, 48.46 credit hours. Cohort 3 completed 28.01 credit hours, significantly exceeding the 24 credit hour minimum. In addition to credit hours completed, academic progress is also measured by grade point average. Table 6 reflects cumulative grade point averages on a 0 to 4.0 scale. On average, cohorts 1, 2, and 3 earned a 2.7 GPA, the equivalent of a B-. Recipients in cohort 4 met the required 2.0 minimum GPA. It is important to note that cohort 4 comprises only 1% of the total population and only 1 semester's progress for this cohort is being reported at this time. Retention rates are a key measure of the program's success. The statewide retention rates for all first-time, full-time freshman, after one-year, is 66% according to the latest available Quality Indicator System data. Table 7 reports retention rates for the cohorts. One-year retention rates exist for GOS students in cohorts 1 and 2 at this time. After one-year, 66% of cohort 1 recipients were retained and 77% of cohort 2. Overall, GOS students are performing at or above their peers.

Table 5: Average Credit Hours Completed by Cohort, Cumulative by Semester

Cohort	Fall 1999	Spring 2000	Fall 2000	Spring 2001
Cohort 1	12.38	23.11	36.95	48.46
Cohort 2		10.88	26.03	37.31
Cohort 3			15.52	28.01
Cohort 4				18.96

Source: The Colorado Commission on Higher Education, SURDS Enrollment Files

Table 6: Average Cumulative Grade Point Average by Cohort

Cohort	Fall 1999	Spring 2000	Fall 2000	Spring 2001
Cohort 1	2.509	2.392	2.601	2.773
Cohort 2		2.423	2.662	2.717
Cohort 3			2.837	2.784
Cohort 4				2.164

Source: The Colorado Commission on Higher Education, SURDS Enrollment Files

Table 7: Retention Rates by Cohort

Cohort	Spring 2000	Fall 2000	Spring 2001
Cohort 1	88%	75%	66%
Cohort 2		79%	67%
Cohort 3			93%

Source: The Colorado Commission on Higher Education, SURDS Enrollment Files

Conclusion

Data show the long-term benefits of acquiring a bachelor's degree are great. The knowledge-based economy, which sets the United States apart from the rest of the world, has made a college education more important than ever. Nearly 60 percent of jobs today require at least some college. This will only increase in the future. The baccalaureate degree is becoming the equivalent of a high school diploma in the old economy. Yet, students from low-income families do not pursue a post-secondary education. The most significant barrier to entry into higher education for these students is financial: they simply are not able to pay for college. Low-income families also do not view student loans as a way of overcoming that barrier. On the other hand, they do view grants and scholarships as incentives but find limited resources at both the federal and state levels.

Students from low-income families also face cultural issues as first generation attendees at institutions of higher learning. An important goal of the GOS program is to provide

assistance for students to not only enroll in an institution of higher education but also to provide counseling so that these students complete their program.

In order to narrow the gaps in postsecondary participation, persistence and degree completion, the Commission, in its master plan, has made student access an important goal. The state's financial aid system should ensure, at a minimum, that the decision of low-income students to attend an institution of higher education should not be constrained solely by unmet need. In order to achieve this, the Commission has refocused financial aid, in particular, need-based grants, toward those students who might not otherwise go to college without the assistance. The Governor's Opportunity Scholarship represents an effort by the Governor, the Colorado Commission on Higher Education and the General Assembly to change the post-secondary enrollment patterns of low-income students.

The Commission will continue to monitor this program and encourage institutions to support these goals. The Commission will partner with Colorado high schools, non-profit outreach organizations and the institutions to search out and encourage low-income students to enroll and complete post-secondary education. In addition, they will work with institutions to assure that each GOS student succeeds. An additional 300 GOS students entered Colorado institutions in the fall of 2001.

TOPIC: STATEWIDE DIVERSITY REPORT

PREPARED BY: MICHELLE DERBENWICK

I. SUMMARY

Under CCHE's Diversity Policy, the Commission annually monitors the state's progress toward access to higher education for all its citizens and the governing boards' progress in achieving institutional access and diversity goals. This agenda item describes the participation, retention, and graduation rates of students of various ethnicities in state-supported institutions of higher education with an historical viewpoint.

Because providing broad and representative access to a quality undergraduate learning experience is the primary goal of the Diversity Policy, the undergraduate participation indicators are the leading indicators of policy success.

By policy, Colorado defines underrepresented higher education populations as those students with Hispanic, Asian, Black or Native American descent. Examining the enrollment, retention, and graduation rates of these students within Colorado's higher education system, the 2001 Diversity Report identified the following trends or conditions:

- Of students graduating from Colorado high schools in 2000, 21.8 percent had Hispanic, Asian, Black or Native American parentage (Table 1).
- Both undergraduate and graduate programs in state-supported Colorado colleges and universities show a positive change in the percentage of underrepresented students enrolled in fall terms over the last five years. Students defined as underrepresented comprised 21.5 percent of undergraduate in-state enrollment and 13.9 percent of graduate in-state enrollment in Fall 2000 (Figures 1A-1D). Since fall 1996, the percentage of underrepresented in-state undergraduates enrolling in the fall term has risen 1.4 percent and the percentage of underrepresented in-state graduates enrolling in the fall term has risen 2.1 percent. At both the undergraduate and graduate levels, the largest increases occurred with Hispanic females (1.3 and 1.6 percentage points, respectively). All underrepresented ethnic groups of both genders saw positive increases in their representation in enrollment between 1995 and 2000, with the exception of Black, non-Hispanic female graduate students.
- Retention rates of underrepresented in-state freshmen students increased for every cohort year from 1997 to 1999 (retained in years 1998 to 2000) for both two and four year institutions. Retention rates of underrepresented freshmen in-state students are increasing at a faster rate (5.4 percentage points over three years) than the retention rates of all in-state freshmen students (2.7 percentage points years) at two-year institutions, while retention rates of all in-state freshmen students are increasing at a faster rate (2.2 percentage points over three years) than the retention rates of underrepresented in-state freshmen students (1.4 percentage points over three years) at four-year institutions.

- Graduation rates of underrepresented in-state freshmen at four-year institutions increased every cohort year from 1992-1994 (completing years 1998-2000), with an aggregate graduation rate of 35.2% for the 1994 cohort. The gap between underrepresented and all in-state freshmen at four-year institutions decreased every cohort year from 1992-1994. All ethnic groups of both genders at four-year institutions saw net increases in graduation rate between the 1992 and 1994 cohorts except American Indian/Alaskan Native females. The graduation rate of Hispanic males showed a minimal increase of 0.2 percentage points.
- Graduation rates of underrepresented in-state freshmen at two-year institutions decreased every cohort year from 1995-1997 (completing years 1998-2000), with an aggregate graduation rate of 14.2% for the 1997 cohort. The gap between underrepresented and all in-state freshmen at two-year institutions decreased between cohort years 1995 and 1996, but increased between cohort years 1996 and 1997. All ethnic groups of both genders at two-year institutions experienced a net decrease in graduation rate from 1995 to 1997 cohorts, with the exception of Asian or Pacific Islander females, who increased their graduation rate by 0.9 percentage points.
- The percentage of undergraduate degrees granted to underrepresented in-state students has risen 1.4 percentage points since 1996, close to the 1.5 percentage point increase in all state awards granted to underrepresented in-state students since 1996 (Figures 4 and 5). The highest percentages of awards earned by underrepresented populations fall in certificates and associates degrees, while graduate degrees are awarded to the smallest percentage of underrepresented students. The percentage of degrees granted to underrepresented in-state students at both the undergraduate and total levels in 2000 lagged the percentage of underrepresented in-state students enrolled in Fall 2000 by close to 4 percent.

The Diversity Report is provided for discussion purposes only. No formal Commission action is necessary.

II. BACKGROUND

In 1998 the Commission adopted a new affirmative action policy, responding to the governing boards' call for a more comprehensive approach toward diversity. CCHE's revised policy evolved from universal graduation targets to a continuous improvement model. Funding was no longer tied to achievement of graduation numbers. Acceptable diversity plans were characterized by a leadership statement, strategic initiatives with specified timeline, and accountability lines that went directly to the President/Chancellor or Academic Vice-President.

Shortly after, the Commission introduced a new initiative – the Governor's Opportunity Scholarship – that provides resources for institutions to recruit low-income students that formerly did not apply to higher education institutions due to financial constraints. While often categorized as a financial aid program, the Governor's Opportunity Scholarship Program (GOS) is a student outreach program that requires participating institutions to

provide the academic and student support services necessary for a successful college transition.

In October 1999, the Commission accepted the Diversity Plans submitted by the Regents of the University of Colorado, the State Board of Agriculture, the Trustees for The State Colleges of Colorado, the State Board of Community Colleges and Occupational Education, the Trustees of the University of Northern Colorado, and the Trustees of the Colorado School of Mines.

For the 2001 Diversity Report, an effort has been made to align methodology for calculation of the following percentages with that used for CCHE's Quality Indicator System. This will provide consistency in various CCHE publications of ethnicity calculations.

III. STAFF ANALYSIS

1. **HIGH SCHOOL GRADUATION RATES OF UNDERREPRESENTED STUDENTS**

The undergraduate in-state participation rates will not directly reflect the high school graduation population, as many institutions recruit students from other states and lose students recruited into other states. However, it is informative to view the ethnic composition of Colorado's high school graduates (See Table 1) and the trends evident in the percentage of total graduates who come from underrepresented populations.

- According to the Colorado Department of Education, the percentage of graduates who are ethnically underrepresented has risen at levels just above 21 percent to the Class of 2000 percentage of 21.8. This compares favorably with the ethnic composition of in-state enrolled undergraduate students, of which 21.5 percent were underrepresented students in Fall 2000.

Table 1: HIGH SCHOOL GRADUATES BY RACE

	Class of:							
	1997		1998		1999		2000	
	Number of graduates	Percent of graduates						
Black	1,557	4.5%	1,594	4.5%	1,608	4.4%	1,693	4.3%
Asian	1,006	2.9%	1,081	3.0%	1,071	2.9%	1,288	3.3%
Native American	238	0.7%	272	0.8%	272	0.7%	321	0.8%
Hispanic	4,433	13.0%	4,612	12.9%	4,958	13.4%	5,172	13.3%
White	26,997	78.9%	28,235	78.9%	29,035	78.6%	30,450	78.2%
Total	34,231		35,794		36,944		38,924	
Percent Underrepresented Graduates	21.1%		21.1%		21.4%		21.8%	

Source: Colorado Department of Education

2. **PARTICIPATION RATES OF UNDERREPRESENTED STUDENTS**

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Participation rates are based on a headcount that excludes extended studies students. These enrollment numbers are also published in the Digest of Colorado Post-Secondary Statistics. See appendix B for aggregate numbers.

Note that in order to be consistent with QIS methodology, percentages are calculated based on the total number of students for whom ethnicity is known.

- Colorado in-state students are well represented at both the undergraduate and graduate level, comprising 86.5% of the total enrolled undergraduates and 79.5% of the total enrolled graduates.
- Percentages of all underrepresented ethnic groups out of the total number of students enrolled at both the undergraduate and graduate levels for both genders have increased since 1995, with the exception of the percentage of African American female graduate students.
- Although the growth in the percentage of all underrepresented students slowed or reversed from fall 1998 to fall 1999 for in-state undergraduates, enrollment in fall 2000 showed relatively large positive change since fall 1999. This change was 0.6 percentage points.

Figure 1A. TRENDS IN UNDERGRADUATE IN-STATE HEADCOUNT, MALES

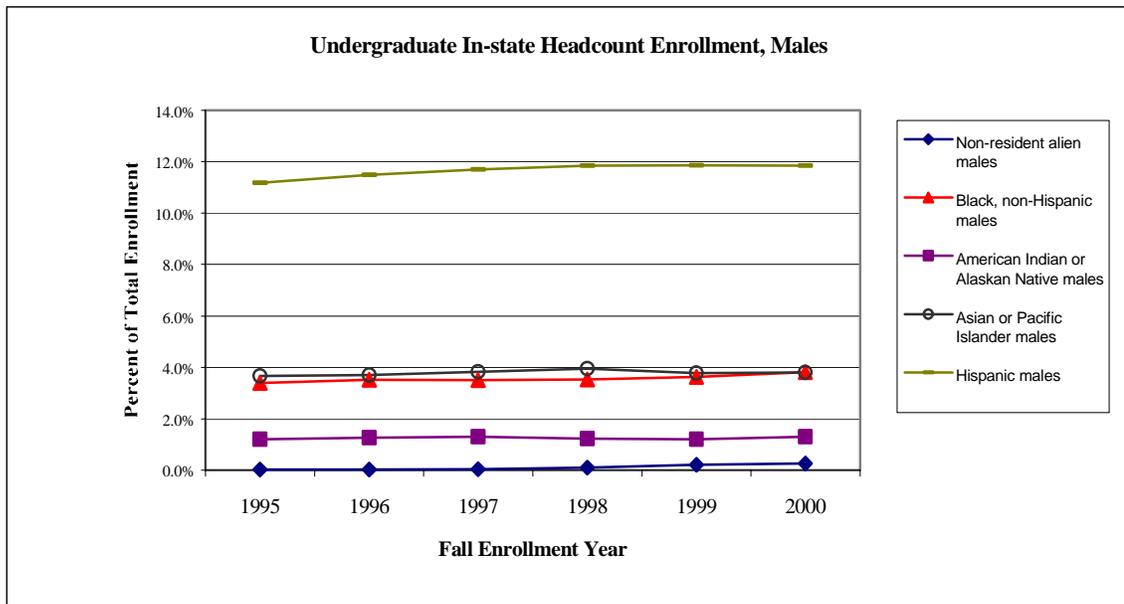
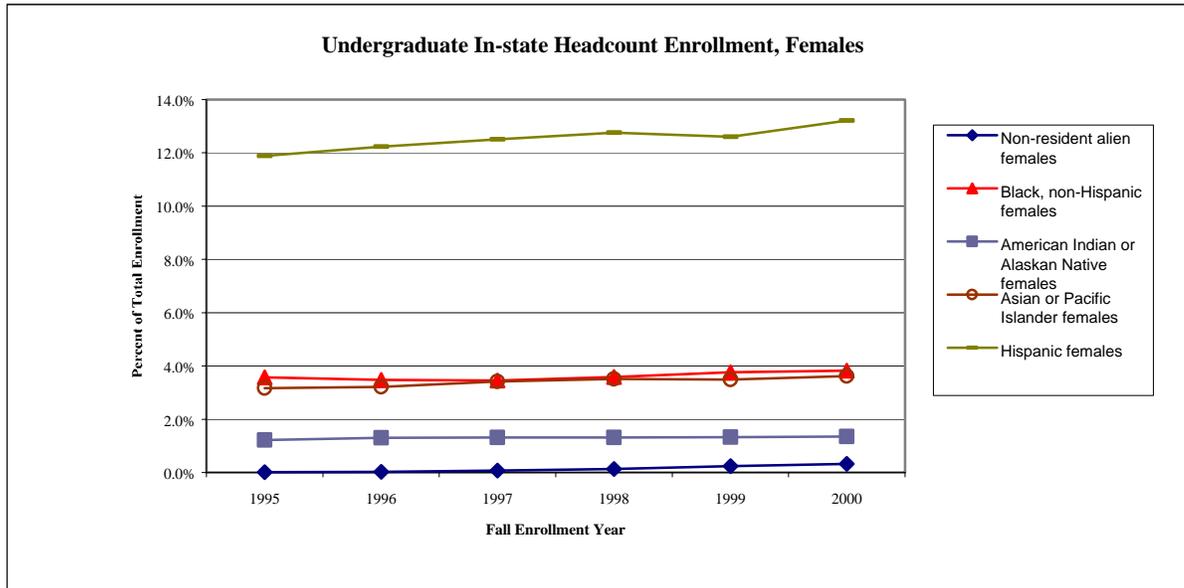


FIGURE 1B. TRENDS IN UNDERGRADUATE IN-STATE HEADCOUNT, FEMALES



- At the undergraduate level, the percent of enrolled students who are Hispanic females grew at a faster rate than the percent of enrolled students who are Hispanic males, 1.3 percentage points and 0.6 percentage points, respectively. This trend is similar at the graduate level, with the percentage of enrolled students who are Hispanic females growing 1.6 percentage points while the percentage of enrolled students who are Hispanic males grew only 0.6 percentage points.
- At the undergraduate level, for Black, non-Hispanic and American Indian or Alaskan Native ethnic groups, representation among males and females is roughly equivalent. A slightly higher subset of the male undergraduate population is comprised of Asian or Pacific Islander students than of the female undergraduate population. This pattern is also seen at the graduate level.
- At the graduate level, students of underrepresented ethnicity comprise 13.9 percent of all in-state students enrolled.
- At the graduate level, Asian or Pacific Islander females saw higher increases in representation than Asian or Pacific Islander males between 1995 and 2000 (1.1 percentage point and 0.8 percentage points, respectively).
- If out-of-state students are included in the ethnically underrepresented participation rates in addition to in-state students, participation rates of underrepresented students decline approximately one percentage point for undergraduates and approximately one and one-half percentage point for graduate students.

