

## **I. State Administration [Section 121]**

### **A. Sole State Agency and Governance Structure**

The staff for the Colorado State Board of Community Colleges and Occupational Education [known as the “Colorado Community College System (CCCS)"] serves a quarter million students through 13 State system community colleges, two local district community colleges, four area vocational schools, one four-year college and career/technical programs in more than 160 school districts throughout the state. Colorado’s unique system of one board (and one agency) having programmatic authority over both community college education and secondary career and technical education (CTE) facilitates seamless collaboration between secondary and postsecondary processes.

### **B. Organization of Vocational and Technical Education Programs**

During the Colorado Fiscal Year 2006, Colorado continued to use content-specific program directors to work with both secondary and postsecondary programs for each of the following categories:

- Business and Marketing Education (Including Multi-Occupational programs)
- Trades, Technical and Industrial Education, including Pre-Engineering
- Agricultural Education
- Family and Consumer Sciences, including Teacher Cadet
- Health, including Criminal Justice
- ACE/WES (Special Populations and Special Education)

CCCS still struggled to operate under severe budget cuts and again released state leadership funds for use toward proposals by local constituents to address content specific initiatives. In Fiscal Year 2006, the initiatives were managed by CCCS program directors. Nine “Leadership” proposals were funded, covering nine specific content areas: Alternative Cooperative Education programs (ACE), Agriculture, Business, career and technical education administrators’ professional development, Consumer and Family Studies, Health, Marketing, Technical and Trades. The focus of these leadership grants was to update standards, facilitate faculty/teacher meetings to organize curricula for pathways and postsecondary transition, and develop curricula and lesson plans that increased academic rigor.

Colorado continues to approve secondary programs designed with career pathways and allows the completer definition to include pathway completers (as long as the competencies of the pathway still meet industry approval.) Colorado continues to require all secondary programs that have postsecondary counterparts to have articulation agreements. Approved postsecondary programs must articulate to secondary level programs and to advanced education programs, if available and appropriate. If there are no postsecondary programs for secondary program articulation, the secondary program must align with any available apprenticeship competencies or industry standards. The Colorado postsecondary common course numbering system and database facilitates secondary to postsecondary competency alignment. It also promotes secondary academic rigor. The Colorado Career and Technical Education Escrow Credit Project is being built on this community college common course system.

Administrative technical assistance continued to focus on teaching faculty how to use data as a continuous improvement tool. Each time we share how the data can be a tool, we find more and more buy-in from teachers about the value of data. This year, due to an extensive State of Colorado, State Auditor's Office, seven-month long program audit, we sent the Perkins Sub-Indicator Results data reports to the sub-recipients later than usual. We received a myriad of phone calls from the field, requesting their data reports. We believe that desire for the reports is indicative of how much the recipients value the reports.

Administrative staff continued to attend "CTE Regional Meetings." These meetings, initiated in Fiscal Year 2005 have been very popular. Morning sessions included reports from State administrative staff. In the afternoon teachers separated by content area to meet with CCCS program directors and focused on detailed strategies toward academic integration and secondary-to-postsecondary linkages.

## **II. State Leadership Activities. [Section 124]**

### **A. Required Uses of Funds**

#### **1. An Assessment of the Vocational and Technical Education Programs That Are Funded:**

The career and technical education programs receiving funding must be approved by CCCS program director staff. Each approved program must reapply for approval after five years. Re-approvals are data-based. Programs with data that do not meet a specific threshold are either not approved or are conditionally approved for a shorter term than the normal five year cycle. Conditionally approved programs have data reviews on an annual basis.

As strong as this system is, the budget mandates of directing more State leadership dollars to field use was not done without challenges. The State Auditor's Office' program audit indicated that CCCS was found to be weak in the areas of on-site monitoring. To address these concerns, CCCS senior staff immediately began re-evaluating the Educational Services Career and Technical Education division's organization and staffing. Additionally, CCCS was able to be cleared of the mandate to direct so many dollars to field use. This will allow increased focus toward on-site monitoring and CCCS will be able to provide more staff for this function. In fact, in December, 2006, the State Audit Committee complimented our agency for how well we are progressing toward addressing the audit report concerns.

#### **2. Developing, Improving, or Expanding the Use of Technology In Vocational and Technical Education:**

Leadership grants continued to train teachers to use new technology for the teaching/learning process. The grants also helped provide teachers with the hardware needed for the new technologies. CCCS also continues to use web-based systems for program approval requests and data reporting. Three categories (demographics, completion and placement) of five-year trend data for each approved CTE program in the state is accessible to schools (and the public) through

the CCCS website for Career and Technical Education. The data also compares each program to all other programs in the state. Improvements and enhancements to these functions continue on an on-going basis. Additionally, new web-based teacher tools continue to be expanded and enhanced in Colorado.

Agriculture Education used state-wide Tech Prep dollars to develop a website tool that teachers can use to build course outlines through either a Career Pathways design or through an Academic Standards design. Teachers can produce a course outline matrix that includes Date, Days, Occupational Standards, Competencies, Academic Standards, Workforce Competencies and Resources. These items are pulled into the course outline matrix by linking the various competency and standards databases. The linkages are controlled by the collaborative work of industry, postsecondary and secondary teachers and administrators.

This unique web-based tool makes the following scenario possible: A secondary Agriculture Education teacher hears the high school principal lamenting about the school not meeting academic based Average Yearly Progress (AYP) goals as mandated by the “No Child Left Behind” legislation. The CTE teacher can ask the principal which specific academic standards are showing the lowest student scores. Then the Agriculture Education teacher can go to the website, choose to design the Agriculture Education curriculum based on the selected “weak” academic standards. This teacher can provide the principal with a printed copy of a redesigned Agriculture Education course outline that focuses on the academic standards needing the most attention!

This website is being demonstrated nationally and has been copied nationally. Other program directors are working to establish similar website tools for other content areas.

The Colorado DECA has completed a five year planning goal of becoming paperless and is now completely web-based for membership, leadership activities, communication, conference registration, judge recruitment, etc.

The work from the ACE leadership grant included the development of ACE statewide standards the match Colorado academic content standards and workforce standards. A website was developed to house these standards. The website also includes ACE resources, lesson plans and classroom activities. Teachers are reporting that the website is wonderful!

A standards website has also been developed for Health programs.

Leadership grants continued the work of increasing teachers’ use of new technology to support the teaching/learning process. Teachers were trained on the use of IPods, IPAQ Pocket PC’s, and, for Precision Agriculture and environmental science, the use of GPS. Both the Trades and the Technical leadership grants involved review and training for new CADD/Construction design software coupled with continued training for teachers from both program areas in use of IPAQ Pocket PC’s.

### **3. Professional Development Programs:**

Regional workshops continued with much popularity from the field. They appreciate having all State staff in one room! They appreciate not losing so much class time to driving time. Program directors were able to reach teachers who cannot or choose not to attend state conferences, especially new teachers. And teacher attendance at state professional organization conferences has increased. Meetings in 2006 focused on content teams to help move the Escrow Credit project forward. The response and evaluations from these meetings continue to be so positive that CCCS has elected to repeat the meetings in Fiscal Year 2007 and incorporate improvements learned from the evaluations. Additionally, in Fiscal Year 2007, the program directors plan to gain even more production of program quality by combining their travel time to the regional meeting sites with local on-site monitoring visits.

The regional meetings have worked to encourage CTE teachers to avoid isolation and to be involved and engaged in professional organizations. More attendance and involvement with career and technical education professional organizations helps support increased partnerships between secondary and postsecondary programs, increased cooperation between CTE and academic teachers, decreased loss of new teachers; increased teachers abilities to collaborate; increased sharing of best practices and increased teachers' skills in networking for new ideas.

The content area leadership grants implemented by the field but managed by State program directors are also successful. The field enjoys the ability to provide input about what topics professional development needs to address. The leadership grants provide a built-in system for needs assessment that is then followed by appropriate workshops, seminars, and training.

Due to very strong interest from the previous year, another leadership grant was again directed to fund a year-long professional development program designed to strengthen the leadership skills of a cadre of current/future career and technical education administrators. Participants were nominated for the program and had to attend a minimum of five trainings. The workshops included learning leadership tools that included academic integration, futuristic CTE program development, teambuilding as well as current CTE issues, locally and nationally.

The community college system is not directly responsible for initial teacher preparation. However, in Fiscal Year 2006, CCCS was able to work with universities to get the third and final phase of the Elementary Education Articulation Agreement approved by the Colorado Commission on Higher Education and authorized by all participating institutions' presidents and provosts. This agreement and continued expansion of the career and technical education Teacher Cadet programs hold much promise for extending teacher preparation opportunities, especially for lower income students who cannot afford all four years of teacher preparation education through universities.

One CCCS program director serves as a liaison to the State's Career and Counseling organization. CTE staff partnered with local CTE administrators to present a workshop about emerging careers and related CTE programs at the counselors' professional organization state meeting.

#### **4. Support for vocational and technical education programs that improve the academic and vocational and technical skills of students...through the integration of academics with vocational and technical education.**

Agriculture Education used part of their leadership grant funds to design an Agriculture Science curriculum that is rigorous enough to qualify for science credit.

The Business leadership grant and the Marketing leadership grant are designed to update specific curricula to determine embedded academics and to develop lessons and assessments that support academic integration. The standards are also being updated and organized into model course sequences and then placed online in a searchable database.

The Consumer and Family Studies leadership grant was used to develop curricula, assessments, and lesson plans that integrate academics in five different occupational areas. These are being completed for secondary programs with the guidance of postsecondary faculty from community colleges so the competencies align and allow for seamless transition.

The Health leadership dollars were used to develop new core curricula for Health Sciences Technology programs that integrate academics and are worthy of high academic credit for science as well as courses for escrow credit.

The Colorado CCCS program approval philosophy continues to be that the first job of secondary CTE is to teach academic skills. Also, in Colorado, we operate career and technical education with the premise that there are no careers now available that only require a high school diploma. We believe all careers require some level of advanced education beyond high school and we expect program competencies and standards to be designed under that premise.

