

U. S. Department of Education  
Office of Vocational and Adult Education

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**The Carl D. Perkins  
Career and Technical Education Act of 2006**

**STATE PLAN COVER PAGE**

**State Name:**

Washington State

**Eligible Agency Submitting Plan on Behalf of State:**

Workforce Training and Education Coordinating Board

**Person at, or representing, the eligible agency responsible for answering questions on this plan:**

Signature:



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**Type of State Plan Submission (check *all* that apply):**

5-Year

1-Year Transition

Unified - Secondary and Postsecondary

Unified - Postsecondary Only

Title I only (*All Title II funds have been consolidated under Title I*)

Title I and Title II

# Washington State Perkins Five-year Plan

**Effective  
July 1, 2008 – June 30, 2013**

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## **Eligible Agency**

### **Workforce Training and Education Coordinating Board**

Chair David Harrison

Executive Director Eleni Papadakis

## **Secondary Recipient**

### **The Office of Superintendent of Public Instruction**

Superintendent Terry Bergeson

## **Postsecondary Recipient**

### **State Board for Community and Technical Colleges**

Executive Director Charlie Earl

In compliance with federal laws, Washington State Public Schools and Community and Technical Colleges administer all state-operated education programs, employment activities and admissions without discrimination based on race, religion, national origin, color, sex, age, military service, or disability.

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# **Part A**

## **State Plan Narrative**

## LEGAL AUTHORITIES

### Workforce Training and Education Coordinating Board

RCW 28C.18

The purpose of the board is to provide planning, coordination, evaluation, monitoring, and policy analysis for the state training system as a whole, and advice to the governor and legislature concerning the state training system, in cooperation with the state training system and the higher education coordinating board.

- The board shall be designated as the state board of vocational education as provided for in P.L. 98-524, as amended, and shall perform such functions as is necessary to comply with federal directives pertaining to the provisions of such law.
- The board shall provide policy advice for any federal act pertaining to workforce development that is not required by state or federal law to be provided by another state body.
- Upon enactment of new federal initiatives relating to workforce development, the board shall advise the governor and the legislature on mechanisms for integrating the federal initiatives into the state's workforce development system and make recommendations on the legislative or administrative measures necessary to streamline and coordinate state efforts to meet federal guidelines.
- The board shall monitor for consistency with the state comprehensive plan for workforce training and education the policies and plans established by the state job training coordinating council, the advisory council on adult education, and the Washington state plan for adult basic education, and provide guidance for making such policies and plans consistent with the state comprehensive plan for workforce training and education

### The Office of Superintendent of Public Instruction

RCW 28A.30

- The state of Washington and/or any school district is hereby authorized to receive federal funds made or hereafter made available by acts of congress for the assistance of school districts in providing physical facilities and/or maintenance and operation of schools, or for any other educational purpose, according to provisions of such acts, and the state superintendent of public instruction shall represent the state in the receipt and administration of such funds.
- The authority for this chapter is RCW 34.05.220 which authorizes the superintendent of public instruction to adopt rules governing the formal and informal procedures prescribed or authorized by chapter 34.05 RCW.

### State Board for Community and Technical Colleges

RCW 28B.50

- The college board shall have general supervision and control over the state system of community and technical colleges. In addition to the other powers and duties imposed upon the college board by this chapter, the college board shall be charged with the following powers, duties and responsibilities:

(1) Review the budgets prepared by the boards of trustees, prepare a single budget for the support of the state system of community and technical colleges and adult education, and submit this budget to the governor as provided in RCW [43.88.090](#);

(2) Establish guidelines for the disbursement of funds; and receive and disburse such funds for adult education and maintenance and operation and capital support of the college districts in conformance with the state and district budgets, and in conformance with chapter [43.88](#) RCW.

## **I. PLANNING, COORDINATION, AND COLLABORATION PRIOR TO PLAN SUBMISSION**

### **A. Statutory Requirements**

#### **1. Public hearings**

Five public hearing were held in January 2008 to solicit comment and input for Washington State's Five-year Perkins Plan. The hearing venues were selected to make participation accessible across the state. Notice of the scheduled meeting dates and locations was sent as a press release. The notice was also submitted to the operating agencies and the Workforce Training and Education Coordinating Board members for electronic distribution. The following excerpt is the press release as it was published the week of December 15, 2007:

#### ***Public comment needed on spending federal career and technical education dollars***

*The public is invited to participate in shaping how Washington will spend federal dollars designed to improve the quality of and expand access to career and technical education programs.*

*The Workforce Training and Education Coordinating Board (WTB) will conduct hearings to solicit ideas and comments on how it should spend federal money provided through the Carl D. Perkins Career and Technical Education Act of 2006. A draft five-year plan will be available at [www.wtb.wa.gov](http://www.wtb.wa.gov) by Jan. 7, 2008.*

*Career and technical educational (CTE) programs are courses that provide individuals with the knowledge and skills needed to prepare for careers in current or emerging employment sectors. CTE programs are usually geared towards careers that do not require a baccalaureate or higher degree to be successful.*

*The WTB staff invites the public, and particularly employers, labor organizations, educators, parents, students, and community organizations to present their views and make recommendations regarding the state's five-year Perkins plan at any of the five hearings held around the state.*

- *Spokane Falls Community College, 3410 W. Fort George Wright Dr., Wednesday, Jan. 9, 2008.*
- *Yakima Community College, S. 16th & Nob Hill Blvd., Thursday, Jan. 10, 2008.*
- *Lower Columbia Community College, 1600 Maple Street in Longview, Friday, Jan. 11, 2008.*
- *Edmonds Community College, 20000 68th Avenue W. in Lynnwood, Monday, Jan. 14, 2008.*
- *Clover Park Technical College, 4500 Steilacoom Blvd. SW, Lakewood, Tuesday, Jan. 15, 2008.*

*All meetings will be open for comment between 4 p.m. and 7 p.m. Written comment can be sent to: Terri Colbert, program manager, Workforce Training Board, PO Box 42495, Olympia, WA 98504; or by email to [tcobert@wtb.wa.gov](mailto:tcobert@wtb.wa.gov).*

*As the eligible state agency receiving the funds, the WTB partners with the Office of Superintendent of Public Instruction and the State Board for Community and Technical Colleges to design programs that enable the state to provide quality career and technical education to meet performance measures.*

*The Perkins Act was adopted in 1998 and reauthorized by Congress in 2006. Last year, the Act provided states with roughly \$1.3 billion with just over \$25 million going to Washington.*

## 2. Summary of public hearings

All of the five public hearings were recorded to ensure that the input, comments, and questions were captured accurately. Each session began with a presentation outlining the primary components of the Perkins legislation and followed with a section by section preview of the plan. While the meetings held to a formal agenda, attendees were encouraged to ask questions or ask for clarification throughout each meeting. Eligible agency, as well as operating agency, staff members were included at each meeting. The following bulleted items capture the general themes and comments of the attendees:

- Challenges as a small district – Many of the rural secondary districts expressed concerns about the challenges they face as a small district, trying to provide quality CTE programs, while still meeting the increased emphasis on the state’s WASL testing requirements.
- Dollars vs. the requirements – Cost effectiveness becomes an issue.
- Faculty development – Will Perkins funds still be allowed to provide this?
- Special populations – Are Perkins funds still able to be used to provide services?
- Maintain flexibility of spending – The secondary and postsecondary districts asked if Perkins allowable uses still provided the flexibility.
- Programs of Study – Districts asked how Programs of Study are being developed.
- Include business and industry in the development process – This was shared at nearly all meetings – a clear message of the importance of having business and industry at the table when developing curriculum for CTE.

Accountability was the primary focus of the comments and questions throughout each of the five hearings. These are reflected in the following bullets:

- How will the state communicate and work with the locals to meet data reporting requirements?
- Provide technical assistance so locals benefit from the collection and reporting process – to assure that accountability isn’t just a data hoop to be jumped through.
- How will districts be informed about baselines, targets, and levels of performance?
- How will districts negotiate?
- Placement – What about self-employment and out-of-state employment? SSNs – What happens when a district doesn’t gather these?
- How is the data collected? What is being done to assure that local districts are able to report the right information?

3. The state shall develop the State Plan in consultation with:
  - a. Academic and career and technical education teachers,
  - b. Faculty
  - c. Administrators
  - d. Career guidance
  - e. Academic counselors
  - f. Eligible recipients
  - g. Parents
  - h. Students
  - i. Institutions of high education
  - j. Tech Prep coordinators and consortia representatives
  - k. Community members
  - l. Representatives of special populations
  - m. Business & industry representatives
  - n. Labor organization representatives
  - o. Governor[Sec. 122(b)(1)(A)-(B)]

The Workforce Training and Education Coordinating Board convened a Perkins Transition Team to provide input and guidance to the implementation of the Perkins IV legislation. Members of that team include:

- Office of Superintendent of Public Instruction (OSPI), Career and Technical Education Division
- State Board for Community and Technical Colleges (SBCTC), Workforce Education Division
- Tech Prep Directors Association
- Workforce Education Council (WEC)
- Washington Association of Vocational Administrators (WAVA)
- Offender Employment Services, a division of Employment Security (OES)
- Workforce Training and Education Coordinating Board (WTB)

The Perkins Transition Team attended the regional workshops to learn about the new Legislation and to begin dialogue about the state's one-year transition plan preparation. As the team members identified goals and strategies, they aligned their efforts to the state's strategic plan, *High Skills, High Wages*. Their work plan guided efforts in development of the transition plan and the five-year plan.

The changes in Perkins legislation resulted in numerous policy decisions. These decisions were made through the direction of the Workforce Training and Education Coordinating Board. Membership of this Board includes:

- Chair, David Harrison, senior lecturer at the Daniel J. Evans School of Public Affairs, University of Washington
- Rick Bender, President, Washington State Labor Council, AFL-CIO
- Janet Lewis, Local 46 Business Representative, International Brotherhood of Electrical Workers



- Beth Thew, Executive Secretary-Treasurer, Spokane Regional Labor Council, AFL-CIO
  - Mike Hudson, Executive Director of the Institute Workforce Development and Economic Sustainability, Association of Washington Business
  - Creigh H. Agnew, Vice President of Government Affairs and Corporate, Retired Contributions, Weyerhaeuser Company
  - Tony Lee, Community Action Director, Fremont Public Association
  - Terry Bergeson, Superintendent of Public Instruction
  - Karen T. Lee, Commissioner, Employment Security Department
  - Charlie Earl, Executive Director, State Board for Community and Technical Colleges
  - Robin Arnold-Williams, Secretary, Department of Social and Health Services
  - Kris Stadelman, CEO, Workforce Development Council of Seattle-King County
  - Juli Wilkerson, Director, Community Trade and Economic Development
  - Eleni Papadakis, Executive Director, Workforce Training and Education Coordinating Board
4. The state must provide access to information and allow opportunities to participate in State and local decisions that relate to development of the State plan [Sec. 122(b)(2)]

Most of the 13 members of the Transition Team participated in one of three Perkins workshops, following passage of the Perkins 2006 legislation. Following these workshops, the team convened monthly to participate in the state's plan development. Members of the Transition Team kept system groups apprised throughout the plan development process, including the WA-ACTE, WAVA, and WEC.<sup>1</sup> System groups included eligible agencies, consortia, and local recipient councils. Transition Team members brought the comments and concerns of their constituent groups to the meetings, and those were considered during the plan's development.

5. Develop State plan relating to amount and uses of funds after consultation with the eligible State agencies.

Funding decisions and the focus of Perkins funds usage were determined during the five-year plan development. Funding issues were discussed at several of the monthly Transition Team meetings. Additionally, staff at the Workforce Board met with representatives of both operating agencies to draft policy recommendations. The Workforce Board met on September 26, 2007 to discuss the recommendation, and again on November 8, 2007 to take action to include a 56 percent postsecondary to 44 percent secondary funding split in the state's five-year plan (*as adopted by the Workforce Board in November 2007 for inclusion in the state's five-year plan*).

Further, the use of basic grant funds will incorporate the required and permissible activities. Eligible agencies will continue to monitor use of the leadership funds,

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<sup>1</sup> Washington Association of Career and Technical Education (WA-ACTE); WAVA An Association of Career and Technical Education Administrators (WAVA); Workforce Education Council (WEC)

using them as allowable under the Act. The secondary and postsecondary agencies will utilize the 10 percent reserve option for the basic grant funds to assist those districts and institutions identified as rural, or with a high number or high percent of CTE students (*as adopted by the Workforce Board in November 2007 for inclusion in the state's five-year plan*). Offender Employment Services, a division of Employment Security, will be the recipient and will administer the one-percent leadership funds, targeting individuals in state institutions by providing career and technical training and employment opportunities (*as adopted by the Workforce Board in November 2007 for inclusion in the state's five-year plan*).

## **II. PROGRAM ADMINISTRATION**

### **A. Statutory Requirements**

1. On April 15, 2007, Washington State submitted its One-Year Perkins Transition Plan. This submission is Washington State's Five-Year Perkins Transition Plan, thus meeting the requirements of the Act. [Sec. 122(a)(1)]
2. Describe CTE activities to be assisted that are designed to meet or exceed the State adjusted levels of performance, include a description of –
  - a. The CTE programs of study that may be adopted by local educational agencies and postsecondary institutions to be offered as an option to students when planning for and completing future coursework for CTE content areas that –
    - i. Incorporate secondary and postsecondary education elements;
    - ii. Include coherent and rigorous content, aligned with challenging academic standards and relevant career and technical content, in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;
    - iii. May include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits; and
    - iv. Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree, or an apprenticeship.
  - b. How CTE programs of study will be developed and implemented, in consultation with eligible recipients.
  - c. How eligible recipients will be supported in developing and implementing articulation agreements between secondary education and postsecondary education institutions.
  - d. How programs at the secondary level will make available information about CTE programs of study offered by the eligible recipients.

The Transition Team's monthly agenda included development of Programs of Study recommendations for inclusion in the Board's policy package. The Board reviewed the policy, standards, and implementation recommendations in September and November 2007.

On November 27, 2007, the Workforce Board convened a Program of Study Workgroup, with representation from operating agencies, system organizations, counselors, and Tech Prep. This group assisted in framing the steps that locals would take in defining their programs of study and how the Tech Prep directors would facilitate where additional assistance may be needed. A Programs of Study template was adopted, and a process identified for assuring that each local secondary and postsecondary district met the Act requirements outlined in Section 122(c)(1)(A)(i-iv).

The list of approved/recognized programs of study will be posted on websites for both secondary and postsecondary program delivery systems and will be included in the local planning process. Local recipients' plans must identify the approved programs of study that are offered, in order to establish eligibility for receipt of Perkins funding. Programs of Study are to be linked to career counseling at a minimum, and if the program exceeds minimums, it will be linked to a comprehensive school counseling program, such as Washington State's Navigation 101.

The recommendations for development and implementation of Programs of Study, as presented and approved for inclusion in the state's five-year plan, were:

*Programs of Study will enable students to clearly envision and understand what courses will be needed for them to gain the appropriate skills and knowledge to attain education goals and entry into the workforce.*

*Programs of Study can provide an educational roadmap for students, regardless of where or when they enter the educational continuum, whether in high school, college, ABE/ESL, as an apprenticeship-bound student, or one who is employment-bound, or as an adult seeking skills upgrade. With a clear perception of their direction, students will better understand what courses they need to reach their destination.*

### **Recommendations**

#### **Policy Recommendations**

- *Primary responsibility for developing Programs of Study should be at the local level with a state determination that a Program of Study meets minimum standards through the Perkins grant approval process. The state will use the Tech Prep consortia coordinators/directors as facilitators of the Programs of Study development process.*
- *The Workforce Board and state operating agencies should encourage the use of the national Career Clusters organizational framework and standards, as a starting place for the identification of required knowledge and skill sets. Local modifications to meet industry or educational standards are permissible.*

- *Programs of Study can provide an education road map for students. A Program of Study must be flexible to accommodate a student's individual course selection and educational goals.*
- *Local schools and colleges are required to provide one Program of Study in the first year of the Perkins plan. Additional Programs of Study should be incrementally phased in, where attainable.*
- *Each Program of Study will identify opportunities for students to obtain high wage, high skills, or high demand jobs in the appropriate fields.*
- *The state's goal is to maximize the number of approved programs of study in place by the end of the five-year plan. At the end of year three, the state will re-examine this goal, based on experience to-date.*

#### ***Programs of Study Standards Recommendations***

- *Minimum standards will be established by the state and must be met for a Program of Study to be approved by the state.*
- *Standards for Programs of Study must include content in a coordinated, non-duplicative progression of courses that align secondary and postsecondary education to adequately prepare students to successfully transition into postsecondary education without remediation.*
- *Minimum requirements for a Program of Study will include the following components:*
  - Alignment with career counseling.*
  - Appropriate Essential Academic Learning Requirements (EALRs) and Grade Level Expectations (GLEs) at the secondary level.*
  - Rigorous academic, occupation-specific, and industry-recognized skills and knowledge at the secondary and postsecondary level that lead to an industry-recognized credential or certificate at the postsecondary level, an associate or baccalaureate degree, or an apprenticeship.*
- *The state should encourage secondary and postsecondary Programs of Study to exceed standards, by including the following components:*
  - Opportunity to earn college credit (secondary component).*
  - Alignment and articulation with baccalaureate programs (postsecondary component).*
  - Alignment with a comprehensive school counseling program, such as Washington's Navigation 101.*
  - Linkages to skill panels and Centers of Excellence.*
  - Self-employment and entrepreneurial opportunities in the pathway at multiple exit points.*

### **Implementation Recommendations**

- *Tech Prep consortia directors will facilitate the development of Programs of Study, including:*
  - Alignment between secondary and postsecondary.*
  - Both academic and technical skill components, at the appropriate level.*
  - Sign articulation agreements.*
  - Attainment of all standards, established by the state agencies.*
- *Marketing and communications should be a critical part of the development of Programs of Study. The OSPI, SBCTC, and Workforce Board should coordinate their marketing efforts in support of Programs of Study.*
- *Professional development will be critical to the development of Programs of Study. Strategies on professional development should be coordinated with other professional development needs related to Perkins.*
- *State leadership resources should be utilized to support Programs of study implementation.*
- *An approval process for Programs of Study will be developed by the Workforce Board together with OSPI and SBCTC. OSPI and SBCTC will retain authority for approval of Programs of Study consistent with the state plan.*
- *An evaluation plan that includes identification of appropriate data elements and performance measures will be developed by the Workforce Board together with OSPI and SBCTC. Every effort will be made to utilize the existing performance measure in the development of performance evaluation for Programs of Study.*

- e. How secondary and postsecondary CTE programs will be carried out to develop, improve, and expand access to appropriate technology in CTE programs.

### **Secondary**

In 2005, the Office of Superintendent of Public Instruction formally adopted CTE standards, which are industry-based and provide the foundation for approved CTE program curricula. Sample model frameworks have been identified and are posted on the agency's website. The technology addressed in the model framework and standards is based on the appropriate business or industry application. With the assistance of each program's industry advisory committee, programs are kept informed about industry technology.

### **Postsecondary**

Industry advisory committees are required for all postsecondary workforce training programs. Guidelines require that two advisory meetings be held annually. During these meetings, curriculum is reviewed and members advise program faculty of current and new industry technology standards.

Section 4 of the postsecondary local planning applications requires colleges to describe how they will develop, improve, or expand the use of technology in CTE, which may include:

1. Providing CTE students with the academic and career and technical skills (including the mathematics and science knowledge that provides a strong basis for such skills) that leads to entry into the technology fields.
2. Encouraging collaboration with technology industries to offer voluntary internships and mentoring programs, including programs that improve the mathematics and science knowledge of students.

- f. The criteria that will be used to approve eligible recipients for funds, including criteria to assess the extent to which the local plan will –
  - i. Promote continuous improvement in academic achievement;
  - ii. Promote continuous improvement of technical skill attainment; and
  - iii. Identify and address current or emerging occupational opportunities.

Funding allocations to eligible local recipients will be formula-based, as outlined in statute. Each local recipient will complete and submit a plan, addressing all required components. (*See Appendices: Secondary and Postsecondary Plan Templates.*)

Plans will include a description of the district's efforts to promote continuous improvement in academic achievement (secondary) and technical skill attainment (secondary and postsecondary). Districts will be informed of the baseline accountability levels for each of the measures, including academic achievement and technical skill attainment. As accountability data is pulled, the districts' performance levels will be addressed within a section of the locals' annual Perkins plans. Locals will be asked to analyze their data results, and to establish a plan that will promote continuous improvement.

Both secondary and postsecondary state agencies have adopted standards for existing and new programs. The standards include an analysis of local labor market information to demonstrate how the program meets local economic need for development of a trained workforce.

### **Secondary**

Secondary districts develop curriculum/programs which must meet standards established by the Office of Superintendent of Public Instruction. The standards are designed to ensure high quality, consistent, and relevant career and technical education programs as essential components of educational and career pathways. Program foundations include:

1. Students will demonstrate occupationally specific skills and competencies including the application of related Essential Academic Learning Requirements and Grade Level Expectations using a contextual approach.

2. Career and technical education programs are coordinated with other workforce development programs.
3. Students who participate in CTE programs develop and apply skills and knowledge needed to live, learn, and work in an increasingly diverse society.
4. Leadership skills are integrated into the content of each course.
5. Employability skills are integrated into the content of each course, and students in CTE programs participate in some form of work-based learning.
6. CTE programs assist students with career planning and development, transitions, employment, and postsecondary options.
7. CTE instructional equipment, facilities, and environment are comparable to those used in the workplace.
8. The instructor holds a valid CTE teaching certificate for the content area in which he or she is assigned.
9. CTE instructors are provided time and resources to connect student learning with work, home, and community.
10. CTE programs are structured so that supervision, safety and the number of training stations determine the maximum number of students per classroom.
11. An advisory committee actively guides the relevance and continuous improvement of the program.
12. CTE programs are reviewed annually and the results are used for continuous program improvement.

