Narrative Report
for the
Consolidated Annual Performance
Accountability and Financial
Status Report – (CAR)
2006 – 2007

I. State Administration [Section 121]

A. Sole State Agency and Governance Structure

The Tennessee State Board of Education (TSBE) is the sole state agency authorized and empowered to accept on behalf of the state any and all acts of Congress pertaining to career and technical education. By statute, the TSBE has the authority to accept federal funding for the Carl D. Perkins Vocational and Applied Technology Act of 1998 and the Carl Perkins Career and Technical Education Act of 2006. The TSBE has statutory authority to cooperate with the United States Department of Education, Office of Vocational and Adult Education, on the administration of the five-year State Plan for Career and Technical Education in Tennessee, and will not delegate its responsibilities under the law to any other state agency.

The Governor of the state appoints the Commissioner of Education who has the authority given by TSBE to manage funding and programs of the Perkins Act of 1998 and the Perkins Act of 2006. This includes the funding levels for secondary and post-secondary education. The Commissioner of Education appoints the professional and support staff in the Tennessee Department of Education (TNDOE) and manages multiple divisions within the Department of Education.

The Tennessee Board of Regents (TBR) is designated the sole agency of the state for administering post-secondary career and technical programs through the Tennessee Technology Centers (TTC) and community colleges. It is authorized and empowered to make such agreements with the federal and local governmental units as may be deemed necessary to participate in federal career and technical funding. The Board of Regents is allotted Perkins funding from the eligible agency, Tennessee Department of Education, for post-secondary technology center programs and Tech Prep. Procedures for utilization of funds and performance accountability are governed by a Memorandum of Understanding (MOU) between agencies.

The Tennessee Career and Technical Education Council (TCTEC) serves as an autonomous advisory board to review and make recommendations on career and technical education to the Tennessee Legislature, Tennessee Board of Regents and Tennessee State Board of Education. The thirteen-member council is comprised of six members representing career and technical areas in post-secondary (2), secondary (4), and seven members representing private business/industry and labor. The Governor appoints all the members.

Organizational chart of key agencies involved. See Attachment (A)

B. Organization of Vocational and Technical Education Programs

The Division of Career and Technical Education is managed by an Assistant Commissioner of Education appointed by the Commissioner of Education. There are seven secondary career and technical program areas led by the Assistant Commissioner. Career and Technical staff include seven program consultants, nine career and technical consultants who operate from the field service centers (FSCs), central office and financial support staff. All seven programs have a Career and Technical Student Organization (CTSO) consultant who manages activities pertaining to youth leadership and development. Additionally, the Division provides consultants who monitor the Contextual Academics, High Schools That Work (HSTW), Jobs for Tennessee

Graduates (JTG), Making Middle Schools Work (MMSW), Project Lead the Way, and Virtual Enterprise programs.

The post-secondary career and technical programs at the Tennessee Board of Regents (TBR) are administered by two offices: the Office for the Tennessee Technology Centers and the Academic Affairs Office for the community colleges. The technology centers provide diplomas and certificate level post-secondary programs. The community colleges provide associate level career and technical education and technical certificates. During the past year, the community colleges continued to work closely with the Tech Prep Office and State Department of Education to develop career pathways from secondary and from the technology centers (TTC) to the community colleges. A sample of a career pathway that allows the students to begin in high school, articulate to the TTC and then on to the community college includes construction management career path at Chattanooga State Technical Community College, and the CISCO academy lead by Jackson State Community College. The community colleges continue to seek avenues to provide career ladders within the pathways for students.

The Tech Prep program serves to provide transition services to both secondary and post-secondary students in pathways leading to a post-secondary award. While the state determines academic requirements for each secondary student to complete secondary education; the post-secondary system delineates criteria for the granting of credit or waiver of competencies if the student chooses to continue education and desires to proceed in a sequential non-duplicative course of study. Articulation agreements are developed to link secondary and post-secondary courses that teach common specified learning outcomes and satisfy learning outcomes in equivalent courses offered by the community college or technology center. Tech Prep is not a separate, unique set of courses, but strives to link equivalent learning outcomes to develop a pathway of sequential non-duplicative courses in order for a student to receive post-secondary credit.

Tennessee career clusters are currently organized into seven clusters driven by what students need to know and do in order to graduate fully prepared for further education and careers in a global economy. The clusters embrace the state's major economic areas that better prepare students for success after high school into post-secondary and high-skill, high-wage or high-demand careers. Beginning this program year, Tennessee has moved to align new programs of study with the sixteen career clusters and USDOE pathways.

All students, including career and technical students, are required to take three units in mathematics. All are considered rigorous mathematics. Four English and three science units are required for graduation. Technical pathway students (concentrators) are required to take three units in a sequential course of study in a career and technical program, plus a fourth course in the sequence or a related career and technical course. Programs align curriculum standards in meetings held with post-secondary educator and business partners to revise programs of study that will articulate from secondary to post-secondary institutions. At the community colleges, courses are aligned around sixteen career clusters. Trade and Industry and Health Science teachers must hold the proper program endorsement along with industry or state certification. An Industry Certification committee has reviewed all programs for certification availability at state and national levels. Career and Technical Education has twenty courses that substitute for core academic courses. A course offered as a substitute for a core academic course must be taught by a highly qualified teacher endorsed in the core subject area.

II. State Leadership Activities [Section 124]

A. Required Uses of Funds

1). An assessment of the vocational and technical education programs that are funded

Twenty-five percent of all LEA career and technical programs are assessed each year using the Local Career and Technical Plan Application and Addendum as a guide for assessment. The assessment team includes members from business and industry, state program consultants, and representatives of teachers and administrators from nearby school systems. Risk based monitoring was defined and implemented for the 2006-07 school year.

A "quality program" has been defined for systems expending Perkins funds on a given career and technical program. Perkins Funds may only be spent on a program that meets these quality indicators:

An appropriately certified teacher; use of state-approved curriculum frameworks/standards; labor market data; an active, affiliated CTSO; an advisory committee; and articulation agreements with post-secondary institutions, as appropriate. Additionally, Trade and Industry teachers must hold an industry certification for Perkins funding to be spent on their programs. Quality program indicators have been redefined this year for inclusion in the State Transition Plan.

Tennessee has implemented Gateway Tests in Algebra I, English II, and Biology, that students must pass to graduate from high school with a regular diploma. Career and technical students take the same tests as all students. Special populations' students are assessed as all students, with the exception of students with Individual Educational Plans (IEPs) that may exempt them from state tests and allow them to graduate with a certificate.

The career and technical programs offered by the Tennessee Technology Centers are assessed in a variety of ways to maintain quality and relevance to local and state industry. At the end of each term, the Tennessee Board of Regents requires the institutions to submit enrollment reports and disaggregated data. Institutions are required to review programs annually for completion, placement and licensure performance. Submission of the program outcomes are submitted for review by the Council on Occupational Education (COE), the accrediting commission for the Tennessee Technology Centers. The result of this evaluation is also sent to the Tennessee Board of Regents Office at the Tennessee Technology Centers. Programs not meeting state standards are placed on monitor status for continued review. Surveys are conducted with alumni and their respective employers on an annual basis. Enrollment audits are conducted by the internal auditor of the lead community college on an annual basis. Method of Administration (MOA) compliance reviews are conducted on-site each year in accordance with the targeting plan. The TBR Central Office reviews the grant reimbursement requests on a quarterly basis. All financial aid programs are reviewed and audited by state and federal program monitors. The Tennessee Board of Regents prepares and disseminates report cards for all institutions on an annual basis.

Activities are designed to assess the post-secondary technical programs. The use of funds under the Perkins Act promotes programs that enable special populations to meet state adjusted levels of performance and prepare special populations for further learning in high-skill, high-wage or high-demand careers. Professional development activities are sponsored statewide in order for teachers and counselors to encourage students to pursue non-traditional career fields and to discourage the perpetuation of race, gender, ability or other biases in career fields.

2). Developing, improving, or expanding the use of technology in vocational and technical education.

Tennessee was the first state in the nation to establish internet connections in all schools. Ongoing technical assistance is given to personnel in charge of the technology with the understanding there will be professional development provided to all teachers in the school. This system provides a mechanism that insures technology is a tool for teaching and learning.

Building on this statewide technology initiative for K-12 education, a requirement in the Local Plan Application Addendum stipulates that LEAs provide every Career and Technical Education teacher with an

up-to-date computer, printer, Internet access and an email address. This has allowed the state to communicate more quickly and efficiently with teachers, giving teachers a means to collect the required Perkins' data, and a resource for student learning through the World Wide Web.

Training for learning to use the computer is required at the local level; however, professional development for teachers is held at the annual summer career and technical conference and through teacher education contracts for skills specific training. Multiple sessions designed to expand the use of technologies in areas such as automated manufacturing, digital cameras, video streaming, virtual enterprise, and new computer applications were offered.

