The State Board of Vocational and Technological Education in Arizona is authorized to receive and distribute Carl D. Perkins funds. The State Superintendent of Public Instruction is authorized to direct Career and Technical Education staff to carry out the functions and administration of the funds to the secondary and postsecondary eligible recipients.

During FY2008 Arizona Department of Education administered Carl D. Perkins funds to the following eligible recipients:

- 117 Secondary Local Eligible Agencies
- 1 Joint Technological Education District
- 10 Postsecondary Local Eligible Agencies
- 11 Tech Prep Consortia

Arizona uses a State-established Career and Technical Education program list for secondary and postsecondary agencies. It is driven by State labor market information and updated every two years. See Appendix A for the list of available programs during FY2008.

Implementation of State Leadership Activities

a. Required Use of Funds:

- **Conducting an assessment of the vocational and technical education programs funded under *Perkins IV*;**

During FY2008, leadership dollars were expended to provide services to all Career and Technical Education (CTE) programs and students including special populations, on several levels throughout the state. Arizona's programs are offered/developed based on high-skill, high-wage and high-demand criteria. To assess these programs and the success of students including special populations, the online reporting system for a Local Education Agency (LEA) to report performance measures to the State Education Agency (SEA) continues to be maintained and updated. CTE and LEA personnel have access to reports generated through this assessment system to assist in the evaluation and improvement of CTE programs. Local Program Improvement Plans are generated and implemented as necessary. CTE staff oversees this accountability/data quality system.

Leadership dollars were also expended to provide professional development, research, and technical assistance through the Program Assessment Review (PAR) monitoring process and other vehicles throughout the state to evaluate and improve all CTE programs as needed. The PAR document is available at http://www.ade.az.gov/cte/PerkinsAcct/PAR.pdf.

- **Developing, improving, or expanding the use of technology in career and technical education;**

State Leadership funds have been used to expand the use of technology in CTE by developing skills to be applied within the Integrated Data to Enhance Arizona's Learning (IDEAL) system in cooperation with the Arizona Department of Education. This electronic communication system allows CTE teachers to receive professional development opportunities and develop learning communities.

Perkins funds are used to develop new technological skills of all students enrolled in CTE programs. Many of the CTE programs in remote areas of Arizona use distance learning to enable the sharing of resources and to provide students with learning opportunities that are not readily available in rural communities.

CTE programs maintain and monitor and equipment list based on current business and industry standards. Expenditures are approved under Perkins Skill Attainment goal to include current state-of-the-art equipment. Professional development and training are provided for a wide variety of equipment required in CTE programs. Teacher training at the summer CTE/$ACTE_{AZ}$ Conference focuses on skills for curricular integration of the most modern, high tech and up to date equipment and software into the 21st Century workplace.

- **Offering professional development programs, including providing comprehensive professional development (including initial teacher preparation) for career and technical education teachers, faculty, administrators, and career guidance and academic counselors at the secondary and postsecondary levels;**

Comprehensive professional development (including initial teacher preparation) is being addressed by using state leadership dollars in a variety of formats, using the National Staff Development Council Standards for Staff Development as guidelines, which support our agency's professional development guidelines. The professional development activities executed with partnerships through Interagency Service Agreements with Arizona State University, Northern Arizona University and University of Arizona, have primarily addressed topics such as curriculum improvement and development, building partnerships, keeping educators current, career guidance and counseling, academic integration and expanding the use of technology. Strategies are used to provide sustainability and follow-up for teachers, administrators, and career/academic guidance counselors that are essential to promoting continued job-embedded professional development. Example of strategies include: participant engaging preparation, onsite practice and performance, evaluations and revisions. ADE and $ACTE_{AZ}$ collaborate to sponsor the CTE/$ACTE_{AZ}$ Summer Conference to support the mission of CTE in Arizona as well as provide a venue for continuous professional development topic development. The 2007 annual CTE/$ACTE_{AZ}$ Summer Conference had 1,227 registered attendees and well over 1,700 in attendance.

CTE designed three conferences specifically to provide career and academic guidance for school counselors. These included the March conference with Ray McNaulty from the International Center for Leadership in Education as keynote speaker, two summer Counselor Challenges and the annual CTE/ACTEaz Summer Conference. In February 2008 the Arizona State of Board of Education requirement that all students must have Education and Career Action Plan (ECAP). To help the Arizona school counselors implement the ECAP process requirements within their school, professional development opportunities have included information, resource building and training in implementation. Additionally, a variety of workshops were offered on the use of Arizona Career and Information System (AzCIS). Attendees have included CTE teachers, CTE local administrators/directors, school guidance counselors or career centers guidance specialists. These trainings have been extremely popular and helpful in expanding career and educational guidance for students.