### **Postsecondary**

Postsecondary districts develop curriculum based on the emerging industries within their workforce sector. The criteria for program approval include:

1. Narrative summary of need, including sources –The estimated output of the proposed program and similar programs statewide does not exceed projected employment need. Forecasts endorsed by the Office of Fiscal Management shall be included where they apply. Needs studies or indication of need from employers should support new and emerging occupations not covered by standard forecasts. The technical content of the primary program will support at least entry-level employment or provide the skills needed for maintaining or improving employment. In cases where colleges train students who generally relocate (many times these schools are found in rural communities), the labor market demand may be substantiated using regional data.
2. Potential career progression, including job titles.
3. Initial assessment of work-based learning/clinical sites (if applicable to the program).
4. Labor market projections and data for Washington State and the region (should include state and federal economic data, occupational and economic forecasts from federal, state, and local organizations, and original research and surveys conducted by the college in cooperation with industry partners.
5. Advisory Committee minutes of meetings showing evidence that the committee determined there is a commitment in the geographic area to employ individuals who have been served by the program.

- g. How programs at the secondary level will prepare CTE students, including special populations, to graduate from secondary school with a diploma.

**Secondary**

Beginning with the graduating Class of 2008, all public high school students will be expected to meet new statewide requirements to earn a diploma. The goal: More students better prepared to become responsible citizens, and to contribute to their own economic well-being and to that of their families and communities, while enjoying productive and satisfying lives. Beginning with the class of 2008, students will need to meet four statewide graduation requirements:

1. Earn a minimum of 19 credits in core courses. (*Many local school districts require students to earn credits beyond the state minimum.*)
2. Complete a Culminating Project to apply learning in a particular area of the student's interests.
3. Meet state standards in reading, writing, and mathematics.
4. Complete a High School and Beyond plan.

Local secondary recipients will address how their programs will prepare their career and technical education students, including special populations, to graduate from secondary school with a diploma. This will include their efforts to track retention and completion, and to provide remediation when necessary.

- h. How programs will prepare CTE students, including special populations, academically and technically for opportunities in postsecondary education or entry into high-skill, high-wage, or high-demand occupations in current or emerging occupations, and how participating students will be made aware of such opportunities.

**Secondary**

Employability skill development for all students is a required, integral part of all CTE instructional programs. These skills include human relations, personal management, and personality (affective) skills – those needed to be a good employee.

When planning an individual course, local districts choose which of the core employability skills from each category will be addressed in that course. Upon completion of a sequence of courses, students will be able to demonstrate knowledge and skills in all of the Employability competencies:

1. The student will demonstrate the ability to identify, organize, plan, and allocate resources including: time, money, materials, space, and staff.
2. The student will demonstrate the ability to acquire and use information in a family, community, business and industry setting. This means that a student can acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information.



3. The student will demonstrate an understanding of complex inter-relations. This means that the student understands social, organizational, and technological systems; they can monitor and correct performance, and they can design or improve systems.
4. The student will demonstrate an ability to work with a variety of technologies, identify or solve problems with equipment, including computers and other technologies. This means that the student can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment.

### **Postsecondary**

Local plans must:

1. Describe how they will provide students with strong experience in, and an understanding of, all aspects of an industry (such as industry skills standards, industry certifications, career progression, management, work-based learning experiences, high skills, high wage, or high demand occupations in current or emerging fields).
2. Describe how they will provide activities to prepare special populations, including single parents and displaced homemakers who are enrolled in CTE programs, for high-skills, high-wage, or high demand occupations that will lead to self-sufficiency.

- i. How funds will be used to improve or develop new CTE courses –
  - i. At the secondary level that are aligned with rigorous and challenging academic content standards and student academic achievement standards.
  - ii. At the postsecondary level that are relevant and challenging; and
  - iii. That lead to employment in high-skill, high-wage, or high-demand occupations.

When funds are used at both the secondary and postsecondary levels to develop or improve CTE courses, the program/course approval guidelines and standards must be met. (*See 2(f) and 2(g) above.*)

Within the local plans, secondary and postsecondary recipients will address how they will use funds to improve or develop new CTE courses. The program approval at the secondary level will require CTE courses to identify how and where CTE curriculum is aligned with rigorous and challenging academic content. Course approval at the postsecondary level requires colleges to demonstrate curriculum relevancy and identify employment opportunities in high-skills, high-wage, or high-demand occupations.

- j. How communications will be facilitated and coordinated using best practices among successful recipients of Tech Prep program grants under Title I, and other eligible recipients, to improve program quality and student achievement.

Washington's Tech Prep Title II grant funds are administered through the State Board for Community and Technical Colleges (SBCTC), and through a grant application/planning process. Funds are allocated to 22 consortia. Each consortium is comprised of secondary and postsecondary partners, as well as business and labor. Directors from each

consortium participate in the state’s Tech Prep Directors Council, which meets throughout the year. SBCTC is the operating agency, and one community or technical college within the consortium is the fiscal agent for the grant funds.

The Directors Council has adopted by-laws and seats an Executive Committee that sets the agenda and provides direction to the Council. The Council has numerous committees that are comprised of the consortia directors, including a Marketing Committee. This group takes a lead in ensuring that all consortia share best practices and successes of the program.

Tech Prep directors, as leads in the development of Programs of Study, will be uniquely positioned to identify and share promising best practices. As Programs of Study are expanded, the directors will replicate those efforts that provide the greatest opportunities for students, and will provide technical assistance where improvements can be made.

Consortia are also required to report at the end of each academic year, describing their Best Practices. These are shared with all consortia and the Washington State Tech Prep Advisory Committee during an annual end of the year meeting. These best practices are also placed on the SBCTC website. Statistics and data are also shared, with open discussions about how to ensure that each student has the increased opportunities available through the Tech Prep programs.

Local Tech Prep and Perkins plans are a collaborative effort of the Tech Prep consortium and its member colleges. Best practices are shared through the planning process by using a peer review and the selection of “model” plans during the review. “Model” plans are posted on the SBCTC website as examples for others.

- k. How funds will be used effectively to link academic and CTE at the secondary level and at the postsecondary level in a manner that increases student academic and career and technical achievement.

In the local planning process, secondary and postsecondary applicants will describe how they will improve the academic and technical skills of students who participate in the CTE programs by strengthening academic and CTE components of programs through integration of academics with CTE programs.

Postsecondary local applications must describe how the college will improve the academic and technical skills of students participating in CTE programs by:

1. Strengthening academic and CTE components of programs through integration of academics with career and technical programs.
2. Ensuring that students who participate in CTE programs are taught to the same challenging academic proficiencies as are taught to all other students.

3. Developing/maintaining a coherent sequence of courses, such as those found in career and technical programs of study, to ensure learning in the core academic and technical subjects.

1. How reports will be made on the integration of coherent and rigorous content aligned with challenging academic standards in CTE programs to adequately evaluate the extent of such integration.

Local recipients will be required in the local planning process to identify how rigorous academic standards will be integrated into coherent and rigorous CTE program content. Annually the local recipients will need to report progress in integration efforts, including how this is measured and how programs are held accountable. Data will be gathered and analyzed in the accountability activities under this Act.

#### **Secondary**

The Office of Superintendent of Public Instruction conducts Comprehensive Program Reviews at selected districts each year. Teams that include CTE program managers, go on site to the districts to review plans, files, data, accountability measures, and to conduct interviews. Districts that are found non-compliant or where issues are identified must respond with corrective action plans.

#### **Postsecondary**

Postsecondary local applications must describe how the college will improve the academic and technical skills of students participating in CTE programs by:

- ◆ Strengthening academic and CTE components of programs through integration of academics with career and technical programs.
- ◆ Ensuring that students who participate in CTE programs are taught to the same challenging academic proficiencies as are taught to all other students.
- ◆ Developing/maintaining a coherent sequence of courses, such as found in career and technical programs of study, to ensure learning in the core academic and technical subjects.

At the end of each year the postsecondary institutions are required to submit their Report of Accomplishments, providing detailed descriptions of the Perkins plan outcomes. Each section of their report described activities and accomplishments and addresses the impact of the activities.

3. Describe how comprehensive professional development (including initial teacher preparation and activities that support recruitment) for career and technical teachers, faculty, administrators, and career guidance and academic counselors will be provided, especially professional development that –
  - a. Promotes the integration of coherent and rigorous academic content standards and career and technical education curricula, including through opportunities for

- academic and career and technical teachers to jointly develop and implement curricula and pedagogical strategies;
- b. Increases the percentage of teachers who meet teacher certification or licensing requirements;
  - c. Is high quality, sustained, intensive, and focused on instruction, and increases the academic knowledge and understanding of industry standards, as appropriate, of career and technical education teachers;
  - d. Encourages applied learning that contributes to the academic and career and technical knowledge of the student;
  - e. Provides the knowledge and skills needed to work with and improve instruction for special populations;
  - f. Promotes integration with professional development activities that the State carries out under Title II of the ESEA of 1965, as amended, and Title II of the Higher Education Act of 1965, as amended. [Sec. 122(c)(2)(A)-(G)]

Perkins funds are used at both the secondary and postsecondary levels to conduct professional development activities. At the secondary level, these activities include:

- ◆ Implementation of adopted standards for CTE teacher preparation.
- ◆ Support for Central Washington University's western Washington site for preparation of CTE instructors.
- ◆ Collaborative efforts with each four-year institution's teacher preparation program.
- ◆ Annual CTE Internship Program for instructors interested in pursuing a director's role.
- ◆ In-service activities for continued professional development.
- ◆ Collaboration with professional organizations in each of the CTE program areas in offering in-service opportunities as separate curriculum areas, as well as the coordination and implementation of an annual summer conference for secondary CTE educators.
- ◆ Support of in-service for current local directors of CTE through collaborative work with the secondary system's Washington Association of CTE Administrators (WAVA) and the postsecondary system's Workforce Education Council (WEC).

The Washington Center for Teaching Careers (WATeach) was established by OSPI to recruit qualified individuals to the teaching profession in order to alleviate the shortage of credentialed teachers in Washington.

WATeach is a one-stop information and referral recruitment center for individuals who may be interested in a teaching career. WATeach offers a variety of informational and advisor-assisted services to prospective teachers. (See [www.wateach.com](http://www.wateach.com).)

OSPI's website provides numerous links to websites for anyone seeking information about professional development within the secondary system. This site provides information on becoming a teacher in Washington (see [www.TeachWashington.org](http://www.TeachWashington.org)); paid internships for those seeking certification through alternative methods; how military personnel can enter teaching as a second career (see *Troops to Teachers at* [www.k12.wa.us/certification/ProfEd/troops/](http://www.k12.wa.us/certification/ProfEd/troops/)). The site also provides information on various education preparation programs and endorsements available in colleges

throughout Washington State that lead to certification for teachers, CTE educators, administrators, and educational staff associates. (See [www.k12.wa.us/certification/profeducation.aspx](http://www.k12.wa.us/certification/profeducation.aspx).)

There are 21 regionally-accredited four-year colleges and universities in Washington with Professional Educator Standards Board approval to offer educator preparation programs. Ten of these institutions are accredited with the National Council for Accreditation of Teacher Education. (See [www.k12.wa.us/certification/profed/approvedprograms.aspx](http://www.k12.wa.us/certification/profed/approvedprograms.aspx))

At the postsecondary level, Perkins Leadership funds are used to support Industry-based Professional Development. This grant is available for professional-technical instructors, administrators, and professional-technical/Adult Basic Education teams engaged in acquiring new skills related directly to the business or industry in which they teach/supervise. The professional development activity is intended to allow the participant to stay current in the field/industry. (*Funding can be used by Adult Basic Education faculty or administrators to jointly attend professional development with professional-technical faculty or administrators with the intent to deliver integrated instruction.*)

Industry-based professional development means any return to industry field work experience or industry sponsored training where the experience is directly related to the program being taught. The purpose of the professional development is to be used to:

- ◆ Increase the participant's knowledge of current practices.
- ◆ Support attendance at recognized hands-on industry sponsored training programs that result in industry certification, or have a hands-on/practice component of sufficient length to result in an in-depth industry upgrade that will increase knowledge of current practices.

4. Describe efforts that your agency and eligible recipients will make to improve:
  - a. The recruitment and retention of career and technical education teachers, faculty, and career guidance and academic counselors, including individuals in groups underrepresented in the teaching profession; and
  - b. The transition to teaching from business and industry, including small business. [Sec. 122(c)(3)(A)-(B)]

Career and Technical Education teachers in Washington State are required to hold a CTE Teaching Certificate at the secondary level. There are two routes to CTE certification:

- ◆ The college/university route prepares someone with the appropriate degree and teacher preparation program and the requisite experience to teach courses within a broad CTE area. Initial CTE certificates are issued in one of the following five broad endorsement areas upon completion of a state-approved teacher preparation program, and documentation of 2,000 hours of paid occupational experience in the broad endorsement area. Washington colleges approved to offer the endorsement as part of a

state-approved teacher preparation program are listed below, next to each broad endorsement area:

Agriculture Education	Washington State University
Business Education	Central Washington University Eastern Washington University
Family & Consumer Sciences	Central Washington University Washington State University Seattle Pacific University
Marketing Education	Central Washington University Eastern Washington University
Technology Education	Central Washington University Western Washington University

- ◆ The business and industry route enables someone with extensive experience and completion of a business and industry route program to teach in one specific subcategory/specialty area. Initial CTE Certificates are issued in one of the specific CTE specialties upon completion of a Washington State Board of Education-approved business and industry route program and documentation of 6,000 hours of paid occupational experience in the specific sub-category/specialty area. Washington colleges approved to offer the program are:

Bates Technical College	Central Washington University
Eastern Washington University	South Seattle Community College
Southwest Washington Consortium (Clark County)	

Broad categories for certification include:

- Agriculture and Science pathway
- Business and Marketing pathway
- Diversified Occupations
- Health and Human Services pathway
- Technology and Industry pathway
- Work-based Learning

*In November 2007, the Workforce Board adopted a recommendation encouraging OSPI and SBCTC to support professional development activities that focus on teacher preparation and/or retention of career and technical education faculty. Professional development activities funded with Perkins basic grant dollars may be short-term or one-day workshops, but state agencies must ensure these activities are of high quality, sustained, intensive, and classroom-focused.*

5. Describe efforts that your agency and eligible recipients will make to improve the transition of sub-baccalaureate career and technical education students into baccalaureate degree programs at institutions of higher education. [Sec. 122(c)(4)]

Both Tech Prep and Programs of Study will include an emphasis on building articulation agreements with four-year baccalaureate programs. Such agreements will be tracked in data compilation and accountability reviews, and in the local planning efforts. While articulation is not a required element of the Program of Study development, it is a component that has been identified as one that 'exceeds minimums.' Postsecondary Perkins applications require each college to describe how they will develop and implement articulation agreements between their college and baccalaureate institutions.

In 2006, the Washington Legislature's passage of SSHB1794<sup>2</sup> enabled our two-year college system to move forward in creating opportunities for more students to access four-year degrees. The bill authorized the community and technical college system to pilot four applied bachelor's degrees, thus expanding educational opportunities to students. The bill also expanded the role of the university branch campuses by allowing them to offer lower-division classes, and increase their capacity for community and technical college transfer students at the junior and senior levels.

The four pilot projects that were selected had to show an unmet demand from employers and a demonstrated need from students. The applied bachelor's degrees provide a direct source for employers looking to recruit qualified applicants with a four-year degree and job-specific skills. The pilot degree programs are: South Seattle Community College's Bachelor's of Applied Science Degree in Hospitality Management; Bellevue Community College's Bachelor's of Applied Science in Radiation and Imaging Sciences; Olympic College's Associate Degree Nursing to Bachelor's of Science Nursing, and Peninsula College's Applied Bachelor's Degree in Applied Management.

Further opportunities for increasing transitions from sub-baccalaureate programs to baccalaureate degree options were established with the same legislation. The bill increased partnerships between the two-year and four-year institutions through contracted agreements. Students can now complete a bachelor's degree, awarded by a public college or university, on a two-year college campus. Three contract pilot projects allow students to remain at their local two-year college campus where they can continue with their junior and senior level courses to complete their bachelor's degree program. The three projects include: Pierce College Fort Steilacoom partnership with Central Washington University to offer a Bachelor's of Elementary Education degree on the Pierce campus; Clark College partnership with Eastern Washington University to offer a Bachelor's of Arts in Social Work; and Edmonds Community College partnership with Central Washington University to offer a Bachelor's of Applied Science in Information Technology and Administrative Management.

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<sup>2</sup> The 2008 Legislature passed Substitute Senate Bill 5104, authorizing up to three additional baccalaureate degree programs to be offered within the state's community and technical college system.

6. Describe how you will actively involve parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), and labor organizations in the planning, development, implementation, and evaluation of career and technical education programs in your state. [Sec. 122(c)(5)]

Both secondary and postsecondary CTE programs seat advisory committees that advise, assist and provide support and advocacy for quality CTE programs. Committee members' involvement is voluntary. Advisory members provide information about employer needs, community opportunities, and increase the instructor's knowledge and understanding of the job market. CTE advisory committees:

- Provide information to update, modify, expand, and improve the quality of programs.
- Support and strengthen the partnerships between business, labor, the community, and education.
- Make recommendations that will strengthen and expand the CTE curriculum.
- Identify and validate academic and occupational competencies, determining priorities, and review and evaluate programs.
- Communicate long-term goals and objectives of the CTE programs to students, parents, employers, and the community.<sup>3</sup>

Postsecondary local plan applicants must describe how students, instructors, representatives of business and industry, labor organizations, representatives of special populations, and other interested individuals are involved in the planning, development, implementation, and evaluation of CTE programs assisted under the Perkins Act. (*See Secondary Perkins Planning Document, Community and Educational Partnerships and Postsecondary Perkins Planning Document, Section 4-3 in Appendices.*)

7. Describe efforts that your agency and eligible recipients will make to –
  - a. Improve the academic and technical skills of students participating in career and technical education programs, including by strengthening the academic and career and technical components of career and technical education programs through the integration of academics with career and technical education to ensure learning in—
    - i. The core academic subjects (as defined in section 9101 of the Elementary and Secondary Education Act of 1965, as amended); and
    - ii. Career and technical education subjects;
  - b. Provide students with strong experience in, and understanding of, all aspects of an industry; and
  - c. Ensure that students who participate in career and technical education programs are taught to the same challenging academic proficiencies as taught to all other students. [Sec. 122(c)(7)(A)-(C)]

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<sup>3</sup> *CTE Advisory Committees*, published by the Office of Superintendent of Public Instruction, November 2007.



Each Perkins local applicant must include in their plan a description of how they will improve the academic and technical skills of students participating in career and technical education programs by strengthening academic and CTE components of programs through integration of academics with career and technical education programs

Applicants must also describe how they will improve the academic and technical skills of students participating in CTE programs by ensuring that students who participate in CTE programs are taught to the same challenging academic proficiencies as are taught to all other students.

Perkins planning documents require that applicants describe how they will provide students with strong experience in, and an understanding of, all aspects of an industry such as industry skills standards, industry certifications, career progression, management, work-based learning experiences, high-skill, high-wage, or high-demand occupations in current or emerging fields.

*(See Secondary Perkins Planning Document, “Improve Academic and Technical Skills of Students Enrolled in CTE Programs and Postsecondary Perkins Planning Document, Section 1 Part 2 and Part 3.)*

8. Describe how local educational agencies, area career and technical education schools, and eligible institutions in the State will be provided with technical assistance.

The Workforce Board staff works directly with the OSPI CTE Director and the SBCTC Workforce Division’s Perkins Program Manager, providing policy direction and clarification; assisting with resolutions to issues as they arise; participating in professional development opportunities to inform stakeholders of Perkins requirements and policies; providing technical assistance as needed or requested; and acting as a liaison to system faculty, counselors, and administrator councils and committees. Secondary and postsecondary agencies provide plan guidance and technical assistance to local recipients through newsletters, websites, presentations, written and oral communications, and staff development training sessions. Secondary and postsecondary administrators receive information throughout the year at their respective conferences including: WA-ACTE Summer Conference, WAOE<sup>4</sup> Annual Conference, and WAVA quarterly conferences.

9. Describe how career and technical education in your State relates to your state’s and regions occupational opportunities. [Sec. 122(c)(16)]

Both secondary and postsecondary state agencies have adopted standards for existing and new programs.

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<sup>4</sup> Washington Association of Occupational Educators (WAOE)

**Secondary**

Secondary districts develop curriculum/programs which must meet standards established by the Office of Superintendent of Public Instruction. The standards are designed to ensure high quality, consistent, and relevant career and technical education programs as essential components of educational and career pathways. The standards require that:

- Career and technical education (CTE) programs are coordinated with other workforce development programs.
- CTE instructors are provided time and resources to connect student learning with work, home, and community.
- An advisory committee actively guides the relevance and continuous improvement of the program.

**Postsecondary**

Postsecondary districts develop curriculum based on the emerging industries within their workforce sector. The criteria for program approval include:

- Narrative summary of need, including sources – The estimated output of the proposed program and similar programs statewide does not exceed projected employment need. Forecasts endorsed by the Office of Fiscal Management shall be included where they apply. Needs studies or indication of need from employers should support new and emerging occupations not covered by standard forecasts. The technical content of the primary program will support at least entry-level employment or provide the skills needed for maintaining or improving employment. In cases where colleges train students who generally relocate (many times these schools are found in rural communities), the labor market demand may be substantiated using regional data.
- Potential career progression, including job titles.
- Initial assessment of work-based learning/clinical sites (if applicable to the program).
- Labor market projections and data for Washington State and the region should include state and federal economic data; occupational and economic forecasts from federal, state, and local organizations, and original research and surveys conducted by the college in cooperation with industry partners.
- Advisory Committee minutes of meetings showing evidence that the committee determined there is a commitment in the geographic area to employ individuals who have been served by the program.