#### **5. Providing preparation for nontraditional training and employment.**

Colorado continues to use the \$60,000 leadership non-traditional training and employment set aside funds as a competitive grant process available to postsecondary institutions. Each year our community and technical colleges implement strategies to recruit and retain students into non-traditional career areas. In 2006, the proposals from five postsecondary institutions were funded. The work completed with this funding included attendance of faculty to non-traditional recruitment and retention workshops; high school presentations regarding non-traditional training opportunities; career fairs that promoted non-traditional enrollments; Project Lead Ahead that consisted of current non-traditional students who collaborated with campus recruitment coordinators to do presentations, interpersonal networking, and recruitment fairs; career days set-up by faculty in non-traditional occupations with middle school students; use of non-traditional student graduates as role models and as a panel for parent's night; use of non-traditional graduates and current students to do a needs assessment of perceived barriers; training graduates of non-traditional programs to serve as mentors and to develop a video; host breakfast meetings for business and industry representatives from non-traditional career areas and feature the videos; use case histories of graduates to create success posters utilizing graduation and job placement data; collaborate with industry women associations; provide job site tours to single parents and community-based organization clients; conduct bridging seminars; work with

secondary teachers to increase academic rigor of CTE programs so female high school graduates enter colleges with better skills in science, math and technology; textbook and tool kit scholarships for non-traditional students; college staff monitoring and mentoring of non-traditional students; and extensive job placement services for non-traditional graduates with job placement followup.

In Colorado, no recipient can use Perkins funds to support out-of-state professional development travel without specific state-level review and approval. One of the major factors for approval includes provision of assurances that the traveler has or will include professional growth in recruitment and retention of the non-traditional student, if applicable.

CCCS and the Colleges are still finding it difficult to overcome three key barriers: Buy-in from some industries for employment of non-traditional graduates; delay in results from health program recruiting because of waiting lists for these programs; and the lack of wage/salary motivation in the Early Childhood Education programs.

## **6. Supporting partnerships to enable students to achieve State academic standards and vocational and technical skills**

In fiscal year 2006, Colorado experimented with the concept of mandating how carry-forward dollars would be used by local recipients. The carry-forward amounts were awarded by the formulas for secondary and postsecondary recipients but the disbursement of the awards were only allowed, if a recipient sent at least one team to a State developed conference titled “Linking Languages for Learning.” The team had to consist of at least one career and technical education teacher, one academic teacher and one administrator. Two Conferences were conducted with over 200 participants.

Each Conference included Dr. James Stone III reporting the “Math in CTE” research findings. Then Academic/CTE teacher teams worked together to map CTE curricula, while their administrator observed the dynamics of this interaction. Finally, some specific classroom activities that enhance mathematics and reading skills were demonstrated. Each team received Math and Reading books that supported these teaching concepts. The Conference evaluation form asked for volunteers to be members of a Linking Languages Sustainability Committee to help CCCS design a system to sustain state-wide implementation of the Math in CTE Research processes. Over 20 or about 10% of the participants volunteered to help assure sustainability of the concepts learned. Later in the year, the Sustainability volunteers designed a plan for State-wide implementation. Currently, CCCS has not been able to fully fund the suggested plan but is implementing several pieces of the concept within existing resources.

Several districts have reported excellent results from these conferences. One district submitted and was awarded a fiscal year 2007 Tech Prep grant to continue this work; five districts served on the Sustainability committee and are trying to find funding for extended contract costs to support the teacher collaboration; and several teachers called the State office asking for more workshops and relating how they have already started implementing some of the techniques.

## **7. Serving individuals in state institutions.**

In addition to annual grants to both the Colorado Department of Corrections and to the Colorado Division of Youth Services, CCCS has provided program and grants management personnel to help coordinate an Incentive Grant program that supports transfer of The Department of Corrections career and technical education course credits to community colleges.

The Division of Youth Services also sent a team to the Linking Languages for Learning Conference.

## **8. Support for programs for special populations that lead to high skill, high wage careers**

Continued support for this function includes funding an annual conference for ACE/WES program teachers. The Colorado standards for program renewals includes reviewing demographic data for enrollment in programs by ethnic minorities, students with disabilities, and non-traditional (gender) students. During on-site visits, programs are monitored for diversity in composition of the program's business and industry advisory committees. CCCS continues to follow the MOA standards and monitor recipients' compliance with Title VI, Title IX, and Section 504. Counselors are made aware of career opportunities and programs. Colleges meet with high school parents of special population students to provide information about transitioning to postsecondary education. Both secondary and postsecondary recipients invest extensive amounts of Perkins funds into tutoring programs and, of course, provide adaptive equipment and interpreters as needed. Postsecondary recipients offer numerous types of bridging programs that are especially supportive for single parents and displaced homemakers. Many Colleges are funding special population coordinators who monitor student success with student retention as their priority.

The State Board established Strategic Plan includes Student Success; Student Access and Operational Excellence. The sub-elements of Student Success and Student Access includes retention and graduation rates of underserved populations and increased enrollment of underserved students. Therefore, State staff and System Colleges must align Perkins funding and strategies with this Strategic Plan which reinforces the Perkins Act requirements for providing programs for special populations in high wage, high skill or high demand occupations.

A key component for assuring access to postsecondary programs for special populations is to control tuition costs. The National Center for Higher Education Management Systems recently released a study on the cost effectiveness of higher education. Colorado was found to be a low-cost, high quality state, ranked the third best State in the nation in terms of overall higher education performance relative to funding.

Perkins local plans are reviewed for inclusion of strategies, activities and projects that support special populations and a local special populations' coordinator or similar representative must endorse the plan before it can be submitted to CCCS.

## B. Permissible Activities [Section 124]

### **1. Technical Assistance:**

CCCS CTE staff provides continuous guidance for career and technical education quality. Website pages specific to career and technical education are accessible, user-friendly and used extensively. The System produces a bi-weekly e-newsletter called “CTE Trends” that is sent to hundreds of CTE teachers and administrators. CCCS staff maintains a representative on the Colorado Association of Career and Technical Education (CACTE) board and on the Colorado Association of Career and Technical Administrators (CACTA) board. Program directors collaborate with teacher organizations for meetings, conferences and workshops. The regional meetings provide easy access to all CTE teachers to updates and guidance. In 2006, five regional meetings were provided with registrations from more than 400 CTE teachers, administrators and others. Other attendees included personnel from counseling, institutional research and planning, special populations, as well as English and Literacy support teachers and Mathematics teachers.

### **2. Improve Career Guidance and Academic Counseling:**

CCCS staff are developing connections to the State Counselors organization and were presenters at their state conference.

### **3. Establishment of Agreements between Secondary and Postsecondary:**

The Escrow Credit Project is continuing and welcomed by secondary and postsecondary recipients. Program Directors have made special efforts to connect secondary and postsecondary teachers and programs.

The agriculture education program director inaugurated a new association of Collegiate Teachers of Agriculture. This connects community college and 4-year university faculty. Their first meeting also included secondary teachers and they began the development of seamless career pathways in agriculture.

The Consumer and Family Studies occupational programs standards development projects paired secondary and postsecondary faculty so the curricula would align.

Some of the key values of one board and one agency having programmatic authority over both secondary and postsecondary career and technical education programs is the inherent ability to align standards, to facilitate meetings with both levels of teachers in attendance, and to work collaboratively on initiatives.

### **5. Support for CTSO's:**

Colorado continues to provide strong leadership through the Colorado Community College System staff for career and technical student organizations. Leadership competencies are part of the standards for approved CTE programs. The student organization state advisors work closely with program directors. The SkillsUSA state specialist sponsored a chapter management institute to help new instructors integrate leadership skills into their program curricula. All CTSOs provide student leadership conferences that focus on soft skills including project management, time management, team building, meeting management, goal-setting, community

service and fund-raising. Students are challenged to enter new horizons including public speaking, running for office and networking with business and industry.

CTSO conferences help provide camaraderie and mentoring for new teachers. It connects teachers and challenges teachers to update and improve programs. CTSOs also provide our strongest direct link to business and industry partners.

The State president from each student organization serves on a collaboration group that helps the CTSOs operate in conjunction with each other. Annually, this group does a presentation to the State Board and it always is one of the Boards' favorite meetings.

The frequent presence of student officers in the CCCS administration building helps remind us of the ultimate purpose of all our work!

### **III. Distribution of Funds and Local Plan for Vocational and Technical Education Programs**

- A. Summary of State's eligible recipients, listing number of secondary local eligible agencies, area vocational and technical education agencies, postsecondary agencies, and consortia.

#### **Postsecondary Community Colleges:**

AIMS COMMUNITY COLLEGE
ARAPAHOE COMMUNITY COLLEGE
COLORADO MOUNTAIN COLLEGE
COLORADO NORTHWESTERN COMMUNITY COLLEGE
COMMUNITY COLLEGE OF AURORA
COMMUNITY COLLEGE OF DENVER
FRONT RANGE COMMUNITY COLLEGE
LAMAR COMMUNITY COLLEGE
MORGAN COMMUNITY COLLEGE
NORTHEASTERN JUNIOR COLLEGE
OTERO JUNIOR COLLEGE
PIKES PEAK COMMUNITY COLLEGE
PUEBLO COMMUNITY COLLEGE
RED ROCKS COMMUNITY COLLEGE
TRINIDAD STATE JUNIOR COLLEGE

**Postsecondary Area Vocational Schools (Technical Colleges)**

T. H. PICKENS TECHNICAL CENTER
DELTA / MONTROSE TECHNICAL COLLEGE
EMILY GRIFFITH OPPORTUNITY SCHOOL
SAN JUAN BASIN TECHNICAL COLLEGE

**Postsecondary Other**

MESA STATE COLLEGE
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**Secondary School Districts – Stand Alone**

ADAMS 1 – MAPLETON
ADAMS 12 – NORTHGLENN/THORNTON
ADAMS 14 – COMMERCE CITY
ADAMS 27J – BRIGHTON
ADAMS 50 – WESTMINSTER
ARAPAHOE 1 – ENGLEWOOD
ARAPAHOE 5 – CHERRY CREEK
ARAPAHOE 28J – AURORA
BOULDER RE-1J – ST. VRAIN VALLEY
BOULDER RE-2 – BOULDER VALLEY
DELTA 50J-DELTA
DENVER 1 – DENVER
DOUGLAS RE-1 – DOUGLAS COUNTY
EL PASO 2 – HARRISON
EL PASO 3 – WIDEFIELD
EL PASO 8 – FOUNTAIN
EL PASO 11 – COLORADO SPRINGS
EL PASO 20 – ACADEMY
EL PASO 49 – FALCON
FREMONT RE-1 - CANON CITY
JEFFERSON R1 – LAKEWOOD/GOLDEN
LARIMER R-1 – POUUDRE (FORT COLLINS)
LARIMER R-2J – THOMPSON (LOVELAND)
LAS ANIMAS 1 – TRINIDAD
LOGAN RE-1 – VALLEY (STERLING)
MESA 51 – MESA COUNTY VALLEY (GRAND JUNCTION)
MONTROSE RE-1J – MONTROSE
MORGAN RE-3 – FORT MORGAN
PROWERS RE-2 – LAMAR
PUEBLO 60 – (CITY) PUEBLO
PUEBLO 70 – (COUNTY) PUEBLO
WELD 6 – GREELEY
WELD RE-8 – FORT LUPTON

