

# Massachusetts Narrative for Consolidated Annual Report Program Year 2010-2011

## 1. Implementation of State Leadership Activities

### a. Required Use of Funds

#### ▪ Conducting an assessment of the career and technical education programs funded under Perkins IV

Each year, the Massachusetts Department of Elementary and Secondary Education's Office for Career/Vocational Technical Education (OCVTE) assesses career and technical education programs funded under Perkins IV through formal analyses of program enrollment and outcome data as well as onsite monitoring of a select number of public school districts, public two-year colleges and correctional institutions. The OCVTE, in collaboration with the offices for Program Quality Assurance, English Language Acquisition, and Audit & Compliance participates in monitoring of school districts that are recipients of Perkins funds. In 2010-2011 seven (7) districts were monitored. (The monitoring schedule can be found at <http://www.doe.mass.edu/pqa/review/cpr/6yrcycle.html>.) The review instrument used by the OCVTE for the assessment of the career and technical education programs, found in the Coordinated Program Review Procedures School District Information for Package Career/Vocational Technical Education at <http://www.doe.mass.edu/pqa/review/cpr/instrument/cvte.doc> includes: *Assessment of Students; Student Identification and Program Placement; Parent and Community Involvement; Curriculum and Instruction; Student Support Services; Faculty, Staff and Administration; School and Work-Based Facilities and Equipment; Program Evaluation, and Recordkeeping and Fund Use.*

The monitoring of public two-year colleges and correctional institutions who are recipients of Perkins funds is conducted separately by staff from the Office for Career/Vocational Technical Education. In 2010-2011 the OCVTE conducted civil rights monitoring at three (3) community colleges using 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. Two correctional institutions were monitored using the "Correctional Institution Onsite Review Criteria & Monitoring Instrument" which is a modified version of the instrument used for the colleges.

In addition, staff from the Office for Career/Vocational Technical Education completed desk reviews of the required documentation submitted in preparation for the onsite reviews and provided quality technical assistance prior to, during, and after monitoring.

#### ▪ Developing, improving, or expanding the use of technology in career and technical education

In 2010-2011, school districts with career/vocational technical education programs continued to develop, improve, and expand the use of technology through implementation of the Massachusetts Vocational Technical Education Frameworks (VTEFs). The sixth standardized strand of each of the 45 frameworks is entitled *Technological Knowledge and Skills*. This strand outlines specific learning objectives and competencies for computer applications; concepts underlying computer hardware and software; responsible use of technology including ethics and safety issues in using electronic media; and the use of technology for research, problem solving, and communication. OCVTE staff conducted desk reviews of budgets Perkins IV allocation grantees to ensure that funds are used by eligible recipients to develop, improve, or expand the application of technology in career and technical education programs.

During onsite monitoring, OCVTE staff look for evidence of the teaching and learning of Strand 6 in order to determine compliance with the Perkins IV requirement of the "development, improvement, and expansion of technology." Two monitoring criteria are used in this aspect of the review: (1) *Are programs structured so that students acquire technological (computer, etc.) knowledge and skills?* (2) *Are the methods of measuring the acquisition by students of technological knowledge and skills appropriate?* If a district is found to be out of compliance, the Department makes a finding and provides technical assistance to the district in the development of its corrective action plan and subsequent progress reports.

In 2010-2011, twenty-two school districts with career and technical education programs (31% of all school districts) utilized the Massachusetts Vocational Technical Competency Tracking System (VTCTS) that is designed to be used by teachers in career/vocational technical education programs for tracking students' progress in acquiring the knowledge and skills in the Massachusetts Vocational Technical Education Frameworks. Training sessions for educators were held throughout the year on an as needed basis. During the 2010-2011 school year, a total of 10,245 log-ins took place. In addition, 28 districts have signed on to implement an improved competency tracking system for vocational technical students as part of Massachusetts' plan for Race to the Top. These districts have nominated 22 educators to serve on an Advisory Committee to work on improvements to the system. The committee members include technical teachers, administrators and technology directors from across the state. The Advisory Committee met three times to review systems and develop a list of desired features and functionality in an improved system.

In 2010-2011, Massachusetts' career and technical education programs continue to expand their curricula to include green

technologies. Through the development and use of solar learning labs, on-site wind turbines and state-of-the-art energy efficiency equipment, students are adding “green” skills to their tool belts. Several schools are championing training for educators to develop more green technology programs supported by the Massachusetts Clean Energy Center and EnSAVE (Energy Solutions Accentuating Vocational Education) through grants designed to help teachers learn clean energy skills in building efficiency, solar photovoltaics and solar thermal systems, which can be incorporated into the curriculum. A consortium of vocational technical schools developed curricula and compiled resources which they made available to all schools on CDs and DVDs. Consortia of vocational technical high schools and community colleges also purchased equipment for solar site design and energy auditing which can be shared among members.

▪ **Professional development programs**

*Initial Teacher Preparation-* Specific college level courses are required for the Professional Vocational Technical Teacher license. The Massachusetts Vocational Technical Education Regulations require a total of 39 college degree credits comprised of 21 credits (seven three-credit professional education courses) and 18 credits in academic core subjects in English, mathematics and science. UMASS Boston, Fitchburg State College, and Westfield State College offer the following professional education courses.

<b><u>Seven Professional Education Courses Required</u></b>
<u>Seminar for the Beginning Vocational Technical Education Teacher</u>
<u>Managing Student Behavior in a Healthy and Safe Environment</u>
<u>Teaching Methods for Vocational Technical Education - Instructional Strategies</u>
<u>Addressing the Needs of Students with Disabilities in Vocational Technical Education</u>
<u>Teaching Methods for Vocational Technical Education - Educating and Assessing the Vocational Technical Education Learner</u>
<u>Developing and Implementing a Standards-Based Curriculum in Vocational Technical Education</u>
<u>Teaching Methods for Vocational Technical Education – Using Research-based Practices to Develop Effective Instructional Strategies</u>

Two new performance exams required for teacher licensure were also developed in 2010-2011 for teachers of telecommunications-fiber optics and construction craft laborers. Performance exams in the following program areas were also aligned, validated, updated, and administered for Automotive Technology, Computer Programming & Web Development, Cosmetology, Culinary Arts, Design & Visual Communications, Early Education & Care, Environmental Science & Technology, Graphic Communications, Health Assisting, and Medical Assisting.

In 2010-2011, under the Massachusetts Vocational Technical Teacher Testing Program, there were eight administrations of written examinations and three administrations of performance examinations in multiple content areas. That year, a total of 599 written and/or performance examinations were taken with 177 candidates qualified for Massachusetts Vocational Technical Teacher Licensure by passing both examinations. In FY 11 there was an increase in the passing rates for candidates participating in both written and performance exams: The FY11 passing rate for candidates participating in the written exam was 64% and 80% for the performance exam (it was 58% and 77% respectively in FY10). Test development and revisions continued in 2010-2011 with changes to reflect current technology as well as additional test forms.

During 2010-2011, the Department of Elementary and Secondary Education continued to collaborate with a number of professional associations and other partners to provide high quality and sustainable professional development for both secondary and postsecondary educators in career/vocational technical education programs:

*Special Education Leadership Institutes* In January 2011, as a result of analyses of both Perkins data and compliance monitoring review findings and in response to requests from LEA’s, the Office for Career/Vocational Technical Education (OCVTE) began planning and collaborating with the Office for Special Education Planning & Policy (OSEPP) to develop a Special Education Leadership Institute to build systems of support in assisting students with disabilities enrolled in career and technical education programs. Traditionally, special education directors attend these intensive professional development institutes sponsored by OSEPP but FY11 was the first year that an institute specifically addressed issues relevant to the directors from the 35 regional and agricultural vocational technical high schools. All districts were invited to apply and 6 schools registered.

Each school is required to send a team of four (4) staff to five (5) full day sessions in the fall-winter of 2011-12. Each team must include the superintendent (opening day session only), the special education director, academic coordinator and vocational technical coordinator. During the institutes, each team will develop a project specifically to support outcomes for students with disabilities in career and technical education in addition to receiving relevant professional development planned and delivered by OCVTE, OSEPP and staff from WestEd Learning Innovations. In the spring of 2012, institute staff will also conduct on-site observations where they will provide technical assistance and conclude with a final summative evaluation of all participants to identify successes and challenges to inform planning for similar collaborative professional development in the future.

*High Schools that Work (HSTW)* Two professional development events were sponsored in 2010-2011. The first was “Using Data to Set Priorities for Teaching and Learning,” held on November 3, 2010 and the second was “Getting to Proficiency by Engaging Students in Learning” held May 10, 2011. The first workshop helped HSTW member districts analyze district HSTW data with the goal of informing teaching strategies to address achievement gaps while the goal of the second was to improve student engagement in academic courses. Attendees at both sessions gave favorable reviews of the training and received materials to follow up on the sessions at their local districts.

