

**Massachusetts Narrative for Consolidated Annual Report
Federal Program Year 2006-2007
Massachusetts Program Year 2007-2008**

I. Implementation of State Leadership Activities

a. Required Uses of Funds

• **Conducting an assessment of the career and technical education programs funded under Perkins IV.** Assessment of career and technical education programs is done by the Massachusetts Department of Elementary and Secondary Education to ensure that Perkins funds are appropriately used by eligible recipients to improve career and technical education programs. A vehicle for assessment of secondary-level career and technical education programs is the Massachusetts Department of Elementary and Secondary Education Coordinated Program Review (CPR). All CPRs include desk reviews and onsite reviews in order to cover requirements in areas including career and technical education, special education, civil rights, and the Elementary and Secondary Education Act as amended by the No Child Left Behind Act. The Coordinated Program Review Procedures School District Information Package Career/Vocational Technical Education at <http://www.doe.mass.edu/pqa/review/cpr/instrument/cvte.doc> contains the review criteria for secondary-level career and technical education.

Depending upon the size of the eligible recipient and the number of areas to be reviewed, a team of two to eight staff conduct the CPR over a two to five day period. Each secondary-level eligible recipient is scheduled to receive a CPR every six years with a mid-cycle follow-up review three years after the CPR.

The CPR onsite team interviews administrative staff, instructional staff, support staff, and others, including members of program advisory committees for career and technical education. Student records for students enrolled in career and technical education, special education, and English language learner education are reviewed to determine whether procedural and programmatic requirements have been implemented.

As part of the CPR, the Massachusetts Department of Elementary and Secondary Education surveys parents/guardians of students with disabilities and parents of English learners. Parents/guardians of students with disabilities whose files are selected for the review, as well as the parents/guardians of an equal number of other students with disabilities, are sent a survey that solicits information regarding their experiences with the eligible recipient's implementation of special education programs, related services, and procedural requirements. Parents/guardians of English language learners whose files are selected for review are sent a survey of their experiences with the eligible recipient's implementation of the English language learner education program and related procedural requirements

The CPR onsite team visits classrooms and other facilities, such as career and technical education shops that are used in the delivery of programs and services to determine levels of compliance with program requirements and to deliver technical assistance.

Postsecondary eligible recipients (public two-year colleges and a small number of school districts) with career and technical education programs are reviewed during stand-alone Perkins Act reviews apart from the CPRs because the CPR was designed for school districts. The Massachusetts Department of Elementary and Secondary Education has built upon the components of the CPR and conducts reviews for the Perkins Act at the postsecondary level using specific criteria for determining compliance with Perkins IV requirements and to deliver technical assistance regarding Perkins.

In addition, the Massachusetts Department of Elementary and Secondary Education assesses compliance by secondary and postsecondary eligible recipients with the Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color National Origin, Sex and Handicap in Vocational Education Programs - 34 CFR, Part 100, Appendix B) as required by the Methods of Administration (MOA) with the United States Department of Education-Office for Civil Rights.

Eligible recipients receive quality technical assistance during onsite reviews. For example, an occupational safety and health specialist provides expert technical assistance regarding the requirements of the United States Occupational Safety and Health Administration Requirements (OSHA) while onsite. The Massachusetts Department of Elementary and Secondary Education requires that eligible recipient staff members, including teachers, shadow the specialist and take notes on occupational safety and health findings. This method has been praised by eligible recipients due to the knowledge and skills that are acquired and then transferred to students as part of teaching all aspects of the industry. In addition, eligible recipients receive quality technical assistance during onsite reviews from the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit staff as well as others under contract with the Massachusetts Department of Elementary and Secondary Education such as certified public accountants. Technical assistance is sought by eligible recipients on a number of subjects during the extensive interview, observation, and documentation review process.

The onsite review also provides the opportunity for the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit staff, occupational safety and health specialists, and certified public accountants to gather information on best practices for dissemination. Information is also collected on topics that may result in the Massachusetts Department of Elementary and Secondary Education providing professional development on the topics statewide.

• Developing, improving, or expanding the use of technology in career and technical education. In 2007-2008, the Massachusetts Department of Elementary and Secondary Education continued to develop, improve, and expand the use of technology in career and technical education programs primarily through a standardized strand for technological knowledge and skills in each of the 43 Massachusetts Vocational Technical Education Frameworks. The frameworks can be found at <http://www.doe.mass.edu/cte/frameworks>. The learning standards within this strand outline rigorous expectations for the acquisition of technological knowledge and skills by students.

Massachusetts Department of Elementary and Secondary Education staff conducted desk reviews of eligible recipient proposed 2007-2008 Perkins IV budgets to ensure that funds, as appropriate, were dedicated to promote student acquisition of technological knowledge

and skills. In addition, during onsite reviews, Department staff sought evidence of the development, improvement and expanded use of technology guided by the following criteria: (1) *Programs are structured so that students acquire technological (computer, etc.) knowledge and skills* and (2) *Methods of measuring the acquisition by students of technological knowledge and skills are appropriate.*

In order to provide guidance to schools in the use of technology, the Massachusetts Board of Education approved *Massachusetts Technology Literacy Standards and Expectations*, updating the State's 2001 instructional technology standards. The standards were reviewed and revised in collaboration with the Massachusetts Technology Leadership Council (MTLC) educators, and business partners. To further support the use of technology for teaching and learning, the Department continued to provide schools with access to a set of web-based tools for communication, collaboration, and curriculum planning through MassONE, which is Massachusetts' set of web-based tools for communication, collaboration, and curriculum planning, which are designed to support standards-based teaching and learning. Through a partnership with Online Professional Development (POPD), the Department offered courses in 2007-2008 using MassONE along with the open source Moodle course management system.

• 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. In 2007- 2008, the Massachusetts Department of Elementary and Secondary Education -Career/Vocational Technical Education unit collaborated with a number of professional associations and educational partners to provide high quality and sustainable professional development for secondary and postsecondary educators in career and technical education programs.