- **Providing support for career and technical education programs that improve the academic and career and technical skills of students through the integration of academics with career and technical education;**

Academic standards are identified for Arizona CTE programs. The State recently adopted new mathematics standards and increased graduation requirements in math and science. As a result, CTE partnered with Arizona State University Workforce Education and Development Office to identify the new mathematics performance objectives embedded in specific CTE Programs. The analysis for relevant and rigorous college and work readiness math content will be used by districts to determine if there is significant math for the CTE course to count for a math graduation requirement. The analysis results are assisting the State in identifying the professional development needs for CTE teachers. In collaboration with the ADE Standards and Assessment Division, the Academic CTE Crosswalk Committee provides insight and direction for the analysis and implementation.

In addition, Arizona used State Leadership Funds to support five pilot sites for Advanced Placement (AP) credit for identified CTE programs. The Advanced Placement areas included AP Biology, AP Computer Science A, and AP Microeconomics. The pilot sites provided training on “lessons learned” in professional development settings.

CTE provided training to CTE staff within the Arizona Department of Education on the Lexile® system available to all CTE teachers to improve the integration of reading into CTE.

- **Providing preparation for non-traditional fields in current and emerging professions, and other activities that expose students, including special populations, to high skill, high wage occupations, except that one-day or short-term workshops or conferences are not allowable;**

During FY2008, services were provided through $60,000 of leadership funds for recruitment and retention of nontraditional (NT) students in current and emerging

professions, exposing students to high-skill, high-wage and high-demand occupations supported by the CTE programs offered in Arizona. All students, including special populations, were included in these NT activities. Special population students needing services to succeed in these programs were provided with accommodations. In Arizona, special population students are mainstreamed into CTE programs.

In order to improve the NT performance measures, Arizona CTE, in partnership with the University of Arizona and the Southwest Institute for Research on Women, offered NT services to students and educators throughout the state. These services were provided to assist secondary school instructors, counselors and CTE administrators in increasing enrollment and retention in NT, CTE classes by offering long-term career education workshops, training and online courses.

CTE programs in Arizona are developed and offered on the basis of high-skill, high-wage and high-demand criteria, so the goal of this NT project was to increase NT recruitment and retention in these programs. NT services were available for Arizona's two new and emerging programs: Engineering Sciences and Bioscience.

Approximately 6,500 participants were served in 155 workshops/courses. Of these, 5,493 (including special population students) participated in long-term training. During 2008-2009, these services will be focused specifically on the districts which did not meet/scored the lowest on the NT performance measures and will also include some postsecondary services.

- **Supporting partnerships among local educational agencies, institutions of higher education, adult education providers, and, as appropriate, other entities, such as employers, labor organizations, intermediaries, parents, and local partnerships, to enable students to achieve state academic standards, and career and technical skills, or complete career and technical programs of study;**

CTE continues to build and promote partnerships with the State's universities, community colleges, other agencies, professional associations, business and industry and foundations to build strong, relevant CTE programs and enable students to achieve the State's academic standards. Examples of CTE partnerships included:

- Arizona State University Office of Workforce Education and Development, Northern Arizona University and University of Arizona provided professional development opportunities to CTE teachers, validate program standards, and build effective program assessments.
- Community colleges throughout Arizona aligned CTE programs to build the foundation for programs of study.
- Flinn Foundation participated in the State's initiative to "build a biosciences pipeline" beginning with developing effective biosciences CTE programs in high schools.

CTE has ongoing partnerships and initiatives with numerous business and industry partners and their respective industry associations to provide opportunities for students, both secondary and postsecondary, to achieve academic standards and technical skills, completion of programs of study and internships/apprenticeships. Examples include:

- High Tech Workforce Initiative working in conjunction with Arizona's Technology, Engineering and Manufacturing industries and Maricopa County Community College District and the National Science Foundation on externships, curriculum/skills development and outreach including career awareness, exploration and preparation.
- Arizona Technology Council Board of Directors and committees. Participating on the Workforce Development and Education committees to raise student achievement at the secondary and postsecondary level, articulation agreements between secondary and postsecondary and workforce opportunities in the myriad of high tech, statewide industries including engineering, manufacturing, aerospace and robotics.
- MASH event. The first in a series of one-day events that brought together technology industry professionals statewide to brainstorm and develop initial input into the growth of IT statewide and how to develop the pipeline from elementary school through adult-postsecondary to produce the future workforce of Arizona. Priorities were established regarding connections and collaboration between education, industry and political entities/state government.
- "Dream It Do It". Arizona is one of 16 sites nationally that have been selected by the National Association of Manufacturers to make manufacturing/advanced manufacturing, robotics and engineering an "Industry of Choice" by FY2010. This ongoing campaign focuses on education, industry and state government working cohesively to produce Arizona's future workforce.
- Governor's Council on Workforce Policy involves the Arizona Departments of Education, Economic Security and Commerce working together to provide opportunities for secondary, postsecondary and adult students to access education and training opportunities in workforce development. The group also works collaboratively with the state legislature to develop statewide workforce policy.
- Arizona Hospital and Healthcare Association sets policy between healthcare entities statewide and education to produce the future healthcare workforce in Arizona, to support the HOSA student organization and to provided grants and scholarships for students in all aspects of healthcare.
- Arizona Automobile Dealers Association. This ongoing three-way collaboration between the automotive industry, state, national and CTE to support the NATEF/ AYES national automotive initiative in developing the industry's future workforce through secondary and postsecondary collaboration.