Course standards are designed to incorporate and encourage students to obtain industry certification that align to programs of study. Examples include Microsoft Office User (MOUS), A+, Cisco, Corel, Certified Internet Webmaster (CIW), Automotive Service Excellence (ASE) and Macro Media.

All local systems completed the Perkins Transition Plan online. A secured system is utilized to transmit the applications electronically. Professional development technical training was provided state-wide to assist career and technical administrators on electronic transmission requirements of the local plan.

Tennessee has moved to a fully integrated online student data reporting system called *eTIGER*. Local systems report enrollment data via a secured *eTIGER* website that has been pre-populated from the state's Education Information System (EIS). This year, effort has refocused on aligning the data collection system to meet with the data warehouse Perkins IV reporting requirements.

Tennessee Technology Center activities are designed to assess the post-secondary technical programs and use of funds under the Perkins Act to improve the quality of the programs and ensure instruction is relevant to business and industry. Through state leadership, institutions are informed that career and technical education programs must keep pace with changes in industry, and this cannot be done without continually upgrading equipment. The availability of high tech, state-of-the-art equipment is necessary to ensure that programs teach competencies for high-skill, high-wage or high-demand occupations.

The community colleges participate in updating secondary CTE programs based upon funds received through Tech Prep. In partnership with local schools and school systems, community colleges have trained secondary faculty, provided new or updated equipment and have provided articulation or dual enrollment opportunities. Examples of this have been the development of CISCO academies in the upper Delta region of the state. In other regions, program startups or improvements included technical areas such as fiber optics, process control technology, and web design.

3). Professional development programs, including providing comprehensive professional development (including initial teacher preparation) for career and technical, academic, guidance, and administrative personnel.

The annual state 2006-2007 CTE Conference was held which addressed each career and technical program area specifically. The theme of the conference, Promoting Student Success through Professional Collaboration, was carried throughout each program area. Sessions included:

- ✓ Making Math Work: A Research-Based Approach to Integrating Academic Skills in CTE;
- ✓ Integration for Data Driven Differentiation;
- ✓ Integrating Biotechnology into the Agriculture Curriculum;
- ✓ Raising Performance Levels in the Nontraditional Core Indicators;
- ✓ Addressing Nontraditional Up Close and Personal;
- ✓ Collaborative Curriculum: Using Partners and Colleagues to Enhance Instruction;

- ✓ Professional Learning Communities;
- ✓ Strategic Reading in the Content Areas;
- ✓ Meeting Mathematic Standards with Contextual Learning in Technology Engineering Education;
- ✓ Promoting Diversity, Valuing Differences; and
- ✓ Quality Agriscience Programs Can Exceed NCLB Requirements.

Also included was a "Successful Practices Showcase" with concurrent sessions that included:

- ✓ Raising Academic Performance through Writing by Rutledge High School;
- ✓ Improving Gateway Performance from Good to Greater by Hampshire School;
- ✓ Reading and Creating: Integrating Classes, Clubs and Communities by White County High School;
- ✓ CCSI./ Crime Scene Investigation: A Model of Integration to Increase Test Scores, Graduation Rates and Post-Secondary Enrollment by Milan High School;
- ✓ Integrating Academic and CTE Curriculum through Radio and Other Media Sources by Haywood High School;
- ✓ ORBIT Academy +Math/English Integration=Testing Success by Oak Ridge High School;
- ✓ CCSI: Building Student Competency in Math, Language Arts and Health Sciences by Humboldt High School;
- ✓ Ninth Grade Transition: Raising Student Achievement with a 9th Grade Academy by McNairy County Schools;
- ✓ Small Learning Communities: School-wide Initiatives Patterned Around Interdisciplinary Curriculum Integration Model by Santa Fe School;
- ✓ Gateway Hands-on Project: Students Teaching Students with the Assistance of Technology Using an Interdisciplinary Approach that Raises Gateway Test Scores by Centennial High School; and
- ✓ How to Use Technology to Teach Standards and Competencies by Centennial High School.

All sessions were designed to assist teachers to implement academic integrations within lesson plans and daily teaching strategies. Sessions also included technical training and industry certification training for teachers in pre and post conference sessions. Included in the annual conferences was a Tennessee Academy for School Leaders (TASL) training, a required activity for Tennessee school administrators. Participants were provided a notebook entitled "Writing the Tennessee Comprehensive System-wide Planning Process." The training focused on including Career and Technical Education as an integral part of system-wide planning which is now a requirement for Tennessee school systems. The TASL activities included data gathering, interpretation, and developing action plans, goals and strategies. Additionally, a High Schools That Work strand was held.

The Career and Technical Education Division partnered with the Division of Teaching and Learning to present three Gateway training sessions. Successful passing of Gateway exams in Algebra I, Biology I, and English II is a requirement for graduation in Tennessee. Gateway training is an annual event provided for all Tennessee teachers. A CTE component was developed as a result of collaboration between academic Gateway trainers and CTE teachers. Additionally, 100 academic and CTE integrated lesson plans were developed and are available for all teachers on the CTE professional development website.

Two professional development training programs for new occupational licensed teachers were provided in the past year. Technical Engineering/Contextual Academics, Health Science, and Marketing also held program specific symposiums which included a strand for new teacher training in those areas. The Division of Career and Technical Education instituted a licensing clearing house for all career and technical teachers to assist in gathering information regarding post-secondary course offerings across the state as well as provide assistance in gaining and maintaining their teaching licenses. A database was developed to be used to keep the CTE Division abreast of CTE teacher licensing status in Tennessee as well as providing a mechanism to alert CTE teachers of license renewal requirements. In order to have teachers who are current in their field, newly hired Trade and Industry teachers and those receiving Perkins funds are required to hold the appropriate industry certification, where available. The Division of Career and Technical Education has identified the

certifications and holds regular training sessions for teachers to prepare them to complete the industry certification requirements. Industry certification training is ongoing to keep teachers knowledgeable and skills current. Health Science teachers must have the minimum of an Associates Degree and a current state health license.

State career and technical consultants have the opportunity to travel outside the state to attend conferences and workshops to keep them informed of changes in their individual fields and to disseminate information and skills learned to LEAs. State consultants have the opportunity to attend and participate in regional training sessions, which are in demand. Local CTE directors utilize the state consultants through regional CTE director study councils, which assist in communication to the local systems. Staff in the division served as guest speakers for teacher preparation programs in Tennessee colleges and universities. Additionally, they collaborate with teacher educators to offer program specific workshops for existing and new teachers each year based on needs assessment.

As a service to school counselors, the Division of CTE offers all Tennessee teachers access to *The Source*, a career database prepared by the Tennessee Department of Labor and Workforce Development in cooperation with America's Job Bank, to assist in planning career and technical course offerings and deletions. LEAs use *The Source* to determine local labor market data and as an instructional tool for assisting students with career planning. The KUDER Career Planning system is available to all local school systems as an additional career assessment tool. Links to *The Source* and the Tennessee Career Information System (TCIDS) are made on the State's career information web page, which also provides links to America's Career Resource Network (ACRN). As part of the four or six year planning process, the Division works with the school counseling office to make available to all 8th grade students and their parents copies of the *American* Careers magazine to assist them with developing their individual school plans. The magazines provided a career interest inventory survey assessment and current information on non-traditional careers to help all students relate the importance of academic planning to career success. Tennessee requires the parents or guardians of each student, with involvement of counselors, to develop a 4 or 6-year plan prior to entering high school. Students may review the plan annually for possible update and changes. Parents serve on the vocational advisory council in each LEA in the state. Additionally, each parent reviews the competencies the student is to master at the beginning of each career and technical education course in which a student is enrolled. Counselors were provided sessions to assist student placement for enhancement of realizing career goals.

Tennessee also partners with business and industry to conduct Career Days designed for students, teachers, administrators, and school counselors. Jobs for Tennessee Graduates and Cracker Barrel partner to provide a career day for JTG students. The division also partners with AYES and TRBA to assist Trade and Industry (T&I) teachers and programs in obtaining industry certification. All Tennessee students are invited to attend "Career Construction Days" presented by the Tennessee construction industry.

State leadership provides professional development needed to ensure that educators know how to use upgraded technology, equipment, and software. Teachers and administrators receive professional development training through statewide conferences and regional meetings.

The Career and Technical Division hosted its second 2006-07 School Counselor Institute, which focused on the three counseling domains. Emphasis was placed on utilizing Career and Technical services and information to assist counselors in their enormous tasks of counseling students for academic achievement, career development, and personal achievement. Over 800 counselors and administrators attended the Counselor Institute.

4). 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.

All career and technical students are presently required to take three units of mathematics, including Algebra I or equivalent. This is the minimum requirement for graduation; however, most career and technical students are completing the dual pathway, which includes math requirements of Algebra I, Geometry and Algebra II. Four English units are required for graduation and are the same courses for all high school students. Three laboratory science courses are required for graduation, which include one physical and life science course. All students are required to complete one of the following: Geometry, Technical Geometry, Algebra II or Integrated Math II as part of the three required mathematics units. Health Science, Anatomy and Physiology may serve as a laboratory science for graduation.