FIGURE 1C. TRENDS IN IN-STATE GRADUATE HEADCOUNT, MALES

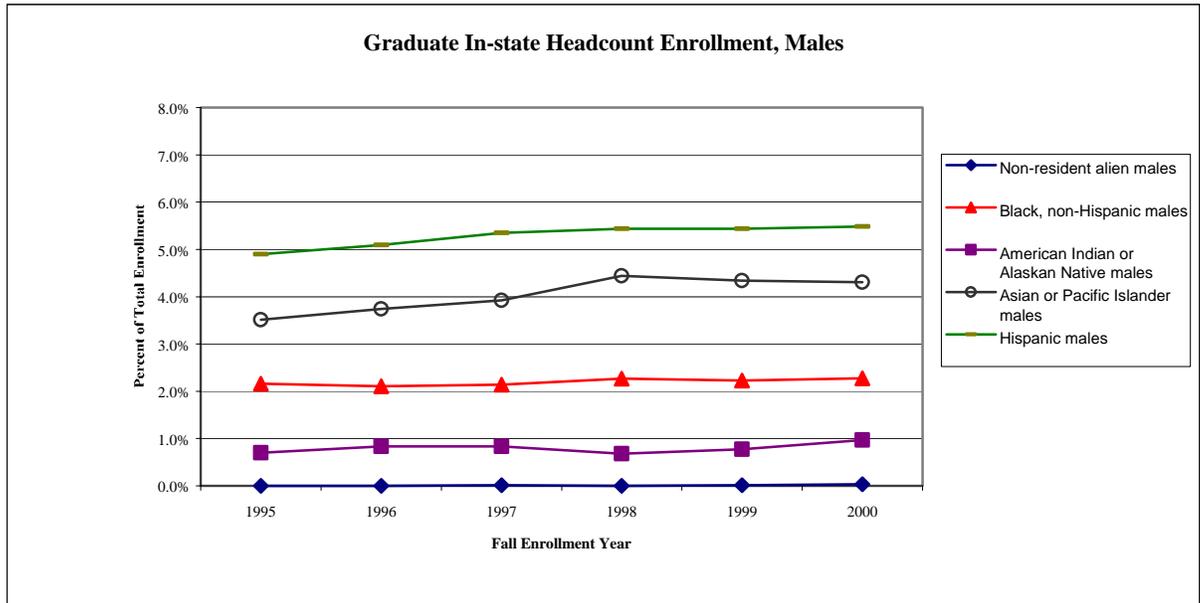
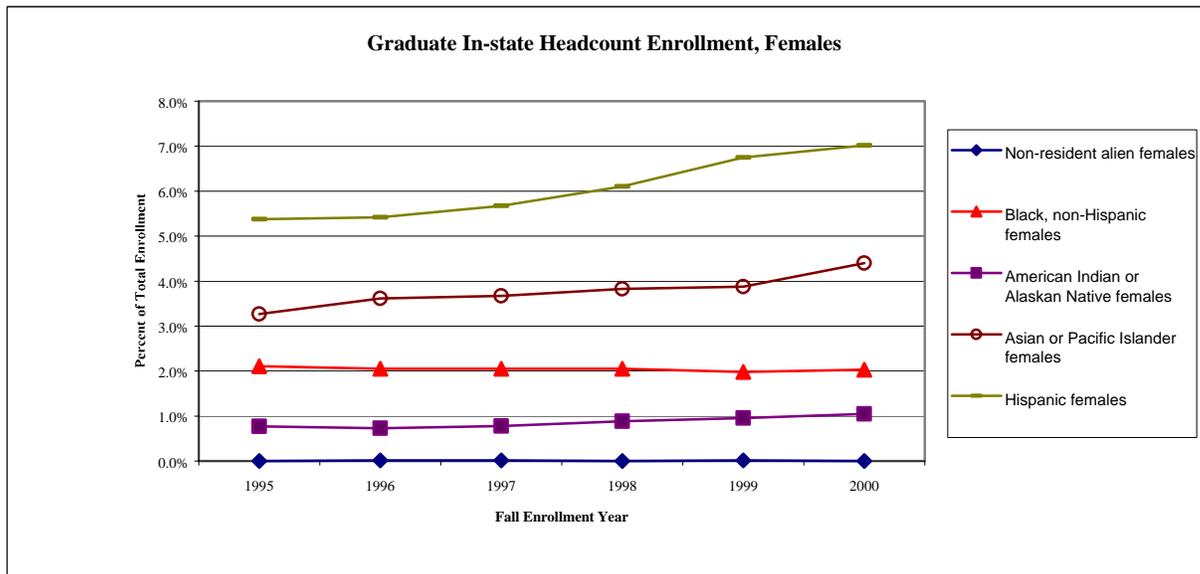


FIGURE 1D. TRENDS IN IN-STATE GRADUATE ENROLLMENT, FEMALES



3. RETENTION RATES OF UNDERREPRESENTED STUDENTS

Figures 2A and 2B show the retention rates of male and female in-state freshmen returning to the same four-year institution, separated into ethnic groups, respectively. Institution-approved QIS cohorts were used for calculation of retention rates. See appendix B for aggregate numbers.

- Retention rates of underrepresented in-state students increased for every cohort year from 1997 to 1999 (retained in years 1998 to 2000) for both two and four year institutions. Four-year institution retention rates of underrepresented student populations increased

1.4 percentage points and two-year institution retention rates of underrepresented student populations increased 5.4 percentage points.

- The gap between retention rates of in-state underrepresented students and the retention rates of all in-state freshman students at four year institutions increased between 1997 and 1998, but remained about the same between 1998 and 1999.
- Retention rates of all in-state students are increasing at a faster rate (2.2 percentage points over three years) than the retention rates of underrepresented in-state students (1.4 percentage points over three years) at four-year institutions.
- Both male and female Asian or Pacific Islander students have higher retention rates at four-year institutions than any other ethnic group, including white non-Hispanics.
- Retention rates of males at four-year institutions increased between the 1997 and 1999 cohorts for all ethnic groups but Asian or Pacific Islander.
- Retention rates of females at four-year institutions increased between the 1997 and 1999 cohorts for all ethnic groups but Asian or Pacific Islander and Hispanic.
- The largest increases in retention rates at four-year institutions for both males and females was seen in the American Indian or Alaskan Native cohort, with increases of 7.1% and 7.9%, respectively.

FIGURE 2A. RETENTION RATES AT FOUR-YEAR INSTITUTIONS, MALES

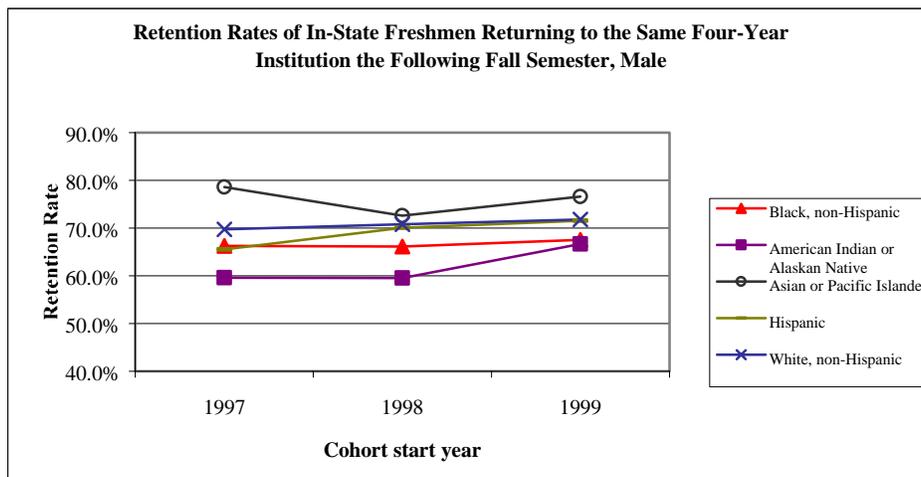
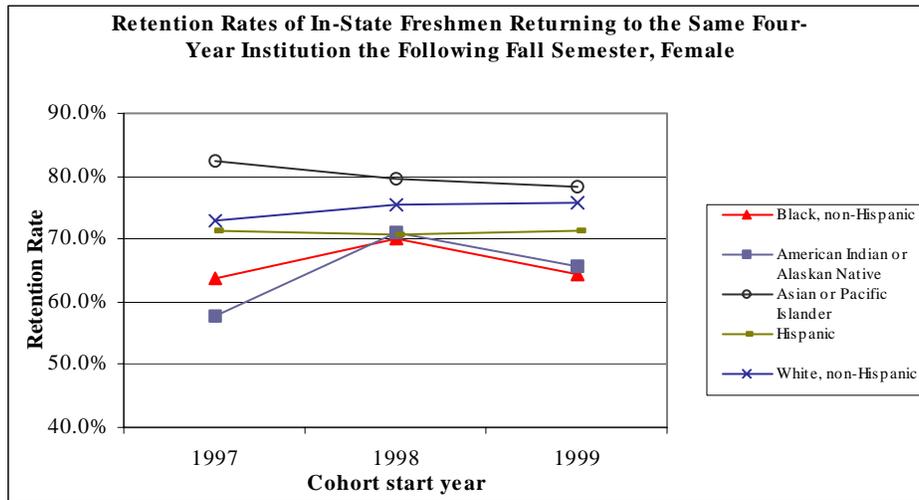


FIGURE 2B. RETENTION RATES AT FOUR-YEAR INSTITUTIONS, FEMALES



Figures 2C and 2D show the retention rates of male and female in-state freshmen returning to the same two-year institution, separated into ethnic groups, respectively. Institution-approved QIS cohorts were used for calculation of retention rates.

- The gap between retention rates of students of underrepresented ethnicity and the retention rates of all in-state freshman students at two year institutions decreased between 1997 and 1998 and remained about the same between 1998 and 1999.
- Retention rates of underrepresented in-state students are increasing at a faster rate (5.4 percentage points over three years) than the retention rates of all in-state students (2.7 percentage points years) at two-year institutions.
- Retention rates at two-year institutions between 1997 and 1999 increased the most for the Black non-Hispanic ethnic group for both males and females at two-year institutions (18.5 percentage point gain and 21.2 percentage point gain, respectively).
- American Indian or Native Alaskan females also saw a large increase in retention of 20.0 percentage points at two-year institutions between 1997 and 1999.
- All ethnic groups except for Asian or Pacific Islander females saw net increases in retention rates between 1997 and 1999.

FIGURE 2C. RETENTION RATES AT TWO-YEAR INSTITUTIONS, MALE

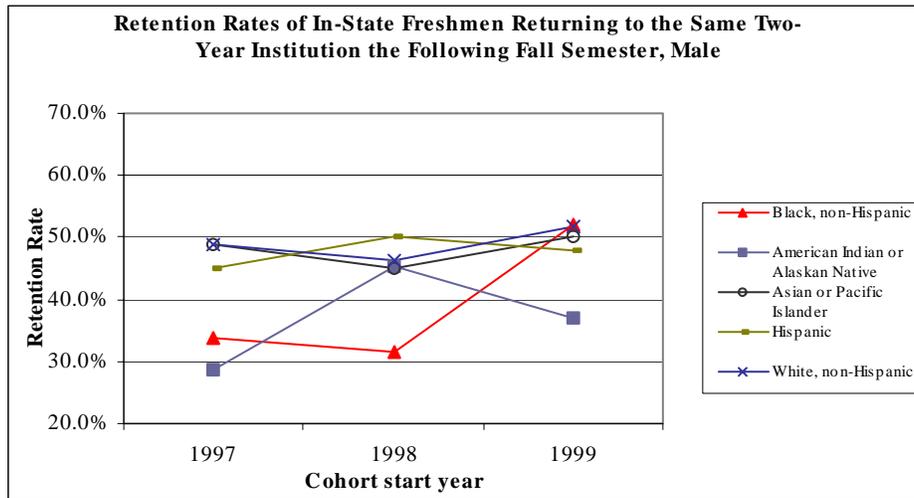
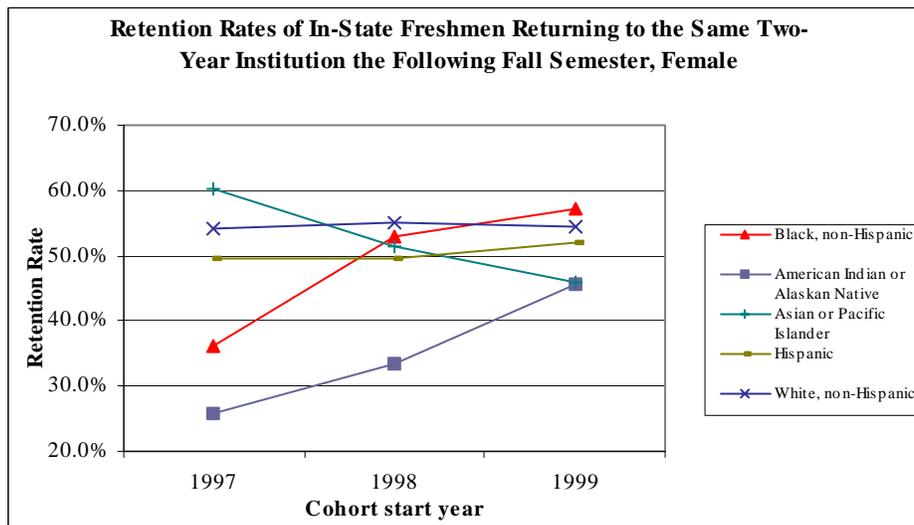


FIGURE 2D. RETENTION RATES AT TWO-YEAR INSTITUTIONS, FEMALE



4. GRADUATION RATES OF UNDERREPRESENTED STUDENTS

Tables 3A and 3B show the percent of first-time, in-state, degree seeking freshman who started at four year institutions in 1994 that graduated by 2000 by gender and ethnicity. Institution-approved QIS cohorts were used for calculation of graduation rates. See appendix B for aggregate numbers.