A review of Massachusetts' core indicator performance data for program year 2006-2007 resulted in the planning, delivery, and support of professional development efforts in 2007-2008 to improve the participation and completion rates of students enrolled in career and technical education programs that are nontraditional for their gender, in particular the marked disparity between males and females. Requests for technical assistance by eligible recipients further illustrated the need to focus on core indicators for nontraditional by gender. Technical assistance began at three regional conferences with the goal of assisting both the staff and students in attendance in creating supportive learning environments wherein students enrolled in career and technical education programs would not be limited by traditional gender roles. The three main objectives in support of that goal were to: (1) support educators in assisting students to make career decisions not limited by gender, sexual orientation, or perceived sexual orientation, (2) promote an understanding that gender should not limit career choices and career success, and to (3) equip schools with ideas and access to resources to improve the school climate for gay, lesbian, bisexual, and transgender students. Attendees were also provided with technical assistance (onsite, virtual, telephone, as applicable) in order to implement strategies and utilize resources gained in these sessions.

Similarly, based on analyses of the 2006-2007 core indicator data, three statewide conferences were held on educational/career planning with the goal of supporting students' future orientation as well as college and career readiness. 325 participants

attended from 65 school districts and eight colleges. Follow-up technical assistance for sustainability included participation in either a web-based seminar on best practices, a school counseling leadership group, or customized technical assistance based upon the needs of the school districts.

In addition, to support improvement in core indicator outcomes, statewide professional development was planned and delivered by the Southern Regional Education Board. Eighty-four teachers and administrators from fourteen school districts participated in this professional development titled “Getting to Proficiency by Designing Policies and Procedures for Revising Student Work.”

In 2007-2008, the Massachusetts Vocational Technical Teacher Competency Testing Program, funded in part with Perkins Leadership funds, administered written tests to 426 candidates and performance tests to 253 candidates. Twenty-four test development workshops were held to align the written tests with the Massachusetts Vocational Technical Education Frameworks and to review test design procedures. Activities and revisions focused upon the alignment of written and performance tests with the Massachusetts Vocational Technical Education Frameworks. The Massachusetts Department of Elementary and Secondary Education provided oversight and collaborated with the testing contractor and advisors on program operations. The Test Appeals Subcommittee reviewed challenges to the written and performance tests. Alignment and revisions were completed on written and performance tests in the following areas: Agricultural Mechanics, Culinary Arts, Major Appliance Repair, Painting & Design Technologies, Power Equipment Technology, Radio & Television Broadcasting, and Sheet Metal Working while alignment revisions were made in: Biotechnology, Diesel Technology, Early Education & Care, Engineering Technology, Environmental Science & Technology, Facilities Management, Information Support Services & Networking, Machine Tool Technology, Marine Service Technology, Marketing, Office Technology, Programming & Web Development, Telecommunications & Fiber Optics.

Staff from the Massachusetts Department of Elementary and Secondary Education - Career/Vocational Technical Education unit evaluated eligible recipients’ Perkins IV Five-Year Plans for Career and Technical Education to ensure that activities were planned and funds were dedicated to professional development in order to improve career and technical education programs and outcomes for students based on core indicator performance.

• **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.** Support for integration of academic and technical knowledge and skills continued to be a major goal in 2007-2008. Each of the Massachusetts Vocational Technical Education Framework provides a crosswalk of the relevant academic learning standards from the Massachusetts Curriculum Frameworks with the knowledge and skills for each technical program. The frameworks can be found at <http://www.doe.mass.edu/cte/frameworks>. Consequently, each Massachusetts Vocational Technical Education Framework includes learning standards in English language arts, mathematics, and science and technology/engineering as appropriate to the technical program curriculum.

Staff from the Massachusetts Department of Elementary and Secondary Education - Career and Technical Education unit conducted desk reviews of the districts' Perkins IV Five-year Plans and budgets to ensure that activities and expenditures were planned to promote academic and technical integration. In addition, during onsite reviews, staff sought evidence of integration guided by the following criteria: *"Programs are structured so that students acquire academic (including embedded academic) knowledge and skills."*

In 2007-2008, Massachusetts continued its involvement with the Southern Regional Education Board's *High Schools That Work* initiative whose primary goal is to promote and support rigorous academic and technical achievement by students enrolled in career and technical education programs. Sixteen schools participated in professional development, networking meetings and conducted data analyses to assist them in implementing the ten key practices of *High Schools That Work*. Two of these key practices: "encouraging the application of academic content and skills to real world problems and projects" and "emphasis on the development of higher-level mathematics, science, literacy and problem-solving skills needed in the workplace and in further education" were the focus of local professional development efforts. Teams of educators from each site also met to share strategies and promising practices in raising student achievement and integrating academic and technical education. The strategies that were shared included using renewable energy concepts across the curriculum to integrate technical education with science, mathematics, and English language arts; adding additional Project Lead the Way integrated pre-engineering courses; and using community service learning to integrate social studies with technical and academic knowledge and skills. Eleven schools also administered the *High Schools That Work* assessment, student survey and teacher survey in January 2008. Results of this assessment and the surveys will be used to identify classroom practices that have led to higher student achievement and to identify areas for further improvement.

• Providing preparation for nontraditional 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. In addition to the policies, initiatives and activities detailed in this narrative, many eligible recipients have adopted Massachusetts' recommended program of study known as MassCore, which is designed to ensure that Massachusetts high school students are ready for college and success in high skill, high wage occupations. In addition, the Massachusetts School Counselors Association's adoption of the *Massachusetts Career Development Benchmarks* has resulted in widespread implementation of standards-based academic and career advising by Massachusetts school counselors to support students' college readiness. System-supported career planning, guided by program of study grids, informed by PSAT and early Accuplacer testing, and promoting students' pursuit of articulated credit is also preparing Massachusetts students enrolled in career and technical education programs for postsecondary education and career success in high skill, high wage occupations.

During onsite reviews in 2007-2008, Massachusetts Department of Elementary and Secondary Education staff sought evidence of assistance with educational and career planning as guided by the following criteria:

- *MCAS and/or another appropriate academic assessment and career interest assessment results are used in the development of each student's individual Career Plan beginning during the early part of each student's first year in a career/vocational technical education program.*
- *A Career Plan for each student enrolled in a career/vocational technical education programs is developed with the involvement of parents/guardians.*
- *Linkages between secondary and postsecondary education including registered apprenticeship programs exist and are accessed by students.*
- *Services exist that support each student (1) with a disability (2) from an economically disadvantaged family and (3) with limited English proficiency in the completion of career/vocational technical education programs, and placement in employment and/or further education and registered apprenticeship programs.*

In 2007-2008, 1,857 secondary students in 34 vocational technical high schools, 4 vocational agricultural technical high schools, 44 comprehensive high schools, and one secondary educational collaborative gained valuable workplace experience through participation in the cooperative education components of their career and technical education programs. Cooperative education affords students the opportunity to develop technical knowledge and skills beyond what they might learn in their technical programs under the guidance and supervision of their teachers and employer-mentors.