*Perkins IV Leadership Academies* -- The Department of Elementary and Secondary Education once again used Perkins funds to support professional development provided in partnership with school districts with career/vocational technical education programs and the statewide career/vocational technical education leadership organization (MA Association of Vocational Administrators). The academies are designed to provide high-quality, intensive, and focused professional development for aspiring leaders in career/vocational technical education. The intended outcome of these academies is initial Vocational Technical Administrator licensure for academy attendees thus creating a leadership pipeline in career/vocational technical education. In 2010 -2011, 50 educators participated but at this juncture the number earning licensure has not been verified.

*Connecting for Success Conference* – In 2010-2011, this two-day statewide conference co-sponsored by the Massachusetts Association of Vocational Administrators (MAVA) and the Massachusetts Vocational Association (MVA) once again highlighted best practices and innovative trends. This year’s conference emphasized green technology and emerging careers in that sector. Staff from the Department of Elementary and Secondary Education’s Office for Career/Vocational Technical Education (OCVTE) also collaborated with MAVA and MVA to plan workshops related to Perkins IV such as understanding Perkins grant requirements and reporting and using Perkins data to improve program outcomes. Workshops also focused on the development of lesson plans specific to programs of study that lead to high skill, high wage and/or high demand occupations.

*Department of Elementary and Secondary Education’s OCVTE Equity Team* - This team provided technical assistance and professional development to teachers and other staff in career/vocational technical education with the goal of increasing student participation in, and completion of, career/vocational technical education programs that prepare students for careers that are nontraditional for their gender. Technical assistance was provided by email, telephone, onsite, regionally, and statewide. In addition to the technical assistance and professional development provided the equity team conducted:

- regional meetings for administrators, counselors, teachers, and student leaders with the purpose of sharing strategies and effective practices
- trainings for prospective CVTE administrators through the Massachusetts Association of Vocational Administrators Leadership Academy
- a gender equity workshop for SkillsUSA Advisors at their statewide conference
- a gender equity workshop featuring student leaders at the annual statewide conference of the Massachusetts Association of Vocational Administrators
- an anti-bullying workshop for school personnel at the annual statewide conference of the Massachusetts Vocational Association, which was developed and delivered in collaboration with staff in the ESE Learning Support Services Unit.

*Secondary Postsecondary Career/Vocational Technical Education Linkage Consortia* - Each consortia offered professional development to support college and career readiness through targeted training and common planning seminars for both secondary and postsecondary teachers on such topics as programs of study, curriculum alignment and mapping and early academic preparation assessments (EPA) using Accuplacer.

▪ **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**

In 2010-2011, the primary method for improving students’ academic and technical knowledge and skills was once again provided through the design and delivery of curricula to address Strand 3 of the Massachusetts Vocational Technical Education Frameworks: *Embedded Academic Knowledge and Skills*. Each framework crosswalks program specific embedded academic knowledge and skills with technical knowledge and skills for the 45 career/vocational technical education programs. The Office for Career/Vocational Technical Education (OCVTE) continues to monitor for compliance through the Coordinated Program Review process. In 2010-2011, the criterion that guided such monitoring was: “*Are programs structured so that students acquire academic (including embedded academic) knowledge and skills?*” In 2010-2011, OCVTE staff also continued to review the proposed budgets of each Perkins IV eligible recipient for evidence that districts utilize Perkins funds, as required, to support such integration.

▪ **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**

In 2010-2011, implementation of the Massachusetts Vocational Technical Education Frameworks continued to guide preparation at the secondary level in 45 career and technical education programs in current and emerging professions, including 36

nontraditional by gender careers. At the postsecondary level, the *Massachusetts Perkins IV Secondary Postsecondary Career/Vocational Technical Education Linkage Initiative* (i.e., tech-prep) coordinated efforts to prepare all college students enrolled in career/vocational technical education for future career success. Several consortia activities included targeted activities for supporting completion and employment for graduates of nontraditional programs.

During onsite monitoring of Perkins IV-assisted school districts, staff from the Massachusetts Department of Elementary and Secondary Education sought evidence that assistance was provided to students in their postsecondary planning. The monitoring criterion used in this aspect of the review is: *“Do 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?”*

One of the four primary objectives in Massachusetts’ Race to the Top plan is to dramatically increase the number of students who graduate from high school ready for college and career. Massachusetts’ primary strategies include: exposing more students to rigorous curricula and college-level work, particularly in STEM fields; aligning high school curricula with college entrance requirements; launching a new college and career planning web portal for students and families, and supporting implementation of comprehensive school counseling programs. Over 50 Perkins IV- assisted school districts have signed onto one or more of these RTTT projects to support college and career readiness.

In 2010-2011, 1631 secondary students from 35 vocational technical high schools, 9 independent vocational schools, and 39 comprehensive high schools with career/vocational technical education programs gained valuable workplace experience through participation in the cooperative education component of their career/vocational technical education programs 15% of those students participating in cooperative education were students with disabilities, 11% were nontraditional enrollees and 28% were economically disadvantaged.

2010-2011 enrollment data (6S1) for females and males were above the Year 4 state adjusted performance goal of 12.4%, and both saw an increase from the previous year. Enrollment data for males increased from 13.59% to 13.79%, and enrollment data for females increased from 22.99% to 24.68%. The overall 6S2 completion data for females and males was 19.92%, nearly a full percentage increase from the previous year. Although 6S1 Cosmetology data and Dental Assisting data fell below the state adjusted performance goal for males, enrollment of males in Cosmetology increased to 2.98% (an increase of .15%), and in Dental Assisting to 5.03% (an increase of .07%). Likewise, although 6S1 data for Plumbing, Electricity, and Heating-Ventilation-Air Conditioning-Refrigeration (HVAC) fell below the state adjusted performance goal, enrollment of females in Plumbing increased to 4.83% (an increase of .38%), in Electricity to 6.27% (an increase of .69%), and in HVAC to 8.44% (an increase of .69%). Enrollment of females in Metal Fabrication & Joining Technologies increased to 14.38% (an increase of 1.47%) and in Carpentry to 13.79% (an increase of 3.32%).

A review of Massachusetts’ performance for the past two years regarding participation of both genders points to the continued need for targeted technical assistance and professional development in the following career/vocational technical education programs that are nontraditional for either gender: Cosmetology, Dental Assisting, Early Education and Care; Electricity, Plumbing, and HVAC.

▪ **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**

The Massachusetts Board of Education has a state-legislated Advisory Council for Vocational Technical Education comprised of representatives from higher education, business, industry, labor, parents and students. This Council advises the Massachusetts Commissioner of Elementary and Secondary Education and the Massachusetts Board of Elementary and Secondary Education for the purpose of enhancing efforts to improve career/vocational technical education and advance student achievement. Members of the council participated in the task force established to create the first state-wide articulation agreements between Vocational-Technical High Schools and Massachusetts Community Colleges and will continue that effort in the coming year, identifying six more programs for state-wide agreements. Members of the council also continue to seek articulation agreements with registered apprenticeship programs. In addition, the Massachusetts Board of Education Advisory Council for Vocational Technical Education continue to advocate for changes to the Board of Registration of Cosmetologists rules regarding credit toward licensure for students that complete high school programs in cosmetology.

In 2010-2011, the Department worked with the Massachusetts Community College Executive Office and the Massachusetts Vocational Administrators Association (MAVA) to establish 2 statewide articulation agreements with the 15 community colleges in computer aided drafting (CAD). These agreements provide graduates of Chapter 74 approved drafting programs with college credit in Introduction to CAD. In addition, in 2010-2011, the Department worked in partnership with MAVA and the Massachusetts Division of Apprentice Training to establish statewide articulation agreements with building trades apprenticeship programs. These agreements provide graduates of Chapter 74 approved programs with additional points during the application process to the Carpenters, Sheet Metal Workers and Laborers Union apprenticeship programs. Graduates who maintain 90% on-

time attendance during their senior year, demonstrate proficiency in technical math and receive the recommendation of their technical teacher will receive credit for one year in the apprenticeship program.

Partnerships with Massachusetts' 16 Workforce Investment Boards and the Massachusetts Department of Elementary and Secondary Education's Connecting Activities initiative provided students with exposure to high skill, high wage occupations through structured internship opportunities in their career/vocational technical education programs. In a number of schools with career/vocational technical education programs, the Massachusetts Work-Based Learning Plan was used to complement the Massachusetts Vocational Technical Education Frameworks in order to structure student learning and productivity in these internships.