- Science Technology, Engineering and Math Center Council board/ committee positions. Created by the governor's office, the Arizona Science Foundation and private industry to develop and expand the collaboration between academic science, physics, chemistry, CTE engineering/manufacturing/ robotics programs and industry to increase the preparedness of students for high-wage, high-skill and high-demand careers in the future.

- A partnership between ADE, CTE, business and industry nationwide and Northern Arizona University's School of Hotel and Restaurant Management to develop curriculum, programs of study, articulation between secondary and postsecondary education to produce the industry's future workforce.

CTE built a working partnership with Northern Arizona University, GearUp and the Arizona Community Foundation to sponsor and fund the electronic Arizona Career Information System (AzCIS) for all Arizona students. This electronic system is used extensively across Arizona schools to help students in their career and educational planning. Counselors, CTE teachers and others use the variety of modules within the AzCIS system, in addition to many workshop opportunities. The consultant-trainer for these training opportunities is on contract with University of Oregon.

CTE has built strong internal relationships within the Arizona Department of Education to enhance student achievement.

- **Serving individuals in state institutions;**

Using the local plan/application process, Arizona distributes one percent of the State Secondary Perkins allocation to State Corrections Institutions serving youth. The Arizona Department of Juvenile Corrections works with a unique set of population-appropriate performance measures for its CTE students, while also complying with services for special populations. Those measures include equivalency proficiency credential (GED), employment, return to secondary education, or enter postsecondary education and training and are attached to funding. Evaluation criteria define outcomes for each goal in the application. Four facilities served 621 students in FY2008, of which 301 were special population students. These students participated in seven different CTE programs, as well as staff participating in professional development. Students attained 77 percent proficiency in reading scores and 76 percent in math. Of those students who were released, 196 earned GEDs, 49 received dual credit for culinary arts, postsecondary, nine students entered postsecondary, 46 re-enrolled in high school and ten were employed.

- **Providing support for programs for special populations that lead to high skill, high wage and high demand occupations;**

High-skill, high-wage and high-demand occupations are those that are supported by Arizona's CTE program list, which is determined by using Arizona labor market data reflecting those criteria. Statewide leadership dollars support these programs and students through many applications. Because Arizona special population students are mainstreamed, all students, including special populations, are afforded opportunities and support for success in these programs. Special population students who need individualized services to succeed in these programs are provided a state-mandated plan. This plan provides accommodations based on the LEA team's determination of services necessary for each student to ensure success in achieving the most rigorous outcomes possible. In districts where special populations do not appear to be making progress, state-directed objectives must be included and implemented through the district's Perkins Basic Grant application to improve attainment of those students.

Statewide leadership dollars supported numerous on-going workshops in support of special populations; in addition to NT services. Topics covered included transition, vocational rehabilitation, overcoming barriers, classroom management and effective instruction, effective use of reading coaches, and other topics which relate to all students as well as to special populations. Because special populations are mainstreamed in CTE, they have the same opportunity, including accommodations, to participate and succeed in these programs which support high-skill, high-wage and high-demand occupations.

- **Offering technical assistance for eligible recipients;**

State leadership dollars supported ongoing technical assistance involving data collection and reporting throughout the state, as is technical assistance involving guidance and counseling.

In FY2008, a team of representatives of the CTE Section/Division visited 15 LEAs who participated in Perkins funding to perform a Program Assessment Review (PAR). The LEAs were selected using criteria such as:

- A new Local Administrator/Director
- Missing or inaccurate data
- Late or incomplete reporting
- Performance Measures that did not meet the minimum level of performance
- By request

In addition to the PARs, Regional Workshops that addressed the Transition State Plan and the new Performance Measures were held in February and March of 2008 at various locations across the state. Enrollment specialists provided technical assistance on enrollment reporting.

The CTE staff provided technical assistance to CTE teachers, administrators, and other personnel through individual, small group, regional and statewide delivery strategies for the purpose of informing, updating, and addressing CTE issues. District CTE program staff provides technical assistance on specific program and Career and Technical Student Organizations (CTSO) issues.

At the annual CTE/ACTE$_{AZ}$ Summer Conference, representatives from grants management, fiscal services, accountability, and information system teams held an all day session of Online Technical Assistance. Attendees included LEA Directors and/or their data assistants and budget directors.