In addition, partnerships with Massachusetts' 16 Workforce Investment Boards provided students with exposure to high skill, high wage occupations through structured internship opportunities in their career and technical education programs. As a complement to the Massachusetts Vocational Technical Education Frameworks, the *Massachusetts Work-Based Learning Plan* was used to structure student learning and productivity in these internships.

In 2007-2008, fourteen high schools participated in the *Life Science Career Development Initiative* supported through a partnership between the Massachusetts Biotech Foundation, the Massachusetts Department of Elementary and Secondary Education, the Massachusetts School Counselor's Association, the University of Massachusetts, and local Workforce Investment Boards. Emphasis was placed on integrated development of the academic/technical, personal/social and workplace-readiness knowledge and skills required for success in careers in the life sciences. In addition, 1,800 students and 375 adults participated in the sixth annual *Construction Career Days* at the New England Laborers Training Academy in Hopkinton. The goal of this experiential event was to support the career development of students enrolled in programs in the construction cluster through meaningful interactions with representatives from industry and higher education.

- **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. In 2007-2008, the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit continued to work collaboratively with numerous partners outside of the Massachusetts Department of Elementary and Secondary Education including the Massachusetts Department of Higher Education, Massachusetts Community Colleges Executive Office, Massachusetts Executive Office of Labor and Workforce Development, Massachusetts Division of Apprentice Training, Massachusetts Association of Vocational Administrators, Massachusetts Vocational Association, Massachusetts Association of School Counselors and numerous business and labor partners at the state, regional, and local levels.

At the state level, communication and collaboration between the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education and Adult Education units and the Massachusetts Workforce Development Office Massachusetts was developed and strengthened through collaboration on the WIA incentive grant. Consequently, improved communication and collaboration also occurred between regional and local partners implementing the state's *Pathways to Success by 21 (P21) Project* to serve older at-risk youth. (More information can be found at www.P21.us.)

The Massachusetts Department of Elementary and Secondary Education also collaborated with the Massachusetts Departments of Occupational Safety and Public Health to conduct occupational safety and health inspection of career and technical education facilities (shops) and to conduct investigations of accidents in career and technical education programs. In addition, both agencies assisted the Department in providing quality technical assistance and professional development to educators in career and technical education programs.

• **Serving individuals in State institutions.** In 2007-2008, the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit continued to collaborate with the Massachusetts Department of Correction to advance career and technical education programming in correctional institutions. Programs served approximately 1000 student-inmates in both male and female facilities. As in prior years, a number of correctional institutions contracted with regional vocational technical school districts to offer student -inmates a number of career and technical education programs.

In 2007-2008, programs in nine (9) institutions were assisted. All student-inmates were involved in reintegration programs at their individual facilities. As part of those programs, a vocational assessment (SAGE) and in some cases, the Myers Brigg were made available to student-inmates preparing for reintegration into the community as well as those requiring assistance with general career and educational planning.

• **Providing support for programs for special populations that lead to high skill, high wage, and high demand occupations.** The Massachusetts Department of Elementary and Secondary Education is committed to ensuring equal access to Massachusetts' career and technical education programs and activities for all special populations i.e., individuals with disabilities, individuals who are economically disadvantaged, individuals

with limited English proficiency, individuals preparing for careers that would be nontraditional for their gender, single parents, and displaced homemakers. Thus, in 2007-2008, the Department strengthened its monitoring of school districts that are selective in terms of admission to career and technical education through its coordinated program review process as guided by the following criteria:

- *Individuals are appropriately admitted to the district/school and/or to career/vocational technical education programs within the district/school.*
- *All individuals including those who are members of special populations are provided with equal access to career/vocational technical education programs, services and activities and are not discriminated against on the basis of their status as members of special populations or race, color, gender, religion, national origin, English language proficiency, disability, and sexual orientation.*

Department staff monitor for compliance with applicable state and federal laws and regulations, including those under the federal Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color National Origin, Sex and Handicap in Vocational Education Programs. In 2007-2008, enrollment and participation data were carefully reviewed and appropriate interviews were conducted to ensure compliance. If a district was found to be out of compliance, findings were documented with the expectation that districts take corrective action to remedy unexplained disproportionate enrollments of special populations.

In 2007-2008, eligible recipients were required to document the involvement of staff members who work with special populations in the development, implementation, and evaluation of the Perkins IV Five-Year Local Plan for Career and Technical Education. A key component of the Five-Year Plan required a detailed response to a request for planned strategies and activities: (1) how members of each special population would be provided with equal access to activities assisted under the Perkins IV (2) how the district would ensure that these students would not be discriminated against on the basis of their status as members of special populations, and (3) how each special population would be provided with services designed to enable them to meet or exceed each Perkins IV core indicator of performance.

Additionally, requests for proposals from tech-prep consortia and career and technical education student organizations included new accountability measures designed to ensure that programs, services, and activities to ensure continual improvements in program outcomes and services specific to the needs of special populations.

In 2007-2008, the Massachusetts Department of Elementary and Secondary Education-Office of Special Education Planning and Policy funded a staff position in the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit in order to ensure equal access and improved results for students with disabilities. The staff person participated in the Secondary Transition Workgroup that is focused on the transition-planning goal of the Massachusetts State Performance Plan for Special Education and consequently provided information, guidance and technical assistance to eligible recipients as well as to Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical

Education unit staff. This staff person also assisted in the review and response to complaints filed by parents/guardians, applicants, and others regarding career and technical education. As a result, concerns regarding special populations were resolved in a timely and appropriate manner.

• **Offering technical assistance for eligible recipients.** In 2007-2008, nine Massachusetts Department of Elementary and Secondary Education staff including three supervisors provided ongoing technical assistance to eligible recipients including tech-prep consortia through onsite visits, phone conferencing, and email.