### **Secondary School Districts – Granted Exemption from Consortia**

BACA RE-4 – SPRINGFIELD
BACA RE-5 – VILAS
BENT RE-2 – MCCLAVE
CHAFFEE R-32J – SALIDA
CLEAR CREEK RE-1 – IDAHO SPRINGS
CONEJOS RE-1J – NORTH CONEJOS (LA JARA)
CUSTER C-1 – CUSTER COUNTY
DOLORES RE-2J – DOLORES COUNTY
ELBERT C-1 – ELIZABETH
FREMONT RE-2 – FLORENCE
GUNNISON RE-1J – GUNNISON
HUERFANO RE-1 – WALSENBURG
OURAY R-1 – OURAY
PARK 1 – PLATTE CANYON (BAILEY)
PROWERS RE-1 - GRANADA
PROWERS RE-3 – HOLLY
PROWERS RE-13JT – WILEY
SAN MIQUEL R-1 – TELLURIDE
SAN MIGUEL R-2J – NORWOOD
SUMMIT RE-1 – SUMMIT COUNTY (FRISCO)

### **Secondary Consortia**

CAVOC CONSORTIUM (8 DISTRICTS)
EAST CENTRAL BOCS CONSORTIUM (19 DISTRICTS)
TRINIDAD STATE JUNIOR COLLEGE CONSORTIUM (5 DISTRICTS)
LITTLETON CONSORTIUM (2 DISTRICTS)
MOUNTAIN BOCS CONSORTIUM (5 DISTRICTS)
NORTHEAST BOCS CONSORTIUM (12 DISTRICTS)
NORTHWEST BOCS CONSORTIUM (9 DISTRICTS)
PIKES PEAK COMMUNITY COLLEGE CONSORTIUM (10 DISTRICTS)
ROARING FORK CONSORTIUM (2 DISTRICTS)
SOUTHEASTERN BOCS CONSORTIUM (4 DISTRICTS)
SAN JUAN BOCS CONSORTIUM (4 DISTRICTS)
SAN JUAN BASIN TECHNICAL COLLEGE CONSORTIUM (3 DISTRICTS)
SAN LUIS VALLEY CONSORTIUM (13 DISTRICTS)
WINDSOR/ESTES PARK CONSORTIUM (2 DISTRICTS)
CENTENNIAL BOCS CONSORTIUM (10 DISTRICTS)
SOUTH WELD CONSORTIUM (2 DISTRICTS)

The latest version of the Colorado local plan (Perkins continuation plan) document and the related budget forms workbook have been e-mailed to Perkins2006@ed.gov.

## **IV. Accountability [Section 113]**

### A. State's Overall Performance Results and Program Improvement Strategies

Colorado met or exceeded all performance goals except 3P2, 4P1 and 4P2. We believe that several efforts supported exceeding the goals, including:

1. Rigorous review of Continuation plans, holding recipients tightly accountable to activities that address the sub-indicators.
2. Field familiarity with the goals and better understanding of how to use the data to direct program improvement activities.
3. Providing performance results in both percentage form and actual count form.
4. CTE Regional meetings assured better outreach to teachers, rather than just administrators.
5. Better understanding about data reporting and better understanding of the importance of the accuracy of data.

Colorado did not meet the goals for Postsecondary Retention, Postsecondary Non-Traditional Enrollment nor Postsecondary Non-traditional Completion. We believe that the barriers to achieving the Postsecondary Retention goal is related to:

1. Extensive confusion about what this measurement definition means and how to properly word the question when surveying completers.
2. Data correction after more training and thus more accurate data reporting.

We believe that the barriers to achieving the Postsecondary Non-Traditional Enrollment and Non-Traditional Completion continue to be:

1. Difficulty in recruiting men into Early Childhood Education and Cosmetology professions due to the relatively low pay of these jobs.
2. Showing the results of recruiting men into Health Careers due to waiting lists.
3. Although the Colleges are beginning to engage business and industry more into solving this problem, the results will not appear in the data immediately.
4. The possibility that the influence colleges have regarding impacting students career selection may have reached a plateau and excessive efforts are having a reverse downward affect rather than an upward improvement affect.

Since CCCS now has eight years of data, it is appropriate to analyze the trend of the data. The trend lines for all secondary sub-indicator performance have become relatively flat in the past five years. The trend lines for postsecondary sub-indicator performance are unique for each indicator. Indicators 1P1, 1P2, and 2P1 (same measurement definition for all three in Colorado) is a steady upward line, reflecting continuous improvement in completion of programs to the certificate or degree level. The trend line for 3P1, Placement, never falls below 92.5% so the variations could simply be the ceiling effect and trend line analysis is limited. The trend line for 3P2, Retention in Employment is erratic the first 3 years of data collection and relatively flat the last 3 years of collection. This seems to indicate early confusion and finally a settling out of correct data reporting. The postsecondary trend line for 4P1, non-traditional enrollment is relatively flat for three years and slightly downward, fairly dramatically upward for the next two years and again relatively flat and slightly downward for the last 3 years. The postsecondary 4P2, non-traditional completers, trend is similar to the 4P1 trend. It shows a fairly dramatic

down slope between the first and second year. But then there is a strong up slope for 3 years. The next year is matching the peak and the last two years is indicating a slightly downward trend. The trend lines of actual results compared to the 2006 Adjusted Performance goals are located in Appendix B of this report.

Strategies that will be implemented to improve these results:

1. Due to extensive time required with the State Auditor's Office seven-month program audit, the Non-Traditional Training and Employment summit could not be organized for FY2007 and the NTTE funds were distributed to postsecondary institutions as in the past.
2. For Colorado Fiscal Year 2007, CCCS is not approving any out-of-state conference attendance by any faculty of programs who have not met the state performance goals unless they assure attendance at related workshops or seek more professional development specific to recruitment and retention of non-traditional (gender) students. We have reviewed the agendas of numerous national conferences and have found very little offered toward recruitment and retention of non-traditional careers. We have asked our attending teachers to warn related professional organizations and their conference designers that these topics need to be included in conference workshops.
3. Continue requiring performance data activities in local plans.
4. Reconsider the Performance goals for the 3P2 Retention sub-indicator using the last three years for averaging since it appears the data collection confusion may be under control.
5. Consider the use of the FY2008 Non-traditional set aside for contracting a consultant to analyze what else Colorado can do to address 4P1 and 4P2. The postsecondary institutions continue to work very hard on this sub-indicator and are quite frustrated with increased efforts causing decreases in outcomes.
6. Continue to watch the trend lines for the 4P1 and 4P2 to determine if the Colleges have done the most they can do to impact students' career choices and perhaps renegotiate the performance goals accordingly.
7. Conduct a state teleconference that discusses the issues and best practices related to recruitment and retention of non-traditional students.

## B. State Performance Results for Special Populations and Program Improvement Strategies

(1S1-Secondary Academic Attainment and 2S1-Completion of High School Diploma)

At the secondary level, two special populations did not meet 1S1 or 2S1 (same measurement definitions.) Students with "Other Educational Barriers" missed the state goal by nearly 5%. Individuals with Disabilities did not meet the state goal by 5.37% Students with Other Educational Barriers is defined in Colorado as students with a cumulative grade point average of 2.0 or less. Colorado is surprised and frustrated by this data. We have asked all recipients to concentrate their efforts on special populations and yet our data results have become worse than the previous year. Some of the factors that may cause this failure include:

1. Students with more severe academic barriers and learning disabilities may be physically incapable of meeting graduation requirements. These students are awarded certificates of completion in Colorado. More focus on these students may have increased. However, for the career and technical education data, we do not count certificates of completion as meeting the graduation from high school definition.

2. Students may have graduated by the end of summer school. We only count students as graduating if they graduate by June of the reporting year.
3. Schools, Administrators, Counselors, Teachers and other staff may not have the resources needed to provide enough individual attention to special needs students.

Strategies to improve graduation rates of 12<sup>th</sup> grade program completers who are “Individuals with Disabilities” and Strategies to improve graduation rates of 12<sup>th</sup> grade program completers who have “Other Educational Barriers:”

1. Analyze our reporting requirements to determine if Certificates of Completion should be or can be reported as a successful “graduation.”
2. Support a field task force of special population coordinators, counselors, CTE administrators and teachers who would focus on reviewing the data, the data definitions, local educational agencies resources for increasing individual student support and provide advisory guidance to CCCS for new strategies.
3. The numbers of students who meet the “Other Educational Barriers” definition has increased by 4% since the 2004-2005 program year so there may be a need to ask program directors to focus on workshops and training that address pedagogical skills to improve the learning process for low achieving students.
4. Survey career and technical education students who meet these two definitions to attempt to determine their perceptions about high school graduation.

(1S2- Secondary Skill Proficiencies)

1. Only one special population did not meet the State goal for 1S2. The population of Unknown/Other students regarding ethnicity was below the State goal by 3.54%. We believe this is a statistical phenomenon that causes a misleading percentage simply because the actual count numbers are so small.

(3S1- Secondary Placement)

All special populations were over 90% for this subindicator so we believe that this is not an issue. Because of the statistical “ceiling effect,” we have allowed recipients to consider any performance data higher than 90% as satisfactory.

(4S1- Secondary Participation in Non-Traditional Careers)

The only population that did not meet the State goal in this subindicator is females. The reasons for not meeting this goal for females include:

1. Lack of role-models in public media and shortage of female faculty in Trades and Technical programs.
2. Most national conferences and training of trades and technical teachers only includes technical content topics.
3. Industry standards and national curricula for trades and technical programs do not address gender enrollment and retention issues.

Strategies for improvement include:

1. For Colorado Fiscal Year 2007, we are continuing to require each recipient, in their continuation plans, to present strategic activities that address increasing performance results for each sub-population that did not meet the State performance goals.