In 2010-2011, the Massachusetts Department of Elementary and Secondary Education continued to work collaboratively with numerous partners 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, Massachusetts Division of Professional Licensure, Massachusetts Division of Occupational Safety, Massachusetts Department of Public Health, Massachusetts Department of Early Education and Care, Massachusetts Area Health Education Center (AHEC) Network at the University of Massachusetts Medical School, Plumbing, Heating, Cooling Contractors of Massachusetts, Retailers Association of Massachusetts, Massachusetts School Building Authority, Massachusetts Department of Correction, Massachusetts Department of Youth Services, and the Massachusetts Board of Education Advisory Council for Vocational Technical Education, other business and labor partners at the local, state, regional levels.

At the state level, collaboration among the Massachusetts Department of Elementary and Secondary Education, the Commonwealth Corporation, the Office of the Attorney General, MA Department of Industrial Accidents, MA Division of Occupational Safety, MA Department of Public Health and the U.S. Department of Labor resulted in an annual professional development strategy on the state and local levels that focused on promoting health and safety for young workers by connecting participants with promising practices that support safe and healthy workplaces. The Massachusetts *Youth Employment Safety Team* (YES) is an interagency network that brings together state and federal agencies to coordinate efforts to protect and promote the health and safety of young workers. Staff from the Massachusetts Department of Elementary and Secondary Education's Office for Career/Vocational Technical Education (OCVTE) participate on the YES team.

The OCVTE also collaborated with the Massachusetts Division of Professional Licensure by participating on the Board of State Examiners of Electricians representing the interests of vocational technical students throughout the state. (Graduates of approved vocational technical programs receive credit applied to the work and theory hour as required for licensure.) Additionally, OCVTE staff worked with the new Board of Examiners of Sheet Metal Workers regarding credit toward licensure for students that complete high school programs in Sheet Metalworking, Metal Fabrication and Heating, Ventilation and Air Conditioning. Graduates of these approved programs are eligible for a year's credit toward both the work and related theory hours requirements for the Sheet Metal license.

A staff person from OCVTE served as a member of the taskforce charged with developing new regulations for a new state license for Dental Assistants. By doing so, students graduating from Massachusetts career/vocational technical education Dental Assisting programs will be recognized as formally trained Dental Assistants by the state licensing agency.

#### ▪ **Serving individuals in state institutions**

In 2010-2011, the OCVTE continued to collaborate with the Massachusetts Department of Correction, Massachusetts Department of Youth Services, and County Sheriffs' Offices to improve career/vocational technical education programming in correctional institutions. Programs that were offered to student-inmates in state institutions included graphic design, culinary arts, computer operation, construction, custodial technician, small engine repair, barbering, auto detailing, dog training and pet care technician, HVAC, welding, auto body, and green technologies.

In 2010-2011 ten (10) institutions received funding for programs that served inmates in both male and female facilities. Several correctional institutions contracted with regional vocational technical schools to provide instruction. All student-inmates were also involved in reintegration programs at their individual facilities. Career assessments, career development and employability skills were included in several programs with some inmates receiving assistance with general career and educational planning. On-site monitoring visits were held at two correctional facilities as a way to ensure that programs in correctional facilities are in compliance with Perkins requirements. Desk reviews were conducted of all grantees. A bidder's conference was held in August of 2011 to help bidders improve the quality of their proposals.

#### ▪ **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 maintains its commitment to ensuring that the special populations - individuals with disabilities, individuals who are economically disadvantaged including foster children, individuals with limited English proficiency, individuals preparing for careers that would be nontraditional for their gender, single parents

(including single pregnant women), and displaced homemakers have access to career/vocational technical education programs that lead to high skill/wage/demand occupations. Several school districts (LEA's) used Perkins funds to offer in-service training for academic and technical teachers to better support students with disabilities in the career areas, with special attention given to ensuring access to information on high skill, high wage and high demand occupations. Modification of curriculum, equipment, work-based work environments and teaching methodologies are offered, where appropriate, to assist students with disabilities in the completion of their program of study.

As noted in previous sections, the Department monitors school districts every six years for compliance with applicable state and federal laws and regulations during its Coordinated Program Reviews. During onsite monitoring, two criteria specific to monitoring special populations are: *“Are all individuals including those who are members of special populations 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, or sexual orientation?”* And *“Are services including career guidance provided to assist each student that is a member of a special population in the successful completion of a career/vocational technical education program, and the transition to employment and/or further education?”* Additional criteria allow us to monitor district efforts to ensure that activities are provided to assist special populations in obtaining the knowledge and skills necessary to gain high skill, high wage and high demand occupations. Examples of the types of information that is received and reviewed during a compliance monitoring visit for this purpose include:

- *Paid and unpaid work-based learning programs, to ensure equal access for special populations, as well as ensure the work-based learning experience provides opportunities for students that can lead to high skill, high wage and high demand occupations.*
- *Career exploratory programs in which students rotate through each of the programs, including programs that are high skill, high wage, and high demand*
- *Admissions policies, standards and materials used by districts/community colleges for program placement*
- *Employability and skills programs offered as part of SkillsUSA Total Participation Membership*
- *Healthcare and Construction Career Days, intended to expand career and technical education students understanding of the range of high skill, high wage and high demand careers available in the manufacturing, engineering, construction, healthcare and biotechnology industries*
- *Implementation of a formal four-year career plan for every student*
- *Activities to assist with the college and/or apprenticeship application process, financial aid assistance, child care, health care and application fees*
- *The approval process for school districts seeking to become a state-approved career/vocational technical education program*

In 2010-11, the Department's Office for Special Education Policy and Planning (OSEPP) continued to fund a special education staff position in the Office for Career/Vocational Technical Education (OCVTE). The position ensures that relevant information, guidance and technical assistance specific to students with disabilities is available to eligible recipients. The OCVTE staff member who holds this position participates in the review and response to complaints filed by parents/guardians, applicants, and others regarding career/vocational technical education and special populations and assists the OSEPP with data collection for the regional vocational technical high schools relative to the transition components of the Massachusetts Special Education State Performance Plan (MA SPP) Secondary Transition (Indicators 13 and 14) performance goals.

#### ▪ **Offering technical assistance for eligible recipients**

In 2010-2011, staff from the Massachusetts Department of Elementary and Secondary Education's Office for Career/Vocational Technical Education (OCVTE) continued to provide technical assistance to eligible recipients primarily through onsite visits, phone conferencing, and online support. Staff also provided assistance through participation at various professional conferences and seminars.

Upon request, technical assistance was provided to high schools on:

- Starting new CVTE programs
- Admissions and access to CVTE
- Advisory committee and partnerships with business and industry
- Program improvement planning, application for Program Grants and data reporting for Perkins IV.

#### **b. Permissible areas undertaken**

##### ▪ **Providing career guidance and academic counseling programs**

A major objective in Massachusetts' Race to the Top plan is to increase the number of students who graduate from high school ready for success in college and career by exposing more students to rigorous curricula and college-level work; aligning high school curricula with college entrance requirements; supporting implementation of comprehensive school counseling programs and launching a new college and career planning web portal for students and families. In 2010-2011 Massachusetts' college and career information portal called *YourPlanforCollege* was utilized by 116,000 students in 129 high schools in Massachusetts. The portal is one of several strategies in Massachusetts' Race to The Top plan to increase the number of students who graduate college and career ready. *YourPlanforCollege* is not only designed to help students and parents plan for college but it has online application tools to make the college admissions process easier and more efficient for guidance counselors to manage.

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

Massachusetts' tech-prep initiative, known as the *Massachusetts Perkins IV Secondary Postsecondary Career/Vocational Technical Education Linkage Initiative* was again designed and delivered in 2010-2011 by thirteen (13) consortia that were formed through written agreements with school districts and at least one public two-year college. Each consortium developed, modified and approved articulation agreements in 2010-2011.

In 2010-2011, consortia combined their marketing and promotion of articulated credit for career and technical course work with the promotion of dual enrollment in academic courses. Students enrolled in career/vocational technical education were made aware of dual enrollment opportunities and advantages during early Accuplacer testing or when they came for a campus tour or technical program presentation. School-wide and/or classroom presentations on dual enrollment were also conducted. Massachusetts students enrolled in career and technical education programs received dual enrollment credit through the Commonwealth Dual Enrollment-funded program, although exact enrollment and outcome data is not yet available. To facilitate access to dual enrollment for some community colleges waived the requirement for college-level placement on the Accuplacer as a condition of dual enrollment. Students enrolled in career and technical education programs also received credit through innovative CVTE linkage consortium-funded efforts such as after school and summer early college courses.

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

The Perkins IV Secondary Postsecondary Career/Vocational Technical Education Linkage Initiative (tech-prep) was instrumental in facilitating the transition of students enrolled in career and technical education programs into baccalaureate programs. In 2010-2011 each consortium was asked to focus its advisory meetings and activities on Tech-prep performance indicator 1PTP4 (enrollment in baccalaureate programs). In addition, professional development and career advising activities were designed and coordinated by the 13 Massachusetts consortia directors and offered at all 15 community colleges. Emphasis was placed on information dissemination about career pathways, transfer program options and related academic requirements. During community college field trips and orientations, information was provided to students and educators about the Massachusetts Department of Higher Education's MassTransfer program (<http://www.mass.edu/masstransfer/Students/LinkedPrograms.asp>).