- Of the first time, in-state, degree-seeking freshmen that enrolled in four-year colleges and universities in fall 1994, 45.1 percent graduated by FY 2000.
- Among males in the 1994 cohort, Asian or Pacific Islander students had the highest six-year graduation rate of all ethnic groups, including white non-Hispanic, at 49.4%.
- Among females in the 1994 cohort, white non-Hispanic students had the highest graduation rate, at 50.3%, closely followed by Asian or Pacific Islander students at 48.3%.

- In both the male and female 1994 cohorts, all ethnically underrepresented students graduated the largest percentage of their cohort 5 years after starting.
- Male white non-Hispanic students graduated the largest percentage of their cohort in five years, while female white non-Hispanic students graduated the highest percentage of their cohort in four years.

FIGURE 3A. FOUR-YEAR GRADUATION RATES OF 1994 COHORT, MALE

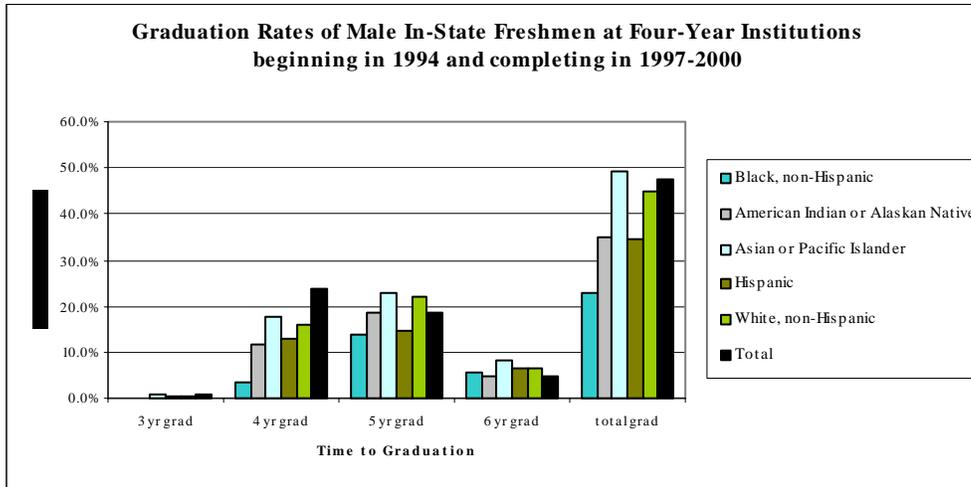
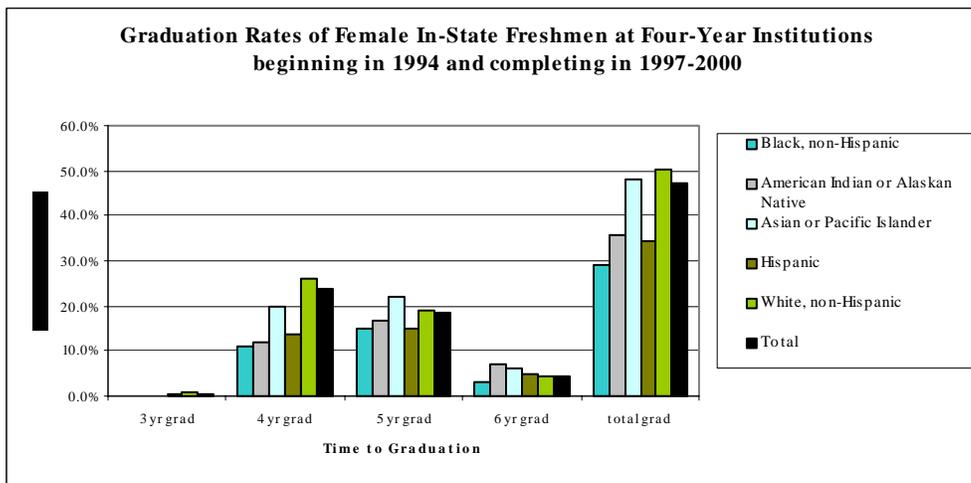


FIGURE 3B. FOUR-YEAR GRADUATION RATES OF 1994 COHORT, FEMALE



Figures 3C and 3D demonstrate six-year graduation rates of students in four-year institutions for the 1992 cohort (completing by 1998), the 1993 cohort (completing by 1999), and the 1994 cohort (completing by 2000). Institution-approved QIS cohorts were used for calculation of graduation rates.

- The gap between the graduation rate of all enrolled undergraduates and underrepresented students in the 1994 cohort was 10.0 percentage points at four-year institutions. This gap has continuously narrowed since 1992.

- All ethnic groups of both genders saw net increases in graduation rate between the 1992 and 1994 cohorts except American Indian/Alaskan Native females. The graduation rate of Hispanic males showed a minimal increase of 0.2 percentage points.
- Among males, the largest increases in graduation rates occurred for American Indian or Alaskan Native and Asian or Pacific Islander ethnic groups, 10.9 percentage points and 10.7 percentage points, respectively.
- Among females, the largest increases in graduation rates occurred for Black, non-Hispanic and Asian or Pacific Islander ethnic groups, 6.3 percentage points and 5.0 percentage points, respectively.

FIGURE 3C. GRADUATION RATES AT FOUR-YEAR INSTITUTIONS, MALE

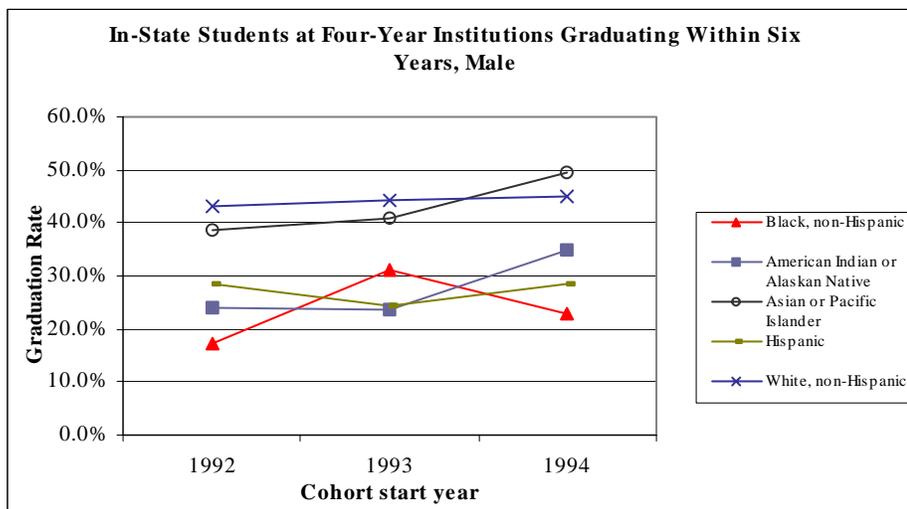
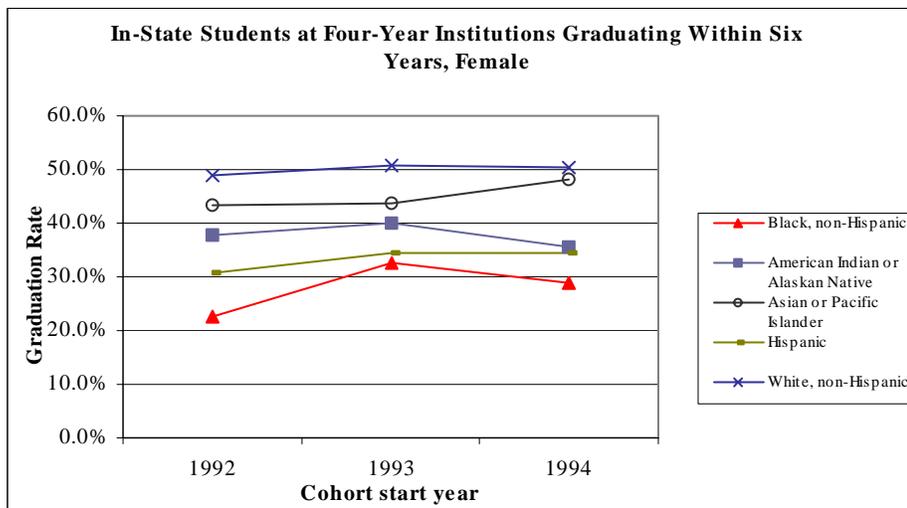


FIGURE 3D. GRADUATION RATES AT FOUR-YEAR INSTITUTIONS, FEMALE



- The four-year institutions with the highest graduation rates for underrepresented in-state students include Colorado School of Mines, University of Colorado at Boulder, and Colorado State University with six-year graduation rates for underrepresented in-state students of 57.5%, 52.8%, and 51.6%, respectively.

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- The four-year institutions that show the most improvement in underrepresented in-state student graduation rates between 1992 and 1994 cohorts include Colorado School of Mines (15.7 percentage points), University of Colorado at Colorado Springs (13.2 percentage points), Western State College (7.9 percentage points), and Mesa State College (7.4 percentage points). All but three four-year institutions had gains in underrepresented in-state student graduation rates between the 1992 and 1994 cohorts.

Figures 3E and 3F demonstrate three-year graduation rates of students in two-year institutions for the 1995 cohort (completing by 1998), the 1996 cohort (completing by 1999), and the 1997 cohort (completing by 2000). Institution-approved QIS cohorts were used for calculation of graduation rates.

- The percent of underrepresented in-state students graduating from two-year colleges has decreased for each cohort between 1997 and 1999, a total of 3.9 percentage points. The percent of all in-state students graduating from two-year colleges decreased 2.8 percentage points between the 1997 and 1998 cohorts and remained constant at 20.8 % for the 1998 and 1999 cohorts.
- The gap between underrepresented and all in-state student graduation rates was highest for the 1997 cohort at 6.6%.
- All ethnic groups of both genders experienced a net decrease in graduation rate from two-year institutions, with the exception of Asian or Pacific Islander females, who increased graduation rates by 0.9 percentage points between the 1995 and 1997 cohorts. The largest decreases for both males and females were seen in the American Indian or Alaskan Native ethnic groups. Most ethnic groups also experienced a decrease in the size of cohort between 1995 and 1997.

FIGURE 3E. GRADUATION RATES AT TWO-YEAR INSTITUTIONS, MALE

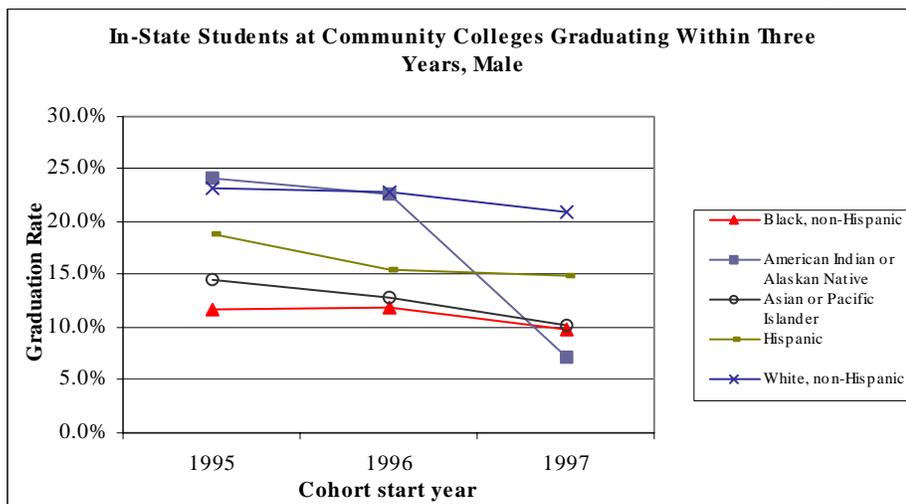
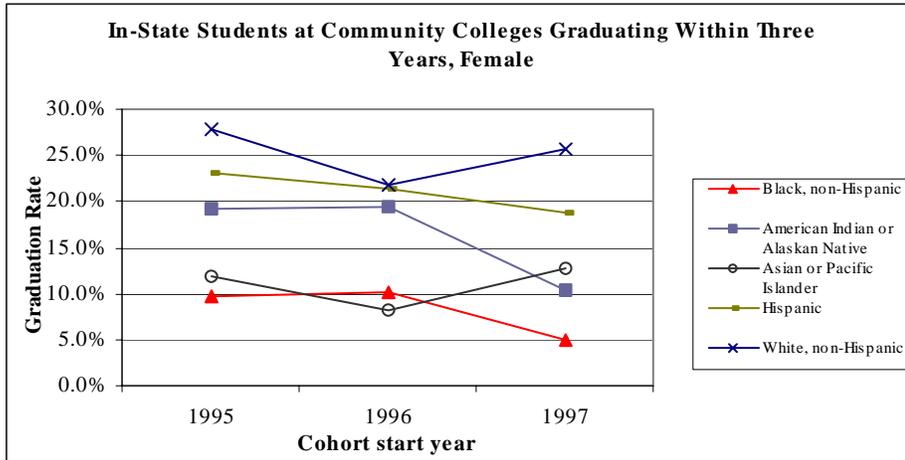


FIGURE 3F. GRADUATION RATES AT TWO-YEAR INSTITUTIONS, FEMALE



5. PERCENT OF DEGREES AWARDED TO UNDERREPRESENTED STUDENTS

The Commission’s over-arching diversity goal is that the system should be accessible to all students regardless of ethnicity or ability to pay. Because the Commission policy goals included graduation rates that were proportional to the percent of in-state residents that graduated from high school, the undergraduate degrees granted indicator should show the steadiest improvement over time. This is supported by the data, in that the percentage of bachelor degrees awarded to underrepresented students shows relatively steady improvement since 1996. However, in general, the percentage of degrees awarded to underrepresented students has not steadily risen as the percentage of underrepresented students enrolling has. See Appendix B for exact numbers.