2. Continue to research the possibility of collaborating with SkillsUSA (VICA) at both the national and the state levels to develop strategies for improvement.
3. Encourage the National SkillsUSA Organization to share the problem with Trades and Technical industry representatives and ask industries to consider updating their training, conferences, and standards so that this issue is addressed.
4. Consider using the non-traditional training and employment set aside to hire a national consultant who would assess current practices and suggest new practices.
5. Give existing state staff more time to do on-site technical assistance with programs not meeting this performance goal.
6. Share results of the Postsecondary teleconference discussion with secondary recipients.

(4S2- Secondary Completion of Non-Traditional Careers)

Two populations did not meet the goals for 4S2: females and individuals with disabilities. The female's reasons for failure and strategies for improvement are addressed in the discussion for 4S1. The individuals' with disabilities barriers and strategies for improvement could be part of the task force described in 1S1, 2S1 strategies agenda. The good news is that last year the second population that did not meet the State goal was the economically disadvantaged. This year, that population exceeds the goal. So it may be advisable to keep some of last year's strategies in place. The individuals with disabilities population exceeds the (4S1) goal so it would seem that this population is getting recruited into the initial course or courses of a program but are not remaining in the program. Reasons could be:

1. Lack of access to tools or not enough availability of adaptive tools.
2. Not enough awareness of the broader scope of career options within a program.
3. Lack of role models.
4. Some program areas have safety issues that require extensive student oversight. This may not be popular with the students.

Some strategies to address retention of females and individuals with disabilities into non-traditional programs include:

1. For Colorado Fiscal Year 2007, we are continuing to require each recipient, in their continuation plans, to present strategic activities that address increasing performance results for each sub-population that did not meet the State performance goals.
2. Research possible causes through survey of students by asking teachers in non-traditional career areas to do a standardized exit survey for all students who leave the program.
3. CCCS staff onsite visits to provide one-on-one technical assistance for addressing gender gaps.

(1P1-Postsecondary Academic Attainment, 1P2-Postsecondary Skill Proficiencies, and 2P1-Postsecondary Completion of Certificates or Degrees)

This year, only two special populations did not meet the State goals for 1P1, 1P2, and 2P1 (all the same measurement definitions): Displaced homemakers and other educational barriers. For postsecondary data, “Other Educational Barriers” are students who are required to participate in remediation classes. Possible reasons for failure to reach the State goals by these groups include:

1. No extra set aside funding directed toward support for displaced homemaker programs.
2. Delays, cost and/or personal frustration with having to add remedial courses (other educational barriers) to the students’ certificate or degree program.
3. Displaced homemakers may not have strong personal support systems.
4. Limited financial resources of displaced homemakers preventing continuation in college.
5. Delay between implementation of new strategies and improvement in data results may take longer than one year.
6. Perkins does not fund remediation coursework so State cannot mandate remediation staff professional development.
7. Displaced homemakers may be facing too much stress just from returning to school. Adding the stress inherent in being a non-traditional career student may be too much at once.
8. Displaced homemakers and students needing remediation often face economic barriers.

Possible strategies to address these issues include:

1. Due to lack of staff, we were unable to complete one of last year’s strategies so we will try to revisit it again in FY2007:

Confer with college special populations coordinators to develop the following:

- a. Design an electronic survey for college special population coordinators to assess their insights of what may be the barriers to displaced homemakers and students in remedial courses (Colorado’s definition for “other educational barriers.”)
  - b. Design a student survey regarding the student’s perception of barriers and the student’s ideas about how to improve tutoring and support services.
  - c. Use the survey results to develop a strategies guide for community colleges and technical colleges.
2. Work with College administrators and Deans about whether class and enrollment schedules can be organized so that remedial course-taking students can still begin one or two program-specific classes so that the career content courses will keep the student interested in continuing the college program.
  3. Work with College administrators and Deans about the feasibility of apprenticeship programs (earn as you learn).
  4. Encourage college program teachers to seek advisory council members who will support paid internships for students.

CCCS anticipates that the greatest barrier is financial. One of the State Board Strategic Plan elements is Student Access, especially for underrepresented populations. The Colleges are all working very hard to keep tuition costs and textbook costs as low as possible. However, for some populations, College is still a financial burden and better performance of certificate and degree achievement by these two populations may require stronger national fiscal support for scholarships, loans and grants.

### (3P1- Postsecondary Placement)

All subpopulations except Single Parents and Individuals with Disabilities achieved a level of performance higher than 90%. The actual counts of these populations are small numbers so the lower percentage is more a data phenomenon than a program weakness. However, CCCS wants to continue to find the best ways to improve program results for Individuals with Disabilities. The following barriers need to be overcome.

1. Business and industry lacks understanding, education and awareness regarding employing individuals with disabilities. (However, it is interesting that of the total Individuals with Disabilities enrolled in CTE, 25% are enrolled in the Health Science cluster which is an industry most likely to understand the capabilities of students with disabilities.)
2. Another interesting data is that 33% of the Individuals with disabilities continue their education whereas over 74% are employed or in the military. It might be an interesting study to try to determine why more Individuals With Disabilities do not pursue advanced education.
3. Students with Disabilities may need confidence building and self-assurance activities to face employment interviews.

Possible strategies to improve these results include:

1. Explore possibility of college's asking more follow-up questions to see if information can be gained about why students are not placed.
2. It could take longer than the data reporting timeframe for Individuals with Disabilities to find employment.
3. Continue to require Perkins recipients to address, in their continuation plans, strategies to improve each sub-populations' performance data results if that population does not meet the State goals.
4. Ask the task force as described in 1S1, 2S1 strategies to explore this data as well.
5. Assess students' with disabilities perceptions of how programs can provide better service and support.

### (3P2-Postsecondary Retention in Employment)

The analysis of the special populations for this indicator are quite surprising. Most ethnic populations do not meet the performance goal. Yet special populations with barriers are all meeting this State goal! Males, Asian or Pacific Islander, Hispanic, White/non-Hispanic, and Unknown/Other, populations did not meet the goal.

1. Males may be changing jobs quickly in order to advance to best pay.
2. Again, this year, it seems the State goal for retention may be beyond a statistical maximum. There was no previous data (prior to Perkins III) to compare or establish a benchmark. The benchmark may be statistically incorrectly calculated.

Strategies to improve these results include:

1. Re assessment of the performance goal since the populations missing the target do not point to any discernable trend.

2. Continue to require Perkins recipients to address, in their continuation plans, strategies to improve each sub-populations' performance data results if that population does not meet the State goals.
3. Use many of the same strategies under 3P1 to help address underperformance in 3P2.

(4P1- Postsecondary Participation in Non-Traditional Careers)

Colorado did not meet our State goal overall with this sub-indicator and all but two populations fell below the performance goal. In fact, the only two populations that exceeded the goal only exceeded the goal by less than 1%. Reasons for these results could be:

1. Difficulty of advising males to seek low wage careers such as Early Childhood Education and Cosmetology.
2. Delay in seeing results of efforts for recruiting males into Health careers due to extensive program entry waiting lists.
3. Lack of exposure to role models.
4. Lack of support from home and family environment.
5. Hispanic populations may have a fear of college in general, much less the courage to pursue a non-traditional career area.
6. Lack of general media portrayals of individuals in non-traditional careers.
7. Difficulty of Hispanics to try to overcome double prejudice regarding both their race and their gender in some career fields.
8. Inadequate career advising.
9. Lack of support from business and industry.
10. Limited openness of college age students to changing their career choice.

Strategies to address these issues are a repeat of those listed under 4S1 and the following:

1. Extra attempt to introduce students to Hispanic role-models in non-traditional careers.
2. Currently, Colorado is conducting an informal statewide survey of Latino males to try to assess their perceptions regarding both high school and college graduation. One of the questions is "If you plan to go to college, what do you plan to study?" We will review those results to determine middle school and high school Latino males' interest in non-traditional careers.
3. Attempt to determine and have influence on making sure that college programs include competency development in areas of diversity and sexual harassment in the workforce.
4. Ask programs to brainstorm for strategic activities with their business and industry advisory committees and to engage industry more as part of the solution.

(4P2- Postsecondary Completion of Non-Traditional Careers)

Again, Colorado did not meet our goal with this performance indicator overall. Several populations did not meet the standard. Reasons for these inadequate results could be:

1. Populations may have financial challenges that prevent them from staying in college long enough to complete the program.
2. Single Parents and Displaced Homemakers may have child care challenges preventing program completion.
3. Faculty may not be providing a safe and welcoming environment.
4. Faculty may need more training regarding working with non-traditional genders in their career program areas.

5. Most national training for faculty does not address this issue.

Ideas for strategies to improve these results are addressed in the completion strategies (1P1, 1P2 and 2P1), and the other non-traditional training and employment strategies (4S1, 4S2 and 4P1.) Colorado is quite perplexed at these results since we have been working hard to address the non-traditional training and employment performance indicators and yet we have lower results than the previous year. We will continue to implement the many ideas that have been developing lately. We will continue to explore strategies to determine what works and to try new strategies. Again, the performance goal may be unrealistic and/or we may need a national consultant to provide better guidance.

### C. Definitions

#### **1. Vocational participant – Secondary**

Any student enrolled in one of the courses of a CCCS approved career and technical education program.

#### **2. Vocational participant – Postsecondary**

Any student enrolled in an average of at least 6 semester credits per number of terms attended for the academic year in a vocational CIP.

#### **3. Vocational concentrator**

The Colorado Community College System has not developed a unique state definition of a vocational concentrator. The state does have a definition of a “Partial Completer” but these students are not counted in the measurement approaches. In Colorado, a Partial Completer is an individual who has been reported on the VE-135 and has demonstrated attainment of more than 50% of the completer requirements as identified in the program approval.

#### **4. Vocational (Program) Completer - Secondary**

An individual who has been reported as a completer on the VE-135 and has demonstrated attainment of the competencies identified in the program’s Measures and Standards of Performance.

#### **5. Vocational (Program) Completer – Postsecondary**

A postsecondary completer has attained a certificate or Associate Degree in the program.

#### **6. Tech prep student – Secondary**

A Secondary learner enrolled in a Tech Prep articulated sequence of study that is nonduplicative and contains a common core of required courses leading to proficiency in math, science, communications, technologies and technical skills designed to lead to the associate degree or 2-year certificate or apprenticeship, and ultimately employment. For data reporting purposes, the survey instrument indicates that the student should be identified as a Tech Prep student, if Tech Prep funds benefited the student that year. If a secondary teacher attended a workshop that was funded by Tech Prep funds, the students in that teacher’s program should be identified as Tech Prep students.