10. Describe the methods you propose for the joint planning and coordination of programs carried out under this legislation with other Federal education programs.  
[Sec. 122(c)(17)]

**Secondary**

Participating local education agencies (LEAs) that receive Perkins funds will need to describe the coordination with other state, federal, district, and school resources in the district's application. Program supervisors within the Career and Technical Education division at the Office of Superintendent of Public Instruction will begin the dialogue with

other state and federal programs within the agency to coordinate efforts in serving special populations, as defined by the Perkins Act of 2006.

Career and technical education programs are held to the same education standards and measures as all programs offered in the secondary schools, including those rigorous academic measures of NCLB.

### **Postsecondary**

Local Tech Prep and Perkins plans are developed collaboratively between consortium partners. Strategies for linkage to other programs are part of the planning process. ABE/ESL and low income students are supported in their educational pursuit through the integrated activities in these plans.

11. Describe the procedures you will develop to ensure coordination and non-duplication among programs listed in sections 112(b)(8) and 121(c) of the Workforce Investment Act (Public Law 105-220) concerning the provision of services for postsecondary students and school dropouts. [Sec. 122(c)(20)]

The Workforce Training and Education Coordinating Board has created a web-based system at [www.jobtrainingresults.org](http://www.jobtrainingresults.org) to inform the public about job training opportunities and actual results for people who have recently participated in occupational training programs in Washington State.

The website provides information about **former students** of a training program:

- Where are they working?
- How much are they earning?
- What was their education level prior to enrolling?
- What are their races, genders and ages?

Training program details include:

- Tuition rates and additional costs and fees
- Length of program
- School contact information
- A link to the school's website

The information on employment, earnings, and student characteristics is based on student data reported to the State Board for Community and Technical Colleges, the Workforce Training and Education Coordinating Board, and the Washington Department of Labor and Industries. Program information is provided and maintained by the school/organization. All training programs listed on the State's Eligible Training Provider List are required to be listed on Job Training Results.

The Workforce Board's role as both eligible agency for Perkins and as the Workforce Investment Board, assures that issues of coordination and non-duplication are addressed.

## B. Other Department Requirements

1. *Local planning documents* for both secondary and postsecondary are included in Appendices.
2. Washington's governance structure (*organization charts*) are included in Appendices. (See also, Page 5, *Legal Authorities*.)
3. Describe the role of postsecondary CTE in the one-stop center delivery system established by Title I of WIA.

Each year the postsecondary institutions include a description of how they will support the one-stop center delivery system with Perkins funds. Colleges address this through their budget narrative section. These plans are updated annually.

In previous years postsecondary plans have included support such as:

- Job placement coordinator
- Center rental
- Resource and materials with program information
- Assistance with costs for development of recruitment and promotional materials
- Job fairs
- Career services within affiliate site locations

Many of the state's community and technical colleges provide co-location sites for One-Stops. Besides office space, the colleges may also provide counseling and placement guidance and support to those who seek services at these co-located centers.

## III. PROVISION OF SERVICES FOR SPECIAL POPULATIONS

### A. Statutory Requirements

1. Describe program strategies for special populations listed in Section 3(29) of the Act, including a description of how individuals who are members of special populations – (*“Special populations” means: individuals with disabilities; individuals from economically disadvantaged families, including foster children; individuals preparing for non-traditional fields; single parents, including single pregnant women; displaced homemakers; and individuals with limited English proficiency.*)
  - a. Will be provided with equal access to activities assisted under the Act.
  - b. Will not be discriminated against on the basis of their status as members of special populations.

The Workforce Board, as eligible agency, works with secondary and postsecondary state staff to design and implement targeting plans to ensure that the needs of special population students are being met. Local districts must develop their Perkins plan with a focus on improving access and opportunity for special population students.

Within local planning documents, applicants must describe the efforts that they will make to ensure members of special populations will not be discriminated against on the basis of their status as members of the special populations.

All institutions within the public secondary and postsecondary education systems maintain clear and consistent policies of non-discrimination and equal opportunities. Special population counselors, disability support services coordinators, and multicultural coordinators provide guidance, support, and resources to career and technical education instructors and students to prevent discrimination.

Colleges within the postsecondary system support an annual Students and Staff of Color Conference, which creates a venue for discussion on issues affecting institutional climate, access, educational quality, and diversity.

MOA coordinators at the Office of Superintendent of Public Instruction and the State Board for Community and Technical Colleges develop annual targeting plans. These plans are used to determine those high schools and colleges that will receive an on-site monitoring and technical assistance visit to ensure compliance with state and federal Civil Rights guidelines. Districts targeted each year receive a letter of finding following the on-site visit and must respond appropriately with a voluntary compliance plan that outlines how and when compliance will be met. The state agencies are required to follow up to ensure that the districts' corrective action addresses those areas identified as non-compliant. A biennial report is submitted to the U.S. Department of Education, Office of Civil Rights.

Personnel who administer the MOA activities for the Workforce Board, the Office of Superintendent of Public Instruction, and the State Board for Community and Technical College attend the annual training to receive guidance to ensure the on-site visits conducted each year are effective and meaningful.

*(See Secondary Perkins Planning Document, "Special Populations" and Postsecondary Perkins Planning Document, Section 4, "Special Populations.")*

- c. Will be provided with programs designed to enable the special populations to meet or exceed State adjusted levels of performance, and how they will be prepared for further learning and for high-skill, high-wage, or high-demand occupations. [Sec. 122(c)(9)(A)-(C)]

Within the local planning document, districts are required to describe how they will provide programs that are designed to enable special populations to meet the local adjusted levels of performance. Secondary school districts and postsecondary institutions have personnel positions that provide support services to their special populations students, such as:

- Disabled Student Services
- Title IX Coordinators

- Section 504 Coordinators
- ABE/ESL Departments/Instructors
- Displaced Homemaker Program Coordinators
- Multicultural Coordinators

Postsecondary college coordinators partner with state and local agencies to provide support services and resources, such as:

- Tutoring (one-on-one and tutoring centers/labs)
- Counseling services
- Disability accommodations
- Dropout prevention
- Study skills

*(See Secondary Perkins Planning Document, "Special Populations" and Postsecondary Perkins Planning Document, Section 4, "Special Populations.")*

2. Describe how you will adequately address the needs of students in alternative education programs, where such programs are available. [Sec. 122(c)(14)]

The state has enacted rules governing alternative learning experiences (alternative education). These are learning experiences for public school students that are primarily characterized by learning activities that occur away from the regular public school classroom setting. The Office of Superintendent of Public Instruction has posted the guidelines on alternative learning experiences. A student's specific requirements and expectations of an away-from-school learning activity are detailed in a written student learning plan developed and supervised by a public school teacher.

In general there are three primary types of alternative learning experiences (some overlap may occur):

- Contract-based learning
- Digital/on-line learning
- Parent partnership programs

Enrolling a student in an alternative learning experience is enrolling a student in a public education program. Thus, all the special education requirements contained in Washington Administrative Code (WAC 392-172) apply. These include, but are not limited to evaluations to determine special educational needs, individual education program development (IEP) requirements, and delivery of specially designed instruction, related services, and accommodations in accordance with the IEP. Alternative learning experience programs work with a school district's special education staff and IEP teams to determine the appropriateness of placement of a student in an alternative learning experience, and to determine what, if any, additional services or modifications are necessary to ensure that the special population student has access to the program.

3. Describe how funds will be used to promote preparation for high-skill, high-wage, or high-demand occupations and non-traditional fields. [ Sec. 122(c)(18)]

The Act requires funds to be used to promote preparation for high skills, high wage, or high demand occupations and nontraditional fields. The Act further requires the state to provide support for career guidance and academic counseling programs designed to promote improved career and education decision making by students (and parents, as appropriate) regarding education (including postsecondary education) and training options and preparations for high skills, high wage, or high demand occupations and nontraditional fields. The state must also provide academic and career and technical education instructors and career guidance counselors with the knowledge, skills, and occupational information needed to assist parents and students, especially special populations, with career exploration, education opportunities, education financing, and exposure to high skills, high wage, or high demand occupations and nontraditional fields, including occupations and fields requiring a baccalaureate degree.

The Workforce Board supports the full set aside amount of \$150,000 to target statewide nontraditional leadership activities to promote preparation for high skills, high wage, or high demand occupations and nontraditional fields. The Office of Superintendent of Public Instruction and the State Board for Community and Technical Colleges will each receive \$75,000. These funds will be focused on recruitment, retention and completion efforts (*as adopted by the Workforce Board in November 2007, for inclusion in the state's five-year plan*).

In the local plans, institutions are required to describe how they will use funds to promote preparation for nontraditional fields, and support of training and activities such as mentoring and outreach, as permissible.

The Workforce Board has cross-walked the goals, objectives, and strategies of *High Skills, High Wages* with the required and permissive uses of Perkins, showing alignment between the two. Through the local plan review process, the operating agencies can evaluate how the plans incorporate programs that meet these strategies. (*See Secondary Perkins Planning Document, "Special Populations" and Postsecondary Perkins Planning Document, Section 4, "Special Populations."*)

4. Describe how funds will be used to serve individuals in state correctional institutions. Sec. 122(c)(19)]

Washington's Workforce Board sets aside the full one percent of leadership funding to service individuals in state correctional institutions and to explore a more coherent and integrated system for career and technical training. Employment Security Department/Offender Employment Services administers these funds and focuses on system change activities that target institutionalized services that blend correctional issues and disability issues. The projects funded through their request for proposal (RFP) process support high skills, high wage occupational training and educational services.

Projects that are funded can be either a replication of a best or promising practice, or an innovative program/activity, and designed to improve the career and technical education services for offender or at-risk individuals with learning challenges and barriers. In past years services have included:

- WorkKeys assessment for individuals who have been or are about to be released from county, state or federal institutions.
- Breaking the cycle of recidivism and incarceration for high risk 16-21 year olds through education support.
- Support of a College Life Scholarship fund for vocational education for offenders who complete the Life-Skills to Work Program.
- Expansion of the “Get Employment Today” program for offenders.

5. Describe how each applicant will be required to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its federally-assisted program for students, teachers, and other program beneficiaries with special needs as contained in section 427(b) of the General Education Provisions Act as amended.

In compliance with GEPA 247B, institutions offering programs under programs funded through the Perkins grants will ensure that barriers to participation in the program for special populations will be addressed. Program materials will be made available in alternative formats; physical barriers will be removed to ensure that the program, when viewed in its entirety, is accessible.

Secondary school districts and postsecondary institutions staff provide support services to special populations, such as:

- Disabled Student Services
- Title IX Coordinators
- Section 504 Coordinators
- ABE/ESL Departments/Instructors
- Displaced Homemaker Program Coordinators
- Multicultural Coordinators

Accommodations include, but are not limited to:

- Interpreters
- Note takers
- Tutoring (one-on-one and tutoring centers/labs)
- Counseling services
- Alternative testing
- Disability accommodations

*(See Secondary Perkins Planning Document, “Special Populations” and Postsecondary Perkins Planning Document, Section 4, “Special Populations.”)*



## IV. ACCOUNTABILITY AND EVALUATION

### A. Statutory Requirements

1. Describe procedures used to obtain input from eligible recipients in establishing measurements definitions and approaches for the core indicators of performance for CTE students at the secondary and postsecondary levels, as well as for any other additional indicators of performance identified by the eligible agency. [Sec. 113(b)(1)(A)-(B), Sec. 113(b)(2)(A)-(C)]

The Workforce Board staff convened accountability teams – one for secondary and the other postsecondary. These teams included both program and data staff. During these meetings, agreement was reached on definitions for the measurements, including numerator and denominator definitions. Strategies for measurements were also discussed and consensus reached.

2. Describe procedures that will be used to obtain input from eligible recipients in establishing a State adjusted level of performance for each of the core indicators of performance for CTE students at the secondary and postsecondary levels, as well as State levels of performance for any additional indicators of performance identified by the eligible agency. [Sec. 122(c)(10)(A), Sec. 113(b)(3)(B)]

During the transitional period, meetings were convened with accountability teams for both the secondary and postsecondary eligible recipients. These meetings provided a venue for input and analysis in establishing our state's adjusted level of performance for each of the core indicators of performance.

3. Identify the valid and reliable measurement definitions and approaches that will be used for each of the core indicators of performance for CTE students at the secondary and postsecondary levels, as well as any additional indicators of performance, identified by the eligible agency, that are valid and reliable. This description must include how the proposed definitions and measures are valid and reliable. [Sec. 113(b)(2)(A)-(B)]

#### Definitions

*CTE Secondary Participant* – A secondary student who has enrolled in one or more courses in any CTE program area

*CTE Postsecondary Participant* – A student enrolled with a vocational intent who has earned one or more college level credits in any CTE program area

*CTE Secondary Concentrator* – A student who has enrolled in two or more CTE courses above the exploratory level in a single cluster

*CTE Postsecondary Concentrator* – Postsecondary CTE participant who has completed at least 12 CTE credits or completed an industry recognized credential or formal award

*CTE Secondary Completer* – A secondary student who has completed a CTE instructional program

*CTE Postsecondary Completer* – A CTE student who has attained a formal award (a degree, certificate, apprenticeship, or an industry certification) or completed at least 45 vocational credits with a 2.0 or higher GPA

#### Core Measures

##### *IS1 Academic Attainment-Reading/Language Arts*

Numerator: Number of CTE concentrators who have met the proficient or advanced level on the statewide high school assessment administered under NCLB and who have left secondary education in the reporting year.

Denominator: Number of CTE concentrators who took the NCLB assessment and who have left secondary education in the reporting year.

Validity/Reliability: This measure is based on the Washington Assessment of Student Learning (WASL), a validated test of high school reading/language arts proficiency. The test is administered to 10th grade students, with retests in subsequent years for those who do not meet proficiency standards on first administration of the assessment. CTE concentrators and year of leaving secondary education will be identified, using data submitted by grantees in the Core Student Record System (CSRS) – the state’s K-12 longitudinal student data system.

Students passing the 10th grade assessments during a retest will be counted no matter when the retest occurs. This is different than the protocol on retests in our state’s AYP workbook. Without this change, the 10th grade assessments would not be a valid and reliable measure of the academic achievement resulting from CTE, since the vast majority of CTE classes are taken during the 11th and 12th grades.

##### *IS2 Academic Attainment - Mathematics*

Numerator: Number of CTE concentrators who have met the proficient or advanced level on the statewide high school assessment administered under NCLB and who have left secondary education in the reporting year.

Denominator: Number of CTE concentrators who took the NCLB assessment and who have left secondary education in the reporting year.

Validity/Reliability: This measure is based on the Washington Assessment of Student Learning (WASL), a validated test of high school mathematics proficiency. The test is administered to 10th grade students, with retests in subsequent years for those who do not meet proficiency standards on first administration of the assessment. CTE concentrators and year of leaving secondary education will be identified, using data submitted by grantees in the Core Student Record System (CSRS) – the state’s K-12 longitudinal student data system.

Students passing the 10th grade assessments during a retest will be counted no matter when the retest occurs. This is different than the protocol on retests in our state's AYP workbook. Without this change, the 10th grade assessments would not be a valid and reliable measure of the academic achievement resulting from CTE, since the vast majority of CTE classes are taken during the 11th and 12th grades.

#### *2S1 Technical Skill Attainment*

Numerator: Number of CTE concentrators who have passed an industry-based assessment and who have left secondary education in the reporting year.

Denominator: Number of CTE concentrators of programs with industry assessments and who have left secondary education in the reporting year.

Validity/Reliability: Validity and reliability will be part of the standard for tests chosen to be used in this measure. Skill attainment results will be collected from grantees using the CSRS, which is being modified to accept this information. Where certifications, i.e., NATEF, ASE, and MOUS, are administered and data collected, they will be reported.

#### *3S1 Secondary School Diploma*

Numerator: Number of CTE concentrators who have attained a high school diploma or GED certificate and who have left secondary education in the reporting year.

Denominator: Number of CTE concentrators who have left secondary education during the reporting year.

Validity/Reliability: Data will be reported using CSRS. High schools maintain valid data on attainment of high school diplomas. Currently, they do not have good data on GED certificate receipt, unless it is reported to the grantee by the student. The other forms of high school credentialing are not included in this measure because they do not exist in Washington.

#### *4S1 Student Graduation Rates*

Numerator: Number of concentrators reported as graduated using our State's approved calculation for graduation rate as defined in our State's NCLB accountability workbook.

Denominator: Number of concentrators who have left secondary education in the reporting year.

Validity/Reliability: Data will be reported using CSRS, based on the same reporting system used to report information used to calculate graduation rates, as described in NCLB.

#### *5S1 Placement*

Numerator: Number of CTE concentrators who were employed, enrolled in higher education, or enlisted in the military during the third post-exit quarter, based on administrative records or a student survey.

Denominator: Number of CTE concentrators who have left secondary education during the reporting year.

Validity/Reliability: Reporting will be based on match of administrative records with Unemployment Insurance wage records and administrative records of enrollment in further education. These records cover most employment and public further education in Washington State, and constitute a valid measure of employment and further education. Social security numbers (SSNs) used for matching will be gathered from grantees through CSRS, where possible, from Tech Prep student enrollment records and from vocational students who take SAT and ACT tests. School districts that do not submit SSNs will be required to participate in a student survey which will be designed to produce valid and reliable results.

*6S1 Nontraditional Participation*

Numerator: Number of CTE participants from underrepresented gender groups who participated in a non-traditional program during the reporting year.

Denominator: Number of CTE participants who participated in non-traditional programs during the reporting year.

*6S2 Nontraditional Completion*

Numerator: Number of CTE concentrators from underrepresented gender groups who completed a non-traditional program during the reporting year.

Denominator: Number of CTE concentrators who completed a non-traditional program during the reporting year.

Validity/Reliability: Data will be collected from CSRS, which should include valid and reliable measures of student gender and program participation and completion. Identification of instructional programs leading to employment in nontraditional fields will be based on OVAE-approved crosswalks.

**Negotiations with Local Recipients**

If a local recipient does not accept the state adjusted level of performance for an indicator, then the local recipient can negotiate an adjusted level of performance that is 3 percentage points above the average performance of the local recipient for that indicator during the past 3 years (fewer years may be used if data is not available for 3 years).

Anticipating this negotiation, the state will set default local levels based on the lower of the state adjusted level of performance or 3 percentage points above the past average performance of the local recipient.

*1P1 Technical Skill Attainment*

Number of CTE concentrators, exiting during the reporting year, who have attained an award (a degree, certificate, apprenticeship, or an industry certification) or completed at least 45 vocational credits with a 2.0 or higher GPA.

**Validity/Reliability:** Skill standards are built into the assessment system for CTE programs approved by the State Board for Community and Technical Colleges. Award of a degree, certificate, apprenticeship completion, or industry certification from an approved program constitutes a valid measure of skill attainment. Similarly, completion of 45 vocational credits with a 2.0 GPA is a valid measure of skill attainment. Grantees reliably report the data identifying concentrators, receipt of awards, or completion of vocational credits using the Student Management Information System (SMIS). Where certifications, i.e., NATEF, ASE, and MOUS, are administered and data collected, they will be reported.

#### *2P1 Industry Certificate Attainment*

Number of CTE concentrators, exiting during the reporting year, who have attained an award (a degree, certificate, apprenticeship, or an industry certification).

**Validity/Reliability:** Records on degrees, certificates, apprenticeships, and industry certifications awarded are maintained by the grantees, and will be reported using the SMIS system.

#### *3P1 Student Retention*

**Numerator:** Number of CTE participants who are not yet concentrators at the beginning of the reporting year, who became CTE concentrators or enrolled in other higher education, including apprenticeship, during the reporting year.

**Denominator:** Number of CTE participants during the reporting year who are not yet concentrators at the beginning of the reporting year.

**Validity/Reliability:** These data will be obtained through administrative match using data collected in SMIS for subsequent CTE concentration and by the Educational Data Service Center (EDSC), which collects data on public postsecondary education in Washington State, and the National Data Clearinghouse. Matching education records in SMIS and EDSC and the Clearinghouse further constitutes a valid and reliable measure of student retention.

#### *4P1 Student Placement*

**Numerator:** Number of CTE concentrators, exiting during the reporting year, who were either employed according to UI wage records or in the military, and not enrolled in higher education during the third quarter after they exit.

**Denominator:** Number of CTE concentrators exiting during the reporting period and not enrolled in higher education during the 3<sup>rd</sup> quarter after exit.

**Validity/Reliability:** Reporting will be based on match of administrative records with Unemployment Insurance wage records. These records cover most employment in Washington State, and constitute a valid measure of employment SSNs used for matching will be gathered from grantees through SMIS.

### *5P1 Nontraditional Participation*

Numerator: Number of CTE participants from underrepresented gender groups who enrolled in a non-traditional program during the reporting period.

Denominator: Number of CTE participants in non-traditional programs during the reporting period.

Validity/Reliability: Data will be collected from SMIS, which should include valid and reliable measure of student gender and program participation. Identification of instructional programs leading to employment in nontraditional fields will be based on OVAE-approved crosswalks.

### *5P2 Nontraditional Completion*

Numerator: Number of CTE completers from underrepresented gender groups who enrolled in a nontraditional program during the reporting period.

Denominator: Number of CTE completers in nontraditional programs during the reporting period.

Validity/Reliability: Data will be collected from SMIS, which should include valid and reliable measure of student gender and program completion. Identification of instructional programs leading to employment in nontraditional fields will be based on OVAE-approved crosswalks.

### **Negotiations with Local Recipients**

If a local recipient does not accept the state adjusted level of performance for an indicator, then the local recipient may negotiate an adjusted level of performance that is 3 percent above the average performance of the local recipient for that indicator during the past 2 or 3 years (depending on available data).

Anticipating this negotiation, the state will set default local levels based on the lower of the state adjusted level of performance or 3 percentage points above the past average performance of the local recipient.