Technical assistance safety reviews were also performed in 2007-2008 through an interagency service agreement with the Massachusetts Division of Occupational Safety. A Division of Occupational Safety specialist provided expert onsite technical assistance regarding the requirements of the United States Occupational Safety and Health Administration (OSHA) Requirements in 16 school districts in 2007-2008. Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit staff also worked with eligible recipients to address safety findings.

In June 2008, at the annual *Connecting for Success Conference* sponsored by the Massachusetts Association of Vocational Administrators, staff from the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit provided technical assistance to several districts at once in technical assistance seminars. One seminar, conducted by the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit engaged attendees in analyzing data as well as potential barriers and promising strategies to improve enrollment and program completion rates for students pursuing careers that are nontraditional for their gender. Three other technical assistance seminars focused on competency tracking, college readiness, and equity and access in the admissions process.

Training sessions were also held at several vocational technical high schools on the use of the Vocational Technical Competency Tracking System (VTCTS), a web-based tool that allows educators to track students' progress toward attaining the technical competencies within the Massachusetts Vocational Technical Education Frameworks.

b. Permissible Activities

• **Improving career guidance and academic counseling programs.** In 2007, Massachusetts Governor Deval Patrick announced the “[Readiness Project](#),” a 10-year strategic plan for the future of education in Massachusetts. The goal of this project is to create a comprehensive, child-centered public education system that begins before kindergarten, continues through grade 12 and higher education, and extends through workforce development and lifelong learning to ensure that each individual has the opportunity to achieve his or her full potential. A major objective of the Readiness Project is to “provide an education system that enables every student to transition successfully from high school to higher education, to the work force ready to succeed and to be a productive, engaged, and contributing citizen.”

While there is no state requirement that Massachusetts schools provide career guidance or academic counseling, the student learning standards adopted by the Massachusetts School Counselors Association in their *Massachusetts Model for Comprehensive School Counseling Programs* are the *Massachusetts' Career Development Benchmarks*. The *Massachusetts Model*, implemented in nearly every high school in Massachusetts, is based upon a broad conception of career development that defines career as “the sequence of occupations and other life roles that combine to express one’s commitment to work, including work-related roles such as student.” In 2007-2008, in order to support *Model* implementation and school counseling program improvement, the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit launched an initiative to institutionalize the development of Career Plans for each student enrolled in a career and technical education program. During onsite reviews in 2007-2008, Department staff sought evidence of career guidance and academic counseling guided by specific monitoring criteria.

• **Establishing agreements, including articulation agreements, between secondary school and postsecondary career and technical education programs to provide postsecondary education and training opportunities for students.** In 2007-2008, Massachusetts elected to retain Perkins IV Title II Tech-Prep Education separate from Title 1. As part of the restructuring of the tech-prep initiative, Massachusetts renamed the initiative to Secondary Postsecondary Career/Vocational Technical Education Linkage Initiative in order to convey the meaning of tech-prep. Massachusetts has thirteen (13) consortia formed through established agreements with regional school districts and public two-year colleges. In each case, a community college serves as the lead agency. Although the initiative was restructured in 2007-2008, the secondary schools and postsecondary institutions within each consortium agreed to maintain the major priorities and activities established in program years 2006-2007. Thus in 2007-2008, the Secondary Postsecondary Career/Vocational Technical Education Linkage Consortia were committed to:

Continued development and updating of articulation agreements with both postsecondary institutions and registered apprenticeship programs. Consortia took the lead in ensuring that the secondary and postsecondary institutions within each consortium update their current articulation agreements annually and develop new ones. As outlined in the Department’s *Perkins IV Tech- Prep Transition 2007-2008 Fund Code 468 Request For Proposals (RFP)*, Consortia were required to “ensure the development and implementation of systems to verify that articulation agreements were current, promoted and of benefit to students” and to “provide information regarding registered apprenticeships to high school guidance counselors, students, parents/guardians.” Staff from the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit monitored Consortia efforts with respect to these priorities during Coordinated Program Reviews.

Continued development of Career Plans for all career and technical education students. As required by the *Perkins IV Tech-Prep Transition 2007-2008 Fund Code 468 RFP*, Consortia were required to “ensure that each student enrolled in career and technical education have a Career Plan which includes information on articulation agreements and if necessary, registered apprenticeship programs that are linked to the students career path. The role of the Consortia in the development and updating of

Career Plans was also monitored by staff in the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit during Coordinated Program Reviews.

Continued development of Program of Study Grids. Another required priority in *Perkins IV Tech-Prep Transition 2007-2008 Fund Code 468 RFP* was that Consortia ensure that “appropriate high school and public two-year college staff collaborate in the development of Program of Study Grids, and that the Grids be used by counselors, teachers, and parent/guardians in assisting students with the development of Career Plans.” The Program of Study Grids were designed for counselors and teachers to use when assisting students with their career planning and in highlighting the time and money saving value of pursuing articulated credit; thus, this was a major focus for the Consortia this past year.

Continued early college placement testing e.g., Accuplacer. As outlined in the *Perkins IV Tech-Prep Transition 2007-2008 Fund Code 468 RFP*, Consortia were also required to ensure that “each student enrolled in a career and technical education program be provided with opportunities to participate in early college placement testing (CPT)” as well as ensuring that, as necessary, remediation services based on the results of the test were provided.

• Supporting initiatives to facilitate the transition of subbaccalaureate career and technical education students into baccalaureate programs. During 2007-2008, Consortia began to play a major role in supporting initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs. Again, as an *RFP* requirement, Consortia were required to delineate plans to ensure that onsite college days were provided to career and technical education students and that during such events, students and parents/guardians would be provided with information on: (1) pre-requisites for matriculation into specific programs, (2) the benefits and processes for awarding articulated credit, (3) the Massachusetts state college and state university policy regarding admission of students enrolled in state- approved vocational technical education programs, and (4) the benefits of the Commonwealth Transfer Compact and Joint Admissions program.