### **7. Tech Prep student – Postsecondary**

Previous to this year's report Colorado did not report postsecondary Tech Prep students due to the multiple barriers in determining this data. However, due to the OVAE Conditional Revision mandate, Colorado had to provide a postsecondary Tech Prep measurement and the definition was approved as follows.

Postsecondary Tech Prep students for Colorado is matched 12<sup>th</sup> graders identified as secondary Tech Prep students, by either social security number or first name, last name and birth date, to the following year's community colleges' and postsecondary area vocational schools' (technical colleges') enrollment data for full-time, career and technical education students.

#### D. Measurement Approaches

<b>Core Sub-Indicator</b>	<b>Measurement Definition</b>
<b>1S1 Academic Attainment</b>	Numerator: Statewide number of 12 <sup>th</sup> grade graduates who have completed Career/Technical education Denominator: Statewide number of 12th graders who have completed Career/Technical education
<b>1S2 Skill Proficiencies</b>	Numerator: Statewide number of 12 <sup>th</sup> graders who have completed Career/Technical education Denominator: Statewide number of 12th graders who have participated in Career/Technical education
<b>2S1 Completion</b>	Numerator: Statewide number of 12 <sup>th</sup> grade graduates who have completed Career/Technical education Denominator: Statewide number of 12th graders who have completed Career/Technical education
<b>2S2 Diploma Credential</b>	Colorado does not award any diplomas or certificates other than high school completion/graduation diplomas.
<b>3S1 Placement</b>	Numerator: Number of 12th grade program completers placed in postsecondary education, advanced training, military service, or employment Denominator: Number of available respondent 12th grade completers
<b>4S1 Participate Non-Trad</b>	Numerator: Total number of males and females participating in programs leading to occupations which are non-traditional for their gender Denominator: Total number of participants in secondary Career/Technical education
<b>4S2 Completion Non-Trad</b>	Numerator: Total number of males and females completing programs leading to occupations which are non-traditional for their gender Denominator: Total number of completers of secondary Career/Technical education programs

<b>Core Sub-Indicator</b>	<b>Measurement Definition</b>
<b>1P1 Academic Attainment</b>	Numerator: Number of students completing approved postsecondary Career/Technical programs  Denominator: Total enrollment in postsecondary Career/Technical programs
<b>1P2 Skill Proficiencies</b>	Numerator: Number of students completing approved postsecondary Career/Technical programs  Denominator: Total enrollment in postsecondary Career/Technical programs
<b>2P1 Completion</b>	Numerator: Number of students completing approved postsecondary Career/Technical programs  Denominator: Total enrollment in postsecondary Career/Technical programs
<b>3P1 Placement</b>	Numerator: Number of postsecondary program completers placed in advanced postsecondary education or training, military service, or employment  Denominator: Number of available respondent postsecondary completers
<b>3P2 Retention</b>	Numerator: Number of available respondent postsecondary completers placed in employment who are retained after 6 months, after the end of the academic year.  Denominator: Number of available respondent postsecondary completers placed in employment
<b>4P1 Participate Non-Trad</b>	Numerator: Total number of males and females participating in postsecondary programs leading to occupations which are non-traditional for their gender  Denominator: Total number of participants in postsecondary Career/Technical education programs
<b>4P2 Completion Non-Trad</b>	Numerator: Total number of males and females completing programs leading to occupations which are non-traditional for their gender  Denominator: Total number of completers of postsecondary Career/Technical education programs

Colorado has not renegotiated its measurement approaches since Round 1 and the state plan.

#### E. Improvement Strategies

For at least another year, Colorado would again like to, if resources permit, focus more on data auditing of recipients. We are hopeful that most recipients are now properly trained in data reporting, data measurement definitions, and use of data for program improvement. CCCS is attempting to establish a full-time equivalent position that is assigned all on-site monitoring duties. We hope this focused monitoring will assure data validity and reliability.

CCCS would like to make more use of field task forces to guide policy and planning so that State rulemaking, State documents and forms, and State reporting are logically aligned with local education agency resources and challenges.

CCCS is providing more personnel for administration and leadership functions. The goal is to free up staff for more direct, on-site technical assistance, especially with strategies related to Perkins performance.

#### **V. Monitoring Follow-up**

Non-applicable for this program year.

#### **VI. Workforce Investment Act (WIA) Incentive Grant Award Results**

For the incentive grant that Colorado received this past program year, several functions addressed activities allowable under Perkins III. The Breaking Barriers/Building Bridges (B4) grant is a collaborative project including the following partners: Colorado Workforce Centers, Colorado Community College System, Colorado Department of Education—Adult Basic Education, and Colorado Department of Corrections. The overarching goal of this project is to improve services for the nontraditional aspiring community college student, specifically the prison population – incarcerated and post-incarcerated individuals. The three primary CCCS objectives of the grant are to: (1) Gather information about prospective community college students that are currently incarcerated and post-incarcerated. (2) Analyze the educational attainment and college preparedness including interest and ability of this population to pursue various community college opportunities – including college admission and placement, (3) Collaborate with the other B4 Project Partners to identify educational pathways and support services necessary to support the prison population in a smooth transition process.

Each agency plays a role in helping offenders—adults and youth—transition from Corrections Education programs delivered in prison to community college. Workforce Centers and adult education/GED centers also provide educational services and program options for offenders and ex-offenders. The B4 CCCS Incentive III reports for the first Three Phases of the B4 Project are available upon request.