School counselors received onsite technical assistance for ECAP implementation from the State Supervisor for Guidance and Counselors. To help school counselors enhance their school's counseling programs, Arizona is in the process of implementing the American School Counseling (ASCA) Model throughout the State. The ASCA standards are aligned to the ECAP requirement and will help schools in their implementation of ECAPs for all students. A variety of workshops, conferences and trainings focused on ASCA standards and requirements.

b. Permissible Activities Include:

- **Improving career guidance and academic counseling programs;**

  During FY2008 counselors participated in several activities provided by CTE to help enhance their counseling skills. The workshop and training offerings were based on the "requested needs" results of the annual professional development survey. Some of these activities included:

  - PAR on-site reviews
  - Variety of conferences
  - Training workshops
  - AzCIS trainings
  - AzCIS yearly license contract

- **Establishing agreements, including articulation agreements, between secondary school and postsecondary career and technical education programs to provide postsecondary education and training opportunities for students;**

The Perkins grant recipients including secondary, postsecondary and Tech Prep Consortia have collaborated with partners in establishing articulation agreements. These agreements provide postsecondary education and training opportunities for students.

Goal 9 of the secondary grant and Goal 10 of the postsecondary grant each specifically addresses articulation. The goals state, "Link secondary and

postsecondary CTE programs including offering at least one Program of Study that may include the opportunity for secondary education students to participate in dual or concurrent enrollment programs and Tech Prep, to acquire postsecondary education credits."

Approximately 85 percent of all secondary CTE programs have been articulated to postsecondary through written and signed Curricular Flow agreements. Curricular Flow agreements are developed utilizing the Tech Prep Consortia which hold articulation activities that connect secondary and postsecondary instructors and points of contacts in sessions where curriculum is compared and coordinated in an effort to reduce duplication of course work, create a sequence of courses and reveal possible dual credit opportunities. Approximately 60 percent of the Curricular Flow Agreements also include a "for credit" element that earns the student postsecondary credit.

- **Supporting initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs;**

Activities that support initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs are mostly centered on the Arizona Transfer Articulation Support System (ATASS) established by the postsecondary institutions. Each program or department at the postsecondary level has established official committees that coordinate the articulation of credit for courses from the community college system to the university system. Each community college has representatives on each ATASS. Meetings are held twice per year for each program area. There is a formal method for submission of courses from the community college through the ATASS committee to the university for approval of transfer credit.

Arizona's Governor, Janet Napolitano, has successfully launched a number of key education initiatives including the Governor's P-20 Council in 2005. One of the Council's major goals is to improve and align education systems in Arizona. CTE State staff continues to serve on the Education/Workforce Pathways Committee and participate in expanding pathways that promote/expand awareness and opportunities for students in the educational pipeline.

- **Supporting career and technical student organizations;**

CTE supports Career and Technical Student Organizations (CTSO) including FFA, FBLA, HOSA, FCCLA, DECA, SKILLSUSA and FEA. During FY2008 CTSO participation became a required essential element for programs to participate in Perkins Funding. CTE supports activities that enhance CTSO participation including:

- Professional development activities for chapter advisors
- Curriculum integration activities
- Engagement of business and industry and postsecondary partners
- State staff CTSO activities

- **Supporting public charter schools operating career and technical education programs;**

Arizona public charter schools are eligible for the same resources and services to support CTE. During the school year FY2008, 12 charter schools participated in the basic grant offering a variety of CTE programs. Charter school administrators and staff received technical assistance and professional development opportunities to operate their CTE programs.

- **Supporting career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter;**

All CTE programs in Arizona have an option of offering Cooperative education and internship courses that offer experience and an understanding of all aspects of an industry related to the identified CTE program. State leadership dollars provide support for administrators and staff offering these courses with onsite technical assistance and current information and resources posted on our Arizona CTE website.

- **Supporting family and consumer sciences programs;**

  N/A

- **Supporting partnerships between education and business, or business intermediaries, including cooperative education and adjunct faculty arrangements at the secondary and postsecondary levels;**

  N/A

- **Supporting the improvement or development of new career and technical education courses and initiatives, including career clusters, career academies, and distance education;**

The 2008 Arizona Career and Technical Program List includes two "new and emerging" occupations for the state: Engineering Sciences and Bio-Medical Health Technologies. Arizona Career and Technical Education, in partnership with Arizona State University, business and industries in the specific occupational areas, community colleges and other stakeholders are currently identifying, validating industry based technical skill standards. CTE is also developing an end of program assessments for both Engineering Sciences and Bio-Medical Health Technologies programs.

- **Awarding incentive grants to eligible recipients for exemplary performance or for use for innovative initiatives under Sec. 135(c)(19) of *Perkins IV*;**

There are no LEAs that pool local funds as described in Sec. 135(c)(19). However, Arizona has used Reserve Funds from the funds allocated for secondary recipients to

develop innovative programs in new and emerging occupations for areas such as biosciences and engineering sciences. Four local districts received an Innovative CTE Program Grant award in FY2008. The recipients are currently demonstrating best practices that will improve performance measures and educational outcomes.

- **Providing activities to support entrepreneurship education and training;**

Arizona Career and Technical Education actively supports entrepreneurship education. Currently Entrepreneurship is a program option under the Marketing Education program. Each CTE program has at least one standard related to entrepreneurship. Additionally, Arizona's Marketing Education and Business Education teachers and students are active in promoting and participating in events such as National Entrepreneurship Week.