The Division of Career and Technical Education partnered with the Division of Teaching and Learning to develop a career and technical component to the Gateway Training Institutes. Academic teachers traditionally receive training in the summer from the Division of Teaching and Learning on teaching Gateway standards in Algebra I, English II, and Biology; successful completion of an end of course test in each subject is a requirement for graduation in Tennessee. The career and technical component illustrated ways to integrate with career and technical classes to assist in teaching each Gateway standard. This is the second year for career and technical teachers to attend the summer Gateway training. Schools were encouraged to send teams of teachers consisting of academic, career and technical and special education teachers. Through the evaluations, the training was deemed successful and plans are to continue the partnership.

The Division is supporting departmental initiatives to ensure computer literacy for all students. Curriculum clusters, as appropriate, offer in-depth knowledge and skill in technology. Family and Consumer Sciences, Marketing and Agriculture standards as well as the Career and Technical Director Employment Standards were implemented. Revised teacher licensure standards were aligned to national standards. Technology is used in school presentations, professional development, conferences and student projects.

Reading standards have been incorporated into each CTE course and reading lists have been developed for all program areas using technical context to stimulate interest in reading. Career and Technical Student organizations continue to take a leadership role in the state's reading initiative by providing books to preschoolers, reading to children, tutoring their peers and encouraging more reading by all students. Reading Across Career and Technical Education is a yearly division project for each program area. A Reading Strategies Manual, developed by the Division of Teaching and Learning, has been presented and professional development was provided to career and technical teachers in the use of the manual as well as other ways to implement reading strategies into lesson plans.

Through the Workforce Investment Act Incentive Grant from the Department of Labor, seventeen high schools received grants to develop small learning communities. Improved student academic performance was emphasized. There were nine schools chosen to continue the grant for an additional year to field-test their models with sister schools. Additionally, through the same grant, the Division of Career and Technical Education partnered with the Division of Teaching and Learning to provide Career Academic Technical Gateway Institutes to teams of teachers from high schools. The teams consisted of academic, career and technical, and special education teachers. The purpose of the institutes was for teachers to collaborate and incorporate common academic, career and technical, and Gateway skills. Each team developed lesson plans based on the identified skills from the three areas. The lesson plans are posted on the department website as a resource for all teachers in Tennessee. Eight recipient schools were chosen to continue the model development process. Each of the eight recipients was chosen because they showed data which supported the premise that career and technical courses assist in raising students' academic performance. Further, each of the eight schools chose a sister site to partner with and field test the models that were developed. The data from the original and sister sites will be compared to determine if student participation in the models, in fact, do raise academic performance.

The success of the Tennessee Technology Centers in strengthening the academic skills of students lies in part to the successful integration of academic competencies into each program curriculum. Applied mathematics, science and language art concepts are core competencies in all occupational programs. Student mastery of these foundation competencies has been proven to be more achievable when taught within a framework of occupational skills. In addition, a Technology Foundations program is available to students who need additional remedial or developmental studies outside the classroom. Curriculum development is a statewide collaboration between faculty and input from occupational advisory committees who ensure the relevancy of academic and technical skill competencies to the occupational area or career cluster. In addition, the curriculum is reviewed by curriculum specialists and approved by the governing board.

State leadership provides support for career and technical programs that improve the academic and career and technical skills of students participating in post-secondary technical education programs. Academic and technical components are strengthened through the integration of academics within the technical area to ensure learning in core academic subjects.

5). Providing preparation for nontraditional training and employment

Each program area provided non-traditional training and information at the annual state career and technical conference. Mimi Lufkin, NAPE, presented these sessions. The Division of Career and Technical Education offers four different programs for career development: KUDER, Tennessee Career Information Delivery System, *The Source*, and *American Careers* Magazine. All of these programs make available of non-traditional employment information to assist students in career decision making. Each program consultant has made inclusion of non-traditional information an important part of their professional development for career and technical teachers. Additionally, non-traditional presentations were made at the School Counselor Institute. FCCLA recognize chapters at the state convention that have five or more males to join the FCCLA chapter each school year.

6). Supporting partnerships to enable students to achieve State academic standards, and career and technical skills

Partnerships with those involved in developing the future workforce in Tennessee have been strengthened through the implementation of a Unified Plan. Collaboration and the elimination of much duplication have been the result of various state agencies working together. The Division of Career and Technical Education is represented on the state's Youth Council, and involvement with the Workforce Investment Areas at the local level has been significant. Grants from the Local Workforce Investment Areas have been used by LEAs to provide extra help for career and technical students through before-and-after school programs.

The Department of Education implemented a Tennessee Comprehensive System-wide Planning Process (TCSPP). The Divisions of Special Education, Federal Programs, and Career and Technical Education partnered to write the TCSPP. Each local system was required to develop a system-wide plan for implementation. The process was required to include career and technical education, special education, and federal programs. The TCSPP was used to integrate the annual Perkins addendum, the special education annual improvement plan, and the NCLB annual improvement plan. The plan in its second year was the first project the department has initiated to require systems to use all departments to plan together for continuous improvement.

Local business/industry and community partnership initiatives have been encouraged through the Local Plan Application.

Tennessee supports the state advisory council to advise and recommend program and policy changes based on business and community input. The State Council conducted a public hearing to begin public input on Perkins IV.

Automotive Youth Educational Systems (AYES) has become a model for industry partnerships in Tennessee. Much progress has been made with regard to modernizing and upgrading automotive programs, curriculum, and teacher credentials. A consultant works with teachers in this program area in order to help students meet National Automotive Technician Education Foundation (NATEF) standards. The AYES consultant, in collaboration with Tennessee Board of Regents, has developed an online student program. Automotive programs have NATEF curriculum standards online that prepare students for articulation to post-secondary education. A construction consultant works with all teachers in the construction program to assist them with the National Center for Construction Research (NCCR) certification.

An incentive grant was received through the Department of Labor for the purpose of building small learning communities and continued professional development in integration techniques and strategies to teams of academic and career and technical teachers.

The instructors at state institutions are invited to attend all of the professional development activities held by the Division. During the school year, new correctional institution instructors were provided with quality professional development

Over 60% of all students completing high school that enter the public community colleges must take at least one remedial or developmental course. Once again during the last year, Tech Prep made funds available for the colleges to pilot projects in participation with local secondary schools to determine if remedial courses could be successfully taught at the high school level. Five of thirteen colleges participated to train local secondary instructors and to provide remedial curriculum to the schools. The pilot projects met with mixed results, but those projects that saw active involvement by the secondary school leadership, college leadership and parents had the best results.

The Executive Director for Tech Prep served as a resource person to the Tennessee Board of Regents' Developmental Studies revision ad hoc committee. Lessons learned through the Tech Prep pilot remediation projects were incorporated into the discussion and review of the postsecondary remediation programs for the community colleges and TBR universities.

During the 2006-07 award year, the Tennessee Technology Centers acquired KeyTrain®, a web-based learning system accessible to career and technical students around-the-clock. Aligned with ACT, WorkKeys®, the KeyTrain® Learning System, is designed to target skills essential to success in a specific occupation. Upon completion of selected lessons, the student's competencies are measured against the Bronze, Silver, and Gold levels for the Career Readiness Certificate. The Career Readiness Certificate is a portable credential based upon the WorkKeys® assessments that confirm to employers that an individual possesses the basic workplace skills required for 21st Century jobs. The Career Readiness Certificate assesses in three different skill areas: Applied Mathematics, Reading for Information, and Locating Information. The Tennessee Technology Centers participated in the Tennessee Career Readiness Certificate pilot with the Department of Labor and Workforce Development and plan to continue this successful partnership across the state.

7). Serving individuals in state institutions

Tennessee supports institutions with disabilities, specifically the Tennessee School for the Blind and Tennessee School for the Deaf and the Department of Children's Services. Since these institutions received limited funding in the past, they have greatly benefited from this support. These institutions are required to

complete a Local Career and Technical Application, which addresses all issues required in Perkins III for local educational agencies. They must incorporate performance indicators, where applicable, equal to those of local educational agencies. Funds for these schools are used to assist special population students in attaining high-skill, high-wage or high-demand jobs.

The Departments of Correction and Children's Services continues to be served through professional development, technical assistance with curriculum, and program evaluation provided upon request to teachers.

The Division of Career and Technical Education has partnered with Special Education, and Teaching and Learning to produce a resource guide to assist IEP Teams in decision making for appropriate placement and support of special needs students.

8). Support for programs for special populations that lead to high-skill, high-wage or high-demand careers.