# **APPENDIX A**

## **COLORADO LOCAL CONTINUATION PLAN**

### **FOR COLORADO FISCAL YEAR 2006**

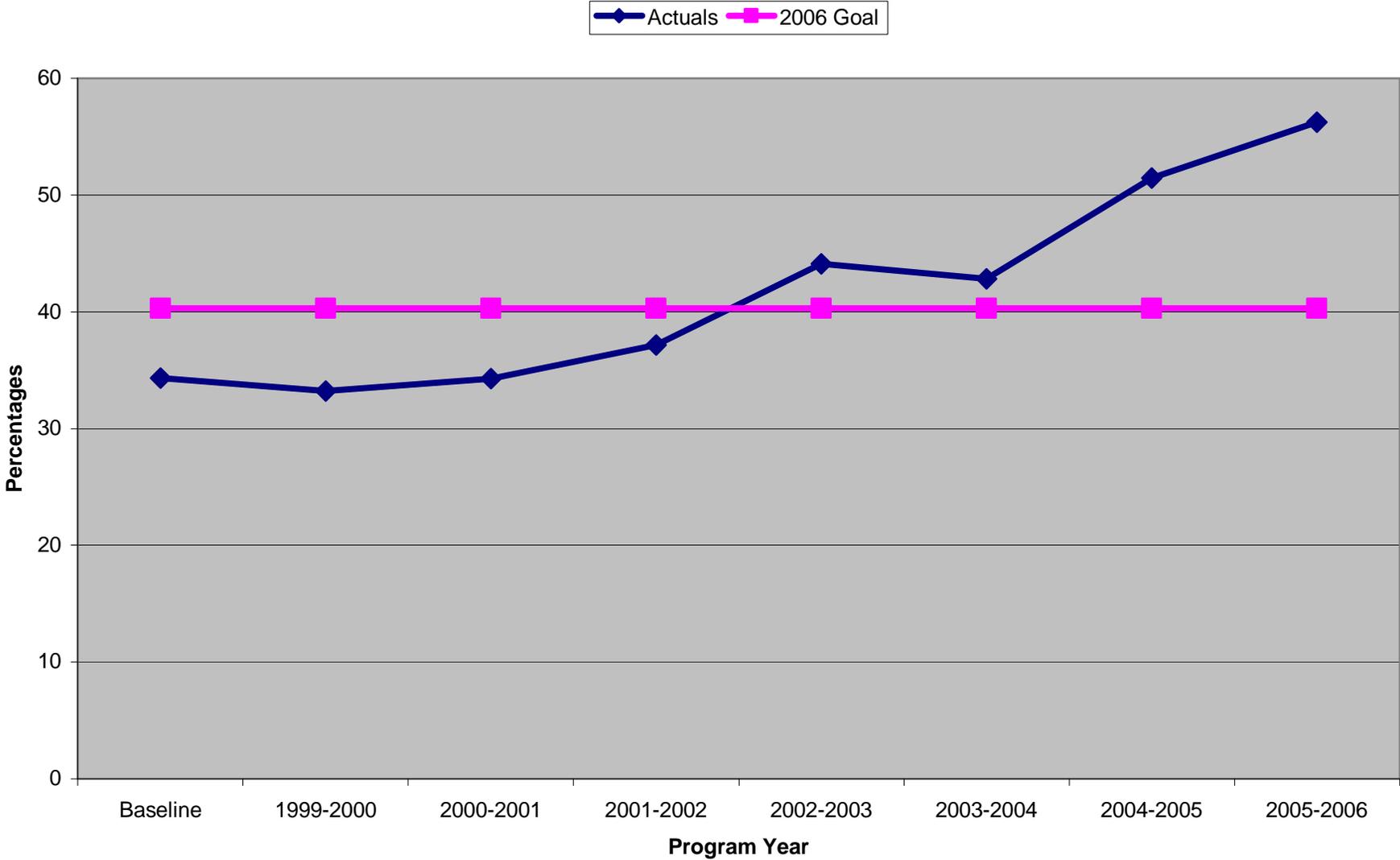
#### **(PROGRAM YEAR 2005-2006)**

**This document consists of two documents and were e-mailed separately to Perkins2006@ed.gov**

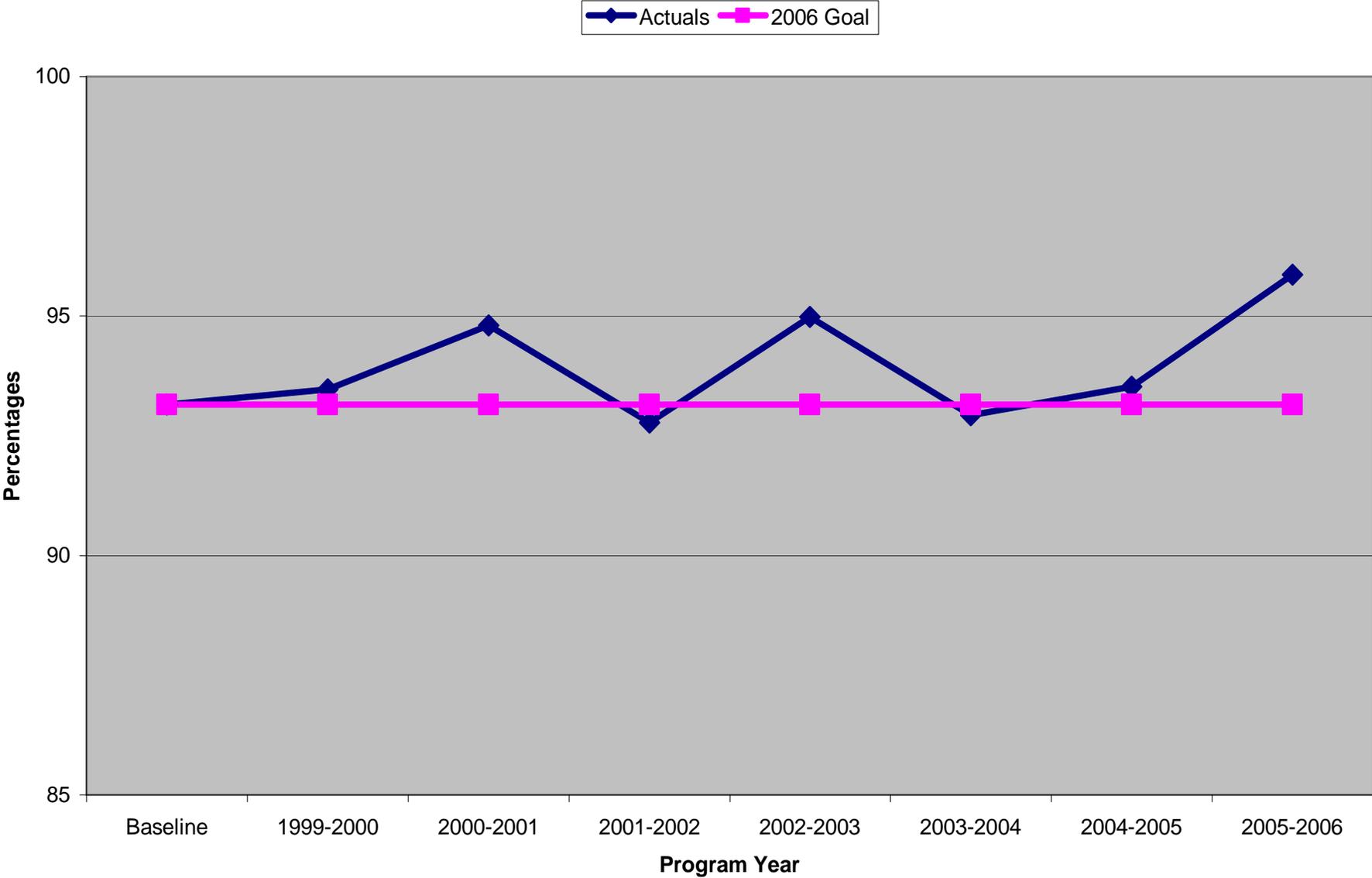
## **Appendix B-1**

# **GRAPHS OF TRENDS OF ACTUAL RESULTS FOR POSTSECONDARY SUB-INDICATORS COMPARED TO PROGRAM YEAR 2005-2006 PERFORMANCE GOALS**

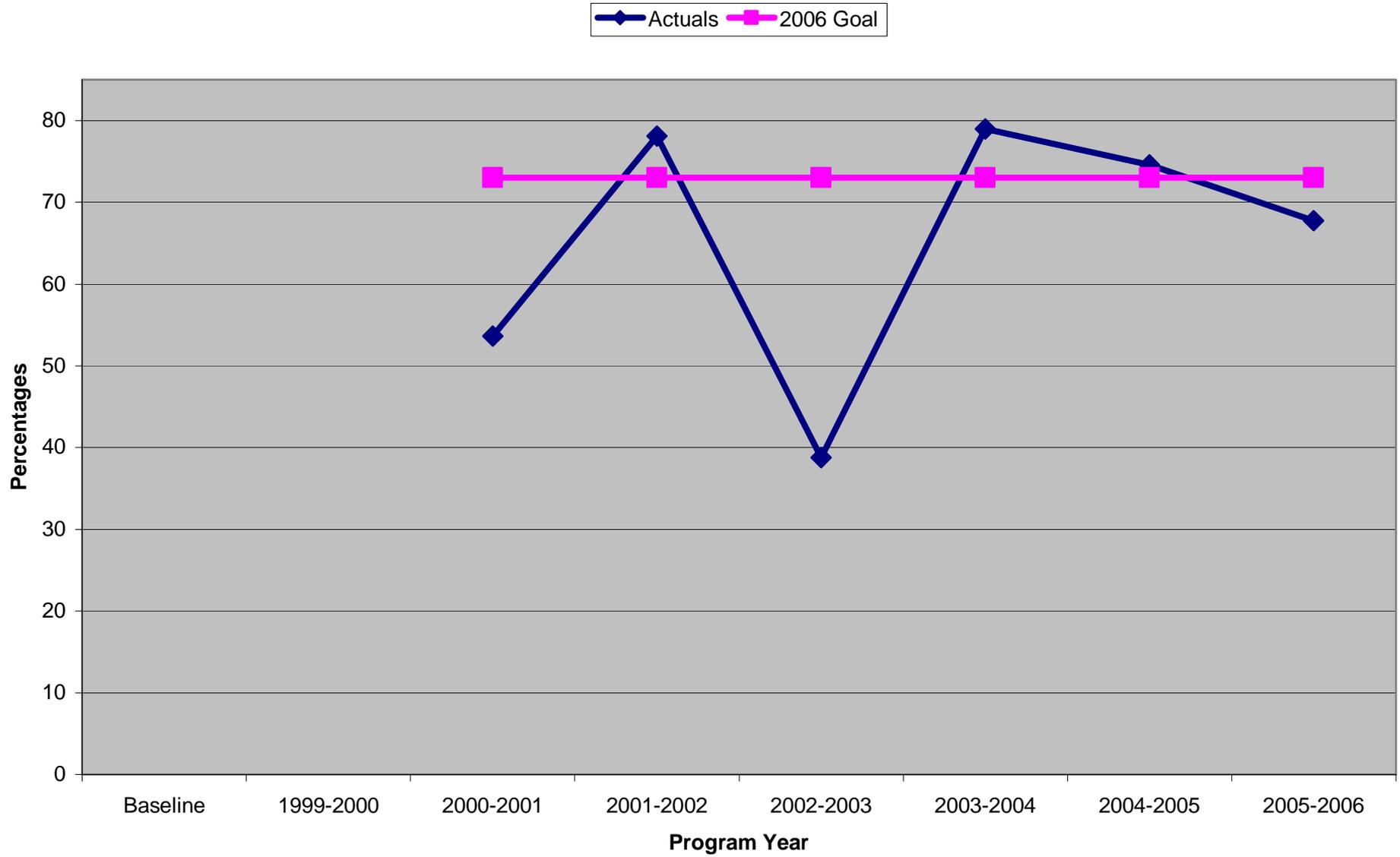
Colorado Trends: 1P1, 1P2, 2P1, Compared to 2006 Goal