- **Providing career and technical education programs for adults and school dropouts to complete their secondary school education;**

  N/A

- **Providing assistance to individuals who have participated in Perkins assisted services and activities in continuing their education or training or finding appropriate jobs;**

  N/A

- **Developing valid and reliable assessments of technical skills;**

To address increased federal requirements for technical skill attainment, Arizona has created Arizona Skills Standard Commission and has implemented the Arizona Skills Standards Assessment System. CTE partnered with Arizona State University Workforce Education and Development Office and Vocational Technical Education Consortium of States (VTECS) to develop the assessment system. The assessment of technical skills is also mandated in A.R.S. 15-391. It requires that students in a Joint Technical Education Districts (JTED) are prepared to pass a certification aligned with business and industry competency.

The assessment system provides a web-based tool that allows students to take assessments quickly and easily and provide immediate feedback to teachers and administrators about the results of the assessment. The system will certify and document student skill attainment of industry validated technical knowledge and skills through online end-of-program assessments.

- **Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes;**

Enhancing the Arizona Online Internet Data Reporting System is an ongoing programming expense. Statewide Leadership funds are used for programming updates, changes and enhancements provided by the CTE programming staff and the ADE technology staff.

- **Improving the recruitment and retention of career and technical education teachers, faculty, administrators, or career guidance and academic counselors, and the transition to teaching from business and industry, including small business;**

State Leadership funds provide professional development activities created and implemented with partnerships through Interagency Service Agreements with Arizona State University, Northern Arizona University and University of Arizona with a focus on new secondary CTE teachers transitioning to teaching from business and industry. Topics include: academic integration strategies, tools for teaching with rigor and relevance, classroom management, instructional design, special populations strategies, industry updating and new teacher orientation and support. These topics are also addressed at the CTE/$ACTE_{AZ}$ Summer Conference with follow up on an individual and group basis during the following school year. Structured English Immersion (SEI-English Language Learners) for CTE instructors is sponsored through State Leadership funds for CTE teachers in and ongoing partnership with Rio Salado Community College.

- **Supporting occupational and employment information resources;**

Arizona's CTE Program List is updated every two years using the most current Arizona labor market information to reflect high-skill, high-wage and high-demand occupations. It is used by stakeholder groups in Arizona as a resource to determine CTE program offerings and by teachers and students to focus on promising career opportunities.

Progress in developing and Implementing Technical Skill Assessments

- **The program areas for which the state had technical skill assessments;**

Arizona has made substantial progress in developing technical assessments. Under Perkins III, a limited number of CTE concentrators were taking state licensing exams (i.e., health occupation areas) or industry-developed exams, but Arizona did not collect results on either type of assessment.

The assessment system provides a web-based tool that allows students to take assessments quickly and easily while providing immediate feedback to teachers and administrators regarding results of the assessments. The system will certify and document student skill attainment of industry-validated technical knowledge and skills through the online end-of-program assessments.

The Arizona Skills Standards Assessment System requires leadership at all levels. To effectively lead the system a newly created Arizona Skills Standards Commission consisting of leaders of business and industry partners will preside over the standards and assessment process. At a system user level, an Assessment Stakeholders Committee ensures the usability of the system.

The Arizona Skills Standards Commission will provide leadership for the "value added" credential issued to students successfully completing the online assessments. The Commission members have been instrumental in reviewing, revising or developing CTE program standards and assessments aligned with appropriate industry-validated requirements.

Membership of the Assessment Stakeholders Committee includes superintendents of Joint Technological Education Districts (JTEDs), public school districts and public charter school districts, local CTE administrators/directors, teacher representatives from major program areas, postsecondary occupational deans and representatives of the One-Stop system of the Workforce Investment Act (WIA).

During April and May 2008, Arizona conducted the first online assessments for 13 secondary CTE program areas. Approximately 5,000 students and 40 percent of CTE eligible recipients participated in the online assessments. The primary purpose of the pilot assessments was to test online connectivity and check test items for validity and reliability. Analysis of the results of the 13 pilot assessments led to modification of the items to improve validity and reliability. Below is a listing of the assessment areas:

CIP	**Program**
12.0500	Culinary Arts
46.0200	Carpentry Technologies Option A - Carpentry
46.0200	Carpentry Technologies Option B - Cabinetmaking
46.0400	Construction Technologies
47.0600	Automotive Technologies Option A - Automotive Technology
47.0600	Automotive Technologies Option B - Automotive Collision Repair
51.0800	Allied Health Services Option B - Laboratory Assisting
51.0800	Allied Health Services Option D - Sports Medicine & Rehabilitation Services
51.0800	Allied Health Services Option E - Medical Assisting Services
51.1600	Nursing Services
52.0200	Business Management and Administrative Services
52.0300	Accounting and Related Services
52.0800	Financial Services

Arizona is currently conducting 11 additional pilot assessments through December 19, 2008. The results will be analyzed in January 2009. These 11 programs will become end-of-program assessments in spring 2009.