In 2010-2011, postsecondary partnerships were supported through *Bridges to Baccalaureate Programs* [http://www.umb.edu/academics/csm/biology/beyond\\_the\\_classroom/bridges\\_to\\_baccalaureate\\_program/](http://www.umb.edu/academics/csm/biology/beyond_the_classroom/bridges_to_baccalaureate_program/). The programs links community colleges and 4-year institutions to advance the careers of community college students interested in pursuing STEM careers like biomedical research. The programs focus deliberate attention on the participation of minority groups (Black African-Americans, Chicano/Latino Americans, Native Americans, and Natives of the U.S. Pacific Islands) in STEM. The programs' driving perspectives including (1) technical skills attainment through paid training; (2) workshop on principles, instrumentation and research techniques; (3) presentation of work findings locally and nationally; (4) academic preparation (math workshops and tutoring) for transfer into 4-year universities; and (5) information about career choices and opportunities. As the tech-prep outcome data illustrates on page 20 of this report, the community colleges saw significant increases in the number of students transitioning to baccalaureate programs.

▪ **Supporting career and technical student organizations**

In 2010-2011, Perkins IV Leadership funds again supported the following career/vocational technical education student organizations: *Business Professionals of America (BPA)*, *Distributive Education Clubs of America (DECA)*, *Health Occupations Students of America (HOSA)*, *Massachusetts FFA*, and *SkillsUSA*. Per the RFP that all CTSO's are asked to respond to, several activities were designed and carried out by each student organization to increase the participation of students who are members of special populations and enhance instruction in employability, leadership, and communication skills. A summary of their activities can be found through links to each organization available at <http://www.doe.mass.edu/cte/studentorgs.html>.

In recognition of the importance of career and technical student organizations to the development of leadership skills that enhance students' abilities to establish successful careers, the Office of Career/Vocational Education reached out to all career and technical student organizations seeking a student representative to serve on the state-wide Vocational Technical Advisory

Committee to the Board of Elementary and Secondary Education. The selected individual will join the Council in the fall of 2011.

▪ **Supporting public charter schools operating career and technical education programs**

Massachusetts does not have any public charter schools operating career/vocational 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**

In 2010-2011, the teaching and learning of all aspects of an industry in Massachusetts' career/vocational technical education programs was again supported by professional development and monitoring for implementation of all strands in the Massachusetts Vocational Technical Education Frameworks. Each of the forty-five (45) Massachusetts Vocational Technical Education Frameworks includes six strands representative of the following aspects of all industries (which were addressed in previous sections): 1. occupational safety & health, 2. technical, 3. embedded academic, 4. management and entrepreneurship, 5. employability, and 6. technological knowledge and skills. The Frameworks can be found at <http://www.doe.mass.edu/cte/frameworks>.

▪ **Supporting family and consumer sciences programs**

Massachusetts has a Life Management Skills and Home Economics Advisory Council, which advises the Massachusetts Commissioner of Elementary and Secondary Education and the Massachusetts Board of Elementary and Secondary Education on matters pertinent to Life Management Skills and Family and Consumer Sciences Education in the Massachusetts

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

On April 12, 2011, Lieutenant Governor Timothy P. Murray announced a new leadership model for career/vocational technical education with the goal of expanding partnerships between educators and employers and increasing collaboration among state agencies. This includes the creation of a new associate commissioner position at the Department of Elementary and Secondary Education that will oversee the implementation and integration of vocational, workforce, and college readiness programs through (1) communication with vocational and technical school administrators, teachers and schools; (2) cultivating relationships across education, labor and workforce development, private sector, housing and economic development and (3) building strategic partnerships throughout the community college system.

In addition in 2010-2011, each career/vocational technical education program at the secondary and postsecondary level supported partnerships through program advisory committees comprised of representatives from business and industry as well as postsecondary education. The committees meet at least twice a year to advise and assist in the improvement, planning, operation, and evaluation of their programs.

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

In 2010-2011, staff from the Massachusetts Department of Elementary and Secondary Education's Office for Career/Vocational Technical Education (OCVTE) supported the development of new career/vocational technical education programs through the state's program approval process. District liaisons reviewed required documentation and conducted onsite reviews with local technical experts to ensure that proposed new programs met the approval criteria of the Massachusetts Vocational Technical Education Regulations. In 2010-2011, fourteen (14) new programs were approved in twelve (12) districts as follows: (1) Biotechnology, (1) Construction Craft Laborer, (1) Dental Assisting, (2) Design & Visual Communications, (1) Diesel Technology, (1) Hospitality Management, (3) Information Support Services & Networking, (1) Machine Tool Technology, (2) Office Technology, and (1) Radio & Television Broadcasting. A total of 549 students were reported as enrolled in these 14 programs in October 2010.

This past year, Massachusetts undertook an initiative to support district projects in collaboration with the Department that created, implemented, and evaluated online courses/modules for underserved high school students in alternative education and credit recovery or credit acceleration programs. Fourteen (14) grantees received funding under this initiative, including 3 vocational technical high schools, 1 education collaborative, and 5 comprehensive high schools all of which receive Perkins funding. Grant recipients specifically target students most at-risk for not graduating. The districts developed coursework, trained staff, and in some cases collaborated between school districts.

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

Massachusetts did not award any incentive grants during 2010-2011.

▪ **Providing activities to support entrepreneurship education and training**

Activities to support entrepreneurship education are carried out by implementing *Strand 5 - Management and Entrepreneurship Knowledge and Skills* of the Massachusetts Vocational Technical Education Frameworks. The teaching and learning standards in this strand that are specific to entrepreneurship require Massachusetts' students enrolled in career/vocational technical education programs to analyze the basic business practices required to start and run a company/organization and apply legal requirements and ethical considerations to business practice and decisions. Also, in 2010-2011, the Community Center for Entrepreneurship (CCE), located at one of the state's Perkins' funded community colleges, has served a resource center that promotes the understanding and growth of entrepreneurial opportunities and supports students through initiatives like Global Entrepreneurship Week; Free Workshops and Seminars; Coaching for Aspiring Entrepreneurs; and Networking with Local Small Business Organizations.

▪ **Providing CTE programs for adults and school dropouts**

Massachusetts did not use Perkins IV funds to provide career/vocational technical education programs for adults and school dropouts during 2010-2011; however, seven school districts who are recipients of Perkins funds enrolled 228 postgraduate students in their secondary-level career/vocational technical education programs. Postgraduates are general education development (GED) credential recipients or high school graduates enrolling in career/vocational technical education for the first time. In 2010-2011, post-graduate enrollment ranged from 1-73 students across seventeen (17) Chapter 74 approved programs offered by seven (7) school districts. Enrollment varied widely ranging from 1-4 students enrolling in the following programs: metal fabrication, marketing, design and visual communications, machining, robotics, web development/programming, auto collision/repair, and HVAC to 24-73 enrolling in: biotechnology, automotive technology, and cosmetology. In addition in 2010-2011 there were 618 adult learners who enrolled in Chapter 74 approved postsecondary education programs in cosmetology (24) dental assisting (28) HVAC (8) medical assisting (34) practical nursing (516) and surgical technology (8).

In 2010-2011, the Department of Elementary and Secondary Education reorganized so that the Office for Career/Vocational Technical Education (OCVTE) and the Office for Adult Community and Learning Services (ACLS) under the "Center for Student Support, Career Readiness and Adult Education" providing increased opportunities for coordination of vocational and adult education.

▪ **Providing assistance to individuals in continuing their education or training or finding appropriate jobs**

In 2010-2011, every eligible recipient provided assistance to students in continuing their education or training or finding appropriate jobs. At the secondary level such assistance was provided to high school seniors and recent graduates through school counseling program delivery and the secondary postsecondary linkage initiative. Cooperative education, internships, clinical, job shadowing opportunities and career days were also provided to assist students with finding appropriate job opportunities.

At the postsecondary level, assistance was provided predominantly through one-on-one advising delivered by transfer counselors, academic advisors, and/or career center staff. Students were provided with information regarding articulation agreements with public four year universities and assistance in designing their program of study as well as job placements, cooperative education, job shadowing, career days, internships and clinical rotations. Services were also provided to special populations students who had self-identified in order to ensure that the services and activities listed above were modified to meet their individual needs.