Special population students have equal access to all career and technical courses and use the same curriculum and assessment as other students. One of the successes observed through the use of competency profiles as a measurement approach for occupational attainment has been the value they have for career and technical teachers and special education teachers working together to develop students' IEPs. After the review of the required competencies, support is given to special education students through educational assistants for success in the classroom. Modification of curriculum, equipment, and teaching methodologies are offered, when needed, for success in the course. Several regional offices offered in-service training for teachers to use competency profiles in the development of IEPs.

A Resource Guide was provided in partnership with the divisions of Teaching and Learning, Special Education, and Career and Technical Education to assist special education teachers, counselors, and IEP teams to develop a relevant and appropriate individual education plan for all students.

Even though Perkins III was not intended as a special population legislation, LEAs continued programs and services for special population's students. Technical assistance was given to the LEAs on equal access, curriculum, assessment, teaching methodologies, and modifications of instruction. Assistance is also provided to teachers, teacher aides and the business community for employment skills training. Work-based learning experiences serve all secondary student populations.

Collaboration with special education is a continuous process to offer the best services to special population students without duplication of services. Also, collaboration with career and technical rehabilitation is continuous. The Office of School Innovation, Improvement and Accountability has begun to offer a Tennessee Comprehensive System-wide Planning Process (TCSPP) to bring regular, special, and career and technical planners together for joint program improvement planning.

Following up on the previous planning year, Tech Prep provided resources to the Tennessee Association of Higher Education and Disabilities (TN AHEAD) to develop and distribute curriculum materials focused on better transition of special population students from secondary to post-secondary education. TN AHEAD is the professional organization for post-secondary ADA and Section 504 campus coordinators at public and private institutions.

In conjunction with the Tennessee Department of Education, TBR community college disability coordinators were supported by local Tech Prep consortia to provide workshops statewide for administrators, special education personnel, guidance counselors and faculty. In addition, the TN AHEAD members from the TBR community college disability coordinators group provided sessions at the Department of Education's first annual school counselor conference in Nashville, Tennessee.

B. Permissible Activities [Section 124]

1). Technical assistance was given to all career and technical teachers and administrators across the state and, as needed, to other education personnel. Much of the assistance this past year was targeted toward continuous improvement and accountability in programs and the collection of valid and reliable data via an online reporting system to align with Perkins IV indicators. Technical assistance was given regarding curricula, assessment, standards, teaching methodology, performance indicators, funding, federal legislation, state policy, best practices and SBE rules and regulations. Technical assistance was provided to local career and technical directors through four scheduled annual meetings. The focus was placed on strategies to improve performance on core indicators and understanding the result of data that had been generated through reporting procedures and new Perkins IV requirements. The two-day professional development event in the summer provided technical assistance to all academic and career and technical teachers, counselors, supervisors, and administration personnel. Each program area consultant provided program-specific guidance on a regular basis. Full-time field service center (FSC) consultants located in nine geographic areas across the state worked with LEAs to address issues related to program improvement planning. Fall drive-in conferences were held in each of the regional service areas. A professional development conference was conducted for six-hundred school counselors.

Annual evaluation of LEAs offers an opportunity for technical assistance through the recommendations for improvement. Additionally, the FSC staff made visits to teachers and administrators and monitored Perkins funding. The regional FSC consultants assisted with program improvement strategies and recognized best practices that can be utilized statewide.

Regional workshops were continued across the state to study Perkins III and Perkins IV regulations and the changes that should be implemented at the local educational agency level as well as data reporting assistance. Career and Technical Field Service Center (FSC) consultants provide technical assistance to assigned school systems on an ongoing basis.

2). Funding has been used over the last several years to support students in planning for their future careers. The America's Career Resource Network (ACRN) grant, which has now terminated, was used for this purpose and has been supplemented by other career planning tools. A program at the Tennessee Board of Regents allows a web-based tool for students through the Tennessee Career Information Delivery System (TCIDS). TCIDS was completely remodeled and its website revised under TBR's guidelines. The KUDER Career Interest Inventory program is available to all schools in Tennessee at no additional expense to the LEA or SDE.

School counselors assist all students in developing their 4 or 6-year plan of study before high school. Leadership funds are used to provide each student with resources to develop a plan through the *American Careers* magazine, the Tennessee Career Information Delivery System and *The Source*. Each eighth grade student was given an *American Careers* magazine, with the centerfold being a tear-out planner, to plan a pathway for high school that articulates with post-secondary training. Professional development sessions were provided for middle school counselors to assist them in deriving maximum use of the planner editions with their students. A parent's edition was made available to orient parents to current careers prior to helping develop their child's high school plan of study.

All high school students must select a college, technical, or dual pathway to meet graduation requirements. Counselors receive technical assistance from the state in the implementation of the college technical and dual pathway requirements. High school redesign efforts are currently in the planning stages and are recommending a single path with focused programs of study. The high school redesign committee is expected to bring forth recommendations for approval next year.

Tennessee has one counseling system in the state that includes career and technical and academic students. Close coordination among educational divisions is necessary to provide adequate counsel for students.

Special sessions at the two-day professional development conference in the summer were provided to counselors across the state. Collaboration among all education entities was accomplished through drive-in conferences to keep abreast on pertinent issues as well as collaboration on new school counseling standards.

School counselors were provided presentations on the implementation of the KUDER Career Planning System and the development and maintenance of electronic portfolios. The school counselors were invited to attend all career and technical administrators' meetings as well as other pertinent conferences, including HSTW. A professional development committee to improve career counseling has been formed.

The SDE Consultant for School Guidance was included in several projects the division is initiating. This input has been valuable in identifying the best methods of delivery of information to school counselors.

The delivery of work-based learning training has been revised to be offered through the nine field service center offices. The teams of trainers from the field service center offices provided training at the state conference. The teams conduct training on a regional basis as it is deemed prudent.

3). Due to the cost of operating up-to-date career and technical education programs at the local level, there has been improved coordination between secondary schools, community colleges, and the Tennessee Technology Centers (TTCs) in many areas of the state. LEAs contract with the TTCs to offer high cost programs or programs where a limited student enrollment does not justify the expense of the program. This has resulted in improved communication between the two delivery systems and, in some cases, has strengthened the secondary and post-secondary program. Schools are beginning to offer more dual credit opportunities for students. Community colleges have, through competitive grants, provided equipment and teacher training for secondary career and technical education programs. In certain cases, by passing a competency-based assessment, college credit is issued to those who enroll in the college.

Articulation from secondary to post-secondary institutions is accomplished through Tech Prep. All LEAs and post-secondary institutions have formal articulation agreements. An emphasis this year is to continue to have a statewide articulation program to allow career and technical students to attend the post-secondary institutions of their choice. Forty-five statewide agreements were developed and implemented this past year. Statewide articulation was achieved through cooperative curriculum planning between SDE and TBR with assistance from the state council and LEAs.

4). Career and Technical Education has expanded the work-based learning programs to include job shadowing, internships, school-based enterprises, youth apprenticeships, and registered apprenticeships, in addition to cooperative education training in business and industry. This has increased our number of students to experience firsthand the competency applications in business and industry. Because of the association of students with workforce personnel, linkages are carried over into the classroom. More business and industry personnel have adopted career and technical programs, schools and career and technical courses. This interaction has given credibility to student learning. Required training of teacher coordinators and supervisors was provided by the Division of Career and Technical Education prior to teachers sending students to the workplace.

5). CTSOs are a vital component of Tennessee's career and technical education programs. Eight nationally affiliated and approved program-specific CTSOs are active in Tennessee career and technical education program areas. Each program area has a state advisor and CTSO consultant to assist in technical assistance of CTSO activities. In Tennessee, over 77,000 students, including many with special population status,

participate annually in CTSO activities. Leadership, group dynamics, content skills, and community activities are the focus of CTSOs training to help provide strong youth leadership in the state. State and local CTSOs have developed a reading and literacy program for preschool, kindergarten, and middle-grade students.

The current revisions of program standards have included a leadership strand in each course. Professional development is offered to teachers on how to incorporate their respective CTSO as an integral part of their program. Tennessee has a professional development leadership camp that is utilized in the summer for career and technical student leadership development. It is used throughout the year by state career and technical program consultants and staff for professional development of career and technical teachers and administrators. Combined fall leadership conferences are provided annually with approximately 6,000 students participating.

Career and Technical Student Organizations have grown well over 40% during Perkins III. A joint CTSO Leadership Conference was held within the three grand divisions of the state. This has been accomplished by increased professional development and published guidelines on organizing and conducting a "model" youth organization program. Seven weeks in the summer are devoted to offering leadership training for CTSO leaders in the summer camp program. A youth and government leadership conference was held in the winter.

CTSOs in the state offer scholarships to students, including special population students.

6). There are currently twelve (12) charter schools in Tennessee—ten in Memphis; and two in Nashville.