FIGURE 4. TRENDS IN DEGREES GRANTED TO IN-STATE UNDERREPRESENTED STUDENTS BY DEGREE LEVEL

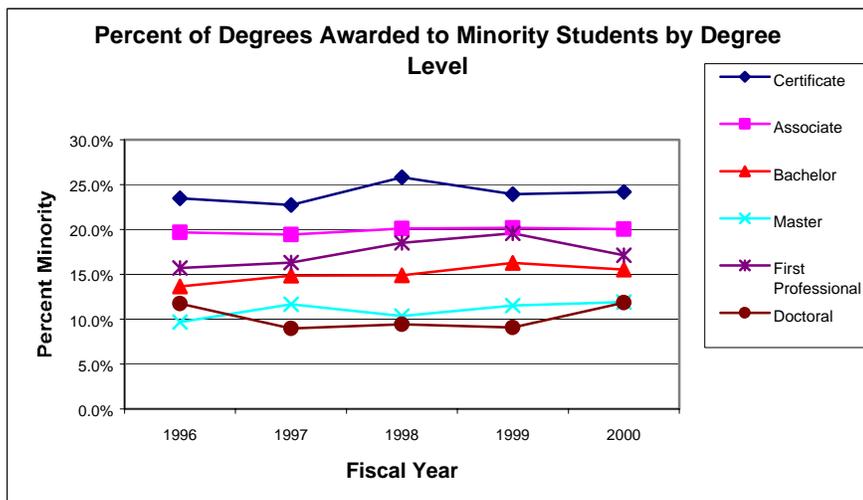
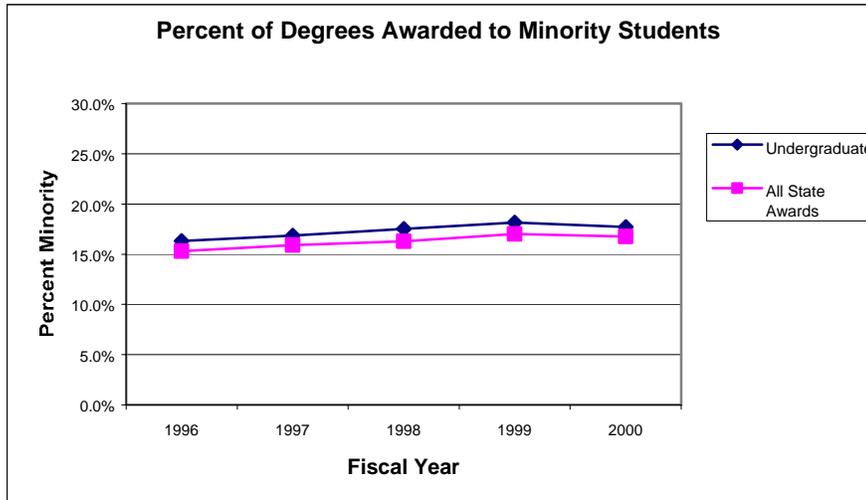


FIGURE 5. TRENDS IN DEGREES AWARDED TO IN-STATE UNDERREPRESENTED STUDENTS (AGGREGATE)



- The percent of certificates and associate degrees awarded to underrepresented students only experiences slight decreases between 1999 and 2000.
- The percent of bachelors' degrees awarded to underrepresented students decreased by 0.8 of a percentage point between 1999 and 2000. Since 1996, the percentage of bachelor degrees awarded to underrepresented students has risen 1.9 percentage points.
- The percent of underrepresented students receiving undergraduate degrees lags the undergraduate underrepresented student participation rate by almost four percentage points – 21.5 percent of enrolled undergraduates are underrepresented students while only 17.7 percent of undergraduate degree recipients are underrepresented students.
- The percent of first professional degree graduates who are from underrepresented student populations experienced a drop of 2.5 percentage points between 1999 and 2000. Since 1996, the percentage of first professional degree graduates who are from underrepresented student populations has risen 1.4 percentage points.
- The percent of master degrees awarded to underrepresented students increased by only 0.4 of a percentage point between 1999 and 2000. Since 1996, the percent of masters' degrees awarded to students from underrepresented student populations has risen 2.2 percentage points.
- The percent of doctoral degrees awarded to underrepresented students has increased by about 2.5 percentage points between 1999 and 2000. However, this increase is due to a large decrease in the number of white students (40 degrees) than an increase in underrepresented numbers.
- The percent of underrepresented students receiving graduate degrees in 2000 – close to 12 percent of masters' degree recipients and Ph.D. recipients – lags the 13.9 percent participation rate of underrepresented students in graduate degree programs by 1.9 percentage points.

Appendix A

STATUTORY AUTHORITY

C.R.S. 23-1-108 The commission, after consultation with the governing boards of institutions and as a part of the master planning process, shall have the authority to:

- (f) Adopt statewide affirmative action policies for the commission, governing boards, and state-supported institutions of higher education. Responsibility for implementation of such policies shall be reserved to the governing boards.

Table B1: UNDERGRADUATE IN-STATE HEADCOUNT ENROLLMENT
(excludes out-of-state and extended studies students)

Enrolled in calendar fall:	1995	1996	1997	1998	1999	2000
Total In-state Undergraduates	148,220	148,775	150,897	152,125	155,010	155,297
Underrepresented	28,323	29,045	29,916	30,590	31,190	32,018
Non-resident Alien	22	34	82	171	341	447
White	115,732	115,368	115,685	115,584	118,011	116,784
Ethnicity unknown	4,143	4,328	5,214	5,780	5,468	6,048
Percent underrepresented	19.7%	20.1%	20.5%	20.9%	20.9%	21.5%

Source: SURDS

Table B2: GRADUATE IN-STATE HEADCOUNT ENROLLMENT
(excludes out-of-state and extended studies students)

Enrolled in calendar fall:	1995	1996	1997	1998	1999	2000
Total In-State Graduate Students	17,183	16,904	17,049	17,304	17,159	16,407
Underrepresented	1,870	1,902	1,976	2,086	2,120	2,133
Non-resident Alien	0	1	2	1	4	2
White	14,516	14,199	14,214	14,299	14,028	13,239
Ethnicity unknown	797	802	857	918	1,007	1,033
Percent underrepresented	11.4%	11.8%	12.2%	12.7%	13.1%	13.9%

Source: SURDS

Table B3: RETENTION RATES OF IN-STATE FRESHMEN RETURNING TO THE SAME FOUR-YEAR INSTITUTION

First-time, full-time, in-state, degree-seekers enrolled in fall semester of listed year also enrolled in the fall semester of the following year

First enrolled in fall:	1997		1998		1999	
	Under represented	All	Under represented	All	Under represented	All
Number enrolled in first fall semester	2,122	10,736	2,155	11,736	2,290	12,235
Number returning next fall semester	1,493	7,647	1,539	8,558	1,645	8,975
Retention rate	70.4%	71.2%	71.4%	72.9%	71.8%	73.4%
Difference between all and underrepresented student retention rates	0.87%		1.51%		1.52%	

Source: Student Unit Record Data System (SURDS), Institution approved QIS cohorts

Table B4: RETENTION RATES OF IN-STATE FRESHMEN RETURNING TO THE SAME TWO-YEAR INSTITUTION

First-time, full-time, in-state, degree-seekers enrolled in fall semester of listed year also enrolled in the fall semester of the following year

First enrolled in fall:	1997		1998		1999	
	Under represented	All	Under represented	All	Under represented	All
Number enrolled in first fall semester	1,415	5,216	1,447	4,802	1,105	4,053
Number returning next fall semester	636	2,593	688	2,386	556	2,123
Retention rate	44.9%	49.7%	47.5%	49.7%	50.3%	52.4%
Difference between all and underrepresented student retention rates	4.8%		2.1%		2.1%	

Source: Student Unit Record Data System (SURDS), Institution approved QIS cohorts

Table B5: IN-STATE STUDENTS AT A FOUR-YEAR COLLEGE OR UNIVERSITY GRADUATING WITHIN SIX YEARS

First-time, full-time, in-state degree-seekers enrolled in the indicated fall who earn a degree from same institution within six years

First enrolled in calendar fall:	1992		1993		1994	
	Under represented	Total	Under represented	Total	Under represented	Total
Number enrolled	1,786	8,920	1,893	9,668	1,954	9,601
Number graduating	558	3,836	624	4,309	687	4,334
Percent of cohort	31.2%	43.0%	33.0%	44.6%	35.2%	45.1%
Difference between total and underrepresented cohort graduation rates	11.8%		11.6%		10.0%	

Source: Student Unit Record Data System, Institution approved QIS cohorts

Table B6: IN-STATE STUDENTS AT COMMUNITY COLLEGES GRADUATING WITHIN THREE YEARS

First-time, full-time, in-state degree and certificate-seeking students enrolled in the indicated fall graduating within three years

First enrolled in calendar fall:	1995		1996		1997	
	Under represented	Total	Under represented	Total	Under represented	Total
Number enrolled	1,462	5,536	1,303	4,720	1,415	5,216
Number graduating	265	1,305	217	980	201	1,085
Percent of cohort (Graduation rate)	18.1%	23.6%	16.7%	20.8%	14.2%	20.8%
Difference between total and underrepresented cohort graduation rates	5.4%		4.1%		6.6%	

Source: Student Unit Record Data System, Institution approved QIS cohorts

Table B7: DEGREES GRANTED TO IN-STATE STUDENTS

Fiscal year:		1996	1997	1998	1999	2000
Certificate	Total	2,740	2,635	2,877	2,938	3,248
	Underrepresented	629	586	730	686	764
	White	2,052	1,994	2,095	2,178	2,392
	Ethnicity Unknown	59	55	51	71	89
	Non-resident Alien	0	0	1	3	3
	% Underrepresented	23.5%	22.7%	25.8%	23.9%	24.2%
AAS/AG/AA	Total	4,821	4,646	4,677	4,541	4,459
	Underrepresented	943	895	926	903	880
	White	3,846	3,711	3,676	3,568	3,506
	Ethnicity Unknown	32	40	72	68	65
	Non-resident Alien	0	0	3	2	8
	% Underrepresented	19.7%	19.4%	20.1%	20.2%	20.0%
Bachelor	Total	13,680	13,786	13,933	14,150	14,506
	Underrepresented	1,822	1,999	2,019	2,232	2,185
	White	11,528	11,463	11,534	11,487	11,893
	Ethnicity Unknown	330	324	379	430	428
	Non-resident Alien	0	0	1	1	0
	% Underrepresented	13.6%	14.8%	14.9%	16.3%	15.5%
Master	Total	3,646	3,950	4,129	4,049	3,948
	Underrepresented	338	441	410	445	447
	White	3,150	3,335	3,553	3,418	3,308
	Ethnicity Unknown	158	174	165	185	192
	Non-resident Alien	0	0	1	1	1
	% Underrepresented	9.7%	11.7%	10.3%	11.5%	11.9%
First Professional	Total	373	386	413	435	463
	Underrepresented	57	60	75	83	78
	White	306	308	330	341	377
	Ethnicity Unknown	10	18	8	11	8
	Non-resident Alien	0	0	0	0	0
	% Underrepresented	15.7%	16.3%	18.5%	19.6%	17.1%
Doctorate	Total	520	563	508	511	467
	Underrepresented	57	47	46	42	52
	White	429	476	441	421	387
	Ethnicity Unknown	34	39	21	48	28
	Non-resident Alien	0	1	0	0	0
	% Underrepresented	11.7%	9.0%	9.4%	9.1%	11.8%
Post Masters Certificate	Total	10	12	13	14	15
	% Underrepresented	*	*	*	*	*
Total In-State Degrees		25,790	25,978	26,550	26,638	27,106
Undergraduate Degrees, Percent Underrepresented Students		16.3%	16.9%	17.5%	18.1%	17.7%
All State Awards, Percent Underrepresented Students		15.3%	15.9%	16.3%	17.0%	16.8%

Source: SURDS Degrees Granted Files

* Post-Masters Certificate underrepresented percentages are not reported because of the small number of awards. They are included in the percent underrepresented student calculations for all state awards.

TOPIC: REPORT ON OUT-OF-STATE INSTRUCTION

PREPARED BY: ANDREW BRECKEL III

I. SUMMARY

The Commission holds statutory responsibility to approve instruction offered out-of-state beyond the seven contiguous states. By action of the Commission in 1986 the Executive Director may act for the Commission to approve or deny requests from governing boards for approval of courses and programs to be offered by their institutions. This agenda item includes instruction that the Executive Director has certified as meeting the criteria for out-of-state delivery. It is sponsored by the Board of Regents of the University of Colorado and the Trustees of The State Colleges.

II. BACKGROUND

Prior to 1983, instruction out-of-state was offered at will by Colorado institutions, primarily through the Extended Studies Program, but an Attorney General opinion of July 3, 1980, concluded that there was no authorizing legislation and out-of-state programs were discontinued. In 1983, the General Assembly enacted legislation that authorized non-state-funded out-of-state instruction but also required governing board approval. When the instruction is beyond the contiguous states, Commission approval is required as well.

At its meeting of May 2, 1986, the Commission delegated authority to the Executive Director to determine when out-of-state instruction beyond the contiguous states complies with statutory requirements. In June 1986, the Commission received the first notification of out-of-state instruction certified by the Executive Director. Additional approved out-of-state instruction is reported to the Commission as it is received and reviewed.

III. ACTION

The Executive Director has approved the following out-of-state instruction.

The Board of Regents of the University of Colorado has submitted a request for an out-of-state instructional program, which was delivered by the University of Colorado Health Sciences Center.

Keystone Symposia on Molecular & Cellular Biology- 2002 Series, a series of six out-of-state instructional programs to be presented in Banff, Alberta, Canada (2 programs); Taos, New Mexico (2 programs); Santa Fe, New Mexico (1 program); and Tahoe City, California (1 program) during the time from February 8 to March 17, 2002.

Appendix A

STATUTORY AUTHORITY

The Commission is given responsibility for approval of out-of-state instruction beyond the contiguous states in C.R.S. 23-5-116.

TOPIC: CCHE – CAPITAL ASSETS QUARTERLY AND END-OF-YEAR REPORTS (WAIVERS, SB 202 APPROVALS, LEASES)

PREPARED BY: JEANNE ADKINS

I. SUMMARY

The Commission has delegated authority to the executive director, who has subsequently delegated authority to the director of policy and planning, to approve program plans, grant waivers from program planning, and authorize cash-funded projects within Commission guidelines and statutory authority. Delegated authority extends to lease approval.

This written report outlines those projects for which the director of policy and planning has waived the requirement for program plans in the second and third quarters of 2001 as well as all spending authorizations for cash-funded or SB92-202 projects sought and/or granted in that same time period. By policy, projects that are denied by the director or that are unusual in scope are brought forward for review by the Commission. No projects are being forwarded to the Commission since all issues have been resolved.

II. BACKGROUND

Statutes and CCHE policy permit CCHE to waive the requirement for a program plan on capital construction projects, regardless of the source of funding, for projects under \$500,000. Discretionary waivers are granted to \$1 million and for special purpose projects where information other than a program plan is more relevant.