▪ **Developing valid and reliable assessments of technical skills**

Given significant budget constraints, now and into the foreseeable future, Massachusetts is currently developing a plan to identify technical skill attainment tests that are readily available, valid and reliable as part of the requirements for the award of the Certificate of Occupational Proficiency. However, this year, the Office of Career/Vocational Technical Education embarked on a project funded through RTTT to improve the competency tracking system used by districts to record student progress toward proficiency in the skills standards of the Vocational Technical Frameworks. Twenty-eight (28) districts selected this project in their response to the RTTT grant solicitation. Seventeen (17) districts nominated individuals to participate on the Competency Tracking Advisory Committee resulting in twenty-two (22) members of the Advisory Committee include technical teachers, technology directors and administrators from across the state. Members come from regional vocational technical districts, comprehensive high schools with vocational programs, agricultural schools and urban vocational technical high schools. In 2010-2011, the committee met three times to view different types of systems and developed a list of required features and functionality for an effective, user-friendly competency tracking system. Future work related to this project will include revisions to the Vocational Technical Frameworks; development of a crosswalk between the technical and academic standards; and the development of model curriculum units and curriculum embedded performance assessments.

▪ **Developing or enhancing data systems to collect and analyze data on academic and employment outcomes**

Massachusetts has implemented the Student Course Schedule System (SCSS) designed to collect student level course completion and mark/grade information to meet federal and state reporting requirements and to provide districts and the ESE with data that will enhance student performance, including vocational training outcomes. In addition to making the collection and reporting of student data easier, this system will help align data collection with the Commonwealth's School Interoperability Framework (SIF), which is part of a 6 million dollar State Longitudinal Data Systems grant Massachusetts has received from the US Department of Education. The Massachusetts Office of Career and Vocational Technical Education was part of the team involved in identifying data elements to be captured by the SIF. Schools with Chapter 74-Approved Vocational Technical Education Programs are required to use the Classification of Instructional Program (CIP) Codes to report in SCSS.

In 2010-2011, the Massachusetts Department of Elementary and Secondary Education continued to refine its data collection tools and processes to ensure that data submitted by eligible recipients with career and technical education program are valid and reliable. Detailed information, instructions, forms and templates are available at <http://www.doe.mass.edu/cte/data> and state and district level summary reports are made available to the districts and colleges through the Department's Security Portal. The Department continues to revise and add reports.

The Massachusetts Department of Elementary and Secondary Education's Education Personnel Information Management System (EPIMS) continues to enable the Department to meet federal and state reporting requirements, perform analyses on the state's educator workforce, evaluate current education practices and programs, and assist districts with their recruiting efforts.

▪ **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**

The Massachusetts Association of Vocational Administrators continued to fund a position to oversee the career/vocational technical education community's recruitment efforts. One of the charges of this position is to coordinate a cohort program for the required courses for Initial Vocational Technical Teacher licensure. These cohort groups support retention of new teachers during the licensure process and during their first few years in the teaching field.

In 2010-2011, employment practices were reviewed during the Massachusetts Department of Elementary and Secondary Education's monitoring visits of secondary and postsecondary institutions 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 34 CFR, Part 100, Appendix B (*Guidelines*).” Specifically, the Massachusetts Department of Elementary and Secondary Education sought evidence that the institution does not engage in any employment practice that discriminates against any employee or applicant for employment on the basis of the five federal protected classes (race, color, national origin, sex and handicap), in addition to the two additional classes for Massachusetts (religion and sexual orientation).

The Massachusetts Department of Elementary and Secondary Education's *Educator Licensure and Recruitment System (ELAR)* 24-hour online system continues to allow 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.

▪ **Supporting occupational and employment information resources**

As part of its work to further Massachusetts' College & Career Readiness agenda, in 2010-2011, the Departments of Elementary and Secondary Education and Higher Education collaborated with the Massachusetts Educational Financing Authority to roll-out **YourPlanforCollege.org**, the state's new web portal for college and career planning. It's the first portal in the nation to support students in a dynamic, data-driven, online environment. Students can access the site in either English or Spanish. As a one-stop college and career planning shop, YPFC uses the critical elements of a student's portfolio (everything from academic information—grades and test scores—to personal career aspirations and college preferences) to personalize the planning process. Based on a student's portfolio, YPFC can alert students to new opportunities they should consider such as scholarships or summer programs in their community, reminding them about financial aid and application submission deadlines. The portal is not just for students—counselor, mentor, and parent tools provide an opportunity for these stakeholders to connect to their students and collaborate along the way. As of this fall, 35 percent of high school students are now using the portal for college and career planning. 17,210 students in 18 of the 35 vocational high schools in Massachusetts are currently using YourPlanForCollege as their college and career planning tool with students.

▪ **Progress in Developing and Implementing Technical Skill Assessments**

During 2010-2011, the Massachusetts Department of Elementary and Secondary Education's Office for Career/Vocational Technical Education will conduct extensive outreach to school districts to (1) alert them to current assessments that are in Appendix A of this narrative; (2) encourage them to report the students that receive a credential based on assessments; (3) engage district staff in researching additional assessments that are valid and reliable for inclusion in Appendix A.

In Year 4, the percentage of CTE concentrators who earned a technical certification was 75.33%. The number of CTE concentrators who left education (i.e., with a competency determination, a certificate of attainment, reached maximum age, or

dropped out of school) was 9,046. Of these students, 6,814 were reported to have earned some form of technical certification (i.e., a Chapter 74 Certificate issued by a school district, an industry-recognized credential issued by a recognized private organization and/or other State, or federal government department, agency or board.)

Given significant budget constraints, now and into the foreseeable future, Massachusetts is currently developing a plan to identify technical skill attainment tests that are readily available, valid and reliable as part of the requirements for the award of the Certificate of Occupational Proficiency.

## 2. Implementation of State Program Improvement Plans

As the tables below illustrate, for the fourth year in a row under Perkins IV, Massachusetts met or exceeded all of the Perkins IV Core Indicator negotiated performance levels for “all students.” Massachusetts did not meet the performance goals for every special population, as shown in the tables below; however, the State did make performance gains for these populations when compared to last year. Therefore, in addition to implementing its plan for Race To The Top, Massachusetts will continue to implement strategies initiated in prior years to improve performance where gaps still exist, as noted in the tables below.

Secondary Core Indicators		State Met/Exceeded 90% for all Students	Special Populations (did not meet)	Action Steps to be Taken (i.e., programs and initiatives)	ESE Offices Responsible	Timeline
IS1 Attainment of Academic Skills – Reading/	Language Arts Yes	73.51%	Disability Status (37.08%)	EPP; CPR; Civil Rights monitoring; Title I; targeted professional development and technical assistance	CVTE; PQA; ATA; CCR; SEPP	Ongoing
			Limited English Proficient (10.29%)	EPP; CPR; OCR monitoring; targeted professional development and technical assistance in SEI	CVTE; PQA; ATA; CCR; SEPP and ELAAA	Ongoing
IS2	Attainment of Academic Skills - Mathematics	Yes 67.58%	Disability Status (37.08%)	EPP; CPR; Civil Rights monitoring; Title I; targeted professional development and technical assistance	CVTE; PQA; ATA; CCR; SEPP	Ongoing
			Limited English Proficient (28.57%)	EPP; CPR; OCR monitoring; Title I; targeted professional development in SEI	CVTE; PQA; ATA; CCR; SEPP and ELAAA	Ongoing
2S1	Attainment of Technical Skills	Yes 75.33%	Limited English Proficient (54.26%)	EPP; CPR; OCR monitoring; Title I; targeted professional development in SEI; collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ELAAA	Ongoing
			Black or African (57.11%)	EPP; CPR; OCR monitoring; Title I; targeted professional development collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATA; CCR; SEPP and ELAAA	

<b>Secondary Core Indicators</b>		<b>State Met/Exceeded 90% for all Students</b>	<b>Special Populations (did not meet)</b>	<b>Action Steps to be Taken (i.e., programs and initiatives)</b>	<b>ESE Offices Responsible</b>	<b>Timeline</b>
3S1	School Completion	Yes <b>95.24%</b>	Single Parents (76.32%)	EPP; CPR; Civil Rights monitoring; Title I; targeted professional development and technical assistance collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATA; CCR; SEPP and ELAAA Office of NHSP	Ongoing
			Limited English Proficient (77.21%)	EPP; CPR; OCR monitoring; Title I; targeted professional development in SEI collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATTA; CCR; SEPP and ELAAA	
4S1	Student Graduation Rates	Yes <b>89.23%</b>	Single Parents (68.18%)	EPP; CPR; Civil Rights monitoring; Title I; targeted professional development and technical assistance collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATTA; CCR; SEPP and ELAAA Office of NHSP	Ongoing
			Limited English Proficient (74.61%)	EPP; CPR; OCR monitoring; targeted professional development in SEI; collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATTA; CCR; SEPP and ELAAA	Ongoing
			Native Hawaiian/Pacific Islander (73.33%)	EPP; CPR; OCR monitoring; Title I; targeted professional development; collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATTA; CCR; SEPP and ELAAA	
5S1	Placement	Yes <b>95.06%</b>	American Indian (83.33%)	EPP; CPR; Civil Rights monitoring; Title I; targeted professional development and technical assistance collaboration w/industry and credentialing/licensing entities	CVTE; PQA; ATA; CCR; SEPP	Ongoing
6S1	Nontrad Participation	Yes <b>21.70%</b>	N/A	N/A	N/A	N/A
6S2	Nontrad Completion	Yes <b>19.92%</b>	N/A	N/A	N/A	N/A