7). Technical pathway students (concentrators) are required to take at least three units in a sequential course of study in a career and technical program, plus a fourth course in the sequence or a course in a related career and technical area. This instruction covers adequate content to insure that the career and technical student has acquired sufficient knowledge and skills in all aspects of an industry. Many program Capstone courses articulate directly with a TTC.

8). Family and Consumer Sciences programs have been supported with the use of federal funding. Curriculum for these programs has been revised and continues to be aligned with national standards to meet the needs of students soon to assume adult and family roles. Family and Consumer Science standards are currently under review and has begun the process of standards alignment using the DACUM model.

9). Business, industry, and community partnerships are most valuable to the career and technical delivery system. Periodically, partners are asked to counsel the career and technical staff on current practices in the workplace. Each career and technical program consultant has a functioning council that meets on a regular basis. As mentioned previously, the Department of Education is supported by a Governor's appointed CTEC.

10). The six-year development cycle for updating and expanding all curricula in Career and Technical Education is ongoing. Concerted efforts to work with business and industry partners and educators are made in this entire process. Ongoing monitoring, evaluation, and adjustment will take place to determine future changes needed, particularly in areas where technology changes rapidly, wages are high, and workers are in demand.

11). Assistance was given to the LEAs to conduct needs assessments and involve "*The Source*" for employment data to upgrade their program offerings and to revise their local plan. Systems deleted courses that were not needed in the workplace and added courses to include technology and fuller integration of academics. A concerted effort is made to give priority to courses leading to high wage, high skill jobs. Support was given LEAs to transition courses to provide seamless pathways to post-secondary experiences.

12). Incentive grants on a Request for Proposal (RFP) basis were awarded to LEAs to:

- Integrate academic core courses and career and technical curriculum through staff development and curriculum alignment;
- Accomplish secondary and post-secondary articulation;
- Provide technology training for career and technical teachers – basic and intermediate;
- Provide professional development for middle and high school guidance counselors on careers in career and technical courses; and
- Provide professional development on analyzing data related to school improvement plan, career opportunities, and NCLB.

The revised Tennessee Career Information Delivery System (TCIDS) has become a very important tool in assisting students to make choices for the workforce. The system has been enhanced to readily highlight non-traditional careers in support of core indicator four and includes interactive videos with those employed in respective career fields.

Participation in CTSO leadership activities is another way that students are exposed to potential opportunities for continuing education or placement in employment after high school.

Core Indicator Related Activity

Activities over the last year were directed toward assisting LEAs and career and technical educators in helping them to continuously improve the use of data to support academic improvement. Specific activities and outcomes included:

Core Indicator 1

Related to 1S1. Presentations were made by program areas to address the need for academic integration within high schools and be ready for post-secondary opportunities. Virtual enterprise initiatives were presented throughout the state as well as credit recovery initiatives. On-line courses have been developed in some areas of the state to assist in credit recovery and graduation rate. Fast Track was also presented, which is a way for students to graduate with post-secondary credit.

Related to 1S2. Each program area had presentations at the state CTE conference on industry certification and program alignment. Additionally, post-secondary instructors were invited to attend the conference, and many did. Issues of transition and curriculum alignment were addressed. Best practices in building pathways to post-secondary education were also presented.

Core Indicator 2

Related to 2S1. A reading initiative in CTE has been fully implemented. A reading skills resource manual that the Division of Teaching and Learning constructed was modified and used by CTE teachers. Presentations were made by systems that have shown academic improvement with specific projects such as: Write Right; Reading and Creating; ORBIT, Integrating Math and English into Business Courses; Integration of Math, Science, and Language Arts in Health Science.

Core Indicator 3

Related to 3S1. Presentations were made in new curriculum areas of T&I, Health Science, Business Information Technology, Marketing, and Technical Engineering, highlighting courses and sequences of courses that lead to a credential, certificate, or degree. Challenge grants were provided to post-secondary

institutions to develop articulation agreements and devise transition programs from secondary to post-secondary institutions. Statewide articulation agreements were instituted in T&I programs. At the state conference, program area presentations focused on secondary preparation of students for successful academic and skill performance at the post-secondary level.

Core Indicator 4

A partnership was formed with EdAmerica in the use of the KUDER program in all Tennessee high schools. A career counselor provided technical assistance and guidelines to LEAs on the importance of student portfolio development. The Division continues to assist counselors in utilizing all career information that the Division of Career and Technical Education provides free of charge to all schools systems in Tennessee which are: KUDER, Tennessee Career Information Delivery System (TCIDS), *The Source* (developed by DOLWD), and *American Careers* magazine. Non-traditional careers and employment play an important role in the development and use of all four TCIDS. The Division of Career and Technical Education hosted its second Counselor Institute where the delivery of career information was highlighted with non-traditional careers being heavily emphasized.

III. Distribution of Funds and Local Plan for Vocational and Technical Education Programs [Sections 131 and 134]

A. With the implementation of the Carl D. Perkins Vocational Education and Applied Technology Act of 1998, the following procedures are utilized to distribute funds to the states eligible recipients via the guidelines for distribution. The use of funds is based on the Local Plan submitted by each eligible recipient and approved by the TNDOE. At the secondary level, the flow charts provided represent the distribution process and provide allocations for the local education agencies. See Attachment (B).

At the post-secondary level, funds are distributed on a pro-rated basis by Pell Grant recipients. The TBR compiles the Pell Grant data, and pro-rates distribution to the Tennessee Technology Centers. No Title I funds are provided to community colleges. The flow chart represents the flow of post-secondary funds for Tennessee Technology Centers. See Attachment (C)

Local Application: Secondary -See Attachment (D); Post-secondary – See Attachment (E)

IV. Accountability [Section 113]

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

The State's performance results in secondary programs exceeded all performance levels except in 1S2. Percentages of increase are as follows: (+4.04), 1S2 (-0.29), 2SI (+4.04), 3SI (+4.04), 4SI (+1.14), and 4S2 (+4.14). Tennessee has made great strides in improving the data each year. Local career and technical directors are taking the accountability much more seriously after receiving their systems' report card for the fourth year. All data reporting was provided online through *eTIGER* and the Perkins Report Card is presented in a separate folder entitled, Career and Technical system's NCLB Report Card data and State's Report Card.

The Tennessee Technology Centers (TTC) exceeded performance levels in four Core Area Indicators: Academic Attainment (1P1), Skill Attainment (1P2), Completion (2P1) and Placement (3P1); however, the Technology Centers did not meet the FAUPL for Retention (3P2). The Technology Centers also missed targeted performance for Non-Traditional Participation and Completion. Historically, the areas of non-traditional participation have not been reached. The Technology Centers reported remarkable increases in the number of special populations served during the reporting year.

State's Overall Performance Results and Program Improvement Strategies
(Actual Level of Performance (ALP 2006-07)), [Final Agreed Upon Performance Level (FAUPL)];
{Actual Level of Performance (ALP 2005-06)}

Secondary (2006-2007 ALP) [Negotiated by State Department of Education]; {ALP}

1S1 - Academic Attainment: (2006-07 ALP 90.25) [FAUPL-86.21] {ALP-91.51}
As the requirement for applied academics is integrated into the career and technical curricula, especially post-secondary equivalent curricula, it is expected that the academic attainment levels will remain high.

1S2 – Career and Technical Attainment: (2006-07 ALP-96.48) [FAUPL-96.77] {ALP-96.43}

2S1 – Completion: (2006-07 ALP-90.25) [FAUPL-86.21] {ALP-91.51}
Articulated courses are intended for the student looking toward enrollment in post-secondary education; therefore, students are more focused on completion and graduation.

2S2 – Diploma: (2006-07 ALP-90.25) [FAUPL-86.21] {ALP-91.51}

3S1 – Placement: (2006-07 ALP-94.04) [FAUPL-90.00] {ALP-92.14}

4S1 – Nontraditional Participation: (2006-07 ALP-22.62) [FAUPL-21.48] {ALP-24.88}
Non-traditional participation is determined by the LEA which may explain a lower participation in articulated courses.

4S2 – Nontraditional Completion: (2006-07 ALP-27.12) [FAUPL-22.98] {ALP-28.85}

Overall Performance Results and Program Improvement Strategies
(Actual Level of Performance (ALP 2006-07)), [Final Agreed Upon Performance Level (FAUPL)];
{Actual Level of Performance (ALP 2005-06)}

Tech Prep (post-secondary)

1P1 - Academic Attainment: (74.00) [71.76] {71.15}
The data is the same as 2P1 as the Technology Centers programs all include applied academics and separate academic courses do not exist in these diploma/certificate programs.

1P2 – Vocational Attainment: (96.51) [90.00] {97.39}
Number of students who score at least 70% on locally developed competency exams or attaining an industry credential within the report-year.

2P1 – Completion: (74.00) [71.76] {71.15}
A post-secondary student who completes a program of study within 150% of the normal (or expected) time for completion, a student who receives a degree, diploma, certificate, or other formal award.