In addition, the Massachusetts Board of Higher Education established a Commonwealth Transfer Advisory Group in 2007-2008 to assess current transfer barriers and to make recommendations on improving the effectiveness of transfer across the Commonwealth’s public higher education system. To that end, the group evaluated the Commonwealth’s current policies and practices; diagnosed barriers associated with transfer; compared and assessed policies and practices enacted in other states; recommended policies and practices to remedy transfer barriers; and identified costs associated with proposed solutions. The final report from the advisory group is available at: <http://www.mass.edu/library/Reports/CTAGReport.pdf>. The Massachusetts Department of Elementary and Secondary Education anticipates that the work of this group will positively affect tech-prep performance indicator 1PTP4, which is the number and percent of postsecondary education tech-prep students who complete a baccalaureate degree program within the normal time for completion of such program.

• **Supporting career and technical student organizations.** In 2007-2008, grants were awarded with Perkins Leadership funds through Request for Proposals (RFP) to support the following career and technical education student organizations: Business Professionals of America (BPA), Distributive Education Clubs of America (DECA), Family, Career, and Community Leaders of America (FCCLA), Massachusetts FFA, and SkillsUSA. The following highlights from 2007-2008 are representative of Massachusetts' career and technical student organization activities designed to increase the participation of students who are members of special populations and enhance instruction in employability, leadership, and communication skills.

• **Supporting public charter schools operating career and technical education programs.** Massachusetts does not have any public charter schools operating career and technical education 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.** The teaching and learning of all aspects of an industry in each career and technical education program in Massachusetts are supported by the Massachusetts Vocational Technical Education Frameworks. These frameworks are designed and written in order to develop students' career cluster knowledge and skills by providing instruction that is broader, more durable, and transferable. Thus, each of the forty-three (43) Massachusetts Vocational Technical Education Frameworks includes six strands representative of aspects of industries: occupational safety, technical, embedded academic, technological, management and entrepreneurship, and employability knowledge and skills. The frameworks can be found at <http://www.doe.mass.edu/cte/frameworks>.

• **Supporting family and consumer science programs.** Massachusetts supported the Family, Career, and Community Leaders of America (FCCLA) career and technical student organization in 2007-2008, however, membership and activity declined during 2007-2008. Massachusetts did not fund this organization for 2008-2009.

• **Supporting partnerships between education and business or business intermediaries, including cooperative education and adjunct faculty arrangements at the secondary and postsecondary levels.** Many career and technical education program in Massachusetts that are assisted with Perkins funds have Program Advisory Committees. The committees consist of representatives of local business and industry related to the program, organized labor, postsecondary institutions, parents/guardians, students, and representatives from registered apprenticeship programs. Program Advisory Committees advise, assist, and support educators in order to improve planning, operation and evaluation in its program area. Such advice is based on adequate and timely information as to workforce and job development demands or job market trends, technological developments, training alternatives and other factors affecting the quality of the program. Program Advisory Committees meet at least twice per year.

In addition, community colleges in Massachusetts have pioneered an innovative, statewide workforce training resource for business and industry called [MASS*NET](#). Community colleges are expanding their network of business partnerships to provide

customized training, consulting, and skills upgrading for employees at companies throughout the state. Massachusetts community colleges train new employees but also work with companies to develop programs that upgrade the skills of their current workforce.

In 2007-2008, as part of the Massachusetts Department of Elementary and Secondary Education's coordinated program review of school districts, each career and technical education program's cooperative education component was reviewed for compliance with applicable state and federal laws and regulations. At the same time, technical assistance regarding cooperative education was provided. When necessary, corrective action plans were developed by the districts and subsequent implementation of those plans was monitored by the Department.

Also in this past year, the Chapter 74 Manual for Vocational Technical Cooperative Education, available at <http://www.doe.mass.edu/cte/programs/coop-ed/manual.doc>, was updated and, more importantly, widely utilized by Massachusetts' cooperative education coordinators and teachers. This manual contains guidelines, forms, assessment instruments, and procedures for designing and implementing the cooperative education component of a career and technical education program. A review of monitoring reports in 2007-2008 illustrated reductions in the number of findings that suggested an increased awareness of cooperative education laws, regulations, and guidelines.

Finally, in collaboration with state youth-serving agencies and the Pathways to Success by 21 (P21) initiative, the Massachusetts Department of Elementary and Secondary Education sponsored an inter-agency High School Graduation Rate Summit on March 5, 2007. The goals of the Graduation Rate Summit were to: 1) acknowledge that the graduation rate is an issue for all of Massachusetts and that the solutions include collaboration with state partners, not just schools; 2) showcase replicable practices from the organizations, partnerships, and schools that are doing an impressive job to assist students in staying in school; and 3) provide an opportunity for structured inter-agency regional discussions on improving the number of students who graduate from high school.

• Supporting the improvement or development of new career and technical education courses and initiatives, including career clusters, career academies, and distance education. Career and technical education in Massachusetts is currently organized around ten occupational clusters (Agriculture and Natural Resources; Arts and Communications Services; Business and Consumer Services; Construction; Education; Health Services; Hospitality and Tourism; Information Technology; Manufacturing, Engineering & Technology; Transportation.) Career and technical education programs in Massachusetts are guided by the Massachusetts Vocational Technical Education Frameworks. These frameworks have been developed to include career cluster knowledge and skills in order to provide instruction in broader, more durable and transferable knowledge and skills. The Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit used Perkins reserve funds in 2007-08 to help school districts with high numbers and concentrations of career and technical education students obtain modern equipment and materials so they could update existing programs to align with the Massachusetts Vocational Technical Education Frameworks. Another Perkins-funded grant provided funding for a consortium

of vocational technical schools, with the assistance of postsecondary and business representatives, to develop a new Massachusetts Vocational Technical Education Framework and a Massachusetts Program of Study Grid for criminal justice in the proposed Law and Public Safety Occupational Cluster. During school year 2008-09, another consortium is developing a Massachusetts Vocational Technical Education Frameworks for Skilled Construction Laboring within the Construction Occupational Cluster.

Staff from the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit provided technical assistance to school districts as they developed new career and technical education programs to assure that the programs met the ten approval criteria of the state's Vocational Technical Education Regulations including alignment with the Massachusetts Vocational Technical Education Frameworks. New Environmental Science & Technology, Information Support Services & Networking, Radio & Television Broadcasting, and Early Education & Care programs were approved during 2007-2008.