Postsecondary Core Indicators		State Met/Exceeded 90% for all Students	Special Populations (did not meet)	Action Steps to be Taken (i.e., programs and initiatives)	ESE Departments Responsible	Timeline
1P1	Attainment of challenging career and technical skill proficiencies	Yes 81.58%	Hispanic/Latino (47.93%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			Native Hawaii or Other Pacific Islander (28.57%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			Two or More Races (21.62%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
3P1	Retention	Yes 71.25%	Two or More Races (51.35%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
4P1	Placement	Yes 74.80%	Male (63.89%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			American Indian or Alaska Native (44%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			Asian (67.36%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			Individuals w/ Disabilities (68.86%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			Economically Disadvantaged (71.53%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
			Displaced Homemakers (64%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
5P1	Nontrad Participation	Yes 24.76%	Male (14.14%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	Ongoing
5P2	Nontrad Completion	Yes 22.47%	Male (15.06%)	EPP; CPR; Civil Rights monitoring; Title I; targeted professional development and technical assistance	OCVTE	Ongoing
			Two or More Races (15.38%)	Perkins Reviews; Civil Rights monitoring; targeted professional development and technical assistance	OCVTE	

### 3. Implementation of Local Program Improvement Plans

The table below summarizes the 2010-2011 performance of sixteen (16) of the ninety-three (93) eligible recipients that **failed to meet 90% of the agreed upon local adjusted level of performance for all students (i.e., total) in one or more core indicators**. As this data summary shows, nontraditional completion (6S2) continues to be the area where Massachusetts must focus its improvement strategies.

Recipients That Failed to Meet for All Students (i.e., Total)							
District	Core Indicators						
	1S1	1S2	3S1	4S1	5S1	6S1	6S2
District 1	x		x	x		x	x
District 2							x
District 3							x
District 4							x
District 5					x		
District 6							x
District 7	x	x	x	x			
District 8			x	x			
District 9						x	
District 10			x				
District 11							x
District 12						x	
District 13						x	
District 14							x
District 15						x	
District 16					x		
<b>Total = 16</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>7</b>

The table below summarizes the 2010-2011 performance of five (5) of the seventeen (17) eligible recipients that **failed to meet 90% of the agreed upon local adjusted level of performance for all students (i.e., total) in one or more core indicators**. As this data summary shows, student placement (4P1) and nontraditional completion (5P2) are the areas where Massachusetts must focus its improvement strategies.

Recipients That Failed to Meet for All Students (i.e., Total)						
District	Core Indicators					
	1P1	2S1	3P1	4P1	5P1	5P2
College 1				x		
College 2	x			x		x
College 3	x			x		x
College 4						x
College 5		x				
<b>Total = 5</b>	<b>2</b>	<b>1</b>		<b>3</b>		<b>3</b>

In 2010-2011, 48 districts failed to meet one or more performance goal **for students with disabilities**. Academic attainment, particularly in English Language Arts (1S1) continues to be Massachusetts greatest challenge for this special population.

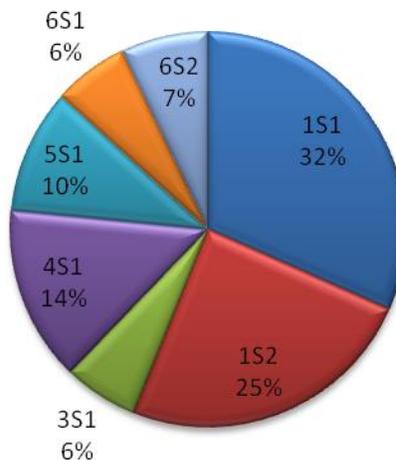
RECIPIENTS THAT FAILED TO MEET FOR STUDENTS WITH DISABILITY STATUS							
District	Core Indicators						
	1S1	1S2	3S1	4S1	5S1	6S1	6S2
District 1						x	
District 2	x						
District 3	x	x	x	x	x		
District 4				x			
District 5				x		x	
District 6				x			
District 7				x	x		
District 8			x	x			
District 9						x	
District 10	x						
District 11	x		x	x			
District 12							x
District 13	x	x		x			
District 14	x						
District 15	x				x		
District 16	x				x		
District 17	x	x		x			
District 18	x	x					x
District 19	x	x	x	x			
District 20	x	x	x	x			
District 21						x	

RECIPIENTS THAT FAILED TO MEET FOR STUDENTS WITH DISABILITY STATUS							
District	Core Indicators						
	1S1	1S2	3S1	4S1	5S1	6S1	6S2
District 22				x			
District 23	x	x					x
District 24	x						
District 25	x	x			x		
District 26	x	x					
District 27						x	
District 28	x	x					
District 29					x		
District 30							x
District 31	x	x					
District 32		x					
District 33	x						
District 34	x	x		x	x		
District 35	x	x					
District 36	x	x	x				
District 37	x	x					x
District 38	x						
District 39	x	x			x		
District 40						x	x
District 41	x	x					x
District 42		x					
District 43	x	x			x		
District 44	x	x		x	x		
District 45	x	x					
District 46	x	x					
District 47	x						
District 48		x					
<b>Total</b>	<b>31</b>	<b>24</b>	<b>6</b>	<b>14</b>	<b>10</b>	<b>6</b>	<b>7</b>

Missed 1S1	Missed 1S2	Missed 3S1	Missed 4S1	Missed 5S1	Missed 6S1	Missed 6S2
31	24	6	14	10	6	7
32%	25%	6%	14%	10%	6%	7%

Number/percentage of the 93 eligible recipients that did not meet at least one performance level for Students with Disabilities by a significant margin.

**48 Districts out of 93 Districts failed to meet one or more performance goals for students with disabilities.**



As illustrated below, 75% of the districts that failed to meet their academic performance goals for students with disabilities failed to do so for both 1S1 and 1S2. Of the Perkins eligible districts that did not meet their goal for 1S1 or 1S2, 35% had enrollment levels for this population well above the state average (20.48%). Targeted technical assistance and professional development are planned for these districts in 2012.

Districts that did not meet 1S1 or 1S2 for Students with Disabilities	Students with Disabilities		District Enrollment	Enrollment of Students with Disabilities	Percentage of Total Enrollment
	1S1	1S2			
District 1	√		798	97	12.16%
District 2	√	√	3461	869	25.11%
District 3	√		220	11	5%
District 4		√	742	169	22.78%
District 5	√	√	1092	194	17.77%
District 6	√		746	233	31.23%
District 7		√	855	165	19.3%
District 8	√		1209	158	13.07%
District 9	√	√	796	183	22.99%
District 10	√	√	718	181	25.21%
District 11	√	√	1503	359	23.89%
District 12	√	√	1077	141	13.09%
District 13	√	√	562	150	26.69%
District 14	√		562	122	21.71%
District 15	√	√	2454	465	18.95%
District 16	√	√	444	180	40.54%
District 17	√	√	359	91	25.35%
District 18	√	√	849	202	23.79%
District 19		√	1237	179	14.47%
District 20	√		1352	128	9.47%
District 21	√	√	1195	260	21.76%
District 22	√	√	2132	188	8.82%
District 23	√	√	2056	469	22.81%
District 24	√	√	649	282	43.45%
District 25	√		1400	203	14.5%
District 26	√	√	474	90	18.99%
District 27	√	√	1254	322	25.68%
District 28		√	466	149	31.97%
District 29	√	√	562	120	21.35%
District 30	√	√	635	200	31.5%
District 31	√	√	1262	326	25.83%
District 32	√	√	1077	220	20.43%
District 33	√		963	275	28.56%
District 34		√	482	78	16.18%
<b>Total</b>	<b>31</b>	<b>24</b>			
<b>Total for Both 1S1 and 1S2</b>	<b>21</b>				<b><sup>1</sup>12 districts</b>

For the third year in a row, the need for specific improvement strategies to ensure access and equity for male students who wish to participate in and complete career/vocational technical education programs nontraditional for their gender is apparent. Improvement efforts are a particular concern in districts with 3 or more of the six career/vocational technical education programs that are nontraditional for males offered in schools in Massachusetts.