Projects under \$250,000 that will use only cash or federal funds do not require referral to the General Assembly for inclusion of spending authority within the Long Bill for the fiscal year in which the institution plans to spend the funds, nor with the passage of SB01-209 approval of CCHE. Annual reporting of this information is required, however. The Commission's first report on these projects was submitted to the General Assembly in December 2001 and is incorporated in the Capital Assets Annual Report mailed to you with this agenda. No project using state capital construction funds, regardless of size, may proceed without Commission and legislative approval. Generally, institutions submit the significant financial information relating to the projects and conceptual analyses of the proposed scope of work. Staff then reviews the proposals and determines whether the information is sufficient to recommend a waiver or whether additional information is needed.

Waivers granted and approvals for cash-funded and SB202 projects (institutional cash funds not TABOR related and federal funds) are outlined in Attachment A for the fourth quarter of 2001.

The Commission in 1999, upon the recommendation of the Attorney General's office, redrafted its review and approval policies to conform to the statutory requirement to review higher education leases. A lease review policy was approved by the Commission in 2000. Leases generally are approved at 6-month or 12-month intervals. Although some leases are submitted outside the December and June timeframes, most begin either at the calendar year or the fiscal year. The fourth quarter lease approvals by type, value and institution are included in Attachment B of this agenda item. A more complete analysis of the leasing is presented in the annual report for Capital Assets and is incorporated in the binder accompanying the agenda packet. This report simply summarizes for the Commission the general lease information, including the general lease categories and the dollars being allocated through operating budgets for leases.

All relevant leases and waivers submitted through the fourth quarter 2001 are included in this report. The Commission will receive the first quarter 2002 report on leases, waivers granted and program plan approvals at its April 2002 meeting.

An additional report incorporating Capital Assets Subcommittee action and referral of state-funded project requests is submitted as a separate agenda item.

No formal action is required. These reports are submitted for Commission review.

Attachments:

[A:](#) Review of waivers, cash-funded projects, SB92-202 projects and leases for fourth quarter of 2001.

[B:](#) Lease review and approval report for fourth quarter.

**CCHE Approvals of Program Plan Waivers, Cash-Funded, and SB97-202 Projects, Third and Fourth Quarters
September 1 through December 31, 2001**

CCHE APPROVAL DATE	PROJECT	TYPE	INSTITUTION	TOTAL PROJECT COST	FUNDING SOURCES	NOTES
<u>AURARIA HIGHER EDUCATION CENTER</u>						
Sept. 17, 2001	Main Campus Addition	Waiver	Auraria Higher Education Center	\$58,100	CFE	Current CDOT property internal to AHEC campus
AURARIA HIGHER EDUCATION CENTER				\$58,100		
<u>UNIVERSITY OF COLORADO SYSTEM:</u>						
October 3, 2001	Conversion of Space at the Pharmacy Building	Waiver	CU-HSC	\$459,000	CFE	
Nov. 26, 2001	Folsom Stadium Improvements	97-202	CU-Boulder	\$45,707,258	CFE	
Nov. 1, 2001	Kittredge Tennis Courts Replacement	97-202	CU-Boulder	\$1,015,358	CFE	
UNIVERSITY OF COLORADO SYSTEM TOTAL				\$47,181,616		
<u>STATE BOARD OF AGRICULTURE:</u>						
Sept. 18, 2001	Fish Culture Facility	Waiver	CSU	\$495,000	CFE	
Sept. 18, 2001	Acquisition of Gamma Camera	Waiver	CSU	\$497,000	CFE	
Sept. 18, 2001	Land Acquisition - Main Campus	Waiver	CSU	\$490,000	CFE	
Dec. 17, 2001	Stallion Barn	Waiver	CSU	\$310,000	CFE	
October 16, 2001	Natural Resources Research Center, Phase IV	SB 97-202	CSU	\$23,963,100	CFE	

October 17, 2001	Tree Processing Facility	SB 97-202	CSU	\$1,086,400	CFE	
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STATE BOARD OF AGRICULTURE TOTAL

\$26,841,500

STATE COLLEGES:

Nov. 7, 2001	General Property Acquisitions	Waiver	Mesa State	\$89,430	CFE	77,000 gsf
Nov. 7, 2001	Parking Lot Acquisition	Waiver	Mesa State	\$65,000	CFE	135 parking spaces
Nov. 7, 2001	Tolman Hall Renovations	Waiver	Mesa State	\$96,447	CFE	

STATE COLLEGES IN THE COLORADO SYSTEM TOTAL

\$550,877

COLORADO HISTORICAL SOCIETY:

Sept. 27, 2001	Regional Museums Historic Preservation Projects	Waiver	Colorado Historical Society	\$385,000	CFE	
Nov. 13, 2001	Cumbres and Toltec Scenic Railroad Locomotive Boiler Work	Waiver	Colorado Historical Society	\$70,000	CCFE	Total \$140,000; rest \$70,000 CFE from New Mexico
Dec. 3, 2001	Cumbres and Toltec Scenic Railroad Railbed Restoration	Waiver	Colorado Historical Society	\$100,000	CCFE	Total \$1,000,000: rest \$70,000 CFE from New Mexico, \$800,00 in FF

COLORADO HISTORICAL SOCIETY TOTAL

\$555,000

COMMUNITY COLLEGES OF COLORADO

Dec. 18, 2001	Telephone Switch Upgrade	Waiver	Arapahoe CC	\$ 159,500	CCFE	
Dec. 18, 2001	Technology Infrastructure	Waiver	Colorado Northwestern CC	\$377,531	CCFE	

Community Colleges of Colorado Total

\$537,031

CCHE ACTION ON LEASES SEPTEMBER 1 THROUGH DECEMBER 31, 2001

Institution	Lease Status	Date Of Approval	Address	Lease Description	Total Annual Cost	New Square Footage	Cost Per SqFt	Type of Lease	DateFrom	DateTo
Front Range Community College - Larimer Campus	Approved and Notification sent	16-May-01	1400 Remington Street, Ft. Collins	Classrooms	\$170,838	28,473	\$ 6.00	Renewal	1-Jul-01	30-Jun-02
Morgan Community College	Approval recommended - pending		215 S. Main Street, Yuma	General Use	\$1,800	462	\$ 3.90	Renewal	1-Jan-02	31-Dec-02
Otero Junior College	Approved and Notification sent	13-Dec-01	980 Broadway, Center	Classrooms	\$430,000	8,000	\$ 53.75	New	1-Feb-02	21-Feb-25
Pikes Peak Community College - Centennial Campus	Approved and Notification sent	27-Nov-01	100 Pikes Peak Ave & 29 W. Kiowa St., Colorado Springs	Classrooms	\$481,716	59,566	\$ 8.09	Renewal	1-Dec-01	30-Nov-06
Community Colleges Totals					\$1,084,354	96,501	\$ 11.24			
University of Colorado - Denver Campus	Approved and Notification sent	4-Dec-01	1059 Yosemite Street, Building 758, Denver	Study	\$10,040	1,004	\$ 10.00	Renewal	1-Nov-01	30-Jun-02

CCHE ACTION ON LEASES SEPTEMBER 1 THROUGH DECEMBER 31, 2001

Institution	Lease Status	Date Of Approval	Address	Lease Description	Total Annual Cost	New Square Footage	Cost Per SqFt	Type of Lease	DateFrom	DateTo
University of Colorado - Denver Campus	Approved and Notification sent	23-Oct-01	535 16th Street, #300, Denver	Office	\$87,500	5,833	\$ 15.00	Renewal	1-Feb-97	2-Feb-02
University of Colorado - Health Sci Center 9th\Co	Approved and Notification sent	10-Dec-01	1400 Jackson Street, Denver	Labs	\$316,500	14,750	\$ 21.46	New	1-Dec-01	30-Nov-06
University of Colorado - Health Sci Center Fitz	Approved and Notification sent	24-Sep-01	5250 Leetsdale Drive Denver	Labs	\$100,502	6,484	\$ 15.50	New	15-Oct-01	14-Oct-03
University of Colorado Boulder	Approved and Notification sent	10-Oct-01	1030 13th Street, Boulder	Classrooms	\$166,409	7,693	\$ 21.63	Renewal	1-Oct-01	16-Aug-06
University of Colorado Boulder	Approval recommended - pending		900 28th Frontage Road, Boulder	General Use	\$156,287	6,259	\$ 24.97	New	1-Apr-01	31-Dec-05
CU System Totals					\$837,238	42,023	\$ 19.92			
Colorado State University	Additional Information Requested from Institution		Denver Center, 110 16th Street, Denver	Special Use	\$477,740	23,887	\$ 20.00	New	1-Jun-03	30-Jun-08
Colorado State University	Approved and Notification sent	13-Dec-01	Palmer Plaza, 2925 So. College Avenue, Fort Collins	Classrooms	\$53,739	5,971	\$ 9.00	New	1-Feb-02	31-Jan-07
Colorado State University	Approval recommended - pending		419 Canyon Ave. #226, Ft. Collins	Office	\$56,758	3,405	\$ 16.67	Renewal	1-Mar-02	28-Feb-03

CCHE ACTION ON LEASES SEPTEMBER 1 THROUGH DECEMBER 31, 2001

Institution	Lease Status	Date Of Approval	Address	Lease Description	Total Annual Cost	New Square Footage	Cost Per SqFt	Type of Lease	DateFrom	DateTo
Colorado State University	Approved and Notification sent	10-Oct-01	Trumbull #13, Cabin No. 2, 7986 South Highway 67, Sedalia	General Use	\$0	850	\$ -	New	1-Oct-00	30-Sep-02
Colorado State University	Approved and Notification sent	10-Oct-01	No address - land only 1 mile east of Rocky Ford	Special Use	\$850	370,260	\$ 0.00	New	1-Jan-02	31-Dec-07
State Board of Agriculture Totals					\$589,087	404,373	\$ 1.46			
University of Northern Colorado	Approved and Notification sent	5-Nov-01	The Chapel, Building 697 on Lowry Campus, 1061 Akron Way, Denver, CO 80230	Classrooms	\$198,880	12,430	\$ 16.00	New	15-Dec-01	30-Jun-06
University of Northern Colorado Total					\$198,880	12,430	\$ 16.00			
Colorado School of Mines	Approved and Notification sent	6-Dec-01	350 Indiana Street, Suite 520, Golden	Study	\$58,000	2,727	\$ 21.27	New	1-Nov-01	31-Oct-02
Colorado School of Mines Totals					\$58,000	2,727	\$ 21.27			
Adams State College	Approved and Notification sent	18-Oct-01	330 Lake Avenue, Pueblo	Classrooms	\$15,491	3,902	\$ 3.97	New	28-Aug-01	13-May-02
Trustees of the State Colleges in Colorado Totals					\$15,491	3,902	\$ 3.97			

TOPIC: FTE SERVICE AREA EXEMPTIONS: APPROVAL FOR STATE SUPPORTED INSTRUCTION OUTSIDE COMMUNITY COLLEGE SERVICE AREA BOUNDARIES

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

This is the first exemption request approved under the FTE Policy, approved March 2000 and effective July 1, 2001. Emily Griffith Opportunity School – the Denver area vocational school – has requested authorization to offer the following program outside its designated service area:

Plumbing certificate program Grand Junction (U-Tech Center)

The community college board has ascertained that no plumbing program is available and that EGOS has made appropriate arrangements for credential instructors to deliver this program on the Western Slope.

CCHE approves this exemption request for 2001-02 and 2002-03 academic years (two-year approval).

II. BACKGROUND

The statute explicitly defines state supported courses as those offered at the main campus. C.R.S. 23-1-109 states that no institution shall provide instruction off-campus in programs or in geographic areas or at sites not approved by the Commission unless otherwise provided by law. The Commission shall set policies that define which courses and programs taught outside the geographic boundaries of the campus may be eligible for general fund support. The Commission may include funding for those courses and programs in its system-wide funding recommendation.

Institutions with a two-year role and mission have defined service areas in which they may deliver two-year degrees ([Attachment A](#)). Typically a service area includes several counties contiguous to the main campus.

The Commission's recently adopted FTE Policy recognizes that there are certain situations in which it is more cost effective to the state to extend a program beyond an institution's designated service area, primarily when the program is unique or of such quality that it is advisable to offer a single program statewide. While any institution may choose to offer an approved certificate or degree program outside its campus or service area as an enterprise operation (i.e., cash funded), the Commission must pre-approve

instruction activities that are delivered outside the boundaries for state support. The statute confers this discretionary authority to the Commission.

A community college or area vocational school shall formally request Commission approval to claim the FTE for state support. The Commission has delegated this authority to CCHE staff to act on exemption decisions to ensure that the Commission agenda does not impede the approval process. The FTE Policy states that "approved exemptions will be published in the Commission agenda and agenda publication will provide an audit trail for claiming FTE. No formal Commission action is required."

III. STAFF ANALYSIS

When the FTE Policy was approved in March 2001, it stated that, "This version of the Full-Time Equivalent Student Enrollment Policy is effective July 1, 2001, and replaces previous versions of the policy. Furthermore, this policy nullifies any previous interpretations of the former policy, including general memos and exemptions."

Staff consulted with the governing boards in developing FTE Guidelines to implement the new policy, including redesigning the reporting forms. The exemption approval process was not fully developed prior to fall 2001 semester. Given this circumstance, CCHE agreed that the two-year institutions may claim state funding for courses that the governing board had approved for delivery outside the service area for fall 2001. The institution will need to apply to CCHE for state funding authority for programs it plans to offer after the fall semester, i.e., all semesters starting January 1, 2002 or later.

The exemption approval process is relatively simple but maintains clear lines of accountability:

- The institution completes the exemption form, a modified version of the former exemption request form.
- The governing board will certify that this program is unique or that the institution has the capacity to offer the program out of service area without compromising the program's quality.
- CCHE staff will act on exemption requests within 5 business days, conferring one-year, two-year, or five-year approval, depending on the type of exemption requested.
- CCHE staff will notify the governing board immediately and publish its decisions in the next Commission agenda.
- All requests must be pre-approved. The Commission will not consider any exemptions retroactively.
- The institutions will report FTE generated at approved off-campus locations separately in the End-of-Year FTE Report.
- CCHE will monitor the FTE generated out of service area and confer with the community college system to determine if the service areas are appropriately defined to guarantee access to Colorado residents.

CCHE staff believe that this approval process will ensure that an institution has timely information for planning purposes and sufficient documentation to support the institution's claims for state funding, if audited. CCHE has developed this process in consultation with the community college system.

PART N SERVICE AREAS OF COLORADO PUBLIC INSTITUTIONS OF
HIGHER EDUCATION

1.00 Introduction

The Colorado Commission on Higher Education is charged by statute to define geographic and programmatic service areas for Colorado public institutions of higher education [23-1-109 (2)]. In 1985 consultations with governing board representatives were conducted and, at its meeting in January 1986, the Commission approved specific geographic service areas for each institution and recognized several programmatic distinctions. Revisions were made in May 1987; March 1988; December 1992; September 1994; May 1995; and June 1995.