- **Awarding incentive grants to eligible recipients for exemplary performance or for use for innovative initiatives under section 135(c) (19) of Perkins IV.** Massachusetts did not award any incentive grants with Perkins funds during 2007-2008.

- **Providing activities to support entrepreneurship education and training.** Support for entrepreneurship education and training is a major teaching and learning goal within each of Massachusetts Vocational Technical Education Frameworks as illustrated in the common strand for management and entrepreneurship. For example, learning standards specific to entrepreneurship require Massachusetts' students enrolled in career and technical education programs to "Analyze basic business practices required to start and run a company/organization" and "Apply legal requirements and ethical considerations to business practice and decisions."

In 2007-2008, several school districts were able to leverage funds acquired from *the National Foundation for Teaching Entrepreneurship* that provides entrepreneurship programs to youth in low-income communities, to enhance their instruction of the management and entrepreneurship strand. This funding allowed for field trips, guest speakers, and teacher training.

- **Providing career and technical education programs for adults and school dropouts to complete their secondary school education.** Massachusetts did not use Perkins funds to providing career and technical education programs for adults and school dropouts during 2007-2008.

- **Providing assistance to individuals who have participated in Perkins-assisted services and activities in continuing their education or training or finding appropriate jobs.** Many Massachusetts' eligible recipients with Perkins Local Plans used Perkins funds to provide assistance to individuals who have participated in Perkins-assisted services and activities in continuing their education or training or finding appropriate jobs.

• **Developing valid and reliable assessments of technical skills.** In 2007-2008, the Massachusetts Department of Elementary and Secondary Education continued the development of the student assessment system for the award of the Massachusetts Certificate of Occupational Proficiency as described in detail in the Massachusetts Perkins IV Five-Year Plan for Career and Technical Education.

• **Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes.** The Massachusetts Department of Elementary and Secondary Education further refined its data collection tools and processes in 2007-2008 to ensure that data submitted by school districts with career and technical education program were valid. Revisions were also made to the postsecondary data collection process to align with the Perkins IV core indicators and the tech-prep performance indicators.

In 2007-2008, the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit's data specialist developed a new online career and technical education reports application. The career and technical education reports application replaces outdated reports that were created in Microsoft Access or were not available at all. The reports application is available to authorized users through the Massachusetts Department of Elementary and Secondary Education Security Portal. The application provides reports that allow school districts to view district level core indicator data in order to plan improvements and negotiate core indicator performance levels. The application also includes other reports at the program level based on data the districts submit through Massachusetts Student Information Management System (SIMS) and the career and technical education graduate follow-up system.

During 2007-2008, the Massachusetts Department of Elementary and Secondary Education-Career/Vocational Technical Education unit also began analysis and design of a web-based application to replace the current career and technical education graduate follow-up system, which is an Access database. The new application would be an online collection, available to authorized users through the Massachusetts Department of Elementary and Secondary Education Security Portal. The proposed application would provide better data validation, resulting in more information that is accurate.

The Massachusetts Department of Elementary and Secondary Education is also working to implement an Educational Data Warehouse and Reporting System. The long-term goal of this project is to provide a standardized and user-friendly system for reporting and analyzing educational data for all school districts. In addition, the Department's Education Personnel Information Management System (EPIMS) is completing its first year of statewide data collection from all public school districts. EPIMS has enabled the Department to meet federal and state reporting requirements, perform greatly needed analysis on the state's educator workforce, evaluate current education practices and programs, and assist districts with their recruiting efforts.

Finally, Massachusetts received a grant from the National Governor's Association as part of the Association's high school redesign initiative. Using the grant, the Massachusetts Department of Elementary and Secondary Education and the Massachusetts Department of Higher Education created a high school to college database that provides for sharing certain data between the Massachusetts Department of Elementary and Secondary

Education and the Massachusetts Department of Higher Education. Findings from the efforts were included in the “Massachusetts School-to-College Report High School Class of 2005” which is available at <http://www.doe.mass.edu/research/reports/research.html>.

• **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.**

Both the Massachusetts Department of Elementary and Secondary Education and leadership within the field recognize the need to improve the recruitment and retention of teachers in career and technical education; thus, the Department’s Career and Technical Education unit worked closely with the Massachusetts Association of Vocational Administrators (MAVA) in 2007-2008 to identify promising practices. Both the Department and MAVA recognize that a key component of improved recruitment efforts is to improve the overall image of career and technical education, which was bolstered significantly in 2007-2008 by students’ performance data. In addition, through the Perkins IV planning process there has been an increased emphasis on recruitment from underrepresented groups and the documentation of strategies such as utilizing current teaching staff as recruiters. MAVA’s strategic planning committee on recruitment and retention of teachers also funded a position in 2007-2008 to oversee the field’s recruitment efforts.

In 2007-2008, the *Educator Licensure and Recruitment System (ELAR)* was fully operational. This online system allows 24-hour access to individuals seeking initial licensure, license renewal, and/or job and resume posting. The system also allows school districts to update staff information online, facilitating the Department’s ability to monitor licensure status and ensure that teachers are appropriately licensed.

The Department’s *MassONE* is a resource for new teachers that offers access to curricula, lesson plans, and important information. Professional organizations use *MassONE* to create online groups for courses, workshops, or collaborative projects as well. Through *MassONE*, teachers and administrators participated in discussion boards, created and shared resources, and offered collegial guidance and support.

• **Supporting occupational and employment information resources.** Massachusetts did not use Perkins funds to support occupational and employment information resources on the state level during 2007-2008. However, Many Massachusetts’ eligible recipients with Perkins Local Plans used Perkins funds to provide assistance to individuals who have participated in Perkins-assisted services and activities in continuing their education or training or finding appropriate jobs.

2. **Progress in Developing and Implementing Technical Skills Assessments**

In 2007-2008, the Massachusetts Department of Elementary and Secondary Education continued the development of the student assessment system for the award of the Massachusetts Certificate of Occupational Proficiency as described in detail in the Massachusetts Perkins IV Five-Year Plan for Career and Technical Education.

In 2007-2008, training sessions were held throughout the state on the use of the Vocational Technical Competency Tracking System (VTCTS).