District	Districts Failing to Meet 90% Performance for Males						
	Core Indicators						
	1S1	1S2	3S1	4S1	5S1	6S1	6S2
District 1	x					x	
District 2						x	x
District 3						x	x
District 4						x	
District 5					x		
District 6						x	
District 7	x		x	x		x	
District 8						x	
District 9			x			x	
District 10						x	
District 11						x	
District 12	x				x		x
District 13						x	x

<sup>1</sup> \* The October 2010 *Statewide Career Vocational/Technical Education (CVTE) Enrollment by Special Populations Report* shows the percentage of Students with Disabilities at 20.48%.

Districts Failing to Meet 90% Performance for Males								
District	Core Indicators						6S1	6S2
	1S1	1S2	3S1	4S1	5S1	6S1		
District 14						x	x	
District 15							x	
District 16			x			x	x	
District 17						x		
District 18						x		
District 19						x	x	
District 20						x		
District 21						x	x	
District 22						x		
District 23						x		
District 24						x		
District 25							x	
District 26						x	x	
District 27						x	x	
District 28							x	
District 29						x	x	
District 30						x		
District 31						x	x	
District 32				x		x	x	
District 33						x	x	
District 34						x	x	
District 35						x	x	
District 36						x	x	
District 37						x		
District 38						x	x	
District 39						x	x	
District 40						x	x	
District 41						x		
District 42					x	x	x	
District 43						x	x	
District 44						x	x	
District 45							x	
District 46						x	x	
District 47						x	x	
District 48						x	x	
<b>Total</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>42</b>	<b>30</b>	

Improvement efforts are a particular concern in districts with 3 or more of the six career/vocational technical education programs that are nontraditional for males offered in schools in Massachusetts.

**Districts Failing to Meet 90% Performance for Males in 6S1 or 6S2 and Programs Offered**

Results ordered by # of programs offered	Core Indicators								Total # of programs offered
	6S1	6S2	Cosmetology	Early Childcare	Health Asst	Medical Asst	Dental Asst	Office Tech	
District 1	x		√		√			√	3
District 2	x	x		√		√			2
District 3	x	x		√	√				2
District 4	x		√	√	√				3
District 5									
District 6	x			√					1
District 7	x		√		√				2
District 8	x				√				1
District 9	x		√	√	√				3
District 10	x		√	√	√				3
District 11	x			√					1
District 12		x	√		√			√	3
District 13	x	x	√	√	√				3
District 14	x	x		√	√			√	3
District 15		x	√	√	√			√	4
District 16	x	x	√	√	√			√	4
District 17	x			√					1

Results ordered by # of programs offered									Total # of programs offered
	6S1	6S2	Cosmetology	Early Childcare	Health Asst	Medical Asst	Dental Asst	Office Tech	
District 18	x		√	√					2
District 19	x	x		√	√			√	3
District 20	x		√		√			√	3
District 21	x	x	√	√	√				3
District 22	x		√		√				2
District 23	x			√					1
District 24	x				√				1
District 25		x	√		√			√	3
District 26	x	x	√		√		√	√	4
District 27	x	x	√	√	√				3
District 28		x	√	√	√		√	√	5
District 29	x	x	√	√	√		√		4
District 30	x		√		√			√	3
District 31	x	x			√			√	2
District 32	x	x	√		√			√	3
District 33	x	x	√	√	√	√	√	√	6
District 34	x	x	√	√	√	√		√	5
District 35	x	x	√	√	√			√	4
District 36	x	x	√	√	√		√	√	5
District 37	x							√	1
District 38	x	x	√	√	√		√		4
District 39	x	x	√	√	√		√	√	5
District 40	x	x	√		√				2
District 41	x		√		√			√	3
District 42	x	x	√		√			√	3
District 43	x	x	√			√		√	3
District 44	x	x	√	√	√			√	4
District 45		x	√		√				2
District 46	x	x	√		√			√	3
District 47	x	x	√	√	√		√		4
District 48	x	x	√		√				2
<b>Total</b>	<b>42</b>	<b>30</b>							
<b>Total for both 6S1 and 6S2</b>	<b>25</b>								

▪ **Tech Prep Grant Award Information**

In 2010-2011, grants were awarded to thirteen (13) consortia through a Request for Proposals (RFP) competitive process. The RFP, *Perkins IV Secondary Postsecondary Career/Vocational Technical Education Linkage Consortia*, can be found at <http://finance1.doe.mass.edu/Grants/grants11/rfp/468.html>. The Department computes allocations by a formula and notifies consortia through the lead community college of the dollar amount for which they may apply. October 1 enrollments in secondary-level career/vocational technical education programs in school districts with Perkins Local Plans, and/or approved vocational technical education programs, and/or Perkins Rural District grants (Fund Code 409 – Reserve funds) are used in the formula. Below are the 13 allocations for these consortia followed by enrollment and performance outcome data for 14 of the 15 community colleges. (One college was unable to verify their data by the date of this report.)

Consortia	Grant Award
Berkshire Community College Consortium	\$ 73,695
Bristol Community College Consortium	190,499
Bunker Hill Community College/Roxbury Community College Consortium	136,187
Cape Cod Community College Consortium	92,153
Greenfield Community College Consortium	64,815
Holyoke Community College/Springfield Community College Consortium.	131,345
Massachusetts Bay Community College Consortium	125,046
Massasoit Community College Consortium	145,158
Middlesex Community College Consortium	105,085
Mount Wachusett Community College Consortium	89,785
North Shore Community College Consortium	129,918
Northern Essex Community College Consortium	107,484
Quinsigamond Community College Consortium	132,043

CONSORTIUM COLLEGE 1						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	33.5	30	N	24	23.46	Y
1STP2	55	79	E	69	24.21	N
1STP3						
1STP4	8	6	N	6	5.26	N
1STP5	60	76	N	71	73.68	N
1PTP1	55	41	N	50	0.00	N
1PTP2	24	40.9	E	43	0.00	N
1PTP3	29	34	E	34	0.00	N
1PTP4	11	39	E	28	0.00	N

CONSORTIUM COLLEGE 2						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	20	23.6	E	22	22.31	Y
1STP2	20	21	E	20	20.39	Y
1STP3						
1STP4	25	13.9	N	14	14.10	Y
1STP5	58	50	E	50	48.59	Y
1PTP1	90	96	E	90	41.03	N
1PTP2	16.7	37.5	E	17	52	E
1PTP3	61	59.6	N	59	31.94	N
1PTP4	10	13.5	E	12	20.25	E

CONSORTIUM COLLEGE 3						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	24	10.4	N	13	15.56	E
1STP2	31	26	N	20	26	E
1STP3						
1STP4	50	85.5	E	25	6	N
1STP5	85	77.9	E	80	76	E
1PTP1	N/A	N/A	N/A	45	0.00	N
1PTP2	40	0	N	8	0.00	N
1PTP3	24	52.9	E	53	42.22	N
1PTP4	19	0.06	N	6	7.27	E

CONSORTIUM COLLEGE 4						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	37	23.3	N	24	20.19	N
1STP2	5	27	E	27	39.53	E
1STP3						
1STP4	12	20.9	E	21	10.85	N
1STP5	63	56.7	E	56	43.41	E
1PTP1	0	25.7	E	26	91.67	E
1PTP2	5	8.3	E	8	20	E
1PTP3	36	36.7	Y	37	17.41	N
1PTP4	10	15	E	15	15.38	Y

CONSORTIUM COLLEGE 5						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	25.16	19.21	N	18.21	17.61	N
1STP2	46.74	27.89	N	28.89	22.10	N
1STP3						
1STP4	21.10	15.26	N	15.26	13.26	N
1STP5	41.72	69.47	N	68.47	76.24	N
1PTP1	88.24	89.29	E	88.29	86.96	N
1PTP2	5	9.38	E	9.38	26.32	E
1PTP3	41.81	37.21	N	38.21	43.91	E
1PTP4	10	4.65	N	5.65	17.80	E

CONSORTIUM COLLEGE 6						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	9	14	E	14	10.21	N
1STP2	5	43	E	56	53.33	N
1STP3						
1STP4	5	0	N	2	3.81	E
1STP5	70	85.6	N	84.6	82.86	E
1PTP1	80	50	N	50	75	E
1PTP2	10	0	N	7	23.53	E
1PTP3	47	52.8	E	52.8	42.99	N
1PTP4	10	0	N	2	0.00	N

CONSORTIUM COLLEGE 7						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	11	17	E	17	15.21	N
1STP2	12	43.5	E	14	21.21	E
1STP3						
1STP4	30	33	E	35	75.76	E
1STP5	48	43.5	E	45	39.39	E
1PTP1	27	50	E	29	66.67	E
1PTP2	3	5	E	4	100	E
1PTP3	20	65	E	22	68.42	E
1PTP4	6	0	N	6	25	E