### **State Additional Indicators**

#### *Earnings*

Median annualized earnings of former participants with employment recorded in UI and other administrative records during the third quarter after leaving the program, measured *only* among the former participants not enrolled in further education during the quarter.

Validity/Reliability: This measure is based on matches to Unemployment Insurance wage records and further education records using SSNs contained in the administrative records used for placement and retention measures. Unemployment Insurance wage records provide a valid measure of earned income.

*Employer Satisfaction*

Percentage of employers who report satisfaction with new employees who are program completers as evidenced by survey responses. (Not required at the local level.)

Validity/Reliability: This measure is based on survey data obtained from a large sample of Washington employers who indicated they hired employees who completed vocational education some time during the prior year. Sample sizes are not sufficient to report this for grantees or sub-state areas. The survey is conducted every other year.

*Student Satisfaction*

Percentage of former students who report satisfaction with the program as evidenced by survey responses. (Not required at the local level.)

Validity/Reliability: This measure is based survey data obtained from a large sample of Washington secondary and postsecondary CTE students who completed vocational education during the prior year. Sample sizes are not sufficient to report this for grantees or sub-state areas. The survey is conducted every other year.

4. Describe how the indicators will be aligned, to the greatest extent possible, so that information substantially similar to that gathered for other State and Federal programs, or for any other purpose, is used to meet the Act's accountability requirements. [Sec. 113(b)(2)(F)]

Perkins IV indicators are aligned, as much as possible, with state performance measures included in *High Skills, High Wages: Washington's Strategic Plan for Workforce Development*. This plan describes a set of common State Core Measures used across 12 workforce development programs. Secondary Career and Technical Education and Postsecondary Career and Technical Education, the two programs funded by Perkins IV, are included among those 11 programs.

Employment rates measured under Perkins IV are similar in definition to the state core measures for employment. We measure both using unemployment insurance and further education matching based on social security numbers, measuring both during the third quarter after student exit. Where social security numbers are not collected or are not available for measurement of secondary placements, those districts will be required to conduct a survey to provide valid and reliable data.

Postsecondary numeric goals prepared for Washington's 1P1 are similar to the Washington State Board for Community and Technical College's Performance Reporting Plan System and college goals for Workforce Education. The fact that Washington State's system uses numeric, rather than percentage goals, for counts of students prepared for work, is the reason that we propose numeric rather than percentage targets for this measure (consistent with Perkins law).

Washington also proposes additional measures of performance – for annualized earnings, employer satisfaction, and participant satisfaction. These are State Core Measures of performance included in *High Skills, High Wages*.

We have no measures analogous to the Perkins IV Nontraditional Participation or Completion Measures.

5. Include accountability forms with baseline data and the first two years covered by the state plan (July 1, 2007 – June 30, 2008 and July 1, 2008 – June 30, 2009), and the performance levels for each of the core indicators of performance. For performance levels that are required, the states' performance levels, at a minimum, must be expressed in a percentage or numerical form, so as to be objective, quantifiable, and measurable; and require the state to continually make progress toward improving the performance of career and technical education students. [Sec. 113(b)(3)(A)(i)-(ii)]

*See Appendices – Accountability Forms*

6. Describe the process for reaching agreement on local adjusted levels of performance if an eligible recipient does not accept the state adjusted levels of performance under section 113(b)(3) of the Act.

If a local recipient does not accept the state adjusted level of performance for an indicator, then the local recipient may negotiate an adjusted level of performance that is 3 percentage points above the average performance of the local recipient for that indicator during the past three years (fewer years may be used if data is not available for three years).

Anticipating this negotiation, the state will set default local levels based on the lower of the state adjusted level of performance or 3 percentage points above the past average performance of the local recipient.

7. Describe the objective criteria and methods that will be used to allow an eligible recipient to request revisions to its local adjusted levels of performance if unanticipated circumstances arise with respect to an eligible recipient.

**Secondary**

A district will be able to request revisions to its local adjusted levels of performance by contacting OSPI in writing and by providing appropriate documentation for the special circumstance. Data will be reviewed in light of the circumstance and documentation, and appropriate levels will be negotiated between OSPI and the requesting district. The Workforce Training and Education Coordinating Board will be notified at the time of the request and may choose to participate in establishing a newly negotiated performance level.



**Postsecondary**

An eligible recipient will be able to request revisions to its local adjusted levels of performance by contacting the SBCTC in writing and by providing appropriate documentation for the special circumstance. Data will be reviewed in light of the circumstance and documentation, and appropriate levels will be negotiated between the SBCTC and the requesting recipient. The Workforce Training and Education Coordinating Board will be notified at the time of the request and may choose to participate in establishing a newly negotiated performance level.

8. Describe how data will be reported, relating to students participating in CTE programs to adequately measure the progress of the students, including special populations and students participating in tech prep programs, if applicable, and how to ensure that the data reported from local education agencies and eligible institutions, and the data reported to the Secretary, are complete, accurate, and reliable.

The Workforce Board compiles program information, enrollment data, and performance data to develop the states Perkins Consolidated Annual Report. Each performance measure follows guidelines for data collection that is valid and reliable. Both secondary and postsecondary systems gather enrollment data electronically.

The Office of Superintendent of Public Instruction (OSPI) has developed an on-line portal for grant applications and data collection - Education Data Systems (EDS). Resource tools and manuals for grant applications will be located within the application site in EDS. Districts may apply for authorization to access the applications in EDS through their Data Security Manager. OSPI provides technical support through their Customer Support staff. Where social security numbers are not collected or are not available for measurement of secondary placements (5S1), those districts will be required to conduct a survey to provide valid and reliable data.

The Washington two-year community and technical colleges report their enrollment information to the State Board for Community and Technical Colleges (SBCTC) quarterly. This data is then used to generate the annual Carl Perkins report. Part of the process of reporting the data to SBCTC requires the colleges to run preliminary edit checks. These checks are used to validate the data and ensure accurate and reliable information. Once SBCTC receives the data, further data validation is performed prior to using the data for reporting and analysis.

In order to ensure the confidentiality of individual students, the state will not report results at the local recipient level on performance measures with fewer than 10 students.

In order to ensure statistical reliability, the state will not report results at the local level on Perkins performance measures with fewer than 30 students (this number will be the same as approved in the state's accountability workbook, which may be higher).

No matter the number of students, local recipients will submit data with the state in order for the state to report state-wide numbers for all students, including required sub-populations, and results.

9. Describe how the State plans to enter into an agreement with each consortium receiving a grant under Perkins IV to meet a minimum level of performance for each of the performance indicators describe in section 113(b) and 203(e) of the Act.

The secondary system has approximately 100 districts that do meet the minimum \$15,000 Perkins grant. Of those, the majority request and are granted waivers.

Each consortium receiving Perkins funding will describe how they will evaluate its program(s) of study. In addition, beginning in the 2008-2009 school year, all participating districts will describe how they will hold secondary schools accountable for meeting a minimum level of performance for each of the performance indicators, as described in section 113(b) and 203(e) of the Act.

The postsecondary system has only one institution that does not qualify (based on enrollment) for a \$50,000 minimum grant, so there are no postsecondary consortia.

10. Describe how the state will annually evaluate the effectiveness of CTE programs, and describe, to the extent practicable, how the state is coordinating those programs with other Federal programs to ensure non-duplication.

### **Secondary**

The Office of Superintendent of Public Instruction has five program supervisors who work closely with the secondary institutions utilizing Perkins funds to improve career and technical education programs. Providing technical assistance throughout the planning process and implementation of the plan enables OSPI staff to address barriers to CTE program effectiveness. These staff members participate in the annual Comprehensive Program Reviews conducted by that agency. These review teams conduct district-wide on-site evaluations of both state and federal programs on an annual basis. Districts to be targeted are placed on a rotating schedule, assuring that all districts receive periodic review.

OSPI will monitor local recipient performance results compared to their adjusted level of performance, except in cases with too few students to ensure individual confidentiality or statistical reliability. If a local recipient fails to achieve the adjusted level of performance, the requirements for a local improvement plan (as described in section 123 (b) of the Act) will go into effect.

For cases with fewer than 10 students, as consistent with the state's AYP workbook section on small numbers, there will be no requirement to report results at the local

recipient level and OSPI will not monitor results compared to their adjusted level of performance. These small local recipients will be required to include in their annual Perkins plan a description of how they will continue to improve results for students.

In cases with 10 students or more but fewer than 30 students, there will be no requirements to report Perkins results at the local recipient level and OSPI will not monitor results (except as described below) compared to adjusted level of performance. These local recipients will be required to include in their annual Perkins plan a description of how they will continue to improve results for students. These small districts will be required to submit data on the measures of completion, technical skill attainment, placement, and earnings (as these measures are defined in this plan) as part of the state accountability system, and OSPI will determine results and compare these results to the local recipient's adjusted levels of performance on these measures.

### **Postsecondary**

Staff members from the State Board for Community and Technical Colleges conduct annual on-site program reviews on a rotating schedule. These program reviews enable staff to provide technical assistance while assuring that funding is being utilized in concert with annual plans.

At the end of each academic year, colleges submit final reports to SBCTC, summarizing activities funded through Perkins. These are reviewed by agency staff in the Workforce Education division.

SBCTC will monitor local recipient performance results compared to their adjusted level of performance. If a local recipient fails to achieve the adjusted level of performance, the requirements for a local improvement plan (as described in section 123 (b) of the Act) will go into effect.

As required by the Workforce Investment Act, the Workforce Board maintains an Eligible Training Provider List (ETP). The Board established program effectiveness criteria which must be met by any training providers who request inclusion on the ETP. This list is used to identify approved training programs for Washington's WorkSource Centers. The effectiveness criteria include meeting performance standards based on completion rates, placement rates, and earning levels.

Annual on-site monitoring at both OSPI and SBCTC is conducted by the Workforce Board staff, in compliance with the Act. These operating agencies complete a self-study, analyzing and documenting program effectiveness and legislative compliance documentation, and provide staff with program and budget files during this annual review.

## V. TECH PREP PROGRAMS

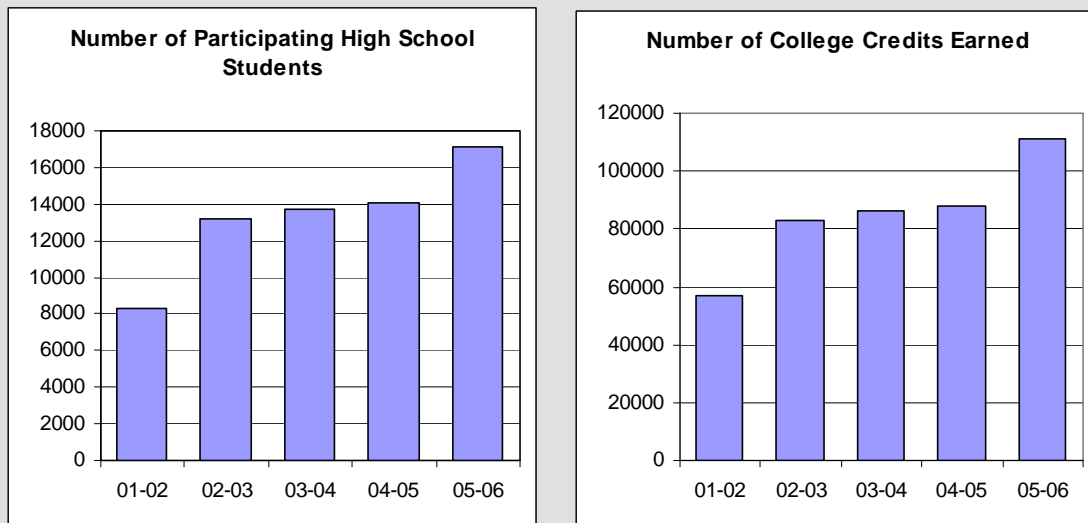
In November 2007 the Workforce Board reviewed background information about Tech Prep in Washington State (*see below*). Based on that information, the Board adopted a recommendation to *maintain Tech Prep as a separate title within the guidelines of the Act and assign the role of fiscal agent to the State Board for Community and Technical Colleges. In maintaining Tech Prep as a separate funding stream, the Board also authorizes the Tech Prep directors in each consortium to assume the role of facilitator in linking secondary and postsecondary institutions in the development of approved Programs of Study. The Board will analyze the system's ability to gather and report data for the required Tech Prep performance indicators during the first and successive reporting years of the Act and will base decisions about continued separation of the funds on these reported outcomes.* (As adopted by the Board in November 2007)

### **Background**

*States have the flexibility under Perkins 2006 to maintain Tech Prep (Title II) as a separate line-item or to consolidate some or all of their Tech Prep funds with funds received under the Basic Grant. Combined funds must be distributed by formula to local recipients and used in accordance with the Basic Grant funds. The decision of whether to merge or not can be made during any one of the six years that the law is in effect. If a state does not use this flexibility, the provisions of Title II will apply.*

*Since Tech Prep was first introduced in the Perkins legislation, Washington State has seen the program grow from a little recognized funding stream into a successful dual credit program for career and technical education students in our schools. In 2005-2006 there were over 17,000 high school students in the state's 22 consortia who earned over 110,000 credits at our community and technical colleges. This saved parents over \$6 million in college tuition.*

### **Statewide Growth for Tech Prep Programs**



*Tech Prep remains a separate Title under the Perkins legislation. During the 1998 reauthorization process, legislators considered merging Perkins Title I and Title II into a block grant, eliminating the separate title for Tech Prep. In 2006 that same discussion took place during reauthorization. In the end, while Congress did not merge Tech Prep into the Basic Grant, they provided states the option to do so.*

*From the funds made available through the 2006 Act, consortia are awarded Tech Prep grants on a competitive basis or on the basis of a formula. Consortia members include secondary schools and postsecondary institutions. Programs are carried out under an articulation agreement among the consortium members.*

*The Act defines a Tech Prep program and the required activities to be conducted under this Title. Consortia must develop Tech Prep programs that meet academic standards developed by the state; link secondary schools and two-year postsecondary institutions, and if possible four-year institutions, through non-duplicative sequences of course, the use of articulation agreements, and dual and concurrent enrollment; use, if appropriate and available, work-based learning experiences in conjunction with business and all aspects of an industry; and use educational technology and distance learning, as appropriate, to more fully involve all the participants of the consortium. Tech Prep programs must connect secondary and postsecondary career and technical education programs through Programs of Study.*

#### **A. Statutory Requirements**

1. Describe the competitive basis or formula that will be used to award grants to Tech Prep consortia.

Tech Prep plans are developed within each consortium, with input and guidance from the consortium partners, including members of the secondary and postsecondary institutions.

Each of the state's 22 consortia receive a base grant of \$70,000, plus an adjustment based on the number of Tech Prep students who earned college credit through Tech Prep, as captured by code, and reported by the colleges through the data and Student Management System. Funds are intended to support the basic consortium operations and activities that meet federal Perkins requirements, state goals, and local priorities. The funding adjustment provides additional support to consortia with large numbers of Tech Prep students.

#### **Current Tech Prep Funding Formula**

**Consortium \$ = variable \$ for the consortium + \$70K base**

\$70,000 base available for each of 22 consortia

$\$70K \times 22 = \$1,540,000$

State Tech Prep allocation – base allocation = balance

Balance ÷ Total State Tech Prep Headcount = \$ per headcount

(Note that the \$ per headcount is not a constant from year to year.)

\$ per headcount x consortium headcount = variable allocation for consortia.

2. Describe how special consideration will be given to applications that address the areas identified in section 204(d) of the Act.
  - a. Provide for effective employment placement activities or the transfer of students to baccalaureate or advanced degree programs;
  - b. Are developed in consultation with business, industry, institutions of higher education, and labor organizations;
  - c. Address effectively the issues of school dropout prevention and reentry, and the needs of special populations;
  - d. Provide education and training in an area or skill, including an emerging technology, in which there is a significant workforce shortage based on the data provided by the eligible entity in the state under section 118;
  - e. Demonstrate how Tech Prep programs will help students meet high academic and employability competencies; and
  - f. Demonstrate success in, or provide assurances of, coordination and integration with eligible recipients described in part C of Title I.

Recipients are required to address these issues in their local Perkins and Tech Prep plans. The plans undergo a peer review to ensure that strategies in the plans are appropriate for the goals and of sufficient size and scope. The peer review also serves as an opportunity for administrators to learn about the activities and strategies that are used by others within the system and to consider replicating similar activities.

3. Describe how equitable distribution of assistance between urban and rural consortium participants will be ensured.

Each of the state's 22 consortia receive a base grant of \$70,000, plus an adjustment based on the number of Tech Prep students who earned college credit through Tech Prep, as captured by code, and reported by the colleges through the data and Student Management System. Funds are intended to support the basic consortium operations and activities that meet federal Perkins requirements, state goals, and local priorities. The funding adjustment provides additional support to consortia with large numbers of Tech Prep students.

All of the 32 colleges and 236 school districts are served by at least one consortium. The funding process balances between urban and rural, and large and small consortia by providing a base to ensure each consortium can operate, plus additional funds, proportional to the number of students served.

4. Describe how the state agency will ensure that each funded tech prep program –
  - a. Is carried out under an articulation agreement between the participants in the consortium, as defined in section 3(4) of the Act;

Washington State's 22 Tech Prep consortia provide an articulated, coordinated sequence of learning experiences involving partnerships with secondary and postsecondary education, business, labor, government and communities.

There are 334 public high schools from 204 school districts and 32 community and technical colleges that participate through articulation agreements. There are 25 four-year partnerships including seven agreements with Washington public colleges, two agreements with Washington private colleges, and two agreements with out-of-state colleges, and numerous apprenticeship agreements.

The 22 consortia work with more than 185 partners from business, education, labor, trade and professional associations, ranging from small firms to larger businesses such as Boeing, Microsoft, and Weyerhaeuser. Their partner representatives discuss industry needs, define workplace competencies, set skill standards, and provide work-based learning experiences for students.

There are more than 5,000 active articulation agreements throughout the state.

The Tech Prep plan requires that consortia “*Describe how you will support the development and implementation of articulation agreements, including articulations in high-skill, high-wage, or high-demand program areas.*”

- b. Consists of a program of study that meets the requirements of section 203(c)(2)(A)-(G) of the Act;

Washington’s Tech Prep planning document, requires consortia to:

- List the programs of study that are currently in place in the consortium and indicate which college each program links.
- List the programs of study the consortium will develop during the coming year.
- Describe how program elements provide technical preparation in a career field and/or lead to technical skill proficiency, an industry-recognized credential, a certificate, a degree, or an apprenticeship in a specific career field, including high-skill, high-wage/high-demand occupations.
- Describe how they will maintain or increase the number of students who participate in and complete a coherent sequence of courses that meet Tech Prep definitions, utilizing career and technical education programs of study, to the extent practicable.
- Describe program efforts to build student competence in technical skills and in core academic subjects through applied, contextual, and integrated instruction in a coherent sequence of courses and through the use of work-based or worksite learning experience, if appropriate and available.
- Describe program elements that support student transition to high-skill, high-wage/high-demand employment, an apprenticeship, or to further education.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges. The SBCTC convenes a review panel to read and review each plan to assure that it addresses each aspect of the required elements, and that the plans meet the intent of the Legislation.

- c. Includes the development of Tech Prep programs for secondary and postsecondary education that meet the requirements of section 203(c)(3)(A)-(D) of the Act;

Washington's Tech Prep planning document, requires consortia to:

- Describe how their Tech Prep program provides support and facilitation for curricula and assessments to be aligned with the state's academic standards and industry standards, including the Essential Academic Learning Requirements (EALRs), Grade Level Expectations (GLEs).
- Describe how the consortium will use educational technology and distance learning, as appropriate, to involve all the participants in the consortium more fully in the development and operation of programs.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges for review and approval.

- d. Includes in-service professional development for teachers, faculty, and administrators that meets the requirements of section 203(c)(4)(A)-(F) of the Act.

Washington's Tech Prep planning document, requires consortia to describe how the consortium will provide professional development that:

- Supports effective implementation of Tech Prep programs by teachers, faculty, and administrators.
- Supports joint training of teachers, faculty, and administrators in the Tech Prep consortium.
- Supports teachers, faculty, and administrators understanding of the needs, expectations, and methods of business and all aspects of an industry.
- Supports the use of contextual and applied curricula, instruction, and assessment by teachers, faculty, and administrators.
- Supports the use and application of technology by teachers, faculty, and administrators.
- Assists teachers, faculty, and administrators in accessing and utilizing data, occupational and employment information and information on student achievement, including assessments.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges for review and approval.

- e. Includes professional development programs for counselors that meet the requirements of section 203(c)(5)(A)-(F) of the Act.



Washington's Tech Prep planning document, requires consortia to describe how the consortium will provide professional development programs designed to enable counselors to:

- Be more effective in providing information to students regarding Tech Prep programs, comprehensive career guidance and academic counseling to participating students, including special populations.
- Support student progress in completing Tech Prep programs, which may include the use of graduation and career plans and providing information on related employment opportunities.
- Stay current with the needs expectations, and methods of business and all aspects of an industry, ensuring that students are placed in appropriate employment or further postsecondary education.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges for review and approval.

- f. Provides equal access to the full range of technical preparation programs (including pre-apprenticeship programs) to individuals who are members of special populations, including the development of Tech Prep program services appropriate to the needs of special populations.

Washington's Tech Prep planning document requires consortia to describe how the consortium will provide equal access to the full range of technical preparation programs (including pre-apprenticeship programs) to individuals who are members of special populations, including the development of Tech Prep program services appropriate to the needs of special populations.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges for review and approval.

- g. Provides for preparatory services that assist participants in tech prep programs.

Washington State's Tech Prep planning document requires consortia to describe how the consortium will develop and implement preparatory services, tools, or plans to assist participants.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges for review and approval.

- h. Coordinates with activities under Title I.