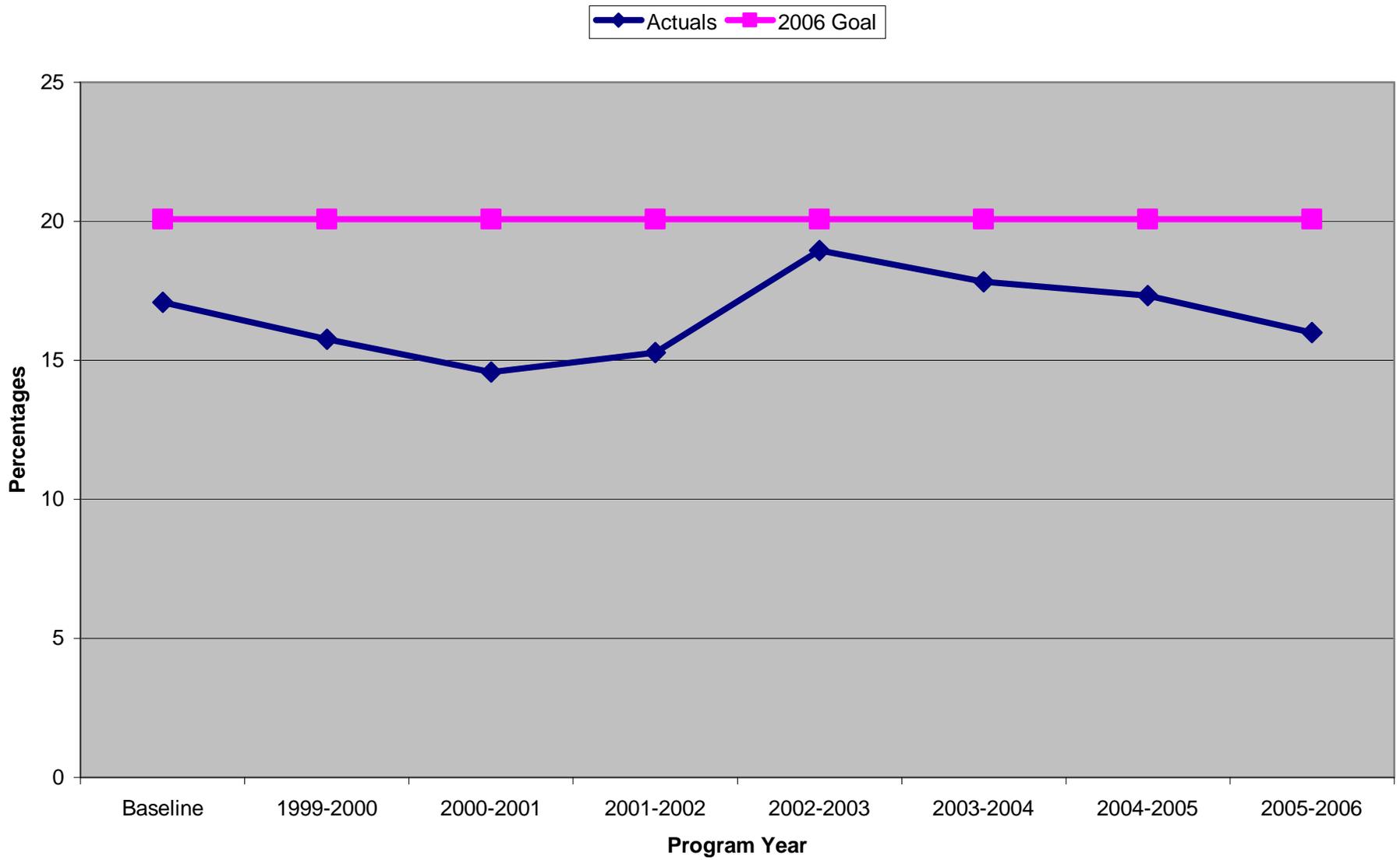
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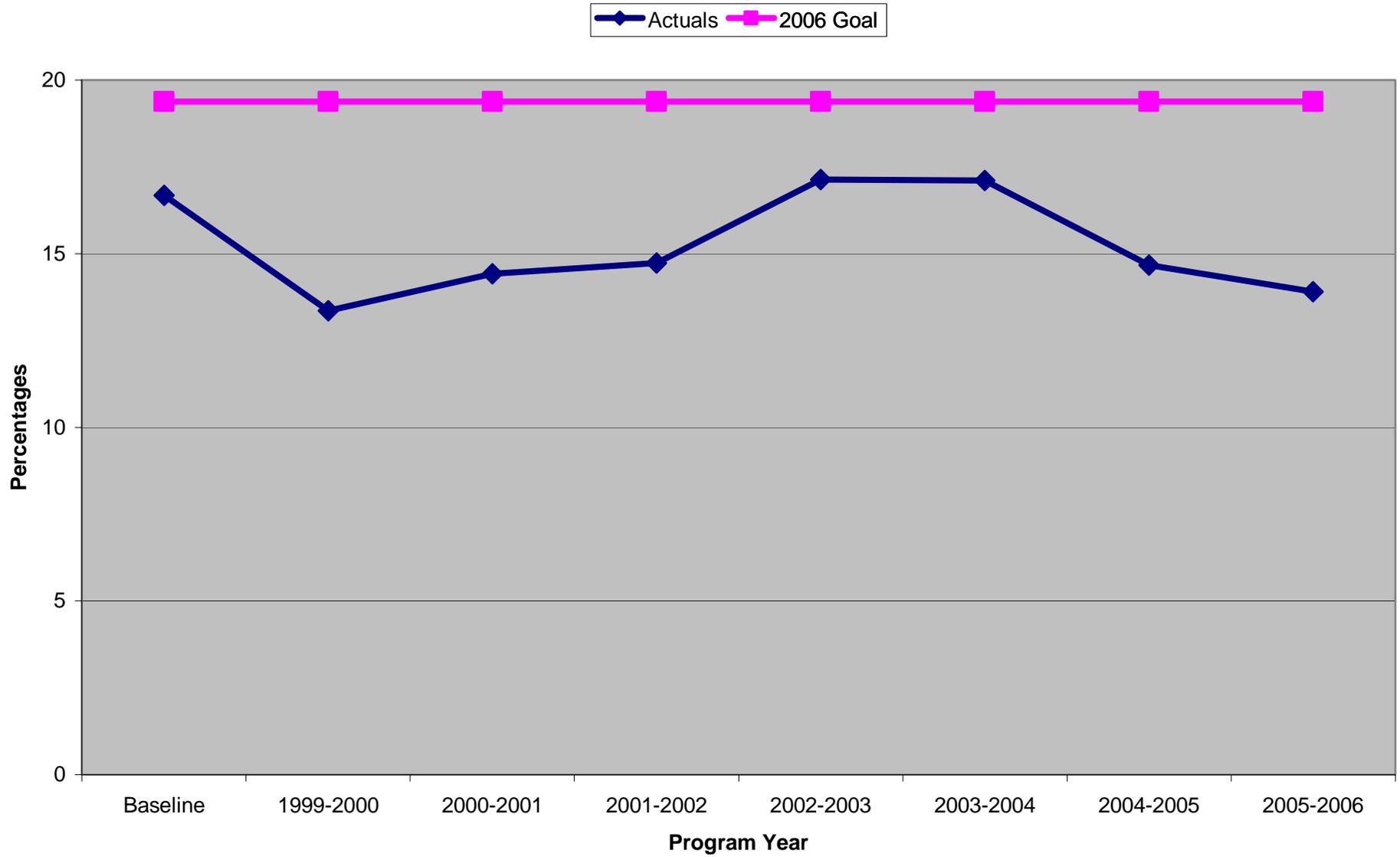
### Colorado Trends: 3P2, Compared to 2006 Goal



### Colorado Trends: 4P1, Compared to 2006 Goal



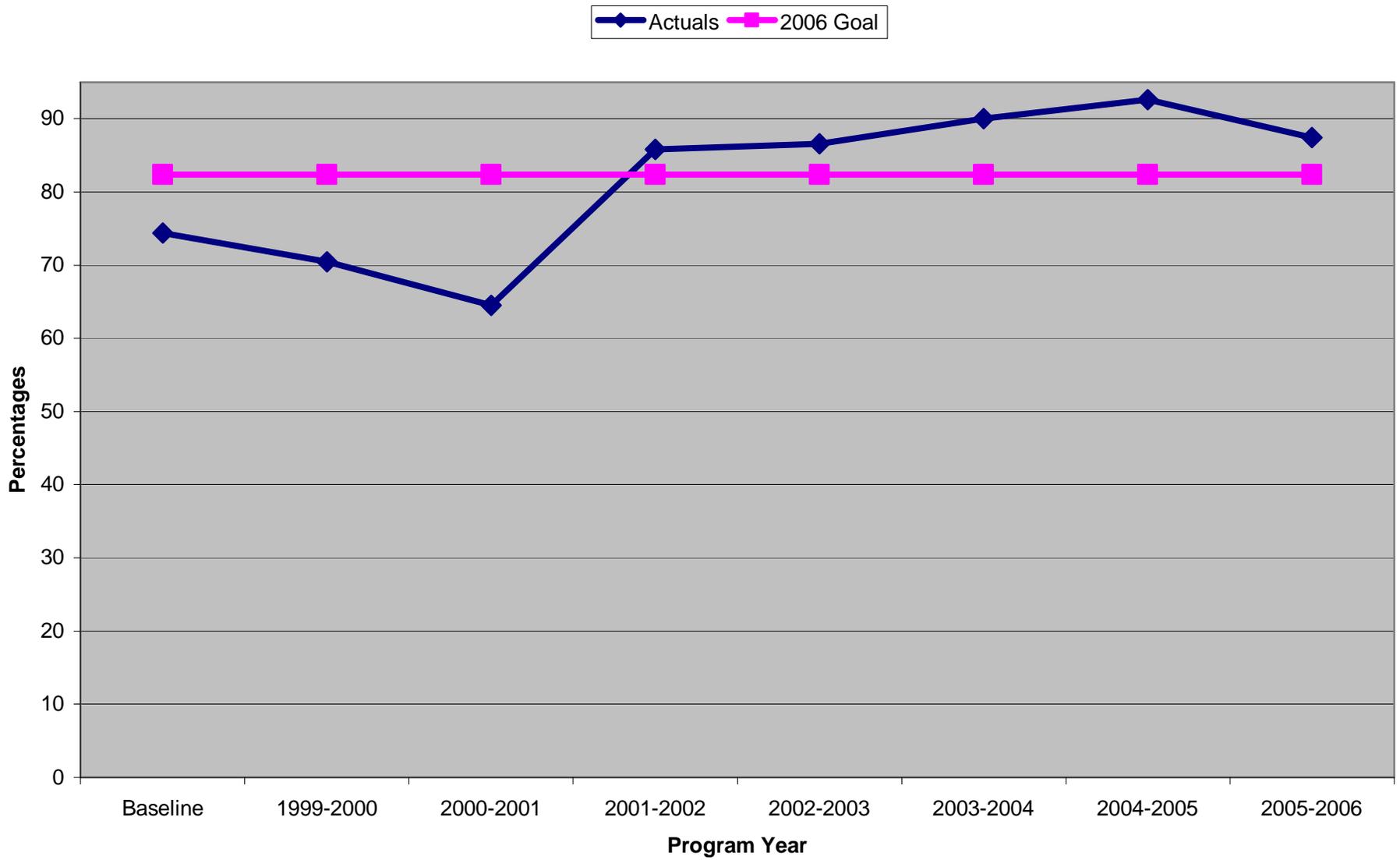
### Colorado Trends: 4P2, Compared to 2006 Goal