CIP	Program
13.1200	Education and Training: Education Professions
15.1300	Drafting and Design Technology Option A - Architectural Drafting
15.1300	Drafting and Design Technology Option C - Electronics Drafting
15.1300	Drafting and Design Technology Option D - Mechanical Drafting
47.0600	Automotive Technologies Option D - Aircraft Mechanics
51.0900	Diagnostic and Intervention Technologies Option B- Emergency Medical Paramedics
52.1900	Design and Merchandising Option A - Fashion
52.1900	Design and Merchandising Option B - Interior
01.0100	Ag Business Management-Agriscience Option B - Plant Systems
01.0100	Ag Business Management-Agriscience Option C - Animal Systems
01.0100	Ag Business Management-Agriscience Option F - Agribusiness Systems

End-of-program assessments are also currently being conducted in 13 CTE program areas.

CIP	Program
12.0500	Culinary Arts
46.0200	Carpentry Technologies Option A - Carpentry
46.0200	Carpentry Technologies Option B - Cabinetmaking
46.0400	Construction Technologies
47.0600	Automotive Technologies Option A - Automotive Technology
47.0600	Automotive Technologies Option B - Automotive Collision Repair
51.0800	Allied Health Services Option B - Laboratory Assisting
51.0800	Allied Health Services Option D - Sports Medicine & Rehabilitation Services
51.0800	Allied Health Services Option E - Medical Assisting Services
51.1600	Nursing Services
52.0200	Business Management and Administrative Services
52.0300	Accounting and Related Services
52.0800	Financial Services

In summary, at the secondary level Arizona is developing valid and reliable assessment procedures to measure technical skill attainment. In the 2009 CAR, Arizona will report on technical skill attainment in the 24 CTE Program areas where concentrators have completed the State-designated sequence of instruction.

- **The estimated percentage of students who would be reported in the state's calculation of career and technical education concentrators who took assessments;**

Arizona will be able to provide an accurate percentage of concentrators who took assessment in the FY2009 CAR. Arizona has been aggressively encouraging districts to assess all eligible students in all 24 CTE program areas this year. Several of the programs in the above list have the largest enrollment in Arizona. The Arizona State Plan establishes that 60 percent of all eligible concentrators will participate in taking the assessment. CTE has provided extensive technical assistance to secondary CTE assessment administrators and plans to

continue to provide additional resources to emphasize the importance of assessing all eligible students. Arizona will use the assurances and goals in the Local Plan/Application to ensure compliance. CTE is expecting to exceed the 60 percent estimate.

- **The state's plan and timeframe for increasing the coverage of programs and students reported in this indicator to cover all career and technical education concentrators and all program areas in the future;**

Arizona has identified CTE programs and a timeframe for increasing the coverage of programs and students reported in this indicator to cover all eligible CTE concentrators and all program areas in the future. The following 28 CTE programs are targeted for industry-standard validation and assessment item development in school year FY2010 to report in the FY2010 CAR.

CIP	Programs and Program Options
13.1210	Early Childhood Education
15.0000	Engineering Sciences
15.1200	Information Technology - Computer Maintenance
15.1200	Information Technology - Network Technologies
15.1200	Information Technology - Software Development
15.1200	Information Technology - Web Page Development
41.0100	Bioscience - Bio-medical
41.0100	Bioscience - Bio-environmental
41.0100	Bioscience - Bio-innovations
46.0300	Electrical and Power Transmission Technologies - Residential Electrician
47.0200	Heating, Ventilation and Air Conditioning
48.0500	Precision Manufacturing – Automation/Robotics
48.0500	Precision Manufacturing - Computer Controlled Fabrication
48.0500	Precision Manufacturing - Product Layout and Development
48.0508	Welding Technologies
50.0100	Performing Arts and Entertainment Industry - Technical Theatre
50.0100	Performing Arts and Entertainment Industry - Arts Management
51.0600	Dental Assisting
51.0800	Allied Health - Pharmacy Support Services
51.0800	Allied Health - Medical Imaging Support Services
51.0900	Diagnostic and Intervention Technologies- Respiratory Therapy Technician
51.0900	Diagnostic and Intervention Technologies - Surgical Technician
51.3500	Therapeutic Massage
52.1800	Marketing, Management and Entrepreneurship - Professional Sales and Marketing
52.1800	Marketing, Management and Entrepreneurship - Entertainment Marketing
52.1800	Marketing, Management and Entrepreneurship - Entrepreneurship
52.1800	Marketing, Management and Entrepreneurship - Advertising and Public Relations

In summary, at the secondary level, Arizona plans to report technical skill proficiency for 50^+ CTE programs/options in the FY2010 CAR. We intend to implement the final 20^+ program/option assessments and report on most Arizona CTE programs in the FY2011 CAR. We will provide districts with technical assistance promoting the benefits of the Arizona Skills Standards Assessment System credential and the local districts will be held accountable for increasing the percentage of participation annually.