The Act defines a Tech Prep program and the required activities to be conducted under this Title. Consortia must develop Tech Prep programs that meet academic standards developed by the state; link secondary schools and two-year postsecondary institutions, and if possible four-year institutions, through non-duplicative sequences of course, the use of articulation agreements, and dual and concurrent enrollment; use, if appropriate and available, work-based learning experiences in conjunction with business and all aspects of an industry; and use educational technology and distance learning, as appropriate, to more fully involve all the participants of the consortium. Tech Prep programs must connect secondary and postsecondary career and technical education programs through Programs of Study. Because of this strong linkage with the Title I requirements, the state's Tech Prep directors/coordinators will take on the role of facilitators of the Programs of Study development.

The Tech Prep annual plans are submitted to the State Board for Community and Technical Colleges for review and approval.

- 5. Describe how the state plans to enter into an agreement with each consortium receiving a grant under Perkins IV to meet a minimum level of performance for each of the performance indicators described in sections 113(b) and 203(e) of the Act.

The SBCTC will have each consortium describe their strategies for meeting minimum performance levels in their local plan, developed in collaboration with the postsecondary consortium partners. The SBCTC will require an assurance from the consortium that they will direct funding or join with colleges that are funding activities to support achieving the minimum levels of performance.

- B. Submit a copy of the local application form(s) used to award Tech Prep funds to consortia and a copy of the technical review criteria used to select winning consortia, if funds are awarded competitively.

*See Appendices.*

## **VI. FINANCIAL REQUIREMENTS**

### **A. Statutory Requirements**

- 1. Describe how the agency will allocate funds it receives through the allotment made under section 111 of the Act, including any funds that may be consolidated under section 202(2) of the Act, will be allocated among CTE at the secondary level and CTE at the postsecondary level, including rationale for such allocation.

Approximately \$19.6 million of Perkins Title I Basic Grant funds for Washington State is distributed to the local level for required and permissive local uses of funds. The

Workforce Training and Education Coordinating Board determines the relative portion of funds provided to the secondary and postsecondary career and technical education programs. The two operating agencies are the Office of Superintendent of Public Instruction (secondary) and the State Board for Community and Technical Colleges (postsecondary).

Both agencies have utilized the funds to make a difference for their respective local institutions, and have used the funds in accordance with the Act’s guidelines and intent.

In determining the secondary and postsecondary split, the Board examined enrollment and full-time equivalents for both systems’ career and technical education students, as well as the comparison of other states’ distribution splits. Based on data history, the Board has determined that the split between secondary and postsecondary will be set at 44/56 percent, respectively. The Board will retain the authority to reexamine the data should additional information become relevant to this issue.

The Title II funds are allocated to the Tech Prep consortia through the State Board for Community and Technical Colleges.

2. Provide the specific dollar allocations made available by the eligible agency for CTE programs under section 131 (a)-(e) of the Act and how these allocations are distributed to local educational agencies, area career and technical education schools, and educational service agencies within the state.

**Secondary formula:**

The secondary distribution will be based on:

1. 70 percent – the number of 5-17 year olds who reside in the school district from families with incomes below the poverty line (as defined by the Office of Management and Budget); and
2. 30 percent – the number of 5-17 year olds who reside in the school district.

**2007 -08 Carl Perkins Vocational and Technical Education Act  
Secondary Awards**

<b>Districts</b>	<b>Basic Grant Allocation</b>	<b>Skills Center Allocation</b>
ABERDEEN	41,506.00	-
ADNA	4,067.00	-
ALMIRA	1,131.00	-
ANACORTES	18,495.00	-
ARLINGTON	26,006.00	-
ASOTIN-ANATONE	6,240.00	-
AUBURN	110,430.00	-
BAINBRIDGE	15,855.00	-

BATTLE GROUND	62,411.00	-
BELLEVUE	91,656.00	-
BELLINGHAM	93,912.00	-
BENGE	-	-
BETHEL	135,770.00	-
BICKLETON	603.00	-
BLAINE	15,872.00	-
BOISTFORT	-	-
BREMERTON	66,424.00	34,284.91
BREWSTER	15,051.00	-
BRIDGEPORT	9,851.00	-
BRINNON	-	-
BURLINGTON EDISON	24,717.00	-
CAMAS	21,254.00	-
CAPE FLATTERY	8,353.00	-
CARBONADO	-	-
CASCADE	8,074.00	-
CASHMERE	9,187.00	-
CASTLE ROCK	10,865.00	-
CENTERVILLE	-	-
CENTRAL KITSAP	68,815.00	-
CENTRAL VALLEY	58,720.00	-
CENTRALIA	35,042.00	-
CHEHALIS	20,437.00	-
CHENEY	35,604.00	-
CHEWELAH	14,390.00	-
CHIMACUM	10,302.00	-
CLARKSTON	31,709.00	-
CLE ELUM-ROSLYN	6,442.00	-
CLOVER PARK	152,830.00	-
COLFAX	4,044.00	-
COLLEGE PLACE	-	-
COLTON	947.00	-
COLUMBIA (STEV)	3,672.00	-
COLUMBIA (WALLA)	5,556.00	-
COLVILLE	19,905.00	-
CONCRETE	12,925.00	-
CONWAY	-	-
COSMOPOLIS	-	-
COULEE/HARTLINE	2,643.00	-
COUPEVILLE	6,862.00	-
CRESCENT	3,563.00	-
CRESTON	1,077.00	-
CURLEW	3,691.00	-
CUSICK	4,098.00	-
DAMMAN	-	-

DARRINGTON	5,443.00	-
DAVENPORT	2,937.00	-
DAYTON	5,377.00	-
DEER PARK	16,037.00	-
DIERINGER	-	-
DIXIE	-	-
EAST VALLEY (SPK)	27,832.00	-
EAST VALLEY (YAK)	13,966.00	-
EASTMONT	37,865.00	31,146.00
EASTON	508.00	-
EATONVILLE	13,421.00	-
EDMONDS	160,289.00	-
ELLENSBURG	26,068.00	-
ELMA	18,180.00	-
ENDICOTT	1,390.00	-
ENTIAT	2,879.00	-
ENUMCLAW	24,589.00	-
EPHRATA	22,238.00	-
EVALINE	-	-
EVERETT	158,098.00	-
EVERGREEN (CLARK)	177,988.00	69,155.00
EVERGREEN (STEV)	-	-
FEDERAL WAY	156,337.00	-
FERNDALE	49,398.00	-
FIFE	23,048.00	-
FINLEY	4,992.00	-
FRANKLIN PIERCE	79,850.00	-
FREEMAN	3,359.00	-
GARFIELD	1,796.00	-
GLENWOOD	735.00	-
GOLDENDALE	15,731.00	-
GRAND COULEE DAM	12,230.00	-
GRANDVIEW	37,641.00	-
GRANGER	24,748.00	-
GRANITE FALLS	16,373.00	-
GRAPEVIEW	-	-
GREAT NORTHERN	-	-
GREEN MOUNTAIN	-	-
GRIFFIN	-	-
HARRINGTON	1,263.00	-
HIGHLAND	11,461.00	-
HIGHLINE	122,792.00	86,054.00
HOCKINSON	4,586.00	-
HOOD CANAL	-	-
HOQUIAM	26,519.00	-
INCHELIUM	2,274.00	-

INDEX	-	-
ISSAQUAH	62,452.00	-
KAHLOTUS	1,197.00	-
KALAMA	9,427.00	-
KELLER	-	-
KELSO	48,692.00	-
KENNEWICK	94,565.00	58,572.43
KENT	198,710.00	-
KETTLE FALLS	11,454.00	-
KIONA BENTON	12,471.00	-
KITTITAS	4,807.00	-
KLICKITAT	1,821.00	-
LA CONNER	6,522.00	-
LACENTER	8,693.00	-
LACROSSE	902.00	-
LAKE CHELAN	15,509.00	-
LAKE STEVENS	37,054.00	-
LAKE WASHINGTON	119,342.00	-
LAKEWOOD	13,368.00	-
LAMONT	-	-
LIBERTY	4,895.00	-
LIND	2,237.00	-
LONGVIEW	83,324.00	-
LOON LAKE	-	-
LOPEZ	3,066.00	-
LYLE	5,400.00	-
LYNDEN	21,034.00	-
MABTON	15,076.00	-
MANSFIELD	690.00	-
MANSON	10,202.00	-
MARY M KNIGHT	2,374.00	-
MARY WALKER	10,046.00	-
MARYSVILLE	71,968.00	-
MC CLEARY	-	-
MEAD	46,034.00	-
MEDICAL LAKE	12,595.00	-
MERCER ISLAND	19,210.00	-
MERIDIAN	10,231.00	-
METHOW VALLEY	5,989.00	-
MILL A	-	-
MONROE	31,648.00	-
MONTESANO	9,406.00	-
MORTON	4,590.00	-
MOSES LAKE	62,234.00	-
MOSSYROCK	5,119.00	-
MOUNT ADAMS	16,042.00	-

MOUNT BAKER	25,594.00	-
MOUNT PLEASANT	-	-
MT VERNON	69,823.00	-
MUKILTEO	112,512.00	66,665.00
NACHES VALLEY	7,230.00	-
NAPAVINE	6,606.00	-
NASELLE GRAYS RIV	2,851.00	-
NESPELEM	-	-
NEWPORT	14,376.00	-
NINE MILE FALLS	7,485.00	-
NOOKSACK VALLEY	16,885.00	-
NORTH BEACH	5,998.00	-
NORTH FRANKLIN	18,638.00	-
NORTH KITSAP	37,623.00	-
NORTH MASON	14,263.00	-
NORTH RIVER	444.00	-
NORTH THURSTON	79,470.00	-
NORTHPORT	3,727.00	-
NORTHSHORE	102,602.00	-
OAK HARBOR	49,235.00	-
OAKESDALE	-	-
OAKVILLE	4,563.00	-
OCEAN BEACH	11,704.00	-
OCOSTA	10,029.00	-
ODESSA	2,360.00	-
OKANOGAN	13,518.00	-
OLYMPIA	56,947.00	-
OMAK	20,572.00	-
ONALASKA	9,999.00	-
ONION CREEK	-	-
ORCAS	5,860.00	-
ORCHARD PRAIRIE	-	-
ORIENT	-	-
ORONDO	-	-
OROVILLE	9,237.00	-
ORTING	10,163.00	-
OTHELLO	35,935.00	-
PALISADES	-	-
PALOUSE	933.00	-
PASCO	107,512.00	-
PATEROS	2,287.00	-
PATERSON	-	-
PE ELL	4,170.00	-
PENINSULA	49,780.00	-
PIONEER	-	-
POMEROY	3,030.00	-

PORT ANGELES	28,286.00	16,058.09
PORT TOWNSEND	15,030.00	-
PRESCOTT	4,514.00	-
PROSSER	28,626.00	-
PULLMAN	17,452.00	-
PUYALLUP	97,369.00	-
QUEETS-CLEARWATER	-	-
QUILCENE	3,684.00	-
QUILLAYUTE VALLEY	12,965.00	-
QUINAULT	3,427.00	-
QUINCY	26,475.00	-
RAINIER	5,596.00	-
RAYMOND	8,053.00	-
REARDAN	4,994.00	-
RENTON	119,133.00	-
REPUBLIC	5,733.00	-
RICHLAND	49,219.00	-
RIDGEFIELD	12,851.00	-
RITZVILLE	3,591.00	-
RIVERSIDE	18,400.00	-
RIVERVIEW	16,357.00	-
ROCHESTER	14,601.00	-
ROOSEVELT	-	-
ROSALIA	2,780.00	-
ROYAL	19,304.00	-
SAN JUAN	4,749.00	-
SATSOP	-	-
SEATTLE	545,632.00	-
SEDRO WOOLLEY	34,696.00	-
SELAH	22,687.00	-
SELKIRK	3,642.00	-
SEQUIM	22,051.00	-
SHAW ISLAND	229.00	-
SHELTON	50,368.00	-
SHORELINE	51,100.00	-
SKAMANIA	-	-
SKYKOMISH	-	-
SNOHOMISH	47,338.00	-
SNOQUALMIE VALLEY	25,338.00	-
SOAP LAKE	10,349.00	-
SOUTH BEND	5,364.00	-
SOUTH KITSAP	70,858.00	-
SOUTH WHIDBEY	13,046.00	-
SOUTHSIDE	-	-
SPOKANE	361,752.00	60,000.00
SPRAGUE	1,492.00	-



ST JOHN	1,700.00	-
STANWOOD	37,686.00	-
STAR	-	-
STARBUCK	-	-
STEHEKIN	226.00	-
STEILACOOM HIST.	16,526.00	-
STEPTOE	-	-
STEVENSON-CARSON	12,027.00	-
SULTAN	19,095.00	-
SUMMIT VALLEY	-	-
SUMNER	39,354.00	-
SUNNYSIDE	86,662.00	-
TACOMA	427,407.00	-
TAHOLAH	3,491.00	-
TAHOMA	20,745.00	-
TEKOA	1,639.00	-
TENINO	8,557.00	-
THORP	1,201.00	-
TOLEDO	8,855.00	-
TONASKET	13,193.00	-
TOPPENISH	45,762.00	-
TOUCHET	2,144.00	-
TOUTLE LAKE	4,397.00	-
TROUT LAKE	1,036.00	-
TUKWILA	24,248.00	-
TUMWATER	21,832.00	55,124.00
UNION GAP	-	-
UNIVERSITY PLACE	30,065.00	-
VADER	-	-
VALLEY	-	-
VANCOUVER	237,007.00	-
VASHON ISLAND	9,461.00	-
WAHKIAKUM	4,031.00	-
WAHLUKE	16,521.00	-
WAITSBURG	3,103.00	-
WALLA WALLA	70,230.00	-
WAPATO	44,812.00	-
WARDEN	10,893.00	-
WASHOUGAL	20,373.00	-
WASHTUCNA	1,101.00	-
WATERVILLE	-	-
WELLPINIT	4,238.00	-
WENATCHEE	58,362.00	-
WEST VALLEY (YAK)	21,259.00	-
WEST VALLEY(SPOK)	23,994.00	-
WHITE PASS	9,567.00	-

WHITE RIVER	29,630.00	-
WHITE SALMON	11,818.00	-
WILBUR	3,565.00	-
WILLAPA VALLEY	3,469.00	-
WILSON CREEK	1,395.00	-
WINLOCK	10,152.00	-
WISHKAH VALLEY	957.00	-
WISHRAM	820.00	-
WOODLAND	11,203.00	-
YAKIMA	162,456.00	76,719.57
YELM	36,470.00	-
ZILLAH	8,137.00	-

These are district allocation tables. Districts must submit an approved Perkins plan, prior to receiving funds.

Not all districts apply for funds.

During the five-year planning process, the Board considered a recommendation for elimination of waivers for secondary allocations under \$5,000. Following discussion, the Board opted to adopt the following policy for secondary waivers:

*OSPI may grant waivers to secondary districts that do not meet the minimum \$15,000 allocation level, and are unable to form a consortium. Such districts and OSPI must assure that allocations are used to provide programs of sufficient size, scope, and quality to positively impact the quality of CTE.*

3. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs under section 132(a) of the Act and how these allocations are distributed to postsecondary institutions within the State. [Section 122(c)(6)(A); Sec. 202(c)]

**POSTSECONDARY  
2008-2009 PERKINS AND TECH PREP AWARDS**

Institution	Carl Perkins	Tech Prep
Bates	\$292,698	\$0
Bellevue	\$244,705	\$103,293
Bellingham	\$331,755	\$84,051
Big Bend	\$160,212	\$85,227
Cascadia	\$0	\$0
Centralia	\$219,647	\$76,164
Clark	\$510,905	\$81,354
Clover Park	\$507,257	\$0
Columbia Basin	\$388,978	\$82,044
Edmonds	\$282,196	\$76,407

Everett	\$365,031	\$91,350
Grays Harbor	\$240,726	\$78,252
Green River	\$255,091	\$109,943
Highline	\$319,940	\$0
Lake Washington	\$208,522	\$0
Lower Columbia	\$326,837	\$82,003
Olympic	\$331,011	\$102,989
Peninsula	\$261,829	\$77,543
Pierce District	\$385,550	\$131,861
Renton	\$346,290	\$0
Seattle District	\$794,157	\$86,504
Shoreline	\$242,172	\$0
Skagit Valley	\$303,578	\$98,143
South Puget Sound	\$190,495	\$98,832
Spokane District	\$1,309,139	\$77,097
Tacoma	\$396,442	\$0
Walla Walla	\$496,435	\$74,927
Wenatchee Valley	\$302,567	\$80,239
Whatcom	\$121,986	\$0
Yakima Valley	\$635,485	\$75,860
<b>Total Award</b>	<b>\$10,771,636</b>	<b>\$1,934,931</b>

4. Describe how the agency will allocate any of those funds among any consortia that will be formed among secondary schools and eligible institutions, and how funds will be allocated among the members of the consortia, including the rationale for such allocation.

**Secondary:**

In the past, the following districts formed consortia – with their respective applications. Each consortium had a district that assumed the fiscal agency role.

Kennewick School District, Columbia (Walla Walla) School District, Finley School District, Kiona-Benton City School District-\$115,651

Rochester School District, Rainier School District-\$19,226

Shelton School District, McCleary School District-\$56,649

St. John School District, Endicott School District-\$3,696

A consortium must use the allocation to support the consortium’s CTE activities – they may not use the consortium’s allocation as a pass-through of the funds.

5. Describe how the data used will be adjusted to make the allocations reflect any change in school district boundaries that may have occurred since the populations and/or enrollment data

was collected, and include local educational agencies without geographical boundaries, such as charter schools and secondary schools funded by the Bureau of Indian Affairs.

The Office of Superintendent of Public Instruction does not anticipate changes in the school district boundaries.

6. Provide a description of any proposed alternative allocation formula(s) requiring approval by the Secretary.

N/A

7. Provide a listing of allocations made to consortia (secondary and postsecondary) from funds available under sections 112(a) and (c) of the Act.

**Secondary**

In the past, the following districts formed consortia – with their respective allocations. Each consortium had a district that assumed the fiscal agency role.

Kennewick School District, Columbia (Walla Walla) School District, Finley School District, Kiona-Benton City School District-\$115,651  
Rochester School District, Rainier School District-\$19,226  
Shelton School District, McCleary School District-\$56,649  
St. John School District, Endicott School District-\$3,696

**Postsecondary**

There are no postsecondary consortia, as only one district does not meet the \$50,000 allocation base.

8. Describe the secondary and postsecondary formulas used to allocate funds available under section 112(a) of the Act, as required by section 131(a) and 132(a) of the Act.

**Secondary**

The secondary distribution will be based on:

- 70 percent – the number of 5-17 year olds who reside in the school district from families with incomes below the poverty line (as defined by the Office of Management and Budget); and
- 30 percent – the number of 5-17 year olds who reside in the school district.

**Postsecondary**

Local allocations are formula-based. The formula is based on 90 percent “Pell Plus,” 9 percent rural, and 1 percent high vocational numbers. Numbers used are unduplicated headcount, one-year numbers, with no caps.

The first 90 percent of funds that are distributed to the colleges are based on the “Pell Plus” formula, based on enrollment data. These are unduplicated students with a vocational intent who are Pell/BIA, Worker Retraining, welfare recipients and former welfare recipients, who are attending for employment related basic skills from the two years proceeding the current fiscal year. (Example FY06 awards were based on FY04 enrollment data.)

The remaining 10 percent is divided with 9 percent for rural schools and 1 percent to schools with a high percentage of vocational students.

The student intent code must be a vocational intent, the headcount is determined for each postsecondary institution. Those institutions where the headcount would result in an award of \$50,000 or more are allocated funds. The funds are then distributed based on this percent of total headcount.

*Rural colleges* are those in counties with population densities of less than 100 persons per square mile, based on data from the Office of Financial Management. Counties not included by this definition are: Clark, Island, King, Kitsap, Pierce, Snohomish, Spokane, and Thurston. Three counties are prorated to reflect the portions of the county where the population meets the rural definition: Spokane, Olympic, and Clark.

*Colleges with high percentage of vocational students* are those colleges that have 50 percent or more of their student populations enrolled in vocational programs. The percentage is calculated from the number of students with a vocational intent code, divided by the college's annual student headcount.

The "Pell Plus" formula was approved by OVAE for use beginning with Perkins III and continues under Perkins IV.

9. Describe the competitive basis or formula to be used to award reserve funds under section 112(c) of the Act.
10. Describe the procedures used to rank and determine eligible recipients seeking funding under section 112(c) of the Act.
11. Describe the procedures used to determine eligible recipients in rural and sparsely populated areas under section 131(c)(2) or 132(a)(4) of the Act.

### **Secondary**

OSPI will use the Rural Education Achievement Program (REAP) guidelines to determine districts that rate as rural. Usually this would be a local education agency (LEA) that is located within an incorporated or unincorporated place that has a district resident population of less than 2,500 or has a population center less than 1,000 persons and is characterized by sparse, widespread populations.

OSPI will distribute the funds to the local districts by a funding formula which will include districts with the OSPI defined rural guidelines, high percentages of career and technical education students, or high numbers of career and technical education students. (*OSPI will define the criteria for districts to be considered for reserve funds for high numbers or high percentages of CTE students.*)

### **Postsecondary**

*Rural colleges* are those in counties with population densities of less than 100 persons per square mile, based on data from the Office of Financial Management. Counties not included by this definition are: Clark, Island, King, Kitsap, Pierce, Snohomish, Spokane, and Thurston. Three

counties are prorated to reflect the portions of the county where the population meets the rural definition: Spokane, Olympic, and Clark.

*Colleges with high percentage of vocational students* are those colleges that have 50 percent or more of their student populations enrolled in vocational programs. The percentage is calculated from the number of students with a vocational intent code, divided by the college's annual student headcount.