This document provides precise narrative descriptions of the geographic service areas to augment pictorial representations for all Colorado community colleges and area vocational schools. For all four-year institutions, their service areas are the entire state of Colorado.

When community college and area vocational schools' service areas are discussed the narrative descriptions herein should be used because of their precision. These definitions also should be used or referenced in planning documents concerning these institutions. The listing is alphabetized by institutional title. Community college and area vocational schools' service areas are the geographic areas in which these institutions may offer their regular programs. In some cases an area vocational school is part of a community college and the service areas generally are the same.

2.00 Geographic Service Areas for Community Colleges and Area Vocational Schools

2.01 Adams State College

Adams State College shall provide Resident Instruction two-year academic programs in Saguache, Mineral, Rio Grande, Alamosa, Conejos, and Costilla counties. It shall cooperate with Mesa State College in providing any needed two-year academic programs, coordinated by the central office of The State Colleges in Colorado, in Gunnison and Hinsdale counties.

2.02 Aims Community College

Aims Community College serves Larimer and Weld counties. Its service area for vocational programs is the same and is shared with Front Range Community College/Larimer County Area Vocational/Technical School for vocational programs. Front Range Community College also serves Larimer County.

2.03 Arapahoe Community College

Arapahoe Community College (ACC) serves an area defined by the boundaries below. Its service area for vocational programs is the same.

Western Boundary (from north to south): U.S. Highway 285 intersect at the western border of Jefferson County; and Jefferson County border south, encompassing all of south Jefferson County.

Northern Boundary (from west to east): U.S. Highway 85 to West Quincy Avenue; east on Quincy to South Irving; north on Irving to West Oxford; west on Oxford, following the Fort Logan Mental Health Center boundaries, to South Lowell; north on Lowell to West Hampden Avenue (U.S. 285); east on Hampden to South Federal Boulevard; north on Federal to West Dartmouth Avenue; east on Dartmouth to South Tejon; north on Tejon to Yale Avenue; east on Yale to University Boulevard; south on University to East Hampden Avenue; east on Hampden to I-25, south on I-25 to I-225; northeast on I-225 to South Yosemite Street; south on Yosemite to the intersect of I-25, which approaches Arapahoe Road; and east on Arapahoe Road to Boxelder Creek.

Eastern Boundary (from north to south): Intersect of East Hampden Avenue and I-25; I-25 southeast to I-225; I-225 northeast to South Yosemite; Yosemite south to I-25 intersect, approaching Arapahoe Road; Arapahoe Road east to Boxelder Creek; Boxelder Creek south through Arapahoe County to the Elbert County border; northern Elbert County border west to Douglas County border; and Douglas County border south encompassing all of Douglas County.

Southern Boundary (from west to east): Southern borders of Jefferson and Douglas counties.

Footnote 1 - ACC shall serve the educational needs of Martin Marietta and US West in south Jefferson County; however, Red Rocks Community College is to coordinate educational delivery in other areas of southern Jefferson County with Arapahoe Community College, whenever and wherever possible. It is suggested that written agreements and other communication be developed between the two colleges, with monitoring by the Community College and Occupational Education System.

Footnote 2 - Fort Logan Mental Health Center shall be assigned to the Community College of Denver (CCD). However, ACC shall negotiate with CCD to share in and provide educational opportunities as requested by Ft. Logan officials.

Footnote 3 - Lowry Higher Education Center is located within the service area of the Community College of Aurora (CCA). However, ACC shall negotiate with CCA to

share in and provide educational opportunities. The Community College and Occupational Education System will monitor instructional activities.

Footnote 4 - ACC will be assigned all of Douglas County as part of its service area.

2.04 Arapahoe-Douglas Area Vocational School

Arapahoe-Douglas Area Vocational School serves Arapahoe Community College and the following school districts: Littleton, Cherry Creek, Englewood, Sheridan, Douglas County.

2.05 Colorado Mountain College

Colorado Mountain College serves Garfield, Eagle, Summit, Pitkin, Lake, Chaffee, Grand and Jackson counties and Routt County school district RE 2. (The section of Routt County school district RE 3 that extends into Eagle County is within the service area of Colorado Northwestern Community College). The College's service area for vocational programs is the same.

2.06 Colorado Northwestern Community College

Colorado Northwestern Community College serves Moffat and Rio Blanco counties and RE 1 and RE 3 school districts of Routt County (the latter extending into a small part of Eagle County). The College's area for vocational programs is the same.

2.07 Community College of Aurora

The Community College of Aurora (CCA) serves an area defined by the boundaries described below. Its service area for vocational programs is the same.

Western Boundary (from north to south): Quebec Street south to Hampden Avenue; west on Hampden to I-25; south on I-25 to I-225; northeast on I-225 to South Yosemite Street; south on Yosemite to the I-225 intersect, which approaches Arapahoe Road.

Northern Boundary: Highway 2 from Quebec Street northeast to the Adams County line and along that line to Boxelder Creek.

Eastern Boundary (from north to south): From Adams County line to Boxelder Creek; south on Boxelder Creek to a point equivalent to Arapahoe Road as it extends east through Arapahoe County to Boxelder Creek.

Southern Boundary (form west to east): Arapahoe Road and a line extending east from Arapahoe Road to Boxelder Creek.

Footnote 1 - CCA has a major responsibility for serving the Lowry Higher Education Center. However, Arapahoe Community College and the Community College of Denver are to share in the educational delivery, clearing requests through CCA with monitoring by the Community College and Occupational Education System.

2.08 Community College of Denver

The Community College of Denver (CCD) serves an area defined by the boundaries described below. Its service area for vocational programs is the same.

Western Boundary: Sheridan Boulevard.

Northern Boundary: Interstate 70.

Eastern Boundary: Quebec Street.

Southern Boundary (from west to east): West Quincy Avenue from Sheridan intersect to South Irving Street; north on Irving to west Oxford; west on Oxford, following Fort Logan Mental Health Center boundaries to South Lowell Boulevard; north on Lowell to U.S. 285 (Hampden); east on U.S. 285 to South Federal Boulevard; north on Federal to West Dartmouth; east on Dartmouth to South Tejon; north on Tejon to Yale Avenue; east on Yale to University Boulevard; south on University to East Hampden Avenue, and east on Hampden to the intersect of Quebec Street. The southern boundary of CCD coincides with the northern boundary of Arapahoe Community College.

Footnote 1 - CCD will operate the Technical Education Center (TEC) located at 62nd and Washington Street in Adams County; the TEC shall be served through the CCD delivery system, although located outside the service area for the college.

Footnote 2 - Lowry Higher Education Center is located within the service area of the Community College of Aurora (CCA). However, CCD shall negotiate with CCA to share in and provide educational opportunities. The Community College and Occupational Education System will monitor instructional activities.

Footnote 3 - The Fort Logan Mental Health Center shall be assigned to CCD. However, Arapahoe Community College shall negotiate with CCD to share in and provide educational opportunities as requested by Fort Logan officials, with monitoring by the Community College and Occupational Education System.

2.09 Delta-Montrose Area Vocational/Technical School

The Delta-Montrose Area Vocational/Technical School serves Delta, Gunnison, Ouray, Montrose, and San Miguel counties, Hinsdale school district RE 1, and Gunnison Watershed School District RE 1J in Saguache County.

2.10 Emily Griffith Opportunity School

Emily Griffith Opportunity School serves the city and county of Denver.

2.11 Front Range Community College (Front Range Community College/Larimer County Vocational-Technical Center)

Front Range Community College (FRCC) serves an area defined by the boundaries described below. Its service area for vocational programs is the same. Front Range Community College also holds a service area assignment in Larimer County. Front Range Community College/Larimer County Vocational-Technical Center shares Larimer and Weld counties with Aims Community College for vocational programs.

Western Boundary (from north to south): Western borders of Boulder and Jefferson counties; Jefferson County border south to a point equivalent to 80th Avenue as it extends west to the border; 80th Avenue line east to Wadsworth Boulevard; Wadsworth south to West 66th Avenue; 66th Avenue east to Sheridan Avenue; and Sheridan south to I-70 intersect.

Northern Boundary (from west to east): Boulder County border to Adams County border and north Adams County border to I-76 intersect, reaching the intersection of Adams County border and I-76.

Eastern Boundary (from south to north): Quebec Street from I-70 to Highway 2; northeast on Highway 2 to the Adams County border.

Southern Boundary: Interstate 70.

Footnote 1 - FRCC shall provide services to Brighton, Commerce City, Adams City, major portions of Boulder and Adams counties, and the northern portion of Jefferson County. If FRCC and Red Rocks Community College officials wish to share selected areas of northern Jefferson County, cooperative agreements should be prepared between the colleges. The Community College and Occupational Education System is to be informed of such agreements and shall monitor the cooperative endeavor.

2.12 Lamar Community College

Lamar Community College serves Cheyenne, Kiowa, Prowers, and Baca counties. Its service area for vocational programs is the same.

2.13 Mesa State College

Mesa State College shall provide Resident Instruction two-year academic programs in Mesa, Delta, Montrose, San Miguel and Ouray counties. It shall cooperate with Adams State College in providing any needed two-year academic programs, coordinated by the central office of The State Colleges in Colorado, in Gunnison and Hinsdale counties. The College's service area for vocational programs is Mesa County.

2.14 Morgan Community College

Morgan Community College serves Morgan, Kit Carson, and Lincoln counties. It will share responsibility for serving Washington and Yuma counties with Northeastern Junior College. Morgan Community College's service area also includes eastern Adams and Arapahoe counties extending to Boxelder Creek on the west and encompasses, among others, the communities of Bennett, Strasburg, Byers, and Deer Trail. The College's service area for vocational programs is the same.

2.15 Northeastern Junior College

Northeastern Junior College serves Logan, Sedgwick, and Phillips counties exclusively and shall share the responsibility for serving Washington and Yuma counties with Morgan Community College. Its service area for vocational programs is the same.

2.16 Otero Junior College

Otero Junior College serves Crowley, Otero, and Bent counties. Its service area for vocational programs is the same.

2.17 Pikes Peak Community College

Pikes Peak Community College serves Teller, El Paso, and Elbert counties. Its service area for vocational programs includes Teller, El Paso, and Elbert counties and Kit Carson County School District RE 4J.

2.18 Pueblo Community College

Pueblo Community College serves Pueblo, Fremont, Custer, Dolores, Montezuma, La Plata, San Juan, and Archuleta counties. Its service area for vocational programs includes Pueblo, Fremont, and Custer counties.

2.19 Red Rocks Community College

Red Rocks Community College (RRCC) serves an area defined by the boundaries described below. Its service area for vocational programs is the same.

Western Boundary: Western borders of Gilpin, Clear Creek, and Park counties.

Northern Boundary (from west to east): Northern border of Gilpin County; Highway 72 south to a point equivalent to 80th Avenue; 80th Avenue extending east to Wadsworth Boulevard; Wadsworth south to 66th Avenue; and 66th Avenue east to Sheridan Boulevard.

Eastern Boundary (from north to south): Eastern border of Gilpin County to a point equivalent to 80th Avenue; 80th Avenue east to Wadsworth Boulevard; Wadsworth south to 66th Avenue; 66th east to South Sheridan Boulevard; and Sheridan south to West Quincy Avenue.

Southern Boundary (from west to east): U.S. 285 from Jefferson County border to West Quincy Avenue east to Sheridan Boulevard.

Footnote 1 - Arapahoe Community College (ACC) shall serve the educational needs of Martin Marietta and Mountain Bell in southern Jefferson County; RRCC, however, is to coordinate educational opportunities in southern Jefferson County with ACC whenever and wherever possible. This to include educational requests from Federal Correctional Facility officials. It is suggested that written agreements and other communication be developed between the two colleges, with monitoring by the Community College and Occupational Education System.

Footnote 2 - RRCC will be responsible for providing educational services to Gilpin, Clear Creek, and Park counties and major portions of Jefferson County.

2.20 San Juan Basin Area Vocational/Technical School

The San Juan Basin Area Vocational/Technical School serves Montezuma, La Plata, Dolores, San Juan, and Archuleta counties and Archuleta School District 50JT in Hinsdale County.

2.21 T. H. Pickens Technical Center

The T. H. Pickens Technical Center serves the area defined by the boundaries described below.

Western Boundary (from north to south): Quebec Street south to Hampden Avenue; west on Hampden to I-25; south on I-25 to I-225; northeast on I-225 to South Yosemite Street; south on Yosemite to the I-225 intersect, which approaches Arapahoe Road.

Northern Boundary: Highway 2 from Quebec Street northeast to the Adams County line and along that line to Boxelder Creek.

Eastern Boundary (from north to south): From Adams County line to Boxelder Creek; south on Boxelder Creek to a point equivalent to Arapahoe Road as it extends east through Arapahoe County to Boxelder Creek.

Southern Boundary (from west to east): Arapahoe Road and a line extending east from Arapahoe Road to Boxelder Creek.

2.22 Trinidad State Junior College

Trinidad State Junior College serves Las Animas and Huerfano counties with both academic and vocational programs. Trinidad State Junior College also serves Conejos, Costilla, Alamosa, Rio Grande, Mineral, and Saguache counties with vocational programs. Academic courses required in the vocational certificate and degree programs in those six counties shall be provided by Adams State College. Trinidad State Junior College may offer other courses in those six counties that are not clearly either academic or vocational with the agreement of Adams State College.

In cooperation with the State Board for Community Colleges and Occupational Education and the Colorado Commission on Higher Education, the college will continue to extend educational opportunities to northern New Mexico through formal reciprocity arrangements.

3.00 Programmatic Distinctions Recognized By the Commission

Two-year lower division programs currently approved for Mesa State College and Adams State College may be delivered as part of these institutions' resident instruction programs within service areas designated. Vocational-technical instruction and academic instruction at the lower division level shall be offered in separate and distinct service areas.

TOPIC: CONCEPT PAPER

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

This agenda item presents the concept paper(s) submitted to the Commission during the past month, including:

*Ph.D. Degree Computer Science and Information Systems
at the University of Colorado at Denver*

This report includes a summary of the issues identified by CCHE staff and a copy of the concept paper. No action is required of the Commission at this time, but if the Commission wishes to have additional issues addressed or questions answered in the full proposal, these can be added to those in the staff report.

II. BACKGROUND

Approval by the Commission of a new degree program proposal is a two-stage process. The governing boards submit a concept paper to the Commission that provides an opportunity for the Commission to identify potential state issues prior to developing the full proposal. In contrast, the full proposal includes details about curriculum, financing, capital construction needs, and other implementation details.

The following expedited process follows CCHE's Existing Approved Degree Policy process, but provides a fast track approval timeline for proposals co-sponsored by CIT.