At the postsecondary level each of ten eligible recipients provides Arizona CTE with community college program name, assessment name, assessment type (national, state, district advisory), timing of assessment (end of course, end of program, continual), assessment agency and whether the community college receives the results from the test administrator or if the results must be student-reported.

Postsecondary institutions will receive technical assistance as needed or requested through occupational deans, Perkins administrators or staff. Such assistance may include training on the use of the Arizona Skills Standards Assessment System, use of the results to design curriculum, courses and programs, and the value of using results for program improvement activities and endeavors.

Arizona will continue to enhance connectivity between secondary CTE and postsecondary institutions. Activities include establishment of workgroups to determine current assessments used by the community colleges and the programs to which they apply. Community colleges work closely with local industry to evaluate program goals and objectives. While focused on the particular area and population served by the community college, consideration is given to broadened application of the assessments for outreach to statewide communities of learners and improvement of Arizona's workforce.

Efforts to improve reporting of CTE postsecondary technical assessment indicators include strategies such as:

- identification of assessment information from community colleges with analysis for common measures and characteristics
- focus on using similar assessments on a statewide level through diverse community groups
- providing information on progress of secondary assessments conducted through use of the Arizona Skills Standards Assessment System, state licensing exams or nationally recognized industry-developed assessment for occupational specialties
- development and implementation of industry recognized assessments which may be used statewide
- refinement of the Postsecondary Perkins IV Manual. The Manual is a postsecondary accountability guide to assist community colleges in ensuring reliable and consistent reporting of technical assessment

Implementation of State Program Improvement Plans

- **Sec. 123(a)(1) of *Perkins IV* requires each state, that fails to meet at least 90 percent of an agreed upon state adjusted level of performance for any of the core indicators of performance described in Sec. 113(b)(3) of *Perkins IV*, to develop and implement a program improvement plan, with special consideration given to performance gaps identified under Sec. 113(c)(2) of *Perkins IV*;**

Arizona has met all State Adjusted Levels of Performance. No State Program Improvement Plan is required (see Student Accountability Forms 1S1,1S2, 4S1).

Implementation of Local Program Improvement Plans

- **Sec. 123(b)(1) of *Perkins IV* requires each state to evaluate annually, using the local adjusted levels of performance described in Sec. 113(b)(4) of *Perkins IV*, the career and technical education activities of each eligible recipient receiving funds under the basic grant program (Title I of the Act). Sec. 123(b)(2) of *Perkins IV* further requires that if the state, after completing its evaluation, determines that an eligible recipient failed to meet at least 90 percent of an agreed upon local adjusted level of performance for any of the core indicators of performance described in Sec. 113(b)(4) of *Perkins IV*, the eligible recipient shall develop and implement a program improvement plan with special consideration given to performance gaps identified under Sec. 113(b)(4)(C)(ii)(II) of *Perkins IV;***

After review of accountability data, all LEAs in Arizona met (or attained within 90 percent of SALP) each of the three required performance measures for FY2008 (see Student Accountability Forms 1S1,1S2, 4S1). For future reference, in order to create a Local Improvement Plan as needed, a district would amend the Local Perkins Application to include at least one measurable objective (and expenditure, as appropriate) to improve attainment. Any objective(s) would be developed and implemented in consultation with the appropriate agencies/individuals, depending on the specific need for improvement. Progress will be monitored by those agencies/individuals. Each LEA agrees to an assurance in the Local Plan/Application to "independently evaluate and continuously improve performance" of CTE programs/students.

Past data has indicated relatively low performance on the NT measures. Using Leadership Funds, specific strategies for providing additional services to improve attainment are being targeted to identify districts.

Tech Prep Grant Award Information

- **Sec. 205 of *Perkins IV* requires each eligible agency that receives a tech prep allotment to annually prepare and submit to the Secretary a report on the effectiveness of the tech prep programs that were assisted, including a description of how grants were awarded in the state. Please provide a description of how grants were awarded during the program year, including a listing of the consortia that were funded and their funding amounts;**

Tech Prep programs are carried out through a consortium composed of secondary and postsecondary participants. A consortium is identified as a single college/local education agency, or county educational agency (in partnership-having a single name), with one of the members that will act as a fiscal agent and establish a central governance structure as described in the Tech Prep governance structure included in the Tech Prep application. Institutions that desire to participate in a consortium will be required to execute an Intergovernmental Agreement, or similar document, that is approved annually by the consortium. Each consortium will be required to have articulation agreements to receive funding.