## **VII. EDGAR CERTIFICATIONS AND OTHER ASSURANCES**

### **A. EDGAR Certifications**

1. Provide a written and signed certification that –
  - a. This plan is submitted by the state agency that is eligible to submit the plan. (Workforce Training and Education Coordinating Board)
  - b. The state agency has authority under state law to perform the functions of the state under the program.
  - c. The state legally may carry out each provision of the plan.
  - d. All provisions of the plan are consistent with state law.
  - e. A state officer, specified by title in the certification, has authority under state law to receive, hold, and disburse Federal funds made available under the plan.
  - f. The state officer who submits the plan, specified by title in the certification, has authority to submit the plan.
  - g. The agency that submits the plan has adopted or otherwise formally approved the plan.
  - h. The plan is the basis for state operation and administration of the program.
  - i. The state will comply with the requirements of the Act and the provisions of the state plan, including the provision of a financial audit of funds received under the Act, which may be included as part of an audit of other federal or state programs.
  - j. None of the funds expended under the Act will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the acquiring entity or the employees of the acquiring entity, or any affiliate of such an organization.
  - k. The state will waive the minimum allocation as required in section 131(c)(1) in any case in which the local educational agency is located in a rural, sparsely populated area or is a public charter school operating secondary school career and technical education programs and demonstrates that it is unable to enter into a consortium for purposes of providing services under the Act.
  - l. The state will provide, from non-federal sources for the costs the eligible agency incurs for the administration of programs under this Act, an amount that is not less than the amount provided by the eligible agency from non-federal sources for such costs for the preceding fiscal year.
  - m. The state and eligible recipients that use funds under this Act for in-service and pre-service CTE professional development programs for CTE teachers, administrators, and other personnel shall, to the extent practicable, upon written request, permit the participation in such programs of secondary CTE school teachers, administrators, and other personnel in

nonprofit private schools offering secondary CTE programs located in the geographical area served by such eligible agency or eligible recipient.

- n. Except as prohibited by state or local law, an eligible recipient may, upon written request, use funds made available under this Act to provide for the meaningful participation, in CTE programs and activities receiving funds under this Act, of secondary school students attending nonprofit private schools who reside in the geographical area served by the eligible recipient.
- o. Eligible recipients that receive an allotment under this Act will consult, upon written request, in a timely and meaningful manner with representatives of nonprofit private schools in the geographical area served by the eligible recipient regarding the meaningful participation, in CTE programs and activities receiving funding under this Act, of secondary school students attending nonprofit private schools.



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*Signature of Assurance*



## B. CERTIFICATION REGARDING LOBBYING


Applicants must review the requirements for certification regarding lobbying included in the regulations cited below before completing this form. Applicants must sign this form to comply with the certification requirements under 34 CFR Part 82, "New Restrictions on Lobbying." This certification is a material representation of fact upon which the Department of Education relies when it makes a grant or enters into a cooperative agreement.

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As required by Section 1352, Title 31 of the U.S. Code, and implemented at 34 CFR Part 82, for persons entering into a Federal contract, grant or cooperative agreement over \$100,000, as defined at 34 CFR Part 82, Sections 82.105 and 82.110, the applicant certifies that:

- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;
- (c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants and contracts under grants and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certification.

NAME OF APPLICANT PROJECT NAME Workforce Training and Education Coordinating Board Washington State's Carl D. Perkins Five-Year Plan	PR/AWARD NUMBER AND / OR
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE Eleni Papadakis, Executive Director Workforce Training and Education Coordinating Board	
SIGNATURE 	DATE April 1, 2008

## ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503


**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**Note:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1721 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, AAudits of States, Local Governments, and Non-Profit Organizations.≡
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL		TITLE	
		Executive Director	
APPLICANT ORGANIZATION		DATE SUBMITTED	
Workforce Training and Education Coordinating Board		April 1, 2008	

Standard Form 424B (Rev. 7-97) Back

# **Part B**

## **Budget Forms**

**PERKINS IV BUDGET TABLE - PROGRAM YEAR 2**  
*(For Federal Funds to Become Available Beginning on July 1, 2008)*

**I. TITLE I: CAREER AND TECHNICAL EDUCATION ASSISTANCE TO STATES**

A. Total Title I Allocation to the State	\$21,965,335
B. Amount of Title II Tech Prep Funds to Be Consolidated with Title I Funds	\$ <u>0</u>
C. Total Amount of Combined Title I and Title II Funds to be distributed under section 112 (Line A + Line B)	\$21,965,335
D. Local Formula Distribution (not less than 85%) (Line C x 85%)	\$18,670,535
1. Reserve (not more than 10% of Line D)	\$ 1,867,053
a. Secondary Programs (44% of Line D.1)	\$ 821,503
b. Postsecondary Programs (56% of Line D.1)	\$ 1,045,550
2. Available for formula allocations (Line D minus Line D.1)	\$16,803,482
a. Secondary Programs (44% of Line D.2)	\$ 7,393,532
b. Postsecondary Programs (56% of Line D.2)	\$ 9,409,950
E. Leadership (not more than 10%) (Line C x 10%)	\$ 2,196,533
a. Nontraditional Training and Employment (\$150,000)	
b. Corrections or Institutions (\$219,653)	
F. State Administration (not more than 5%) (Line C x 5%)	\$ 1,098,267
G. State Match (from non-federal funds) <sup>5</sup>	\$ 1,098,267

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<sup>5</sup> The eligible agency must provide non-Federal funds for State administration of its Title I grant in an amount not less than the amount it provided in the preceding year.

**PERKINS IV BUDGET TABLE - PROGRAM YEAR 1**  
 (For Federal Funds to Become Available Beginning on July 1, 2007)

**II. TITLE II: TECH PREP PROGRAMS**

A. Total Title II Allocation to the State	\$ 2,036,850
B. Amount of Title II Tech Prep Funds to Be Consolidated with Title I Funds	\$ <u>0</u>
C. Amount of Title II Funds to Be Made Available For Tech-Prep (Line A less Line B)	\$ 2,036,850
D. Tech-Prep Funds Earmarked for Consortia	\$ 1,935,008
a. Percent for Consortia (Line D divided by Line C) [95%]	
b. Number of Consortia <u>22</u>	
c. Method of Distribution (check one):	
<input checked="" type="checkbox"/> <u>xx</u> Formula	
<input type="checkbox"/> <u>      </u> Competitive	
E. Tech-Prep Administration	\$ 101,842
a. Percent for Administration (Line E divided by Line C) [5%]	

# **Part C**

## **Accountability Forms**

**II. FINAL AGREED UPON PERFORMANCE LEVELS FORM (FAUPL) – WASHINGTON**

**SECONDARY LEVEL**

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Indicator &amp; Citation</b>	<b>Measurement Definition</b>	<b>Measurement Approach</b>	<b>Baseline 7/1/05- 6/30/06</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>
<b>1S1 Academic Attainment – Reading/Language Arts 113(b)(2)(A)(i)</b>	<p><b>Numerator:</b> Number of CTE concentrators who have met the proficient or advanced level on the Statewide high school <b>reading/language arts</b> assessment administered by the State under Section 1111(b)(3) of the Elementary Secondary Education Act (ESEA) as amended by the No Child Left Behind Act based on the scores that were included in the state’s computation of adequate yearly progress (AYP) and who, in the reporting year, left secondary education.</p> <p><b>Denominator:</b> Number of CTE concentrators who took the ESEA assessments in <b>reading/language arts</b> whose scores were included in the State’s computation of AYP and who, in the reporting year, left secondary education.</p>	<b>State and Local Administrative Records</b>	<b>B: 63.30%</b>	<b>L: 61.50%</b> <b>A:</b>	<b>L: 61.50%</b> <b>A:</b>



Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline 7/1/05- 6/30/06	Year One 7/1/07- 6/30/08	Year Two 7/1/08- 6/30/09
<b>1S2 Academic Attainment - Mathematics 113(b)(2)(A)(i)</b>	<p><b>Numerator:</b> Number of CTE concentrators who have met the proficient or advanced level on the Statewide high school <b>mathematics</b> assessment administered by the State under Section 1111(b)(3) of the Elementary Secondary Education Act (ESEA) as amended by the No Child Left Behind Act based on the scores that were included in the state's computation of adequate yearly progress (AYP) and who, in the reporting year, left secondary education.</p> <p><b>Denominator:</b> Number of CTE concentrators who took the ESEA assessments in <b>mathematics</b> whose scores were included in the State's computation of AYP and who, in the reporting year, left secondary education.</p>	<b>State and Local Administrative Records</b>	<b>B: 37.90%</b>	<b>L: 43.60%</b>  <b>A:</b>	<b>L: 43.60%</b>  <b>A:</b>
<b>2S1 Technical Skill Attainment 113(b)(2)(A)(ii)</b>	<p><b>Numerator</b> Number of exiting CTE concentrators who have received an industry certification</p> <p><b>Denominator</b> Number of exiting CTE concentrators who were in a course at a school where one or more students received an industry certification in that course</p>	<b>State and Local Administrative Records</b>	<b>B: 37.71%</b>	<b>L: 38.21%</b>  <b>A:</b>	<b>L: 38.71%</b>  <b>A:</b>
<b>3S1 Secondary School Completion 113(b)(2)(A)(iii)(I- III)</b>	<p><b>Numerator:</b> Number of CTE concentrators who have attained a high school diploma or GED and who have left secondary education in the reporting year.</p> <p><b>Denominator:</b> Number of CTE concentrators who have left secondary education in the reporting year.</p>	<b>State and Local Administrative Records</b>	<b>B: 87.78%</b>	<b>L: 88.28%</b>  <b>A:</b>	<b>L: 88.78%</b>  <b>A:</b>

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Indicator &amp; Citation</b>	<b>Measurement Definition</b>	<b>Measurement Approach</b>	<b>Baseline 7/1/05- 6/30/06</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>
<b>4S1 Student Graduation Rates 113(b)(2)(A)(iv)</b>	<p><b>Numerator:</b> Number of CTE concentrators who, in the reporting year, were included as graduated in the State's computation of its graduation rate as described in Section 1111(b)(2)(C)(vi) of ESEA.</p> <p><b>Denominator:</b> Number of CTE concentrators who, in the reporting year, were included in the State's computation of its graduation rate as defined in the state's Consolidated Accountability Plan pursuant to Section 1111(b)(2)(C)(vi) of the ESEA.</p>	<b>State and Local Administrative Records</b>	<b>B: 78.80%</b>	<b>L: 69.00%</b>  <b>A:</b>	<b>L: 70.00%</b>  <b>A:</b>
<b>5S1 Secondary Placement 113(b)(2)(A)(v)</b>	<p><b>Numerator:</b> Number of CTE concentrators who were employed, enrolled in higher education, or enlisted in the military during the third post-exit quarter, based on administrative records or a student survey.</p> <p><b>Denominator:</b> Number of CTE concentrators who left secondary education during the reporting year.</p>	<b>State and Local Administrative Records or Student Survey</b>	<b>B: 75.33%</b>	<b>L: 75.83%</b>  <b>A:</b>	<b>L: 76.33%</b>  <b>A:</b>
<b>6S1 Nontraditional Participation 113(b)(2)(A)(vi)</b>	<p><b>Numerator:</b> Number of CTE participants from underrepresented gender groups who participated in a program that leads to employment in nontraditional fields during the reporting year.</p> <p><b>Denominator:</b> Number of CTE participants who participated in a program that leads to employment in nontraditional fields during the reporting year.</p>	<b>State and Local Administrative Records</b>	<b>B: 28.00%</b>	<b>L: 28.50%</b>  <b>A:</b>	<b>L: 29.00%</b>  <b>A:</b>
<b>6S2 Nontraditional Completion 113(b)(2)(A)(vi)</b>	<p><b>Numerator:</b> Number of CTE concentrators from underrepresented gender groups who completed a program that leads to employment in nontraditional fields during the reporting year.</p> <p><b>Denominator:</b> Number of CTE concentrators who completed a program that leads to employment in nontraditional fields during the reporting year.</p>	<b>State and Local Administrative Records</b>	<b>B: 38.96%</b>	<b>L: 39.46%</b>  <b>A:</b>	<b>L: 39.96%</b>  <b>A:</b>

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Indicator &amp; Citation</b>	<b>Measurement Definition</b>	<b>Measurement Approach</b>	<b>Baseline 7/1/05- 6/30/06</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>
<b>7S1 Earnings of Completers</b>	<b>Median:</b> Annualized earnings in Q3 after exit for those not in further education or training (Q1 2007 dollars)	<b>Administrative Record Exchanges/ Matching</b>	<b>B: \$11,409</b>	<b>L: \$11,751</b>	<b>L: \$12,104</b>
<b>7S2 Employer Satisfaction with Completers</b>	<b>Numerator:</b> Number of employers satisfied with preparation of completers <b>Denominator:</b> Number of employers completing survey	<b>State developed and Administered Surveys</b>	<b>B: 89.4%</b>	<b>NA</b>	<b>L: 90.0%</b>
<b>7S3 Participant Satisfaction</b>	<b>Numerator:</b> Number of exiters satisfied with training <b>Denominator:</b> Number of participants completing survey	<b>State developed and Administered Surveys</b>	<b>B: 95.8%</b>	<b>NA</b>	<b>L: 95.0%</b>

**III. FINAL AGREED UPON PERFORMANCE LEVELS FORM (FAUPL) – WASHINGTON**

**POSTSECONDARY LEVEL**

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Indicator &amp; Citation</b>	<b>Measurement Definition</b>	<b>Measurement Approach</b>	<b>Baseline 7/1/05- 6/30/06</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>
<b>1P1 Technical Skill Attainment 113(b)(2)(B)(i)</b>	<p><b>Numerator:</b> Number of CTE concentrators, exiting during the reporting year, who have attained an award (a degree, certificate, apprenticeship, or an industry certification) or completed at least 45 vocational credits with a 2.0 or higher GPA</p> <p><b>Denominator:</b> The number of CTE Concentrators who exited during the reporting year: 48,248</p>	<b>State and Local Administrative Records</b>	<b>B: 37,495</b>	<b>L: 37,682</b>  <b>A:</b>	<b>L: 37,870</b>  <b>A:</b>
<b>2P1 Credential, Certificate or Degree 113(b)(2)(B)(ii)</b>	<p><b>Numerator:</b> Number of CTE concentrators, exiting during the reporting year, who have attained an award (a degree, certificate, apprenticeship, or an industry certification).</p> <p><b>Denominator:</b> the number of CTE concentrators, exiting during the reporting year: 48,248</p>	<b>State and Local Administrative Records</b>	<b>B: 30,162</b>	<b>L: 30,313</b>  <b>A:</b>	<b>L: 30,465</b>  <b>A:</b>

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Indicator &amp; Citation</b>	<b>Measurement Definition</b>	<b>Measurement Approach</b>	<b>Baseline 7/1/05- 6/30/06</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>
<b>3P1 Student Retention or Transfer 113(b)(2)(B)(iii)</b>	<p><b>Numerator:</b> Number of CTE participants who are not yet concentrators at the beginning of the reporting year, who became CTE concentrators or enrolled in other higher education, including apprenticeship, during the reporting year</p> <p><b>Denominator:</b> Number of CTE participants during the reporting year who are not yet concentrators at the beginning of the reporting year</p>	<b>State and Local Administrative Records</b>	<b>B: 64.5%</b>	<b>L: 65.0%</b>  <b>A:</b>	<b>L: 65.5%</b>  <b>A:</b>
<b>4P1 Student Placement 113(b)(2)(B)(iv)</b>	<p><b>Numerator:</b> Number of CTE concentrators who were either employed according to UI wage records or in the military, and not enrolled in higher education during the third quarter after they exit</p> <p><b>Denominator:</b> Number of CTE concentrators exiting during the reporting period and not enrolled in higher education during the 3<sup>rd</sup> quarter after exit</p>	<b>State and Local Administrative Records</b>	<b>B: 65.4%</b>	<b>L: 65.9%</b>  <b>A:</b>	<b>L: 66.4%</b>  <b>A:</b>
<b>5P1 Nontraditional Participation 113(b)(2)(B)(v)</b>	<p><b>Numerator:</b> Number of CTE participants from underrepresented gender groups who enrolled in a non-traditional program during the reporting period</p> <p><b>Denominator:</b> Number of CTE participants in non-traditional programs during the reporting period</p>	<b>State and Local Administrative Records</b>	<b>B: 18.4%</b>	<b>L: 18.9%</b>  <b>A:</b>	<b>L: 19.4%</b>  <b>A:</b>
<b>5P2 Nontraditional Completion 113(b)(2)(B)(v)</b>	<p><b>Numerator:</b> Number of CTE completers from underrepresented gender groups who enrolled in a nontraditional program during the reporting period</p> <p><b>Denominator:</b> Number of CTE completers in nontraditional programs during the reporting period</p>	<b>State and Local Administrative Records</b>	<b>B: 17.9%</b>	<b>L: 18.4%</b>  <b>A:</b>	<b>L: 18.9%</b>  <b>A:</b>

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>
<b>Indicator &amp; Citation</b>	<b>Measurement Definition</b>	<b>Measurement Approach</b>	<b>Baseline 7/1/05- 6/30/06</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>
<b>6P1 Annualized Earnings</b>	<b>Median:</b> Annualized earnings in Q3 after exit for those not in further education or training (Q1 2007 dollars)	<b>Administrative Record Exchanges/ Matching</b>	<b>B: \$28,138</b>	<b>L: \$28,982</b> <b>A:</b>	<b>L: \$29,851</b> <b>A:</b>
<b>6P2 Employer Satisfaction</b>	<b>Numerator:</b> Number of employers satisfied with preparation of completers <b>Denominator:</b> Number of employers completing survey	<b>State developed and Administered Surveys</b>	<b>B: 92.6%</b>	<b>N.A.</b>	<b>L: 90.0%</b> <b>A:</b>
<b>6P3 Participant Satisfaction</b>	<b>Numerator:</b> Number of exiters satisfied with training <b>Denominator:</b> Number of participants completing survey	<b>State developed and Administered Surveys</b>	<b>B: 92.9%</b>	<b>N.A.</b>	<b>L 91.0%</b> <b>A:</b>

## STUDENT DEFINITIONS: WASHINGTON

**CTE Secondary Participants –**

A secondary student who has enrolled in one or more courses in any CTE program area.

**CTE Secondary Concentrators –**

A secondary student who has enrolled in 2 or more CTE courses above the exploratory level in a single cluster

**CTE Secondary Completers –**

A secondary student who has completed a CTE instructional program.

**CTE Postsecondary Participants –**

A student enrolled with a vocational intent who has earned one or more college level credits in any CTE program area

**CTE Postsecondary Concentrators –**

Postsecondary CTE participant who has completed at least 12 CTE credits or completed an industry recognized credential or formal award

**CTE Postsecondary Completer –**

A CTE student who has attained a formal award (a degree, certificate, apprenticeship, or an industry certification) or completed at least 45 vocational credits with a 2.0 or higher GPA