3P1 – Placement: (88.04) [87.39] {86.47}
The post-secondary student who has completed a program of study and through a state-developed survey has declared entrance into upper-level post-secondary education, apprenticeship programs, employment or the military upon graduation from the technology center.

3P2 – Retention: (84.25) [90.00] {91.16}
Number of 2004-05 completers employed 180 days to 12 months following initial employment.

4P1 – Nontraditional Participation: (9.12) [11.16] {11.05}
Number of students in under-represented gender groups who participated in non-traditional programs during the year.

4P2 – Nontraditional Completion: (11.37) [18.59] {11.44}
A post-secondary student who completes a nontraditional program of study within 150% of the normal (or expected) time for completion, a student who receives a degree, diploma, certificate, or other formal award.

Adult (community colleges) – (2005-2006) [no benchmarks negotiated] {2006-2007}

1A1 -Academic Attainment: Gen Pop: (42.74) [N/P] {42.74}; Tech Prep: (13.41) [N/P] {46.84}
The data is the same as 2A1 as the Community Colleges A.A.S. programs all include required academic courses for completion. These courses can be taken at any time during the course of study and the Tennessee Board of Regents does not track this information separate from completion.

1A2 –Career and Technical Attainment: Gen Pop: (42.74) [N/P] {42.74}; Tech Prep: (13.41) [N/P] {46.84}
The data is the same as 2A1 as the Community Colleges A.A.S. programs all include required academic courses for completion. These courses can be taken at any time during the course of study, and the Tennessee Board of Regents does not track this information separate from completion.

2A1 – Completion: Gen Pop: (42.74) [N/P] {42.74}; Tech Prep: (13.41) [N/P] {46.84}
A cohort of sophomores (concentrators) were identified in the Fall of 2004 and were followed to June 2006 when the number of completers were identified.

3A1 – Placement: Gen Pop: (47.10) [N/P] {50.21}; Tech Prep: (48.65) [N/P] {48.65}
The Total Placement data includes UI data and students who graduated and were found in Tennessee Board of Regents institutions. The data reflects those college graduates who are employed, or in school, during the fourth quarter in the calendar year in which the individual graduated. The information is non-duplicative with 109 graduates being found both in employment and in another TBR institution. In the case of duplication the graduate was placed in employment.

3A2 – Retention: Gen Pop: (95.69) [N/P] {95.19}; Tech Prep: (100) [N/P] {100}
This data reflects information on relevant matches through Tennessee UI databank and TBR data. The cohort is based upon those individuals who graduated and were in school year, or were placed in employment by the fourth quarter of the graduation year; and continued in school or in employment during the second quarter of the following calendar year.

4A1 – Nontraditional Participation: Gen Pop: (10.75) [N/P] {26.44}; Tech Prep: (11.11) [N/P] {21.61}
The data reflects those under-represented gender students who participated in career and technical education programs identified as non-traditional programs of study.

4A2 – Nontraditional Completion: Gen Pop: (47.28) [N/P] {15.70}; Tech Prep: (44.44) [N/P] {9.30}
A cohort reporting process identified non-traditional sophomores (concentrators) and completers that parallel 2A1 (Completion), above.

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

Special populations' students experienced varying degrees of success with the core indicators. While economically disadvantaged students and single parents seemed to improve, individuals with other educational barriers and English language learners proficiency had a more difficult time meeting the core indicators. There was much improvement on indicator 1S2 with regard to the number of sub-groups who did meet the adjusted level of performance. For core indicators 1S1 and 2S1 (which have the same measure), the special populations' students who are already often deficient in academic skills and need extra help are reflected here, especially for other educational barriers. Emphasis will continue to be placed on assisting LEAs in disaggregating students' academic performance for improvement, including the critical skill of reading. A report of sub-group's performance was included in a report to each school system.

Students with limited English proficiency continue to struggle with all five core indicators. These students tend to be located in pockets throughout Tennessee, either in urban areas or rural areas where their parents are working in a specific field. Some are directly from war torn countries where they have not attended school recently or at all, and their cultural frame of reference is quite different from that in this country. They are often unfamiliar with mandatory education policies. Many different languages are spoken, and resources

available for these students vary across the state. Though professional development regarding ELL has been offered throughout the state, we will increase efforts to assist teachers in appropriate instructional techniques and resources for reaching this target population.

An analysis of the non-traditional data when compared to previous year data shows a significantly higher number of students in the underrepresented gender groups for both participants and concentrators. We will continue to target student participation in non-traditional courses, and gender disparity in those courses.

Total student records collected from eTIGER = 362,973. Teachers and administrators were requested to attest to the data accuracy. All data were attested and 204,808 non-duplicate students are included in the reporting database. Each individual teacher/administrator was required to check and validate data via an automated online process to insure data quality.

The Division will continue to target and intensify strategies to promote gender equity in non-traditional courses at the local system level. Perkins Program Improvement funds must be targeted to non-traditional performance for systems that do not meet the required levels of performance.

Improvements in our data collection are evident in this year's report, and efforts for continued improvement are still underway. Tennessee has moved to a paperless web-based reporting system and online reporting. The previous Management Information System (MIS) had individual student/teacher pencil bubble sheet form. Online reporting of data is again disaggregated by subgroups. As each individual system's data is broken out, a "report card" is provided to them. Systems are to focus improvement efforts based on report card data. The local plan addendum continued to focus on these areas of needed improvement. Additionally, funds must be targeted to areas of needed improvement.

Through carryover Tech Prep funds, the Tennessee Technology Centers were able to initiate important changes to the Student Information System to enhance data collection of special populations, development of custom reports, and backup of each database to a secure off-site server. Through the establishment of a data warehouse, the TTC central office will be able to merge all databases into one database for improved monitoring of Perkins activities across the state. The Technology Centers contract with the Tennessee State Department of Labor to secure data to measure the performance level for the Retention core indicator.

The Technology Centers are currently developing a statewide brochure to highlight the success of non-traditional students for distribution to high school students and prospective adult students. It is anticipated that the publication will promote participation in non-traditional programs. In addition, several of the Technology Centers have hired personnel to promote access and diversity as well as non-traditional enrollment in their institutions.

Tech Prep seeks to support both the Tennessee Department of Education and the post-secondary institutions to meet the needs of special populations. In cooperation with the TNDOE and the Tennessee Association of Higher Education and Disabilities, training programs were developed for each consortium on how to assist special education students to better transition between secondary and post-secondary. Training for LEA personnel occurred throughout the year through the support of local Tech Prep consortia.

C. Definitions

Vocational Participant: A student enrolled in a state approved career and technical course.

Vocational Concentrator: A student with three units (credits) in a focused, sequential career and technical program of study (concentration) and one unit in a related career and technical area or an additional credit in the sequence.

Vocational Completer: A student who completes the technical pathway requirements for graduation.

Tech Prep Student:

Secondary tech-prep: A student who is an eleventh or twelfth grade career and technical concentrator enrolled in a career and technical course that is articulated with a post-secondary institution. The competencies for each institution's course must demonstrate common learning outcomes for the specified courses to be articulated.

Post-secondary tech-prep: A student is defined as:

Technology Centers: A post-secondary tech-prep student who, through a specific articulation agreement with a high school, has received benefit from a post-secondary institution. For the Tennessee Technology Centers (TTC), benefit is realized by the student receiving clock hour credit for the attainment of specific skills in a high school course or courses. Each technology center and high school must establish a process for establishing common learning outcomes for specified courses for articulation.

Community Colleges: A post-secondary tech-prep student who, through a specific articulation agreement with a high school, has received benefit from a post-secondary institution. For the community colleges, benefit is realized by the student receiving academic credit or waiver for the attainment of specific skills in a high school course or courses. Each college and high school must establish a process for establishing common learning outcomes for specified courses for articulation.

Career and Technical Participant- Any student who enrolls in our program who has an employment objective and demonstrates, through counseling and testing, reasonable potential for achieving that objective.

Career and Technical Concentrator Students – Career and technical concentrators are students who are entering the second half of their program.

Career and Technical Completer- A student who achieves a certificate or diploma.

D. Measurement Approaches

- **<u>Core Indicator 1S1</u>**

High School Completion Combined with State Academic Assessment System
Measurement Definition: Numerator: Number of 12th grade secondary career and technical concentrators graduating from high school. **Denominator:** Total number of 12th grade secondary career and technical concentrators.
Measurement Approach: The measurement approach used for academic attainment in this core indicator is the high school graduation rate. Federal benchmarks as part of NCLB requires that subgroups demonstrate required proficiency in math, English and writing assessment. In addition, beginning with the 2004-05 school year, students must successfully pass exit exams (Gateway Exams) in: Algebra I, English II, and Biology in order to graduate from high school. Prior to 2004-05, it was a prerequisite that students pass the Tennessee Comprehensive Assessment Program (TCAP) competency test in the areas of math and language arts in order to graduate with a regular education diploma, as mandated by the State Board of

Education. The Gateway Exam requirement replaces TCAP for those students graduating spring 2005 and thereafter.