1. CIT or the participating governing board's staff submits a short concept paper (no longer than 3 pages) to CCHE that outlines
 - a. Proposed program's goals,
 - b. Basic design of the program,
 - c. CIT's endorsement of the program.
2. CCHE will analyze the concept paper within five days, communicate any issues to the governing board, circulate the concept paper for governing board peer review, and use the concept paper to solicit an external consultant that will conduct the analysis with a 2-week turn-around. Since the proposal originating under CIT will be innovative (non-duplicative), with a partner institution whose role and mission is most aligned with the proposed degree program, it is assumed that few if any state issues will exist. The staff analysis will be published as part of the next Commission

agenda.

3. The governing board may proceed with the full proposal development immediately after receipt of the staff letter and address any issues identified by CCHE staff.
4. CIT will assist CCHE in the market analysis.
5. CCHE will waive the requirement for the governing board to respond to the external consultant before the governing board action.

While the Commission considers degree proposals at the January and June meetings, the Commission will consider CIT-sponsored degree proposals as submitted. It is expected that the approval process will take no longer than 60 days from concept paper to full approval.

**TOPIC: PH.D. IN COMPUTER SCIENCE AND INFORMATION SYSTEMS
AT THE UNIVERSITY OF COLORADO AT DENVER**

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

The Regents of the University of Colorado, in conjunction with the Colorado Institute of Technology, have submitted a concept paper for a Ph.D. in Computer Science and Information Systems to be offered by the University of Colorado at Denver. The program is intended to (1) provide a doctoral degree that meets the needs of current professionals in the computing field, and (2) enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships, and industry participation.

According to the concept paper, the integrated nature of the computing field has promoted individuals with diverse educational backgrounds -- about 15% of computer science students have a business background while 20% of information system students have background in computer science or engineering. The natural cross over between the fields indicate an unmet educational need to address emerging computer technology issues at an advanced level.

This concept paper for a Computer Science and Information Systems degree is consistent with UCD's role and mission as an urban university. While CSU and UCB offer doctoral degrees in Computer Science, no public institution offers a doctoral degree that explicitly integrates the two facets of computer technology. The Colorado Institute of Technology endorses the concept for a Computer Science and Information Systems doctoral degree program at UCD.

II. STAFF ANALYSIS

In reviewing the concept paper, the Commission staff considers role and mission, program duplication, and market demand.

As an urban university, UCD is authorized to offer doctoral degrees in professional fields -- applied mathematics, civil engineering, design and planning, educational leadership, and public administration, and health and behavioral science. Each of these degree programs have robust enrollment and annually graduate between two to twenty students -- above the benchmark for doctoral degree programs. Its statutory mission statement states that the University of Colorado at Denver "shall provide selected professional programs and such graduate programs as will serve the needs of the Denver metropolitan area."

The proposed CSIS program design can position UCD to being an educational leader in new-generation design concepts and practices. Demand is expanding rapidly in the engineering professions for employees with IT expertise. Collaboration between computer science and the traditional engineering design sectors can help meet this demand. What is needed is *expertise in applying IT to engineering design*. Incorporation of IT into the skill set of the traditional engineering design domains can maximize the richness and efficiency of design practice in civil, mechanical and electrical engineering.

The proposal states that the payoff for this investment includes:

- graduate students receive training better reflecting the increasingly interdisciplinary nature of computer science and information systems
- graduate students receive a degree that makes them more marketable and gives them more flexibility in choosing employment
- the industries and universities in the Denver area, the state, and across the nation that eventually employ these students will directly benefit by having employees with an interdisciplinary background.

Bona fide demand is a particular concern at the doctoral degree level. Doctoral degrees require greater resources for faculty and research to sustain a quality doctoral program. The economy is adjusting to a more stable technology employment scenario it will be important to monitor the demand for “applied” doctoral degrees – those designed to serve industry rather than prepare professionals for faculty roles. The Commission will collaborate with the Colorado Institute of Technology on the market analysis for this degree.

Attachment A

Proposal for a Doctor of Philosophy Degree
in
COMPUTER SCIENCE AND INFORMATION SYSTEMS
to be offered by
Computer Science and Engineering Department
and
College of Business
University of Colorado at Denver

Contact Persons:

Krzysztof (Krys) Cios, Chair
Computer Science & Engineering

Michael Mannino, Assoc. Prof.
College of Business

Sue Ann Ambron, Dean
College of Business

1. Concept Paper

1.1 Introduction

The Computer Science and Engineering Department and the College of Business at the University of Colorado at Denver propose to offer a joint Doctor of Philosophy degree program in Computer Science and Information Systems (CSIS). This program builds upon existing faculty and curricular strengths in each academic unit as well as student and industry demand for advanced education in the field.

The Computer Science and Engineering (CSE) Department and the College of Business (COB) currently offer high-quality, technology-oriented programs. The CSE Department offers a unique undergraduate program in Computer Science and Engineering, one of only 14 such programs in the U.S. Among them there are UC Berkeley, UC Los Angeles, University of Connecticut, and University of Texas at Arlington. It is the largest department in the College of Engineering and Applied Sciences (COE). In addition, the CSE Department offers an MS program in Computer Science that attracts working professionals from many area high technology companies. Between the two, it is by far the largest program in the College of Engineering and Applied Sciences containing about 45% (well over 400) of the students in the COE. The COB offers an MS program in information systems aimed at working professionals in the Rocky Mountain region along with an undergraduate program with a significant collection of information systems courses. The MS in Information Systems has seen substantial enrollment increases in recent years growing from about 150 students in 1996 to about 320 students in 2001. It is now the second largest degree program in the COB. Both the CSE Department and COB provide online courses in addition to traditional courses to accommodate the needs of working professionals. The Colorado Institute of Technology (CIT) has awarded grants in 2001 to support the development of the online courses in both the CSE Department (\$300,000) and the College of Business (\$300,000); over a dozen of such courses will be offered for the first time in the Fall of 2002.

Two observations motivate the desire to add the proposed joint Ph.D. program to these quality programs. The first observation is the significant number of MS graduates who inquire about the possibility of continuing their education at CU-Denver. For example, we identified five students from just one high-tech company who indicated that they would enroll in the Ph.D. program as soon as it was offered. The second observation is the significant number of MS students with diverse educational backgrounds. Typically about 15% of computer science students have a business background while about 20% of information system students have background in computer science or engineering. This diversity of student backgrounds is due to the integrated nature of the disciplines of computer science and information systems. The interests in advanced education beyond the masters level and the diversity of student backgrounds leads to this proposal for a joint Ph.D. program. The other major motivating factor is that industrial advisory boards for the CSE Department and COB indicated that they are in favor of such a program and see the need for it for their employees, who want to finish the program part-time.

The aim of the proposed joint Ph.D. program is to produce graduates who are capable of extensive interdisciplinary research and practice, combining their computer science and information systems skills. The proposed curriculum provides students with a firm grounding in CSIS, augmented with training in related disciplines. The joint Ph.D. program will attract students who want to combine computer science, information systems, and related disciplines in research and practice. Examples of research areas that require significant interdisciplinary training are software project management research involving software metrics knowledge and options theory and intelligent agent research involving artificial intelligent techniques and game theory.

The proposed joint Ph.D. program supports recent recommendations for reforms in graduate training as well as

calls for the development of the information technology profession. The Committee on Science, Engineering, and Public Policy, a joint committee of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, issued a report entitled "Reshaping the Graduate Education of Scientists and Engineers" (1995). Noting that more than half of new graduates with Ph.D.s now obtain work in nonacademic positions, the committee recommended that graduate programs institute several basic reforms to enhance the educational experience of future scientists and engineers. The committee recommended a new model of graduate education that emphasizes breadth of training and provides students with more options in their Ph.D studies. The study by American Association for the Advancement of Science pointed that interdisciplinary research is one of the key issues "confronting science and technology, and indeed society at large, in the coming decades" (*Science* 1997). In a February 2001 article in the *Communications of the ACM*, the renowned computer scientist, Peter J. Denning, emphasizes that computer scientists must work closely with other computing disciplines such as management information systems to develop the profession of information technology.

The proposed program will meet these objectives by providing a broader and more flexible educational experience. To enhance career options and provide more relevance of the educational experience, the program will provide significant industry interaction for students. The program will accomplish these goals in a cost-effective manner by primarily using the resources of the participating academic units and existing Ph.D. programs in related disciplines at the University of Colorado at Denver and at University of Colorado Health Sciences Center.

The proposed CSIS program can contribute to the COE's goal of being a leader in education on new-generation design concepts and practices. Demand is expanding rapidly in the engineering professions for employees with IT expertise. Collaboration between computer science and the traditional engineering design sectors can help meet this demand. What is needed is *expertise in applying IT to engineering design*. Incorporation of IT into the skill set of the traditional engineering design domains can maximize the richness and efficiency of design practice in civil, mechanical and electrical engineering.

The payoff is considerable for a modest investment:

- graduate students receive training better reflecting the increasingly interdisciplinary nature of computer science and information systems
- graduate students receive a degree that makes them more marketable and gives them more flexibility in choosing employment
- the industries and universities in the Denver area, the state, and across the nation that eventually employ these students will directly benefit by having employees with an interdisciplinary background.

These benefits accrue with a modest investment of developing a total of only six new courses in the CSE Department (3) and the College of Business (3).

1.2 Field of Study and Related Programs

Computer Science and Information Systems (CSIS) involves the study of information systems combining computing and management issues. An information system is a defined and interacting collection of data, automated procedures and processes, along with the organized deployment of people, machines and other resources that carry out those procedures and processes. Many contemporary problems in the study of information systems require background and methodologies that involve both computer science and management. Advanced research and practice in CSIS is a broad field encompassing analytical studies of algorithms, computer systems performance, information economics, organization dynamics, human decision

making, software development methodologies, artificial intelligence in decision making, and data mining.

There are no programs like the proposed Ph.D. in Computer Science and Information Systems in the US. The program that is similar is the Ph.D. in Management program at Rutgers University, which requires heavy concentration in computer science coursework. They implement the program via cooperation with Computer and Information Systems Department at the New Jersey Institute of Technology. On the other hand there are several Ph.D. programs in Computer and Information Systems; one example is the program at Ohio State University.

Various programs within the COE have research and education content related to the proposed program. For example, Civil Engineering faculty at CU Denver have several active programs with strong IT components, in particular it has a *Systems* track. The Systems students learn the fundamentals of systems science, operations research, information technology, and systems modeling and analysis. Other program is one in Geographic Information Systems (GIS). The GIS degree at CU-Denver is multidisciplinary involving Civil Engineering, Geography and Environmental Sciences, Urban and Regional Planning, Computer Science, Applied Mathematics, and Engineering Management.

The main advantage of the proposed joint Ph.D. stems from integrating the two fields into a single advanced program. To obtain similar education, one might obtain a master's degree in computer science and continue for a Ph.D. in management. The other route would be a master's degree in information systems and management, and to continue for a Ph.D. in computer science. Although students may require considerably longer to complete either alternative program, the results would not produce graduates who can integrate research and practice from both disciplines.

1.3 Program Goals

The overall goal of the Ph.D. program in Computer Science and Information Systems is to provide high-quality education in CSIS for graduate students at the University of Colorado at Denver. The Ph. D. program targets students with a Master's level education who seek research training that combines computer science and information systems along with strong industry interaction. We will seek applicants with MS degrees mainly in Computer Science and Information Systems; the other degrees, with some additional coursework, are MS degrees in Mathematics, Physics, Business, and Engineering. The specific goals of the Ph.D. program, listed below, complement these general goals.

I. Create a pool of graduates with advanced CSIS training who are qualified for academic and nonacademic careers

Ph.D. graduates in CSIS will have career opportunities in both academic and industrial environments. We envision that the majority of the program students will come from industry and stay at industry, with only several being full time students who possibly will look for careers in academia. Both kinds of careers demand broad interdisciplinary knowledge along with a solid foundation in research methodologies. A given research problem may require knowledge from a variety of fields. Furthermore, the nature of the research problem may change frequently. For these reasons, the researcher must have a broad knowledge base and the skills necessary to continue the life-long learning process. One of the goals of the joint Ph.D. program is to create broadly trained graduates who can continue to contribute to new fields of knowledge with the latest information technology developments and tools.

II. Meet student demand for advanced training in CSIS

The existing MS programs in computer science or in information systems were designed to provide graduate students breadth knowledge in the respective disciplines. These programs have been successful in providing technical and management career opportunities in the Rocky Mountain region. However, these programs do not meet the needs of students who want integrated training in both disciplines and research skills, at the advanced level, for academic and technical careers.

III. Promote interdisciplinary research between the CSE Department and the College of Business

There are a growing number of significant problems that lie on boundary between computer science and information systems. Problems in software engineering, computer system performance analysis, project planning, intelligent agents, data mining, and information economics require approaches that combine traditional techniques from computer science and information systems. This joint Ph.D. program will focus attention to the many problems that require joint approach and provide a formal mechanism for cooperation among faculty in the CSE Department and the College of Business.

IV. Enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships, and committee participation

The CSE Department and the College of Business have well-established programs to support interaction with Front Range technology businesses. The CSE Department has an active Industrial Advisory Committee, which consists of representatives of major high-technology companies in the Denver area. The College of Business has the Center for Information Technology Innovation with close connections to more than 30 Chief Information Officers. The joint Ph.D. will expand these relationships and support new relationships that focus on research and development. The joint Ph.D. program will support relationships with Front Range technology businesses through industry representation on student committees, student internships, corporate sponsorship of students, faculty externships, and joint research projects.

V. Extend resource sharing between the CSE Department and the College of Business

As recognition of the need for computer scientists to work with other computing disciplines to create an IT profession, the CSE department and College of Business have agreed to closer integration and resource sharing across all programs. As part of this initiative, a new proposal to the Colorado Institute of Technology entitled "Expansion and Integration of Information Technology Education at CU Denver" seeks funding to integrate course offerings at the undergraduate level and to provide seed funds for the joint Ph.D. program. The joint Ph.D. program will require cooperation between the CSE Department and the College of Business in admittance of students, enrollment of students in graduate courses, course design and offerings, and supervision of students. This level of cooperation should also spur additional resource sharing and integrated course offerings in the existing graduate programs.

1.4 Target Market

One measure of the market is external demand or need by the world outside of the University for the program's graduates trained in Computer Science and Information Systems. The other measure is the student interest.

These two measures provide background for the projected enrollment.

Survey of Colorado Industries

A web survey of Colorado industries is currently being conducted to determine the demand in the State for future graduates from the proposed joint Ph.D. program. The survey and its results are presented in Appendix 9. In addition to the survey results, letters of support from local industry are presented in Appendix 7.

TOPIC: CAPITAL ASSETS SUBCOMMITTEE MEETING

PREPARED BY: JOAN JOHNSON

I. SUMMARY

The Colorado Commission on Higher Education's Subcommittee on Capital Assets met Monday, December 3, 2001, to re-prioritize the capital projects for FY 02-03. The Subcommittee had previously met November 27 to prioritize projects for the coming fiscal year; a continuing downturn in state revenues necessitated the second meeting.