3. Implementation of State Program Improvement Plans

As the table below illustrates, Massachusetts has met or exceeded all of the Perkins IV core indicator negotiated performance levels for “all students”; however, Massachusetts did not meet the performance goals for every special population. The table below provides an overview of the achievement gaps alongside the actions steps that Massachusetts will take and the units that will be responsible in 2008-2009 in order to address these gaps.

| Core Indicators | | State met/exceeded 90% for all students | State Performance of Special Populations below 90% | Action Steps to be Taken (i.e., programs and initiatives) | Departments Responsible | Timeline |
|-----------------|---|---|--|---|--|----------|
| 1S1 | Attainment of Academic Skills – Reading/Language Arts | Yes 54.12% | American Indian (30.77%) | EPP ¹ ; MassCore ² ; Goals 2008-10 ³ ; CPR’s ⁴ and Civil Rights monitoring; Title I | CVTE, Nutrition, Health & Safety Services | Ongoing |
| | | | Hispanic (37.97%) | EPP, CPR’s ⁴ and Civil Rights monitoring; targeted professional development in SEI | CVTE, Office for Language Acquisition | Ongoing |
| | | | Disability Status (20.75%) | EPP ¹ ; MassCore ² ; Goals 2008-10 ³ ; CPR’s ⁴ and Civil Rights monitoring | CVTE, Secondary Education Services, PQA; Office of Special Education | Ongoing |
| | | | Limited English Proficient (7.47%) | EPP, CPR ⁴ and Civil Rights monitoring; targeted professional development in SEI | CVTE in collaboration w/ Office for Language Acquisition | Ongoing |
| 1S2 | Attainment of Academic Skills – Mathematics | Yes 55.23% | Disability Status (25.65%) | Same as above | CVTE, Secondary Education Services, PQA; Office of Special Education | Ongoing |
| | | | Single Parents (33.68%) | EPP ¹ ; MassCore ² ; Goals 2008-10 ³ ; CPR’s ⁴ and Civil Rights monitoring; targeted professional development | CVTE, Nutrition, Health & Safety Services | Ongoing |
| | | | Limited English Proficient (25.41%) | Same as above | CVTE, Office for Language Acquisition | Ongoing |
| 3S1 | School Completion | Yes 94.13 % | American Indian (78.05%) | Same as above | CVTE, Nutrition, Health & Safety Services | Ongoing |
| | | | Single Parents (78.79%) | Same as above | CVTE, Nutrition, Health & Safety Services | Ongoing |
| | | | Limited English Proficient (75.65%) | Same as above | CVTE, Office for Language Acquisition | Ongoing |
| 4S1 | Student Graduation Rates | Yes 86.81% | Single Parents (64.23%) | Same as above | CVTE, Nutrition, Health & Safety Services | Ongoing |
| | | | Limited English Proficient (73.21%) | Same as above | CVTE, Office for Language Acquisition | Ongoing |

¹ **Educational Proficiency Plan (EPP)** established to ensure that students who score below the *Proficiency* standard on the grade 10 MCAS tests receive the additional rigorous coursework and academic help they need in grades 11 and 12 that will prepare them for college and a career. For more information, visit <http://www.doe.mass.edu/hsreform/epp/>

² **MassCore** recommended program of study that Massachusetts high school students need in order to be better prepared for college and a career maintaining. For more information, visit <http://www.doe.mass.edu/hsreform/masscore/>

³ **State Board and Commissioner’s Working Goals and Priorities, 2008-2010** - Educator Development; Curriculum and Instruction; Accountability Redesign; Supports for Students and Families: State Leadership and Operations

⁴ the CVTE unit conducts regular **Coordinated Program Reviews (CPR’s)** to ensure that career/vocational and technical education programs and activities are implemented in compliance with criteria pertaining to the Carl D. Perkins Vocational and Technical Education Act and in monitoring of unexplained disproportionate enrollments of special populations and protected groups (such as racial and ethnic minorities)

4. Implementation of Local Program Improvement Plans

Massachusetts' plans for program improvement in 2008-2009 began in 2007-2008 with in depth planning for the collection, analysis and dissemination of Perkins IV core indicator data to be followed by a standardized negotiation and improvement planning process. Districts that have not met 90% of the adjusted level for at least one population in at least one core indicator are required to submit a Perkins IV Improvement Plan to improve outcomes. For more detailed information on Massachusetts' plans to implement local program improvement plans, see the three (3) Massachusetts Perkins IV Accountability Workbooks at <http://www.doe.mass.edu/cte/perkins>.

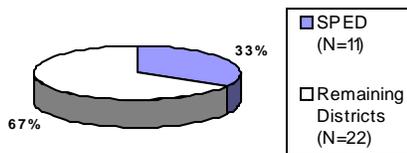
Thirty-three (33) of the ninety-five (95) districts that have Perkins IV Local Plans did not reach 90% of the state performance goal for "all students" in at least one core indicator. Seventy-two (72) did not reach 90% of the state's performance goals for at least one special population in at least one core indicator. At the very same time as this report is being written, these school districts have reviewed these data and are in the process of developing their plans to improve performance outcomes by improving the design and delivery of their career and technical education programs as well as activities and services to be implemented to support student achievement with respect to the specific core indicator outcomes.

With only one year of data for the Perkins IV core indicators, it is too soon to note trends as requested; however, as the tables and graphs below depict, there are a number of patterns and observations that have emerged with respect to core indicators and special populations. Consequently, as indicated in a number of earlier sections, action steps such as targeted professional development and monitoring, technical assistance and support for student support services are being planned to improve outcomes.