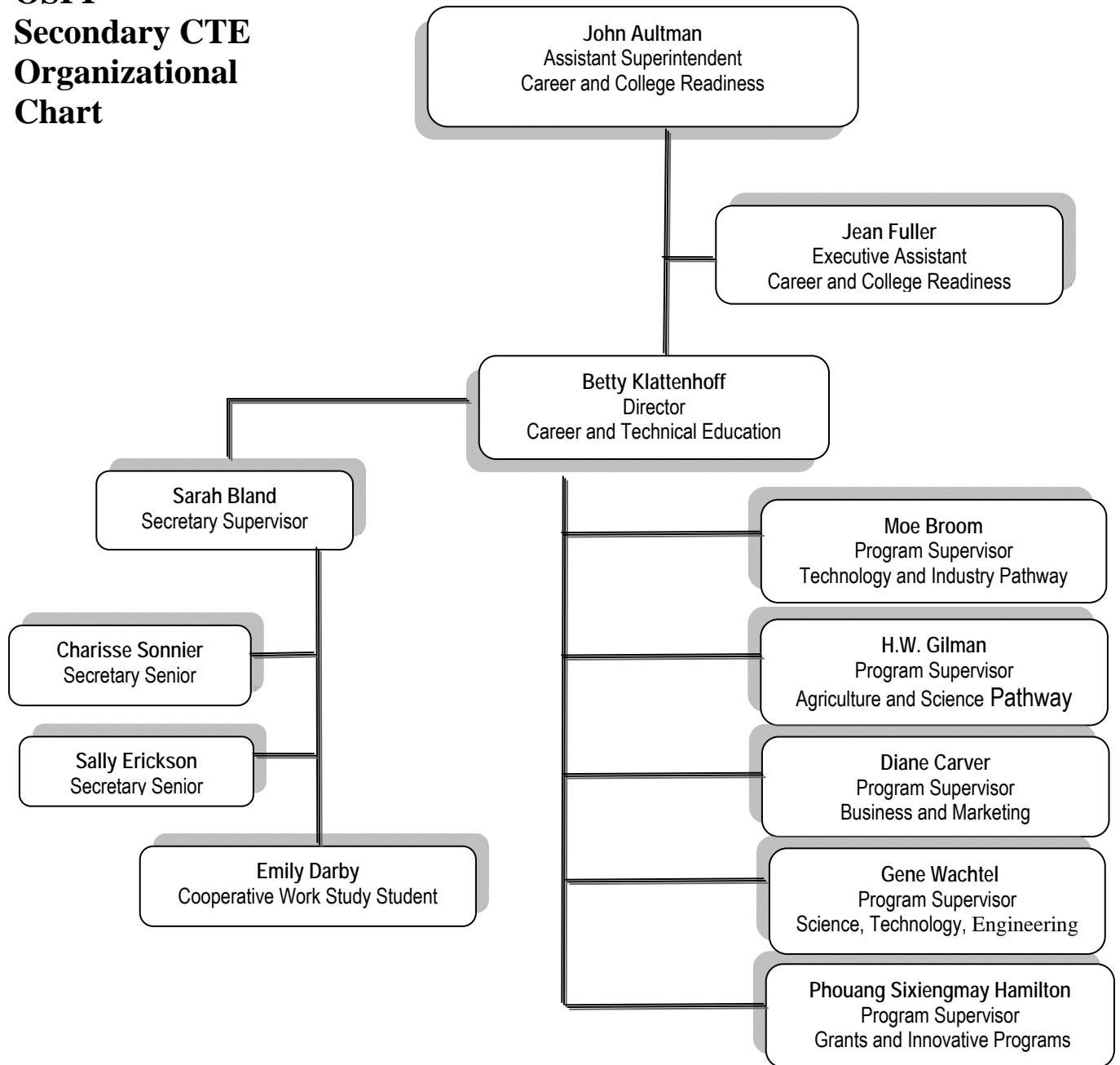
# APPENDICES



# **APPENDIX A**

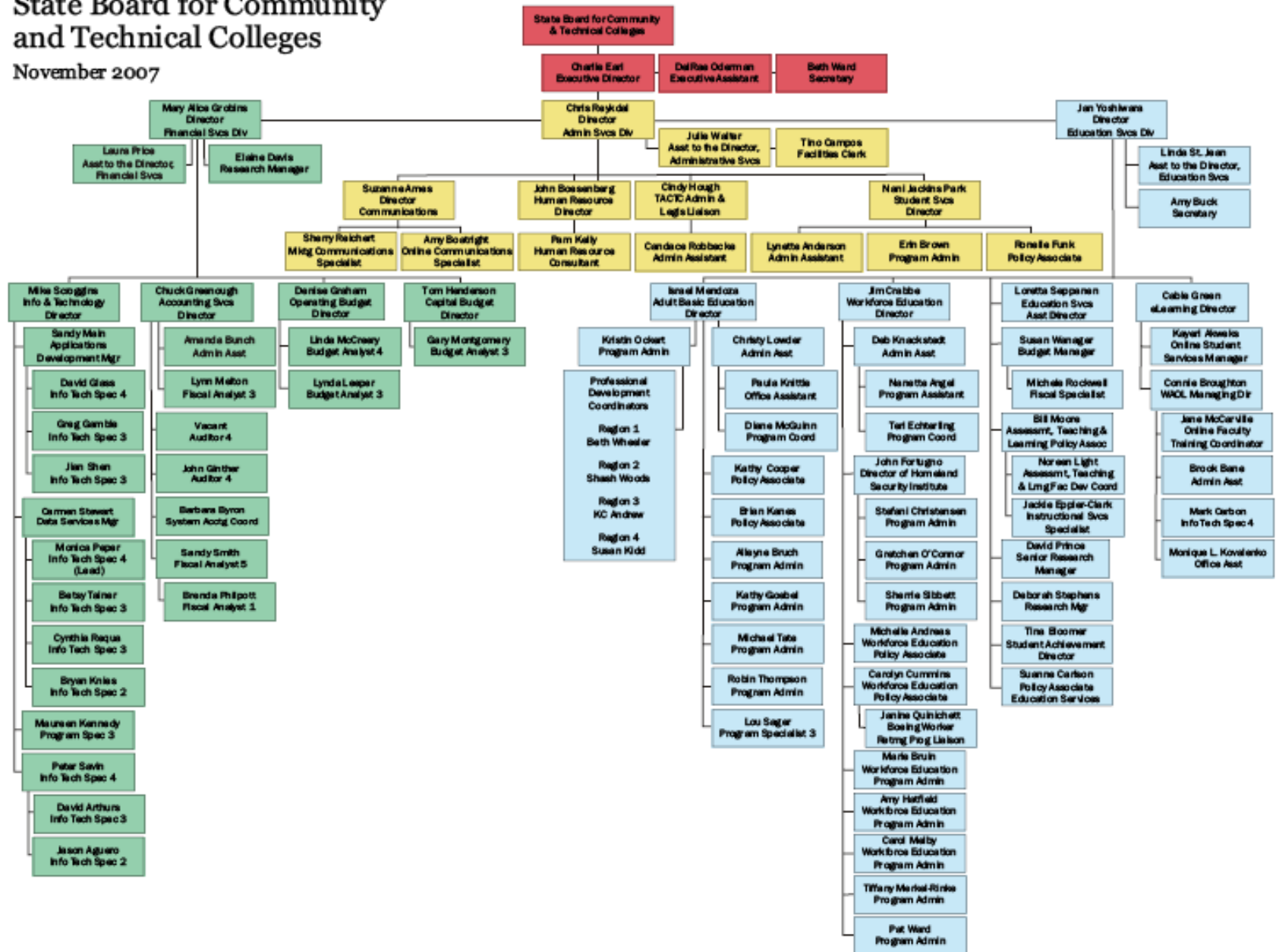
## **Organizational Charts**

**OSPI  
Secondary CTE  
Organizational  
Chart**

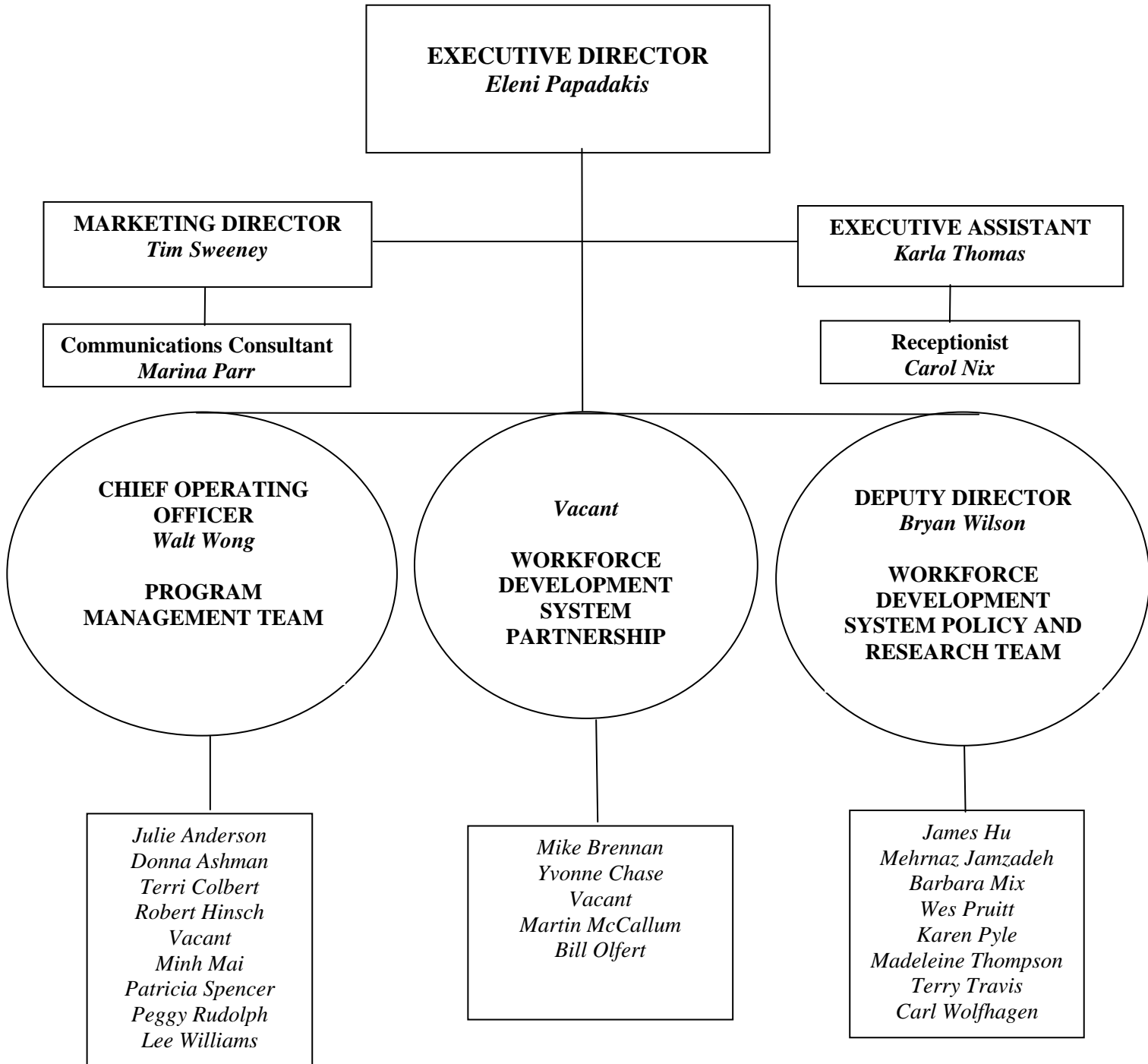


# State Board for Community and Technical Colleges

November 2007



# Workforce Training and Education Coordinating Board Organizational Chart



# **APPENDIX B**

## **Local Recipients**

## Washington State School Districts

Aberdeen	Eastmont	Lynden
Adna	Easton	Mabton
Almira	Eatonville	Mansfield
Anacortes	Edmonds	Manson
Arlington	Ellensburg	Mary M. Knight
Asotin Martin	Elma	Mary Walker
Auburn	Entiat	Marysville
Bainbridge Island	Enumclaw	Mead
Battle Ground	Ephrata	Medical Lake
Bellevue	Everett	Mercer Island
Bellingham	Evergreen	Meridian
Bethel	Federal Way	Monroe
Bickleton	Ferndale	Montesano
Blaine	Fife (02)	Morton
Bremerton	Finley	Moses Lake
Brewster	Franklin Pierce	Mossyrock
Bridgeport	Freeman	Mount Adams
Burlington-Edison	Garfield	Mount Baker
Camas	Glenwood	Mount Vernon
Cape Flattery	Goldendale	Mountlake
Cascade	Grand Coulee	Mukilteo
Cashmere	Grandview	N Central SC
Castle Rock	Granger	Naches Valley
Central Kitsap	Granite Falls	Napavine
Central Valley	Harrington	Naselle-Grays River
Centralia	Highland	New Market SC
Chehalis	Highline	Newport
Cheney	Hockinson	Nine Mile Falls
Chewelah	Hoquiam	Nooksack Valley
Chimacum	Inchelium	North Beach
Clark County SC	Issaquah	North Franklin
Clarkston	Kalama	North Kitsap
Cle Elum-Roslyn	Kalotus	North Mason
Clover Park	Kelso	North Olympic Peninsula SC
Colfax	Kennewick	North River
Colton	Kent	North Thurston
Columbia (Stevens)	Kettle Falls	Northport
Columbia (Walla Walla)	Kiona-Benton	Northshore
Colville	Kittitas	Oak Harbor
Concrete	Klickitat	Oakville
Coulee-Hartline	La Center	Ocean Beach
Coupeville	La Conner	Ocosta
Crescent	Lacrosse	Odessa
Creston	Lake Chelan	Okanogan
Curlew	Lake Stevens	Olympia
Cusick	Lake Washington	Omak
Darrington	Lakewood	Onalaska
Davenport	Liberty	Orient
Dayton	Lind	Orting
Deer Park	Longview	Othello
East Valley (Spokane)	Lopez	Palouse
East Valley (Yakima)	Lyle	Pasco

Pateros  
Pe Ell  
Peninsula  
Pomeroy  
Port Angeles  
Port Townsend  
Prosser  
Pullman  
Puyallup  
Quilcene  
Quillayute Valley  
Quinault  
Quincy  
Rainier  
Raymond  
Reardan-Edwall  
Renton  
Republic  
Richland  
Ridgefield  
Ritzville  
Riverside  
Riverview  
Rochester  
Rosalia  
Royal  
San Juan Island  
SeaTac Occup. SC  
Seattle  
Sedro-Woolley  
Selah  
Selkirk  
Sequim  
Shelton  
Shoreline  
Skykomish  
Snohomish  
Sno-Isle SC  
Snoqualmie Valley  
Soap Lake  
South Bend  
South Kitsap  
South Whidbey  
Spokane  
Spokane Area Prof. Tech SC  
Sprague  
St. John  
Stanwood-Camano  
Steilacoom  
Stevenson-Carson  
Sultan  
Sumner

Sunnyside  
Tacoma  
Taholah  
Tahoma  
Tekoa  
Tenino  
Thorp  
Toledo  
Tonasket  
Toppenish  
Touchet  
Toutle Lake  
Tri-Tech SC  
Tukwila  
Tumwater  
University Place  
Vancouver  
Vashon Island  
Wahkiakum  
Wahluke  
Waitsburg  
Walla Walla  
Wapato  
Warden  
Washougal  
Washtucna  
Waterville  
Wellpinit  
Wenatchee  
West Sound Tech SC

West Valley (Spokane)  
West Valley (Yakima)  
White Pass  
White River  
White Salmon  
Wilbur  
Willapa Valley  
Wilson Creek  
Winlock  
Wishkah Valley  
Wishram  
Woodland  
Yakima  
Yakima Valley Tech SC  
Yelm  
Zillah

## Washington Postsecondary Institutions

Bates Technical College	Peninsula College
Bellevue Community College	Pierce-Fort Steilacoom
Bellingham Technical College	Pierce-Puyallup
Big Bend Community College	Renton Technical College
Cascadia Community College*	Seattle Central Community College
Centralia College	Seattle Vocational Institute
Clark College	Shoreline Community College
Clover Park Technical College	Skagit Valley College
Columbia Basin College	South Puget Sound Community College
Edmonds Community College	South Seattle Community College
Everett Community College	Spokane Community College
Grays Harbor College	Spokane Falls Community College
Green River Community College	Tacoma Community College
Highline Community College	Walla Walla Community College
Lake Washington Technical College	Wenatchee Valley Community College
Lower Columbia College	Whatcom Community College
North Seattle Community College	Yakima Valley Community College
Olympic College	

\*Cascadia did not meet the required \$50,000 level. This college will not receive Perkins Basic funds for 2008-2009.





## WA State Tech Prep Consortia

Basin Tech Prep Consortium - Big Bend Community College  
Clark-SW Washington Consortium - Clark College  
Columbia Basin Consortium - Columbia Basin College  
Cowlitz-Wahkiakum Career Development Consortium - Lower Columbia College  
Edmonds Tech Prep Consortium - Edmonds Community College  
Lewis & So. Thurston Counties Consortium - Centralia College  
NE Washington/Spokane Consortium – Community Colleges of Spokane  
North Central Washington Consortium - Wenatchee Valley College  
North Olympic Peninsula Consortium - Peninsula College  
Northeast Tech Prep Consortium - Bellevue Community College  
Pierce County Careers Connection - Carlton Center  
PrepWork Consortium - Skagit Valley College  
Puget Sound Career Consortium -South Seattle Community College  
Seattle Tech Prep Consortium - Siegel Center, Seattle Community Colleges  
Sno-Isle/Everett Community College Consortium - Everett Community College- Monroe Campus  
South King County Tech Prep Consortium - Green River Community College  
South Sound Tech Prep Partnership - South Puget Sound Community College  
Southeastern Washington Tech Prep Consortium - Walla Walla Community College  
Twin County Consortium - Grays Harbor College  
West Sound Consortium - Olympic College  
Whatcom Tech Prep Consortium - Bellingham Technical College  
Yakima Valley Consortium - Yakima Valley Community College

*Note: Colleges listed act as fiscal agents to the consortia. All colleges in the CTC system are partners in at least one consortium.*

# **APPENDIX C**

## **Local Applications**

# **Secondary Application**

**iGrants Form Packages 215  
Carl D. Perkins Career and Technical Education Act  
(Federal Funds)  
Profile of this Form Package**

**OSPI Program Area:** Learning and Teaching

**Funding Type:** Entitlement within the Perkins Act of 2006

**Funding Source:** Federal

**Authorizing Statute:** PL 105-332

**Purpose:** To provide more fully the academic and career and technical skills of secondary education students and post secondary students who elect to enroll in career and technical education programs.

**Allocation Formula Basis:**

70% students ages 5-17 in poverty in district. 30% total ages 5-17 in district.

**Eligible Subgrantees:**

School Districts

**Reference Materials:**

<http://www.ed.gov/policy/sectech/leg/perkins/index.html>

**Funding Information:**

**Application Information:**

**Funding Amounts 07-08:**



Application Process:

iGrants System

**Indirect Rates for 2008-09: ALERT! 5% CAP**



Board Approval:

Yes

CFDA #: Code of Federal Domestic Assistance 84.048

Program Acct. Number: 38/46

**Application Due Date:**

**October 15, 2008**

Revenue Acct. Number: 6138/46

Fiscal Year:

2009

ESD Program Acct. Number: 32

Project Period:

7/1/08

ESD 69 thru 8/31/09  
Revenue  
Acct.  
Number:  
Carryover No  
Applies:  
Budget August 31  
Revision  
Deadline:

**Valid Program Activities:**

21 Supervision                      25 Pupil Mgmt. Safety  
22 Lrn. Resources                    27 Teaching  
  
24 Guid. Counsel                    29 Payment to District

**Fiscal Contact:**

Holly Hill  
(360) 725-6281  
[holly.hill@k12.wa.gov](mailto:holly.hill@k12.wa.gov)

**Program Contacts:**

Phouang Sixiengmay-Hamilton  
(360) 725-6253  
[phouang.hamilton@k12.wa.us](mailto:phouang.hamilton@k12.wa.us)

James Smith  
(360) 725-6254  
[james.smith@k12.wa.us](mailto:james.smith@k12.wa.us)

Moe Broom  
(360) 725-6241  
[moe.broom@k12.wa.us](mailto:moe.broom@k12.wa.us)

Diane Carver  
(360) 725-6258  
[Diane.Carver@k12.wa.us](mailto:Diane.Carver@k12.wa.us)

Wayne Gilman  
(360) 725-6244  
[hw.gillman@k12.wa.us](mailto:hw.gillman@k12.wa.us)

Gene Wachtel  
(360) 725-4467  
[Gene.wachtel@k12.wa.us](mailto:Gene.wachtel@k12.wa.us)

Betty Klattenhoff  
(360) 725-6254  
[betty.klattenhoff@k12.wa.us](mailto:betty.klattenhoff@k12.wa.us)

## Page 1

**Submission Notes**

**Alert!** *There is a 5 percent Indirect Rate for this program*

**Alert!** *In order to receive funds for 2008-09 under the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV), districts must submit an application that describes how the district will carry out the requirements of the Act and, in particular, Sections 134 and 135 of the Act.*

*Districts wishing to apply for these funds must complete this application by providing responses to all sections of the application.*

*All districts offering approved Career and Technical Education programs are required to maintain:*

- *Equipment inventories*
- *Type of Student Leadership Used*
- *Specific Programs Offered*
- *Advisory Committee Minutes and memberships*
- *Program Improvement goals/objectives*

## Page 2

**WAIVER REQUEST/ CONSORTIUM REQUIREMENTS****Carl D. Perkins Vocational and Technical Education Act of 2006****Alert!**

*A local educational agency shall not receive an allocation of Perkins IV grant funds unless the amount of the allocation is greater than \$15,000. A local educational agency may enter into a consortium with other local educational agencies for purposes of meeting the minimum allocation requirement.*

**[Y/N]:** *Does the total allocation amount meet the minimum \$15,000 allocation?*

**[[Y/N]]:** *District wish to apply for a consortium (districts that do not qualify for a minimum of \$15,000 allocation)*

*The following applies to districts applying for a consortium:*

- *One school district acts as the fiscal agent for the other member(s) of the consortium.*
- *Each district in the consortium must complete and submit a Perkins application.*
- *Funds must be spent to benefit all members of the consortium*

**[[Y/N]]:** *The district is in a rural, sparsely populated area (225 or fewer students in grades 9-12)*

**[[Y/N]]:** *Will the district apply for a waiver? If district wish to apply for a waiver, districts must provide services and activities that are of sufficient size, scope, and quality to be effective. (If yes, the following questions must be completed). [131 (c) (2 a,b)]*

Briefly describe why it is not feasible for the district to participate in a consortium with other districts for the use of Perkins funds.

*Text Here*

Describe how the district will provide services and activities that are sufficient size, scope, and quality to be effective.

*Text Here*

What is your plan to provide preparatory programs?

*Text Here*

**Page 3**

### **Perkins Assurances**

**ALERT!** A copy of the printed, signed, and dated assurance pages must be in district files for monitoring/auditing purposes.

#### **Instructions:**

1. Review the following assurance statements.
2. Sign, date and print a copy of this assurance section.
3. Place the hard copy of the printed, signed, and dated assurance section in district files for monitoring/auditing purposes.
4. Please key in the requested names of school officials and the dates on which they have signed a printed copy of the assurance section

Districts planning to offer Career and Technical Education programs in secondary schools must do so in conformity with the State Perkins Plan for Career and Technical Education programs (WAC 180-58-55[7]).

**[[Y/N]]:** Upon written request, did the district consult in a timely and meaningful manner with representatives of nonprofit private schools in the geographic areas served by the eligible recipient regarding the meaningful participation, in CTE programs and activities receiving funding under this Act, of secondary school students attending nonprofit private schools.  
[section 317(b)(2)]

#### **This district hereby assures compliance with the following requirements:**

1. All Career and Technical Education classes/programs receiving state and/or federal Career and Technical Education funding are currently approved by the Office of Superintendent of Public Instruction (OSPI) and are taught by an instructor who has a current Career and Technical Education certification and whose certification matches the instructional area.
2. District must have programs of study documentation on file.
3. All Career and Technical Education instructors of approved applied academic courses have completed approved preparation and yearly in-service for the course(s) they teach.
4. All Career and Technical Education teachers in approved Career and Technical Education programs hold a current first aid and CPR certificate.
5. The local Career and Technical Education programs have been developed according to state career and technical education standards which are the basis for federal, state, and special grant funding requirements.
6. The local Career and Technical Education program plan was developed in consultation with program specific advisory committee.