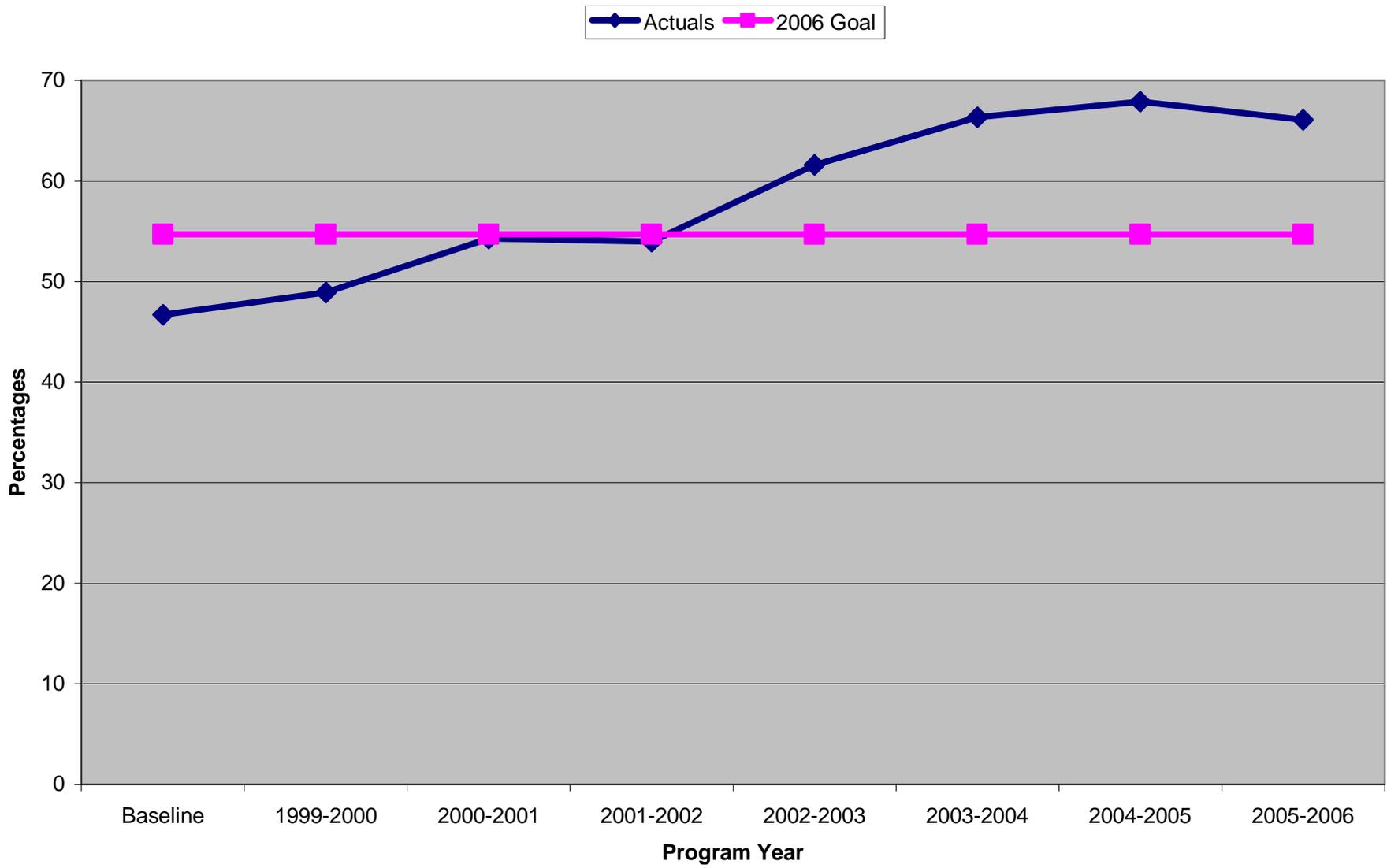
## **Appendix B-2**

# **GRAPHS OF TRENDS OF ACTUAL RESULTS FOR SECONDARY SUB-INDICATORS COMPARED TO PROGRAM YEAR 2005-2006 PERFORMANCE GOALS**

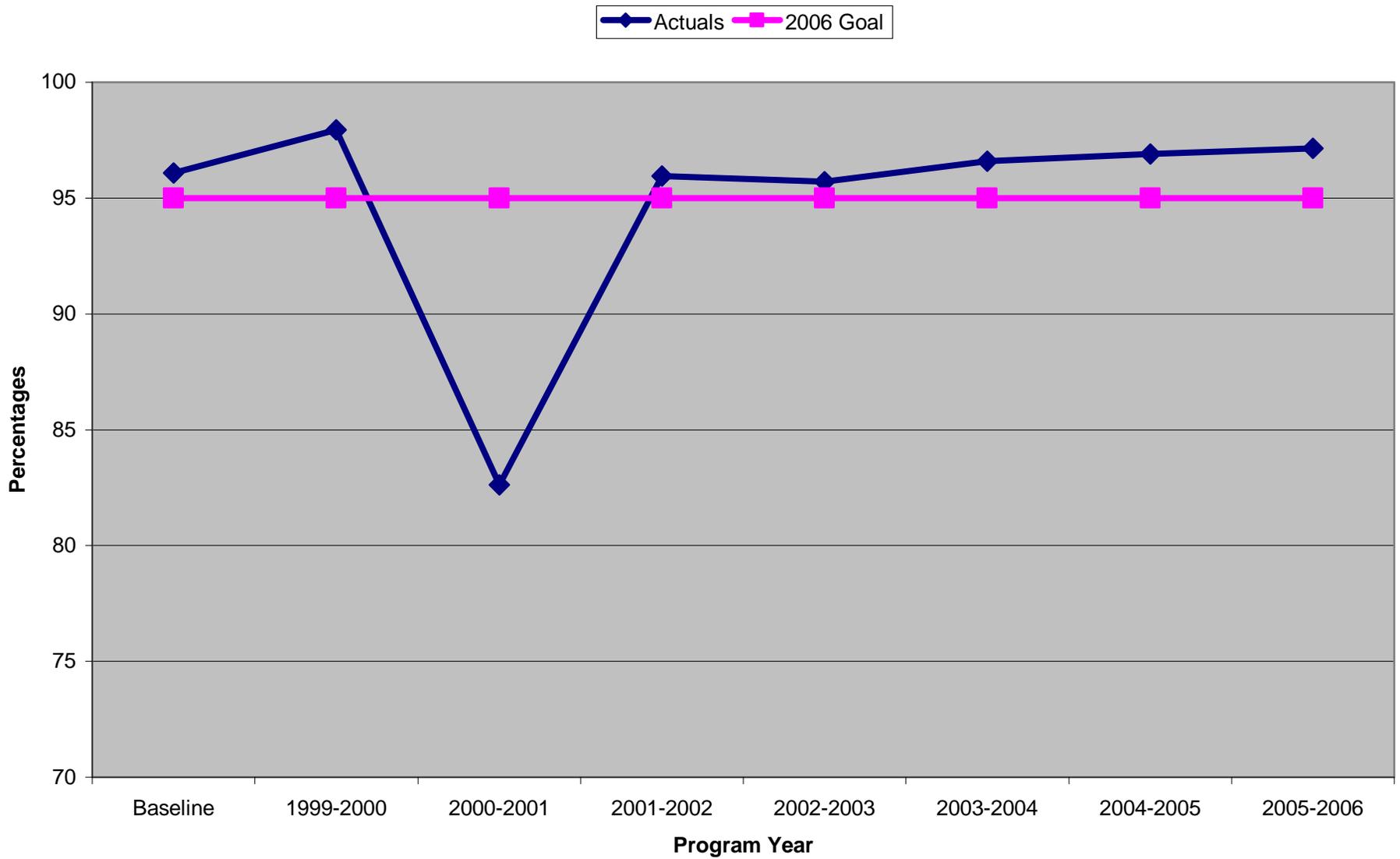
Colorado Trends: 1S1, 2S1, Compared to 2006 Goal



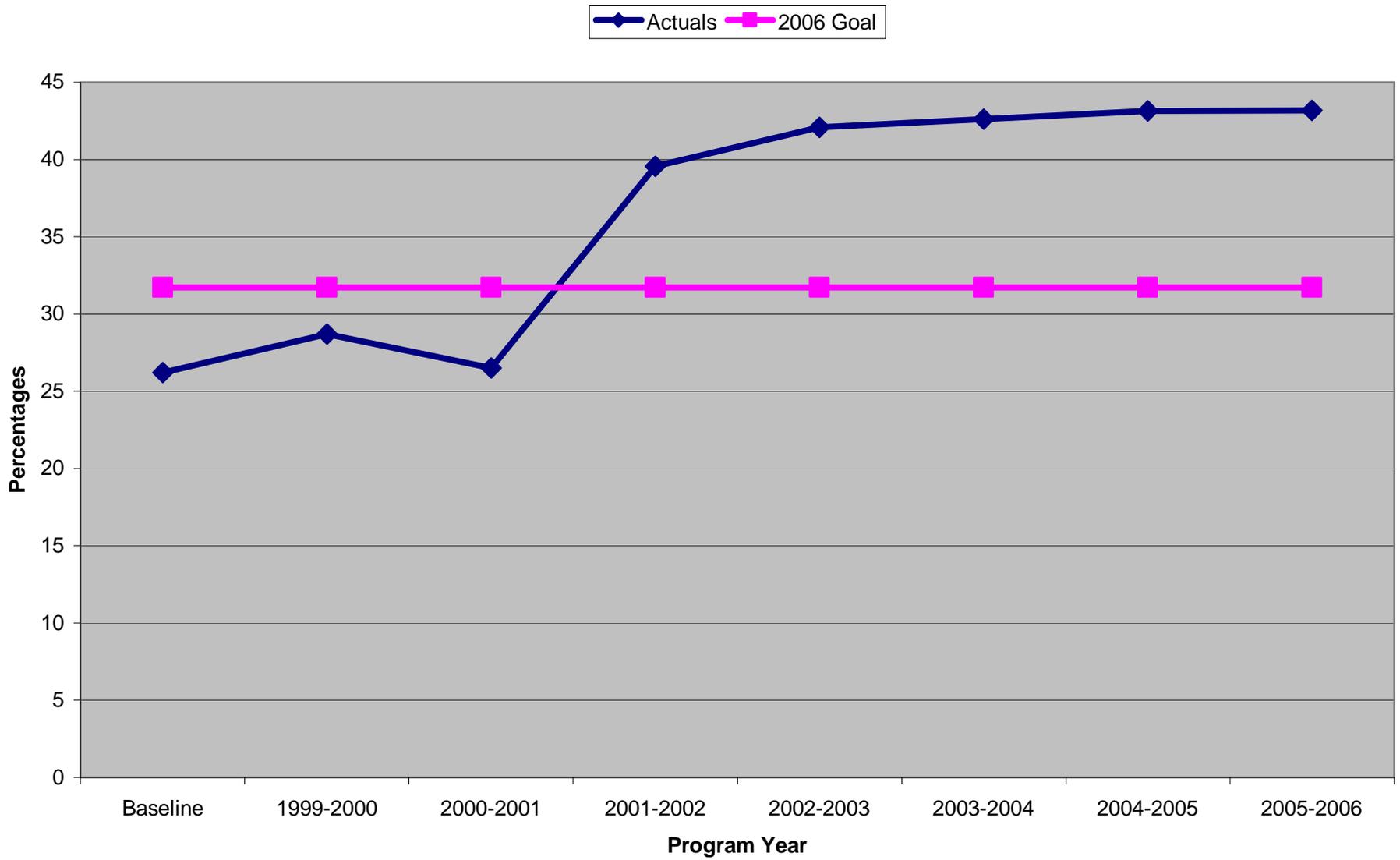
### Colorado Trends: 1S2, Compared to 2006 Goal



### Colorado Trends: 3S1, Compared to 2006 Goal



### Colorado Trends: 4S1, Compared to 2006 Goal



Colorado Trends: 4S2, Compared to 2006 Goal