Arizona Tech Prep consortia are funded on a formula basis. There are currently eleven consortia. Recommendations regarding this process were established from input gathered during statewide CTE dialog meetings in addition to input collected from the State Plan Work Group. Funding was available to each of the established consortia members. The formula factors were:

- A minimum of $120,000 per consortia is funded in order to give special consideration to rural areas ($1,320,000).
- Consortia must demonstrate adequate performance and data levels in order to receive funding above the base level of $120,000. Data and performance levels included articulations, sites, and student populations. Three large consortia qualified for additional $670,000 based on:
  - Secondary Tech Prep enrollment by consortium.
  - Secondary Tech Prep concentrators that have transitioned to postsecondary education.
  - Postsecondary Tech Prep enrollment as determined from the past five years of secondary Tech Prep concentrator graduates.
  - Total number of secondary and postsecondary performance measures achieved.
- Two additional awards totaling of $225,638 were made to two consortia for statewide articulation work based on the need of all the consortia, and for expanding articulations in a school district with special needs. These awards were funded utilizing funds carried over from previous years.

Components within the grants are also evaluated according to the State priorities. The state priority grant components included the following based on needs as determined annually by Tech Prep state staff and consortia directors:

- Articulation
- Programs of Study
- Professional Development
- Technology needs
- Partnerships
- Work-Based Learning opportunities
- Assessments
- Communication/Education/Recruitment
- Access and equality for Special Populations/Equity/Nontraditional Careers
- Counseling/Guidance
- Evaluation

In addition to the current components, there are specific state goals within most components targeting counselors, low performance, academic attainment, career pathways, and business partnerships. Tech Prep state staff may identify policy barriers affecting Tech Prep, programs of study, articulations, dual/concurrent enrollment, and other priorities as determined during the plan and seek viable solutions.

Tech Prep Local Funding levels

The following is a list of the consortia the State funded for FY2008 and the funding level for each.

Grantee	**Allocation**
Yuma/Western Arizona Consortium	$123,383.00
Cochise Consortium	$151,200.00
Coconino Consortium	$131,400.00
Eastern Arizona Consortium	$120,000.00
Eastern Maricopa Consortium	$380,058.00
Mohave Consortium	$122,400.00
Northeastern Arizona Consortium	$120,000.00
Western Maricopa Consortium	$315,000.00
Pima/Santa Cruz Consortium	$308,194.00
Pinal Consortium	$144,000.00
Yavapai Consortium	$300,000.00
	$2,215,638.00

Appendix A
FY 2008 Program List With Options

CIP	2008 CTE Program List
01.0100	**Agricultural Business Management - Agriscience** Food Products and Processing Systems Plant Systems Animal Systems Natural Renewable Resources Systems Power, Structural and Technical Systems Agribusiness Systems Environmental Service Systems
10.0200	**Audiovisual Technology** Electronic Journalism Interactive Digital Media Audio/Radio Technologies
10.0300	**Graphic Communications** Graphic Arts Graphic Design Photo Imaging
12.0400	**Cosmetology**
12.0500	**Culinary Arts**
13.1200	**Education and Training: Education Professions**
13.1210	**Education and Training: Early Childhood Education**
15.0000	**Engineering Sciences**
15.0300	**Electronic Technology**
15.0600	**Industrial Manufacturing** Metals Manufacturing Plastics Manufacturing Production Technology
15.1200	**Information Technology** Computer Maintenance Network Technology Software Development Web Page Development
15.1300	**Drafting and Design Technology** Architectural Drafting Civil Drafting Electronic Drafting Mechanical Drafting
43.0100	**Law, Public Safety and Security**
43.0200	**Fire Science**
46.0200	**Carpentry Technologies** Carpentry Cabinetmaking
46.0300	**Electrical and Power Transmission Technology** Residential Electrician Industrial Electrician
46.0400	**Construction Technologies**

CIP	2008 CTE Program List
46.0500	**Plumbing**
47.0100	**Telecommunications Maintenance and Installers**
47.0200	**Heating/Air Conditioning Maintenance**
47.0600	**Automotive Technologies** Automotive Technology Automotive Collision Repair Diesel Engine Repair Aircraft Mechanics
48.0500	**Welding Technology**
49.0200	**Heavy Equipment Operations**
50.0100	**Performing Arts**
51.0600	**Dental Assisting**
51.0800	**Allied Health Services** Pharmacy Support Services Laboratory Assisting Medical Imaging Support Services Sports Medicine and Rehabilitation Services Medical Assisting Services
51.0900	**Diagnostic and Intervention Technologies** Respiratory Therapy Technician Emergency Medical Paramedics Surgical Technician
51.1000	**Biomedical Health Technologies**
51.1500	**Mental and Social Health Services**
51.1600	**Nursing Services**
51.3500	**Therapeutic Massage**
52.0200	**Business Management and Administrative Services**
52.0300	**Accounting and Related Services**
52.0800	**Financial Services**
52.0900	**Hospitality Management**
52.1800	**Marketing, Management and Entrepreneurship** Professional Sales and Marketing E-Commerce Entertainment Marketing Entrepreneurship Advertising
52.1900	**Design and Merchandising** Fashion Design and Merchandising Interior Design and Merchandising