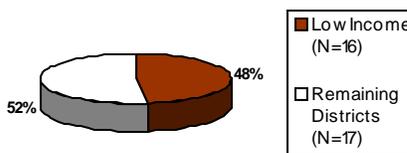
| District | % Low Income | % SPED | Missed 1S1 | Missed 1S2 | Missed 6S1 | Missed 6S2 |
|----------------------------|----------------|-------------|----------------|------------|----------------|------------|
| School 1 | 20.5 | 12.9 | | | X | X |
| School 2 | 71.4 | 20.1 | X | | | |
| School 3 | 24.4 | 18.3 | | | X | |
| School 4 | 66.5 | 17.4 | | X | | |
| School 5 | 59.7 | 19.4 | | | | |
| School 6 | 26.2 | 21.0 | | | X | X |
| School 7 | 76.7 | 22.6 | X | X | | |
| School 8 | 7.0 | 12.4 | | | X | |
| School 9 | 18.0 | 17.4 | | | X | |
| School 10 | 75.4 | 16.9 | X | | | |
| School 11 | 27.0 | 19.2 | X | | | X |
| School 12 | 19.9 | 15.4 | | | | X |
| School 13 | 6.9 | 18.8 | | | | X |
| School 14 | 43.5 | 16.8 | | | | |
| School 15 | 21.7 | 16.9 | | | X | |
| School 16 | 37.3 | 16.8 | | | | X |
| School 17 | 43.1 | 20.9 | | | | |
| School 18 | 78.5 | 23.2 | X | X | | |
| School 19 | 37.0 | 22.5 | | | X | X |
| School 20 | 39.2 | 17.7 | | X | X | |
| School 21 | 18.6 | 17.3 | | | X | X |
| School 22 | 32.5 | 39.5 | X | | | |
| School 23 | 22.0 | 17.5 | | X | | |
| School 24 | 7.2 | 15.5 | | | | X |
| School 25 | 26.1 | 16.2 | | | X | |
| School 26 | 7.7 | 17.7 | | | X | |
| School 27 | 9.6 | 14.6 | | | X | X |
| School 28 | 9.9 | 14.4 | | | | X |
| School 29 | 72.6 | 19.5 | X | X | | |
| School 30 | 44.0 | 39.7 | X | X | X | |
| School 31 | 41.0 | 26.6 | X | | | |
| School 32 | 35.1 | 37.2 | X | | | |
| School 33 | 43.8 | 23.1 | X | | | |
| Total Districts: 33 | 16 | 11 | 11 | 7 | 13 | 11 |
| | Both: 9 | | Both: 4 | | Both: 5 | |
| State | 29.5 | 16.9 | | | | |
| Exceeded by 20% | 36 | 20 | | | | |

Summary of Performance for the 33 Districts that Did Not Meet for “All Students” in at Least One Core Indicator Disaggregated by Notable Special Population Disparities.

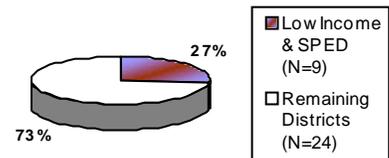
% of 33 districts that did not "meet" the performance goal for "all students" in at least one core indicator and that exceed the state average (29.5%) for **special education** by 20% or more.



% of 33 districts that did not "meet" the performance goal for "all students" in at least one core indicator and that exceed the state average (29.5%) for **low income** by 20% or more.

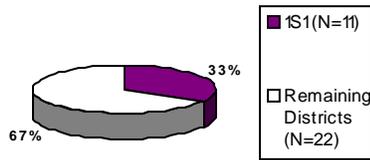


% of 33 districts that did not "meet" the performance goal for "all students" in at least one core indicator and that exceed the state average (29.5%) for **special education** and the state average (29.5%) for **low income** by 20% or more.

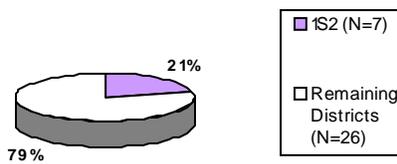


Summary of Performance for the 33 Districts that Did Not Meet For “All students” in at Least One Core Indicator Disaggregated by Notable Core Indicator Differences

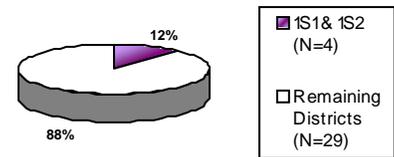
% of 33 districts that did not "meet" the performance goal for "all students" in **Core Indicator 1S1**.



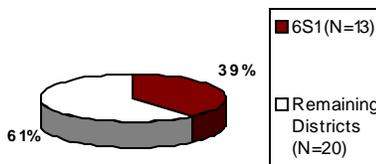
% of 33 districts that did not "meet" the performance goal for "all students" in **Core Indicator 1S2**.



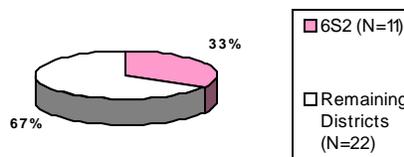
% of districts that did not "meet" the performance goal for "all students" in **Core Indicators 1S1 and 1S2**.



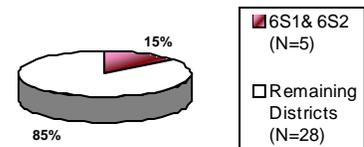
% of 33 districts that did not "meet" the performance goal for "all students" in **Core Indicator 6S1**.



% of 33 districts that did not "meet" the performance goal for "all students" in **Core Indicator 6S2**.



% of 33 districts that did not "meet" the performance goal for "all students" in **Core Indicators 6S1 and 6S2**.



5. Tech Prep Grant Award Information

In 2007-2008, grants were awarded to consortia through a Request for Proposals (RFP) competitive process. The RFP's were: (1) Perkins IV Tech-Prep Transition at <http://finance1.doe.mass.edu/Grants/grants08/rfp/468.html> and (2) Perkins IV Tech-Prep Transition Round Two at <http://finance1.doe.mass.edu/Grants/grants08/rfp/468B.html>. The grants that were awarded from the two RFP's were as follows:

- Berkshire Tech-Prep Consortium - \$102,451
- South Coast - Cape Cod Tech-Prep Consortium - \$200,613
- Metro Boston Tech-Prep Consortium - \$101,225
- North Central Tech-Prep Consortium - \$160,000
- Upper Pioneer Valley Tech-Prep Consortium - \$80,500
- Hampden-Hampshire Tech-Prep Consortium - \$174,612
- Merrimack Valley Tech-Prep Consortium - \$201,000
- North Shore Tech-Prep Consortium - \$113,500
- Southeastern Tech-Prep Consortium - \$166,995
- Metro West Tech-Prep Consortium - \$100,000
- Worcester Tech-Prep Consortium - \$160,500

Massachusetts submitted a one-year transition plan and thus was not required to negotiate performance levels with tech-prep consortia for the first program year for the indicators of performance under Section 203 of Title II.