- **Core Indicator 1S2**

Vocational-Technical Education Course Completion and Competency Attainment
Measurement Definition: Numerator: Number of 12th grade concentrators who have met state-established, industry-validated career and technical standards. **Denominator:** As 1S1 denominator
Measurement Approach: Career and Technical Education Course Completion coupled with Performance Benchmarks is used as the measurement approach for career and technical skill attainment in this core indicator. Occupational skill attainment of career and technical concentrators is measured by using course competencies established for each career and technical course. Competency profiles correlated to each career and technical education course are provided to LEAs. As curriculum standards are revised using the DACUM process, new competency profiles will be developed and disseminated. The standards incorporate national and industry standards (where available) as well as input from business and industry representatives in the state. Occupational attainment is determined by using course competencies established for each career and technical course.

- **Core Indicator 2S1**

Secondary Completion Using State/Local Administered Data
Measurement Definition: Numerator: As 1S1 numerator. **Denominator:** As 1S1 denominator
Measurement Approach: The measurement approach used for academic attainment in this core indicator is the high school graduation rate. Federal benchmarks as part of NCLB requires that subgroups demonstrate required proficiency in math, English and writing assessment. In addition, beginning with the 2004-05 school year, students must successfully pass exit exams (Gateway Exams) in: Algebra I, English II, and Biology in order to graduate from high school. Prior to 2004-05, it was a prerequisite that students pass the Tennessee Comprehensive Assessment Program (TCAP) competency test in the areas of math and language arts in order to graduate with a regular education diploma, as mandated by the State Board of Education. The Gateway Exam requirement replaces TCAP for those students graduating spring 2005 or thereafter.

- **Core Indicator 3S1**

State-Developed, School-Administered Surveys/Placement Records
Measurement Definition: Numerator: Number of concentrators who graduated in a year before the reporting year and were placed in post-secondary education or advanced training, employment, and/or military service within one year of graduation. **Denominator:** Number of concentrators who graduated at the same year as the numerator.

Measurement Approach: State-Developed, School-Administered Surveys/Placement Records will be used as the measurement approach for this core indicator. The Division of Career and Technical Education developed a sample survey instrument and guidelines for implementing a follow-up system for career and technical concentrators to be implemented and reported to the state by LEAs. Designed to determine if a student went into post-secondary education, apprenticeship programs, employment, or the military, the survey to determine placement is conducted six months after concentrators have graduated from high school. LEAs are required to monitor responses to the surveys, and follow-up telephone calls are used to increase the response rate. Technical assistance is provided to ensure that the follow-up system is implemented uniformly statewide.

- **Core Indicator 4S1**

State/Local Administrative Data (4S1)
Measurement Definition: Numerator: Number of students in under-represented gender groups who participated in a non-traditional secondary career and technical program in the reporting year.
Denominator: Number of students who participated in a non-traditional secondary career and technical program in the reporting year.
Measurement Approach: State/Local Administrative Data is the measurement approach to be used for this core indicator of performance. The Division of Career and Technical Education targets career and technical programs encompassing the greatest number of non-traditional occupations, disseminates this information to LEAs, and provides technical assistance to them in devising ways to encourage student participation in these programs. Management Information System (MIS) data submitted to the Division of Career and Technical Education is utilized to determine enrollment changes by gender in the targeted areas.

- **Core Indicator 4S2**

State/Local Administrative Data (4S2)
Measurement Definition: Numerator: Number of concentrators in under-represented gender groups who enrolled in a non-traditional secondary career and technical program in the reporting year.
Denominator: Number of concentrators who enrolled in a non-traditional secondary career and technical program in the reporting year.
Measurement Approach: State/Local Administrative Data is the measurement approach used for this core indicator of performance. The Division of Career and Technical Education targets career and technical programs encompassing the greatest number of non-traditional occupations, disseminates this information to LEAs, and provides technical assistance to them in devising ways to encourage student participation in these programs. LEAs report students who complete non-traditional career and technical education programs, using data collection guidelines developed by the Division of Career and Technical Education.

- **Core Indicator 1P1**

Measurement Definition: Numerator: Number of students who receive a certificate or diploma within the report-year. **Denominator:** Number of students who were enrolled during the reporting period minus the number of students continuing into the next reporting period, referred to as *calculated enrollment*.

Measurement Approaches – Post Secondary

- **Core Indicator 1P2**

Measurement Definition: Numerator: Number of students who pass licensure or certification exams, or attain other industry-recognized credentials within the report-year. **Denominator:** Number of students who took licensure or certification exams or attained other industry-recognized credentialing exams.

- **Core Indicator 2P1**

Measurement Definition: Numerator: Number of students who receive a certificate or diploma within the report-year. **Denominator:** Number of students who were enrolled during the reporting period minus the number of students continuing into the next reporting period, referred to as *calculated enrollment.*
Measurement Approach: In order to be considered a completer, the degree/award must actually be conferred. A post-secondary student who completes a program of study within 150% of the normal (or expected) time for completion, a student who receives a degree, diploma, certificate, or other formal award.

- **Core Indicator 3P1**

Measurement Definition: Numerator: Number of completers available for placement.
Denominator: Number of completers placed during the report year or within 90 days of completion.
Measurement Approach: The post-secondary student who has completed a program of study and through a state-developed survey has declared entrance into upper-level post-secondary education, apprenticeship programs, employment or the military upon graduation from the technology center.

- **Core Indicator 3P2**

Measurement Definition: Numerator: Number of completers employed 180 days to 12 months following initial employment. **Denominator:** Number of completers who were employed after completion of program.
Measurement Approach: The post-secondary Tech Prep student who has completed a program of study and, through a state-developed survey, has declared retention in upper-level post-secondary education, apprenticeship programs, employment or the military upon graduation from the technology center.

- **Core Indicator 4P1**

Measurement Definition: Numerator: Number of students in under-represented gender groups who participated in non-traditional programs during the year. **Denominator:** Number of students who participated in non-traditional programs during the year.
Measurement Approach: A post-secondary student who is enrolled in a technology program identified by the Tennessee Board of Regents, Office of Technology Centers, as related to a non-traditional occupation.

- **Core Indicator 4P2**

Measurement Definition: Numerator: Number of students in under-represented gender who completed a non-traditional program during the report-year. **Denominator:** All students who completed a non-traditional program during the report-year.
Measurement Approach: A post-secondary student who completes a nontraditional program of study within 150% of the normal (or expected) time for completion, a student who receives a degree, diploma, certificate, or other formal award. In order to be considered a completer, the degree/award must actually be conferred.

Open conversations among the three career and technical providers within the state allowed for an advance in data quality for this reporting year.

The following measurement approaches were taken for each Core Indicator:

a. Data were extracted from the Student Information System database of each TTC and verified by the institution and TTC Central Office for the Skill Attainment, Completion, and Non-Traditional Participation and Completion core indicators.

b. Retention data were obtained from the State Department of Labor.

c. The TBR Office of Data and Statistics provided information for the Enrollment and Non-Traditional Participation for comparison with institutional data.

Through programmatic changes and concerted efforts by the institutions, the technology centers have improved their data collection and reporting capabilities.

Measurement Approach Tech Prep – Secondary and Post-secondary

Secondary

1S1 – Academic Attainment:

The Tech Prep data used for academic attainment are the twelfth grade concentrators in an articulated secondary career and technical education course who pass the Gateway Assessment Program competency test in the areas of math and language arts.

1S2 – Vocational Attainment:

The Tech Prep data used for career and technical attainment are the twelfth grade concentrators in an articulated secondary career and technical education course, who demonstrate attainment for 75% of the competencies profiled in the articulated career and technical course.

2S1 – Completion:

The Tech Prep data used for completion are the twelfth grade concentrators in at least one articulated secondary career and technical education course, who have passed the Gateway Exams Assessment Program competency tests in the areas of math and language arts *and have graduated by end of the school year.*

3S1 – Placement:

This information is gathered by survey from the LEAs.

4S1 – Non-traditional Participation:

A tech-prep student who is enrolled in an articulated course identified by the State Department of Education as related to a non-traditional occupation.

4S2 – Nontraditional Completion:

A tech-prep student identified as a nontraditional student who passes the Gateway Exams and has graduated by end of the school year.

Post-secondary – Technology Centers

1P1 – Academic Attainment:

[The same as 2P1]

1P2 – Vocational Attainment:

A student who completed a program of study in a technology center and who passed a licensure or certification exam or attained another industry-recognized credential within the reporting year.

2P1 – Completion:

A student enrolled in a technology center during the reporting period who completed all requirements in a program of study necessary to receive diploma or certificate. In order to be considered a completer, the award must actually be conferred.

3P1 – Placement:

A completer who was placed in employment, entered the military, or who continued their education.