CONSORTIUM COLLEGE 8						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	16	22	E	22	19.74	N
1STP2	21	24	E	23	23.71	Y
1STP3						
1STP4	9	10	E	12	21.98	E
1STP5	55	65	N	61	75	N
1PTP1	35	37.5	E	37.5	82.81	E
1PTP2	15	66.6	E	50	0	N
1PTP3	22	27	E	28	27.21	N
1PTP4	10	0	N	2	27.27	E

CONSORTIUM COLLEGE 9						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	5	13.68	E	15	8.81	N
1STP2	5	28.57	E	25	16.09	N
1STP3						
1STP4	2	51.96	E	35	2.30	N
1STP5	80	50	E	60	43.68	E
1PTP1	20	11.76	N	20	100	E
1PTP2	10	33	E	30	36.36	E
1PTP3	14	33	E	33	30.59	N
1PTP4	3	36	E	36	0.00	N

CONSORTIUM COLLEGE 10						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	20	19	N	20	20.02	Y
1STP2	10	14	E	15	19.29	E
1STP3						
1STP4	8	8	Y	8	85.16	E
1STP5	60	69	N	68	69.44	N
1PTP1	27.8	100	E	30	72.73	E
1PTP2	5	16.6	E	17	13.04	N
1PTP3	38	43	E	40	41.51	Y
1PTP4	2	0	N	2	0.00	N

CONSORTIUM COLLEGE 11						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	29	21.3	N	30	19.72	N
1STP2	6	22.4	E	18	29.76	E
1STP3						
1STP4	3	0	N	4	0.00	N
1STP5	74	75.8	N	73	70.24	E
1PTP1	57	89.7	E	60	83.93	E
1PTP2	5	0	N	6	0.00	N
1PTP3	63	37.6	N	35	41.31	E
1PTP4	26	0	N	27	0.00	N

CONSORTIUM COLLEGE 12						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	28	27.2	N	25	24.52	Y
1STP2	4	15.4	E	16	20.61	E
1STP3						
1STP4	10	0.61	N	2	4.85	E
1STP5	78	64.6	E	65	64.85	Y
1PTP1	40	80	E	42	94.74	E
1PTP2	8	18.4	E	15	26.67	E
1PTP3	35	40.5	E	41	37.44	N
1PTP4	10	6.3	N	6	10.62	E

CONSORTIUM COLLEGE 13						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	35	32.7	N	24	24.64	Y
1STP2	10	19	E	15	29.97	E
1STP3		7.56				
1STP4	16		N	8	10.10	E
1STP5	79.25	39.76	E	60	71.34	N
1PTP1	41	66.6	E	47	100	E
1PTP2	3	21.8	E	5	35.71	E
1PTP3	42.35	39.6	N	40	41.55	E
1PTP4	3	6.25	E	5	11.76	E

CONSORTIUM COLLEGE 14						
Performance Indicators	YEAR 3			YEAR 4		
	% Negotiated Perf. Level	% Actual Perf. Level	Met	% Negotiated Perf. Level	% Actual Perf. Level	Met
1STP1	14	20	E	18	19.02	E
1STP2	10	24.5	E	25	30.0	E
1STP3						
1STP4	24	16	N	24	4.38	N
1STP5	79	77	E	83	77.50	E
1PTP1	50	64.7	E	50	73.91	E
1PTP2	10	41.6	E	10	27.50	E
1PTP3	26	28	E	27	30.50	E
1PTP4	10	17.9	E	17	10.47	N

Note that while there are 13 community colleges responsible for the programmatic and fiscal activities of the Massachusetts Perkins IV Secondary Postsecondary Career/Vocational Technical Education Linkage Consortia, postsecondary performance data are submitted by two other consortium member colleges as well.

**APPENDIX A:**

**DOE031 Career/Vocational Technical Education — Technical Competency Attainment Codes  
Referenced with Occupational Clusters**

SIMS DOE031 (Report in End of School Year )	CERTIFICATIONS	1. AGRIC & NATURAL RESOURCES	2. ARTS & COMMUNICATIONS	3. BUSINESS & CONSUMER SERVICES	4. CONSTRUCTION	5. EDUCATION	6. HEALTH SERVICES	7. HOSPITALITY & TOURISM	8. INFORMATION TECHNOLOGY	9. MANUFACTURING, ENGINEERING & TECHNOLOGICAL	10. TRANSPORTATION
02 – Private Org.–Issued Credential	A+ HVRAC Certification (A+)				x						
02 – Private Org.–Issued Credential	American Heart Association - Choke Saving							x			
02 – Private Org.–Issued Credential	American Red Cross CPR Certification (ACPR)	x			x	x	x	x	x	x	x
02 – Private Org.–Issued Credential	American Red Cross First Aid (FirstAid)	x			x	x	x	x	x	x	x
02 – Private Org.–Issued Credential	American Welding Society [AWS] Welder Certificate (ANSI / AASHT / AWS D 1.5)				x					x	
02 – Private Org.–Issued Credential	ASE Refrigerant Certification (ASER)				x					x	x
02 – Private Org.–Issued Credential	Barcode Cert. (Mass Restaurant Association)							x			
02 – Private Org.–Issued Credential	BASF Painting: Color Match & Blend										x
03 – State/Fed. Issued Credential	Certified Nurse Assistant (CNA)						x				
02 – Private Org.–Issued Credential	Cisco Certified Network Associate (CCNA)								x		
03 – State/Fed. Issued Credential	Commonwealth of MA Radiation Certification (MARAD)						x				
02 – Private Org.–Issued Credential	Comptia A +								x		
02 – Private Org.–Issued Credential	Comptia Network +								x		
03 – State/Fed. Issued Credential	Cosmetologist License (COSL)			x							
02 – Private Org.–Issued Credential	C-Tech Certification Network Specialist (C-Tech)								x		
02 – Private Org.–Issued Credential	Dental Assistant National Board Certification in Infection Control (DANBIN)						x				
02 – Private Org.–Issued Credential	Dental Assistant National Board Certification in Radiation Health & Safety (DANBRA)						x				
03 – State/Fed. Issued Credential	Electronic Imaging Certification (EIC)						x				
03 – State/Fed. Issued Credential	Emergency Medical Technician (EMT)						x				
03 – State/Fed. Issued Credential	EPA 608 Refrigerant Certification (EPA608)				x					x	
03 – State/Fed. Issued Credential	Hoisting Machinery Operator License (HMOL)	x									
03 – State/Fed. Issued Credential	Home Health Aid (HHA)						x				

SIMS DOE031 (Report in End of School Year )	CERTIFICATIONS	1. AGRIC & NATURAL RESOURCES	2. ARTS & COMMUNICATIONS	3. BUSINESS & CONSUMER SERVICES	4. CONSTRUCTION	5. EDUCATION	6. HEALTH SERVICES	7. HOSPITALITY & TOURISM	8. INFORMATION TECHNOLOGY	9. MANUFACTURING, ENGINEERING & TECHNOLOGICAL	10. TRANSPORTATION
03 – State/Fed. Issued Credential	Office for Child Care Services Infant/Toddler Teacher Certification (OCCSINT)					x					
03 – State/Fed. Issued Credential	Office for Child Care Services Pre School Teacher Certification (OCCSPRE)					x					
02 – Private Org.–Issued Credential	Microsoft User Specialist Certification (MOUSC)			x					x		
02 – Private Org.–Issued Credential	National Automotive Technicians Education Foundation [NATEF] and National Institute for Automotive Service Excellence [ASE] Certification (NATEF/ASE)										x
02 – Private Org.–Issued Credential	National Institute for Metalworking Skills (NIMS)									x	
02 – Private Org.–Issued Credential	National Restaurant Association ProStart Certification (PROST)							x			
02 – Private Org.–Issued Credential	National Restaurant Association ServSafe Certification (SESAFE)							x			
02 – Private Org.–Issued Credential	Novell CAN Certification								x		
03 – State/Fed. Issued Credential	OSHA Construction, Safety & Health - 10 Hrs (OSHA C10)				x						
03 – State/Fed. Issued Credential	OSHA Construction, Safety & Health - 30 Hrs (OSHA C30)				x						
03 – State/Fed. Issued Credential	OSHA General Industry – 10 Hrs (OSHA G10)	x			x						
03 – State/Fed. Issued Credential	OSHA General Industry – 30 Hrs (OSHA G30)	x			x						
03 – State/Fed. Issued Credential	OSHA Hazardous Waste Operation Training Cert. [HZMAT] – 8 Hrs Refresher (OSHA HZMAT 8)	x			x						
03 – State/Fed. Issued Credential	Pesticide Applicator Certificate (PAC)	x									
03 – State/Fed. Issued Credential	Second Class Boiler Fireman License									x	
01 – Chapter 74 Certificate	Chapter 74 Certificate	x	x	x	x	x	x	x	x	x	x