The teleconference took place in CCHE Executive Director Tim Foster's office at 1380 Lawrence St. in Denver. Present in person was Commissioner Bill Vollbracht. Joining the meeting by phone were Commissioners Ray Baker, "Pres" Montoya, Ralph Nagel and Dean Quamme. In addition to Executive Director Foster, other CCHE staff in attendance were Joan Johnson, Lauren Ferris and Kathi Williams.

Representatives from several institutions of higher education were also present and given time to make comments during the discussion. Senator Lewis Entz joined in the conference call to urge approval of the Cumbres & Toltec Railroad projects.

A motion was made by Commissioner Nagel and seconded by Commissioner Quamme to accept the staff recommendations for the newly prioritized list. The vote was unanimous.

The list, which has been sent to the legislature's Capital Development Committee for consideration, contains 11 state-funded higher education projects. The first eight projects are identical to those submitted to the CDC by the Governor's office. The three projects added by the subcommittee are: McBride Hall (Otero Junior College), Technology Infrastructure (Colorado Northwestern Community College), and a Telephone Switch Upgrade (Arapahoe Community College). The latter three projects meet the Governor's criteria for forwarding only those projects that enhance health and life safety.

Two additional projects were added to the Cash Funds list: the CSU Hazardous Waste Treatment and Storage facility and the Fitzsimmons Infrastructure 4B project. CSU subsequently has decided it wishes to continue pursuing state general funds for this project. Therefore, it would not be forwarded as a general-fund project by the Commission.

Complete details of the lists submitted, as well as facility program plans, are available in the notebook, CCHE Capital Construction Program Annual Report, which has been delivered to the Commission and governing boards. The complete list is also [attached](#).

II. BACKGROUND

The Commission has delegated authority to the Capital Assets Subcommittee to prioritize capital construction projects. The Commission has also delegated authority to the Executive Director or his delegated representative to review all cash-funded and SB 92-202 auxiliary-funded projects. The Director of Policy and Planning has reviewed staff evaluations and budgets on the cash-funded and 202 projects for the past three years.

Appendix A

STATUTORY AUTHORITY

23-1-106. Duties and powers of the commission with respect to capital construction and long-range planning. (1) It is declared to be the policy of the general assembly not to authorize or to acquire sites or initiate any program or activity requiring capital construction for state-supported institutions of higher education unless approved by the commission.

(2) The commission shall, after consultation with the appropriate governing boards of the state-supported institutions of higher education and the appropriate state administrative agencies, have authority to prescribe uniform policies, procedures, and standards of space utilization for the development and approval of capital construction programs by institutions.

(3) The commission shall review and approve master planning and program planning for all capital construction projects of institutions of higher education on state-owned or state-controlled land, regardless of the source of funds, and no capital construction shall commence except in accordance with an approved master plan, program plan and physical plan.

(4) The commission shall ensure conformity of facilities master planning with approved educational master plans and facility program plans with approved facilities master plans.

Colorado Commission on Higher Education

Proposed Capital Projects - by CCHE Priority

<i>Gov Bd Priority CCHE Priority</i>	<i>Project Title Project Title</i>	<i>New New SqFt</i>	<i>Total Total Project</i>	<i>Prior Prior Appropriation Year Appropriation</i>	<i>FY FY 2002 - 2002 - 2003</i>	<i>FY FY 2003 - 2003 - 2004</i>	<i>FY FY 2004 - 2004 - 2005</i>	<i>FY FY 2005 - 2005 - 2006</i>	<i>FY FY 2006 - 2006 - 2007</i>
1	Campus Maintenance Facility	0	\$116,050	\$0 CCFE	\$116,050	\$0	\$0	\$0	\$0
1				CF	\$0	\$0	\$0	\$0	\$0
				CFE	\$0	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	Community College of Aurora			All Funding Sources	\$116,050	\$0	\$0	\$0	\$0
2	Telephone System	0	\$385,555	\$0 CCFE	\$385,555	\$0	\$0	\$0	\$0
2				CF	\$0	\$0	\$0	\$0	\$0
				CFE	\$0	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	Trinidad State Junior College - Trinidad Campus			All Funding Sources	\$385,555	\$0	\$0	\$0	\$0
1	Ross Hall Expansion and Renovation - Phase V	78,781	\$8,270,000	\$0 CCFE	\$6,270,000	\$0	\$0	\$0	\$0
3				CF	\$0	\$0	\$0	\$0	\$0
				CFE	\$2,000,000	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	University of Northern Colorado			All Funding Sources	\$8,270,000	\$0	\$0	\$0	\$0

<i>Gov Bd Priority CCHE Priority</i>	<i>Project Title Project Title</i>	<i>New New SqFt</i>	<i>Total Total Project</i>	<i>Prior Prior Appropriation Year Appropriation</i>	<i>FY FY 2002 - 2002 - 2003</i>	<i>FY FY 2003 - 2003 - 2004</i>	<i>FY FY 2004 - 2004 - 2005</i>	<i>FY FY 2005 - 2005 - 2006</i>	<i>FY FY 2006 - 2006 - 2007</i>
1 4	Main & Cragmor (October Revision)	0	\$18,196,336	\$14,076,336	CCFE CF \$4,120,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
					CFE FF \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	University of Colorado - Colorado Springs Campus				All Funding Sources	\$4,120,000	\$0	\$0	\$0
8 5	Plant Sciences Building Revitalization	0	\$9,095,055	\$6,330,690	CCFE CF \$2,764,365 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
					CFE FF \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado State University				All Funding Sources	\$2,764,365	\$0	\$0	\$0
5 6	University Center for the Arts	8,952	\$20,328,336	\$14,474,132	CCFE CF \$5,326,329 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
					CFE FF \$527,875 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado State University				All Funding Sources	\$5,854,204	\$0	\$0	\$0
2 7	Locomotive Boiler Work	0	\$702,100	\$560,000	CCFE CF \$72,100 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
					CFE FF \$70,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado Historical Society				All Funding Sources	\$142,100	\$0	\$0	\$0

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<i>Gov Bd Priority CCHE Priority</i>	<i>Project Title Project Title</i>	<i>New New SqFt</i>	<i>Total Total Project</i>	<i>Prior Prior Appropriation Year Appropriation</i>	<i>FY FY 2002 - 2002 - 2003</i>	<i>FY FY 2003 - 2003 - 2004</i>	<i>FY FY 2004 - 2004 - 2005</i>	<i>FY FY 2005 - 2005 - 2006</i>	<i>FY FY 2006 - 2006 - 2007</i>
3	CHS Rail Restoration	0	\$2,000,000	\$1,000,000	CCFE CF \$100,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
8					CFE FF \$100,000 \$800,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado Historical Society				All Funding Sources	\$1,000,000	\$0	\$0	\$0
1	McBride Hall Remodel	0	\$503,164	\$0	CCFE CF \$503,164 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
9					CFE FF \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Otero Junior College				All Funding Sources	\$503,164	\$0	\$0	\$0
1	CNCC Technology Infrastru	0	\$377,531	\$0	CCFE CF \$377,531 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
10					CFE FF \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado Northwestern Community College				All Funding Sources	\$377,531	\$0	\$0	\$0
2	Telephone Switch Upgrade	0	\$159,500	\$0	CCFE CF \$159,500 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
11					CFE FF \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Arapahoe Community College - Littleton Campus				All Funding Sources	\$159,500	\$0	\$0	\$0

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<i>Gov Bd</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>Priority</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>CCHE</i>				<i>Appropriation</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
		<i>SqFt</i>	<i>Project</i>	<i>Year</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
<i>Priority</i>				<i>Appropriation</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
<i>Sub Total for this Group of</i>									
				CCFE					
				CCFE	\$20,194,594	\$0	\$0	\$0	\$0
	Total New Gross Sq Ft.	87,733		CF	\$0	\$0	\$0	\$0	\$0
	Total Project Costs		\$60,133,627	CFE	\$2,697,875	\$0	\$0	\$0	\$0
	Total Prior Years Appropriation		\$36,441,158	FF	\$800,000	\$0	\$0	\$0	\$0
			All Funding Sources		\$23,692,469	\$0	\$0	\$0	\$0

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<i>Gov Bd</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>Priority</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>CCHE</i>				<i>Appropriation</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
<i>Priority</i>		<i>SqFt</i>	<i>Project</i>	<i>Year</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
				<i>Appropriation</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
5	Material Storage and Disposal Facility	9,289	\$2,491,304	\$0 CCFE		\$0	\$0	\$0	\$0
90				CF	\$2,491,304	\$0	\$0	\$0	\$0
				CFE	\$0	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	Colorado State University			All Funding Sources		\$0	\$0	\$0	\$0
2	CHS Regional Museums	0	\$385,000	\$0 CCFE	\$0	\$0	\$0	\$0	\$0
90				CF	\$0	\$0	\$0	\$0	\$0
				CFE	\$385,000	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	Colorado Historical Society			All Funding Sources	\$385,000	\$0	\$0	\$0	\$0
4	Fort Vasquez Facility Upgrades	0	\$114,500	\$0 CCFE	\$0	\$0	\$0	\$0	\$0
90				CF	\$0	\$0	\$0	\$0	\$0
				CFE	\$25,000	\$0	\$0	\$0	\$0
				FF	\$89,500	\$0	\$0	\$0	\$0
	Colorado Historical Society			All Funding Sources	\$114,500	\$0	\$0	\$0	\$0
6	University Center for the Arts Concert Hall Addition	21,700	\$7,001,633	\$0 CCFE	\$0	\$0	\$0	\$0	\$0
90				CF	\$0	\$0	\$0	\$0	\$0
				CFE	\$7,001,633	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	Colorado State University			All Funding Sources	\$7,001,633	\$0	\$0	\$0	\$0

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<i>Gov Bd</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>Priority</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>CCHE</i>				<i>Appropriation</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
<i>Priority</i>		<i>SqFt</i>	<i>Project</i>	<i>Year</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
				<i>Appropriation</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
9	Environmental Health & Safety	0	\$3,200,000	\$0	CCFE	\$0	\$0	\$0	\$0
					CF	\$0	\$0	\$0	\$0
90					CFE	\$3,200,000	\$0	\$0	\$0
					FF	\$0	\$0	\$0	\$0
	University of Colorado - Health Sci Center Fitz				All Funding Sources	\$3,200,000	\$0	\$0	\$0
2	Infrastructure Phase 4B	0	\$32,057,145	\$31,571,500	CCFE		\$0	\$0	\$0
					CF	\$485,645	\$0	\$0	\$0
90					CFE	\$0	\$0	\$0	\$0
					FF	\$0	\$0	\$0	\$0
	University of Colorado - Health Sci Center Fitz				All Funding Sources		\$0	\$0	\$0
<i>Sub Total for this Group of</i>					CCFE				
	Total New Gross Sq Ft.		30,989		CCFE	\$0	\$0	\$0	\$0
	Total Project Costs		\$45,249,582		CF	\$2,976,949	\$0	\$0	\$0
	Total Prior Years Appropriation		\$31,571,500		CFE	\$10,611,633	\$0	\$0	\$0
					FF	\$89,500	\$0	\$0	\$0
					All Funding Sources	\$13,678,082	\$0	\$0	\$0

<i>Gov Bd</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>Priority</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>CCHE</i>				<i>Appropriation</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
		<i>SqFt</i>	<i>Project</i>	<i>Year</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
<i>Priority</i>				<i>Appropriation</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
10	Colorado State Forest Service Tree Processing Facility(SB202)	10,000	\$1,158,850	\$0 CCFE CF	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
202				CFE FF	\$1,158,850 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado State University			All Funding Sources	\$1,158,850	\$0	\$0	\$0	\$0
90	East Folsom Field Stadium Improvements	0	\$45,707,258	\$0 CCFE CF	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
202				CFE FF	\$45,707,258 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	University of Colorado Boulder			All Funding Sources	\$45,707,258	\$0	\$0	\$0	\$0
9	Natural Resources Research Center NRRC Phase 3 (SB 202)	110,604	\$20,937,000	\$0 CCFE CF	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
202				CFE FF	\$20,937,000 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	Colorado State University			All Funding Sources	\$20,937,000	\$0	\$0	\$0	\$0
96	Tennis Court Replacement	0	\$1,015,358	\$0 CCFE CF	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
202				CFE FF	\$1,015,358 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	University of Colorado Boulder			All Funding Sources	\$1,015,358	\$0	\$0	\$0	\$0

<i>Gov Bd</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>Priority</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>CCHE</i>				<i>Appropriation</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
		<i>SqFt</i>	<i>Project</i>	<i>Year</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
<i>Priority</i>				<i>Appropriation</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
6	West Campus Dining Facility	25,105	\$9,641,967	\$0 CCFE	\$0	\$0	\$0	\$0	\$0
				CF	\$0	\$0	\$0	\$0	\$0
202				CFE	\$9,641,967	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	University of Northern Colorado			All Funding Sources	\$9,641,967	\$0	\$0	\$0	\$0
8	Parking Improvments	0	\$6,000,000	\$0 CCFE	\$0	\$0	\$0	\$0	\$0
				CF	\$0	\$0	\$0	\$0	\$0
202				CFE	\$6,000,000	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	University of Northern Colorado			All Funding Sources	\$6,000,000	\$0	\$0	\$0	\$0
90	Natural Resources Research Center NRRC Phase 4 (SB 202)	0	\$23,963,100	\$0 CCFE	\$0	\$0	\$0	\$0	\$0
				CF	\$0	\$0	\$0	\$0	\$0
202				CFE	\$23,963,100	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
	Colorado State University			All Funding Sources	\$23,963,100	\$0	\$0	\$0	\$0
Sub Total for this Group of				CCFE					
	Total New Gross Sq Ft.		145,709	CCFE	\$0	\$0	\$0	\$0	\$0
	Total Project Costs		\$108,423,533	CF	\$0	\$0	\$0	\$0	\$0
	Total Prior Years Appropriation		\$0	CFE	\$108,423,533	\$0	\$0	\$0	\$0
				FF	\$0	\$0	\$0	\$0	\$0
				All Funding Sources	\$108,423,533	\$0	\$0	\$0	\$0

<i>Gov Bd</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>Priority</i>	<i>Project Title</i>	<i>New</i>	<i>Total</i>	<i>Prior</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>	<i>FY</i>
<i>CCHE</i>				<i>Appropriation</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
		<i>SqFt</i>	<i>Project</i>	<i>Year</i>	<i>2002 -</i>	<i>2003 -</i>	<i>2004 -</i>	<i>2005 -</i>	<i>2006 -</i>
<i>Priority</i>				<i>Appropriation</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
Grand Total All of Higher Education									
				CCFE					
				CCFE	\$20,194,594	\$0	\$0	\$0	\$0
	Total New Gross Sq Ft.		264,431	CF	\$2,976,949	\$0	\$0	\$0	\$0
	Total Project Costs		\$213,806,742	CFE	\$121,733,041	\$0	\$0	\$0	\$0
	Total Prior Years Appropriation		\$68,012,658	FF	\$889,500	\$0	\$0	\$0	\$0
			All Funding Sources		\$145,794,084	\$0	\$0	\$0	\$0