3P2 – Retention:

A student who received a certificate or diploma during the 2004-05 reporting year who is employed 180 days to 12 months following initial employment. UI data is used to determine performance levels for this indicator.

4P1 – Nontraditional Participation:

A student who is enrolled in a technology program identified by the Tennessee Board of Regents, Office of Technology Centers, as related to a non-traditional occupation.

4P2 – Nontraditional Completion:

A TTC student who completed a nontraditional program of study and received a certificate or diploma. In order to be considered a completer, the award must actually be conferred.

Adult – Community Colleges

1A1 – Academic Attainment:

[The same as 2A1]

1A2 – Vocational Attainment:

[The same as 2A1]

2A1 – Completion:

A community college student identified as a tech-prep student who completes a program of study within 150% of the normal (or expected) time for completion, a student who receives a degree, diploma, certificate, or other formal award. In order to be considered a completer, the degree/award must actually be conferred.

3A1 – Placement:

The combined data (Total Placement) is the addition of UI reported data, plus those students who continued into a four-year institution within the TBR system. The data reflects those college graduates who were identified by the college as Tech Prep students, and who are employed during the fourth quarter after the academic year. For the first time those students who continue their education at four-year institutions are broken out. The Total Placement is non-duplicative data with 109 graduates being placed both in employment and education.

3A2 – Retention:

This data reflects information on relevant matches through Tennessee UI databank. The cohort is based upon those individuals identified as Tech Prep students who graduated, who were placed in employment by the fourth quarter, and continued employment during the second quarter of the following year. In addition, those individuals who articulated into four-year institutions and remain enrolled or who have graduated are included in the calculation (non-duplicative data).

4A1 – Nontraditional Participation:

A tech-prep student who is enrolled in a technology program identified by the Tennessee Board of Regents, Office of Tech Prep, as related to a non-traditional occupation.

4A2 – Nontraditional Completion:

A community college student identified as a tech-prep student who completes a nontraditional program of study within 150% of the normal (or expected) time for completion, a student who receives a degree, diploma, certificate, or other formal award. In order to be considered a completer, the degree/award must actually be conferred.

E. Improvement Strategies

a. Effectiveness of Improvement Strategies in Previous Program Year

The following were implemented successfully:

- Continued improvement was made on the reliability of data collected from secondary and post-secondary recipients and through the development of a statewide data warehouse.
- Agriculture and Family and Consumer Sciences began to revise standards and competency profiles.
- Online WebEx technical assistance workshops for administrators on accurate data gathering and baseline reporting for the new Perkins IV indicators.
- Systems were provided an online report card of the results for five (5) years on the baseline data and future levels to achieve as it related to the statewide results. Additionally, subgroup performance was reported on each core indicator.

- New report card business rules have been developed for input and data collection based on Perkins IV reporting requirements.

- The division continues to develop course correlations to Gateway Standards.

- Professional development was provided for new local career and technical directors in the state focusing on the new requirements of Perkins IV and the need for improved and accurate data collection.

- Staff attended OVAE data quality meetings and the Career Cluster Institute.

- The TSBE continues to approve all "special courses" and LEAs were encouraged to follow TNDOE approved course standards.

- Nontraditional careers were specifically indicated on TCIDS, Tennessee's web site for career information.

- Emphasis was and continues to be placed on adolescent literacy of students. This effort had a dual focus--assisting high school students in improving their reading, math and writing skills and CTSO activities designed to assist younger children in developing strong reading and writing skills.

- Incentive Grants were awarded to LEAs to develop and implement models for technical and small learning communities.

- The Division partnered with the Division of Teaching and Learning to provide Gateway Institutes.

- The second Counselor's Institute was held to focus on career decision making.

- The Division supports a career placement specialist to assist Local Education Agencies (LEAs) to strengthen career options for students using EdAmerica, KUDER, Career Planning System and other career decision-making programs.

- The Division continued its 20/20 visioning process to address where CTE should be in Tennessee by the year 2020 and beyond.

- Post-secondary challenge grants were provided to community colleges and technology centers for model transition programs.

- Post-secondary improving data grants were provided to the TBR, community colleges, and TTC's.

- Curriculum areas – Technology, Trade and Industry, and Health Science were revised the previous year and were implemented 2006-07 to align with state accountability standards.

- The Office of Academic Affairs, Tennessee Board of Regents, continues to work with the Tennessee Department of Labor to access unemployment insurance information as related to the TBR students and graduates.

- Developed a Memorandum of Understanding (MOU) with post-secondary for Perkins IV. This MOU establishes fiscal and programmatic agreement between the eligible agency, i.e. the Tennessee Department of Education and the Tennessee Board of Regents.

- The TTCs continued to focus on state-wide articulation opportunities, particularly in the business cluster. The community colleges continued to focus on articulation agreements relevant to their institution.

- The State Department of Education was able to establish articulation agreements between the LEAs and two universities: University of Tennessee at Martin and Middle Tennessee State University.

- Each community college reaffirmed a formal appeals process for disputes regarding credit earned by secondary students through dual enrollment and through articulated courses once the student enrolled in the institution.

- Implemented the "Transitions Initiative Curriculum" statewide to assist secondary personnel to transition special needs students from secondary to post-secondary.

- Set forth Tech Prep consortia closeout procedures to phase out the consortia

- The Tennessee Technology Centers implemented improved data collection processes and instruments for the reporting of special population students.

b. Improvement Strategies for Next Program Year

- Continue to improve the quality of data collection and online reporting and merge with the state's Educational Information System (EIS) and data warehouse.

- Provide technical assistance and professional development opportunities to LEAs for non-traditional participation and completion, especially those that do not meet their performance levels in 4S1 and 4S2 and professional development.

- Provide technical assistance to local systems to interpret the Perkins IV Act and new accountability.

- Expand coordination with others in the department to broaden and eliminate duplication in the collection of student data through the State Data Management PMOC process.

- Continue to provide more specific training through WebEx conferences to those working with the data collection at the local level through data technical assistance workshops.

- Continue to work toward improvement in each special population category with the goal of each disaggregated population meeting the performance level.

- Continue to add edits at different stages of the data collection to make the data more reliable.

- Continue to work closely with post-secondary institutions to identify pathways, increase articulation, dual enrollment credit and efforts that lead to high-skill, high-wage or high-demand jobs.

- Continue the non-traditional student and local system recognition program to increase awareness, participation, and emphasis on non-traditional careers.

- Provide focused professional development for school improvement and the new high school redesign and program of study.

- Continue the Perkins IV Planning Committee comprised of members from the state department, business and industry, secondary and post-secondary education to assist in the development of a state plan for Perkins IV.

- Conduct three public hearings on Perkins IV.

- Develop a Perkins PMOC to seek input from the entire department and keep all partners apprised of available information pertaining to Perkins IV state plan development.

- Review the recommendation of the Technical Skill Assessment PMOC and pilot implementation of technical skill assessments for Perkins IV.

- Disseminate the "Special Needs Student in CTE Resource Guide" to assist in the development of Individual Education Plans and modification of competencies for special needs students.

- The TBR has taken a more aggressive approach for measurement attainment of the performance indicators. Indicators will be reviewed closely during the upcoming year and will be assessed in regard to historical data. Likewise, the TTCs will continue to encourage articulation with sister institutions and provide secondary students with clear career pathways.

- The technology centers have added new data fields to their Student Information Systems to improve data collection and reporting and enhance program monitoring of Perkins recipients.

- To improve data quality and to ensure consistency in reporting performance for each core indicator, the Tennessee Technology Centers plan to review each measurement approach for alignment with recommendations of the Data Quality Institute and the Next Steps Working Group.

V. Monitoring Follow-up

Tennessee did not receive a monitoring visit during this reporting period.

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

Through the WIA Incentive Grant from the Department of Labor, seventeen high schools received grants to develop models of integration. Improved student academic performance was emphasized. Each school identified a population and a sample to test, and the measure to show academic improvement. There were nine schools chosen to continue the grant for an additional year to field-test their models with sister schools. Additionally, through the same grant, the Division of Career and Technical Education partnered with the Division of Teaching and Learning to provide Career Academic Technical Gateway Institutes to teams of teachers from high schools. The teams consisted of academic, career and technical, and special education teachers. The purpose of the institutes was for teachers to collaborate and identify common academic, career and technical, and Gateway skills. Each team developed lesson plans based on the identified skills from the three areas. The lesson plans will be posted on the department website as a resource for all teachers in Tennessee. There were 400 teachers trained.

THE ATTACHMENTS (A), ORGANIZATIONAL CHART OF KEY AGENCIES; (B), SECONDARY FUNDING FLOW CHART; (C), POST-SECONDARY FUNDING FLOW CHART; (D), LOCAL APPLICATION SECONDARY; AND (E), LOCAL APPLICATION POST-SECONDARY HAVE BEEN SENT BY EMAIL TO PERKINS2006@ED.GOV