7. *The local Career and Technical Education plan was developed in consultation with representatives of the educational and training resources available in the area to be served by the applicant. Representatives must include, where available, private technical schools, skills centers, and other public or private educational agencies.*
8. *All Career and Technical Education programs and activities are conducted in compliance with Title I of the Perkins Act of 2006 and the provisions of the State Perkins Plan. This includes the provision of a financial audit of funds received under this title which may be included as part of an audit of the federal or state programs.*
9. *The district has conducted an evaluation of Career and Technical Education programs using the current state CTE standards.*
10. *Each recipient of financial assistance shall annually evaluate the effectiveness of the program. As part of each such evaluation, each recipient shall (1) review programs with the full and informed participation of representatives of individuals who are members of special populations, and (2) evaluate the progress of Career and Technical Education programs assisted under this Act in providing Career and Technical Education students with strong experience in, and understanding of, all aspects of the industry the students are preparing to enter.*
11. *Students who participate in Career and Technical Education programs are taught to the same challenging academic proficiencies as are taught to all other students.*
12. *Federal Career and Technical Education funds made available will be used to **supplement**, and in **no case to supplant** (replace), such state or local funds.*
13. *None of the funds expended under Title I of the Perkins Act of 2006 will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the purchasing entity, or any affiliate of such an organization.*
14. *Consortium dollars are not distributed to member districts based upon the amount of funds generated by the Carl D. Perkins formula.*
15. *Career and technical services, programs, and activities relate to state or regional occupational opportunities and prepare students for post secondary opportunities or entry into high skill, high wage jobs in current and emerging occupations.*
16. *The district will ensure their Career and Technical Education programs are in compliance with Perkins IV Sec. 134 & 135.*
17. *The district has developed an affirmative action plan which is on file in the school district administration office and at OSPI. The affirmative action plan ensures that there will be no discrimination of staff or students in any school district education program.*
18. *Equal access to Career and Technical Education programs will be provided to meet the needs of women and men for training in nontraditional occupations.*
19. *Provisions will be made to provide programs and facilitate access and opportunities for all students who desire to participate in career and technical services, programs, and activities regardless of race, color, national origin, sex, disability, or age.*
20. *The district has developed a transition plan (which is on file in the school district administration office) for the removal of any building barriers which may exist which would limit access by students with disabilities to any school district education program, including Career and Technical Education.*



21. *Career and Technical Education planning for individuals with disabilities will be coordinated between appropriate representatives of Career and Technical Education and special education.*
22. *Each student who is disadvantaged and/or each student with a disability who enrolls in Career and Technical Education programs shall receive:*
  - a. Assessment of the interests, abilities, and special needs of such students with respect to completing successfully the Career and Technical Education program.*
  - b. Supplementary services, including adaptation of curriculum, instruction, equipment, and facilities designed to meet the needs of special populations.*
  - c. Guidance, counseling, and career development activities conducted by professionally/technically trained counselors who are associated with the provision of such special services.*
  - d. Counseling services designated to facilitate the transition from school to post-school employment, career opportunities, and postsecondary education.*
23. *The districts will adequately address the needs of students in alternative education programs, if appropriate.*
24. *Data reported to OSPI under Perkins IV is complete, accurate, and reliable.*
25. *Reports and other information will be submitted within the dates established, and documentation will be maintained for five years.*
26. *The accounting system and management process used by the institution must be consistent with generally accepted accounting and management practices and meet the specific requirements of the Single Audit Act.*
27. *An inventory record will be maintained for all equipment purchased whole or in part with federal funds. All such equipment will be available for use by students in the approved Career and Technical Education program for which purchased.*
28. *The district will supply information to the Office of Superintendent of Public Instruction (OSPI) to meet reporting requirements regarding staff, finances, enrollment, completion, and follow up as mandated in the Carl D. Perkins Career and Technical Education Act of 2006.*
29. *The district has a policy developed and on file in the school district administration office which ensures that there will be no discrimination based upon race, color, national origin, religion, sexual orientation, sex, or disabling condition in any school district education program, including Career and Technical Education. Districts are required to identify a coordinator of federal Title IX and 504 regulations.*

**Superintendent:**

**Section 504 coordinator:**

**Title IX Officer:**

**General Advisory Chair:**

**Board Chair:**

**Career and Technical Education Director/Administrator:**

**Date printed copy was signed:**

*[Add additional consortium members]*

**Allocation Amount:**

**REQUIRED USES OF THE FUNDS** (Section 134 and Section 135)

Provide a brief description of how Perkins IV funds will be used to support the following "required" uses of the funds. If you do not plan to use Perkins IV funds for a particular category, please briefly describe how the district is meeting this requirement activity. Narrative in other sections of this plan should support the intended expenditures.

**IMPROVE ACADEMIC AND TECHNICAL SKILLS OF STUDENTS ENROLLED IN CAREER AND TECHNICAL EDUCATION PROGRAMS** (Sec. 134(b)(3)(B))

Describe how the district will ensure that students who participate in career and technical education programs are taught to the same challenging academic proficiencies as are taught for all other students.

Text Here

Describe how the district will provide students with strong experience in, and understanding of, all aspects of an industry (i.e., industry skill standards, certifications, career progression, and management).

Text Here

**Community and Educational Partnerships** (Sec. 134(b)(5))

Describe how students, teachers, representatives of business and industry, labor organizations, representatives of special populations, and other interested individuals (i.e., parents, community members) are involved in the development, implementation, and evaluation of career and technical education programs assisted under this Act, and how such individuals and entities are effectively informed about, and assisted in understanding, the requirements of this Act.

Text Here

**SPECIAL POPULATIONS** (Sec. 134(b)(8 & 9)(A-B))

**Note:** Special populations means individuals with disabilities, individuals from economically disadvantaged families (including foster children), individuals preparing for nontraditional training and employment, single parents (including single pregnant women), displaced homemakers, and individuals with other barriers to achievement, including those with limited English proficiency.

Describe how individuals who are members of the special populations will not be discriminated against and will have full accessibility to CTE programs. For the

*purpose of CTE programs accessibility requires looking at how programs, services and activities are delivered to special populations.*

Text Here

**PREPARATION FOR NONTRADITIONAL TRAINING AND EMPLOYMENT (Sec. 134(b)(10))**

*Describe how the district will promote preparation in non-traditional fields, i.e. gender, ethnicity, and socio-economic. Include recruitment methods and strategies of special population groups.*

Text Here

**Professional Development/ CTE Personnel**

*Describe how comprehensive professional development (including initial teacher preparation) for CTE, academic, guidance and administrative personnel will be provided that promotes the integration of coherent and rigorous content aligned with challenging academic standards and relevant CTE (including curriculum development).*

Text Here

*Describe how career guidance and academic counseling will be provided to CTE students, including linkages to future education and training opportunities.*

Text Here

*Describe efforts to improve the recruitment and retention of CTE teachers, faculty, and career guidance and academic counselors, including underrepresented groups; and the transition to teaching from business and industry.*

Text Here

Page 5

**Carl D. Perkins Career and Technical Education Act of 2006 Allowable Activities**

Under the statute, the LEA must provide for enhanced instructional opportunities that may include the following activities:

**Priorities of the Carl D. Perkins Career and Technical Education Act of 2006 include:**

**Note: for each priority box checked, a description of use of funds is required.**

- Preparing students for postsecondary education and careers through strong

- high school programs, career, and technical education;
- Providing opportunities to adults to increase their literacy skills;
- Promoting identification and dissemination of effective practice in raising student achievement in high schools, community colleges, and adult education programs, and lead targeted research investments;
- Promoting improved coordination and communication among programs and activities that prepare youth and adults for postsecondary education and careers;
- Insuring the equal access of minorities, women, individuals with disabilities and disadvantaged persons to careers, technical, and adult education;
- Providing a unified Federal approach to high school, career and technical and adult education as well as community colleges with a focus in particular on low achieving areas; and
- Promoting the implementation of education technology, as it applies to access and service delivery, as well as instructional methodology.

**Funds made available to an eligible recipient under this title may be used –**  
**Note: for each allowable activity box checked, a description of use of fund and amount is required.**

- To provide career guidance and academic counseling, with may include information described in section 118, for students participating in career and technical education programs, that –
  - o Improves graduation rates and provides information and postsecondary and career options, including baccalaureate degree programs, for secondary students, which activities may include the use of graduation and career plans; and
  - o Provide assistance for postsecondary students, including for adult students who are changing careers or updating skills;
- To support local business and education partnerships and provide work related experiences, entrepreneurship, internships, cooperative education, and job shadowing that are related to career and technical education programs for local education and business (including small business).
- For work-based learning opportunity development for students.
- To improve curriculum development or upgrades.
- To support staff development and related expenses to counselors and instructors – stipends, registration, materials, etc..
- To provide support for training programs in automotive technologies
- Articulation agreement development – Funds may be used to purchase textbooks for newly articulated courses, but cannot be used to replace textbooks currently being used by a secondary school. The Carl D. Perkins grant is supplemental funding, therefore districts cannot supplant.
- Provision of mentoring, leadership activities, and academic or career counseling for secondary youth in CTE programs.
- Transportation to Tech Camps or Technical College visits.
- Support for family and consumer sciences programs.
- Support assistance to students who have participated in services and activities under this title in finding an appropriate job and continuing their education.
- Activities for mentoring and support services
- Coordination efforts with parents, businesses and labor organizations in the design, implementation, and evaluating the CTE program to promote

parents, community, and businesses to become active participants in their local education agency.

- ☑ Activities coordinated with community-based organizations, institutions of higher education, private sector entities, or other entities with expertise in working with, to assist parents of CTE students by offering comprehensive community services.
- ☑ Services that are directly attributable to the presence in the secondary schools of CTE students, including the payment of costs of providing additional classroom supplies to support extended instruction, culturally relevant materials, or such other costs that are directly related to the goals and objectives of the grant.
- ☑ To support other career and technical education activities that are consistent with the purpose of this Act



**STATE LEVELS OF PERFORMANCE (Section 134(b)(2))**

**Note: Perkins IV requires new performance measures. Districts are required to meet each level of performance for each indicator. If districts do not accept the state adjusted level of performance measure then districts may negotiate an adjusted level of performance that is a 3% above the average performance of the district's indicator during the past 2 or 3 years. If targets are not met, a CTE improvement plan will be required beginning in 2009-2010 School Year for any unmet targets.**

*[Districts choosing to negotiate will need to provide a narrative as to how they will meet local targets]*

*Describe how the district will use Perkins funds and local program activities to meet the state-defined Adjusted Performance Level assigned to each indicator.*

**Indicator I:**

*Describe how the district will increase student attainment of challenging academic content standards and student academic achievement standards.*

*Text Here*

**Indicator II:**

*Describe how the district will increase student attainment of career and technical skill proficiencies, including student achievement on technical assessments that are aligned with industry recognized standards.*

*Text Here*

**Indicator III/IV:**

*Describe how the district will increase student rates of attainment of each of the following:*

- A. A secondary school diploma (student graduation rates)
- B. A GED credential, or other state recognized equivalent

Text Here

**Indicator V.**

Describe how the district will identify student placement in postsecondary education, military service, or in employment.

Text Here

**Indicator VI:**

Describe how the district will increase enrollment in the districts nontraditional training and employment programs

Text Here

**EVALUATION**

Describe how the district will review CTE programs, identify and adopt strategies to overcome barriers that result in lower access or success for special populations. This should include programs that are designed to enable the special populations to meet the State adjusted levels of performance and activities to prepare special populations for high-skill, high wage or high demand occupations that will lead to self-sufficiency.

Text Here

Describe how the district will use Perkins funds to independently evaluate and continuously improve the performance of the district's career and technical education program. Please list strategies for improving your performance measures. (Examples include: evaluation procedures demonstrating the occupational skills gained by students, teacher evaluations of staff development activities, and procedures used to demonstrate outcomes realized by students through improved technology).

Text Here

Page 7

**Teacher Data**

**NOTE:** This information is for the Office of Superintendent of Public Instruction (OSPI) Career and Technical Education purposes only. Names and emails will not be shared with anyone outside of OSPI without permission from individual teachers. This will assist OSPI with professional planning and trainings.

By teacher name please enter the CIP codes that the Career and Technical Education (CTE) Teachers will teach for the 2008-09 school year. (Include ALL CTE Teachers)

**Press New** button below to create each new teacher record. Press the save button

(bottom or top of this page) after completion of each new teacher record to ensure data is saved.

<b>Name: (First)</b> Sally		<b>Name: (Last)</b> Smithers		<b>Email:</b> <a href="mailto:ssmithers@districta.org">ssmithers@districta.org</a>	
<b>(010000) (drop commas, but not the 0s in front)</b>					
<b>CIP Codes: (Up To 7 Entries)</b>					
<b>1</b> 123,546	<b>2</b> 234,567	<b>3</b> 345,678	<b>4</b>		
<b>5</b>	<b>6</b>	<b>7</b>			

---

<b>Name: (First)</b> Jack		<b>Name: (Last)</b> James		<b>Email:</b> <a href="mailto:jjames@districtb.org">jjames@districtb.org</a>	
<b>CIP Codes: (Up To 7 Entries)</b>					
<b>1</b> 985,644	<b>2</b> 102,563	<b>3</b>	<b>4</b>		
<b>5</b>	<b>6</b>	<b>7</b>			

**Program of Study/ Certification**

**[Y/N]:** Does your district offer any program(s) of study that will lead to any OSPI recognized certification?

If yes, please list by CIP codes (refer to CIP code chart) and certification(s) offered by the district within the district CTE courses to a student during state five year plan. (Ex. 120401-State Licensed Cosmetologist)

\_\_\_\_\_ CIP Code                      \_\_\_\_\_ Certification

**NOTE:** This information is for the Office of Superintendent of Public Instruction (OSPI) Career and Technical Education to help meet the requirements of Perkins IV.

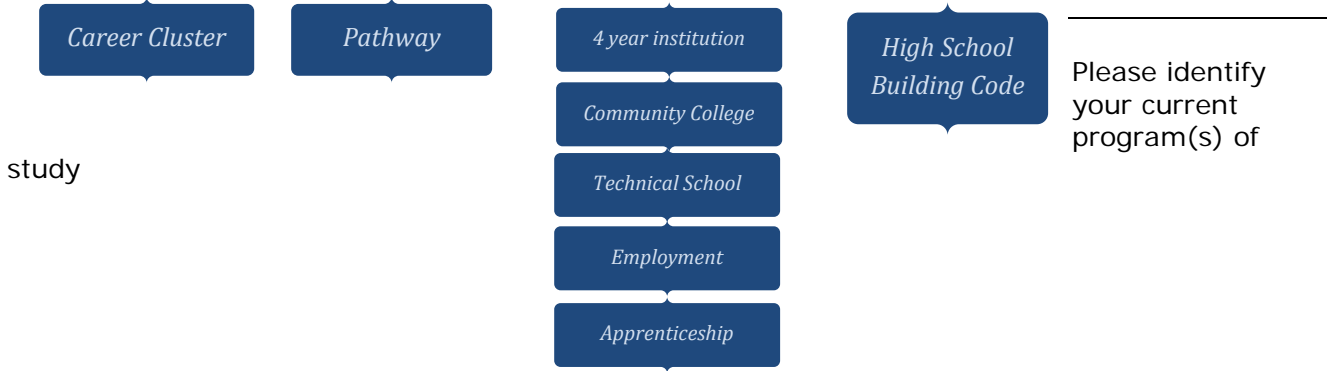
Describe how the district will offer a career and technical education programs of study to students (and their parents as appropriate) when planning for and completing future coursework, for career and technical content areas that – Section 122 (c)(1)(A)(i-iv)

- Include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;
- May include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits; and
- Leads to an industry-recognized credential or certificate at the postsecondary level, or an associates or baccalaureate degree.

The following are minimum Criteria for program of study assurances:

- The secondary CTE, academic, and appropriate elective courses are included, as well as the state and local graduation requirement;
- The secondary program of study includes leadership standards where appropriate;
- The secondary program of study includes employability standards where appropriate;
- The program of study includes coherent and rigorous coursework in a non-duplicative sequence of courses from secondary to postsecondary;
- Completion of the secondary program of study prepares students for entry into the postsecondary program or apprenticeship;
- Program of study courses include appropriate state standards and industry skills standards, where applicable; and
- Program of study leads to an industry recognized credential; academic certificate or degree; or employment.

*Text Here*





# **Postsecondary 5-Year Application**



**Carl Perkins  
Five Year Planning Document  
DRAFT**

This document is intended to facilitate strategic planning related to Carl Perkins efforts and funding.

**SECTION 1 – Professional and Technical Programs**

- 1. Over the next five years, what new programs do you intend to create that will have seamless pathways and programs of study?**

Program name	Courses articulated (if appropriate)	High school articulation partner

- 2. At the end of five years, what outcomes will you have met for: (1) improving academic and technical skills of professional and technical students and (2) ensuring that professional and technical students are taught to the same academic rigor as all other students?**

Outcomes for improving skills:

*Examples*

- *Sunshine College will establish five new I-BEST programs that integrate academic and technical skills for low literacy adults.*
- *Sunshine College will implement a performance-based assessment model in three new programs with assessment criteria (rubric) that focuses on the applied integration of technical and academic skills.*

Outcomes for ensuring rigor:

*Example*

*Sunshine College will review all programs within the next five years to ensure academic rigor. Reviews will be based upon a standard set of criteria, designed by a team of academic and technical faculty members that focuses on academic rigor.*

**Select first year strategies that apply toward your outcome(s)**

- Integration of basic skills and technical skills development (I-BEST or I-BEST-Like activities)
- Tutoring services
- Integration of core employability skills –Multicultural competency, information literacy, technology literacy, business literacy, communication, teamwork, responsibility, ethics, and critical thinking/problem solving.
- Use of formalized industry skill standards
- Use of industry-based assessments/tests /credential
- Integration of academic components across the curriculum (math, writing, speaking, etc.)
- College-level academic courses required as part of the professional and technical program (math, science, English, Sociology, Psychology etc.)
- Skill competence tracking (industry certification, industry skill standard assessments)
- Outcome and assessment based program and course curriculum
- Formal program accreditation standards
- Use of industry trend data
- Formal program review or evaluation processes
- Integration of college-wide core abilities or college outcomes or general education outcomes.
- Related instruction—communication, computation, and human relation courses
- Other activities – please describe

**3. At the end of five years, what outcomes will insure that students have strong experience in, and understanding of, all aspects of industry?**

*Example*

*At the end of five years, 75% of professional and technical degrees and certificates will require industry cooperative experience, job shadow experience, or an internship experience.*

**Select first year strategies that apply toward your outcome(s)**

- Internships
- Job shadow experiences
- Clinical experiences
- Externships
- Student participation in college job search activities
- Cooperative learning experiences
- Use of industry-standard equipment and tools
- In-class simulations
- Industry tours
- Industry as guest speakers
- Other activities – please describe

**SECTION 2 –Faculty, Staff, and Administrators**

**1. At the completion of five years, what outcomes will be accomplished to demonstrate that you have recruited and retained high quality professional and technical faculty, advisors, and administrators representing the ethnic diversity of your region?**

*Examples*

- *Sunshine College will strive for a 10% increase in the ethnic diversity among faculty members.*

- *Sunshine College will match a seasoned college faculty member with each new faculty member for a one-year period of time. The seasoned faculty member will provide support and mentoring for her/his mentee.*

**2. At the end of the five-year planning period, what outcomes will you have accomplished to transition faculty members who come from business and industry into strong facilitators of learning?**

Examples

- *Sunshine College will increase the number of faculty members who attend teaching and learning workshops and conferences by 20% over the next five years.*
- *Sunshine College will implement a web-based education and training calendar of events so that all faculty members can be informed of various teaching and learning conferences and workshops within our college and throughout the state.*

**Select first year strategies that apply toward your outcome(s)**

- Faculty orientation workshops *(Please list workshop titles)*
- Faculty workshops that assist in meeting initial certification standards under WAC... *(Please list workshop titles)*
- Professional and Technical “Boot Camp” for faculty
- On-going professional development through a campus teaching and learning center *(please list workshop titles)*
- Peer faculty mentoring program
- *Other, please specify*

**3. Over the next five years, what outcomes will be accomplished to ensure that your college is providing professional and development opportunities for faculty, advisors, and administrators to ensure rigor and high quality academic and technical standards are maintained in programs?**

Example

*Sunshine College will increase the amount of money set-aside for faculty, staff, and administrative support by 10% in the next five years to enhance access for professional development opportunities.*

**Select first year strategies that apply toward your outcome(s)**

- Leadership training
- Student learning outcomes workshops
- Student learning assessment workshops
- Integrating academics into technical skill development workshops (i.e. math, science, writing across the curriculum etc.)
- Integrating cultural competency across the curriculum workshops
- I-BEST system training
- Intensive workshops on teaching and learning (more than 1 day trainings and workshops that provide changes in teaching and learning)
- Technical assistance workshops (workshops and conferences lasting 1 day or less)
- *Other, please specify*

## SECTION 3 – Advising

1. What **outcomes** will be accomplished in five years that ensure that professional and technical students understand education pathways linked to career pathways?

Example

*Sunshine College will have selected a model pathway diagram that includes programs of study information. The model pathway diagram will be developed for 75% of all existing programs and used in college orientation programs and posted on the website for student use.*

**Describe first-year strategies that apply toward your outcome(s):**

2. What **outcomes** will be accomplished in the next five years that will help students find jobs and continue their education?

Examples

- *Sunshine College will implement job search activities in 50% of existing professional and technical programs.*
- *Sunshine College will increase the number of job search workshops available for students by 20% in five years.*
- *Sunshine College will increase the number of articulated programs to four-year colleges and universities by 25% in the next five years.*

**Select first year strategies that apply toward your outcome(s)**

Job finding strategies/activities:

- Job search opportunities
- Career exploration workshops/classes
- Employment preparation workshops/classes (i.e. mock interviews, “dress for success” etc.)
- Job Shadowing
- Internship/cooperative learning
- Externships
- Clinical Placements
- Job or career fairs
- On-campus interviews with employers
- Job posting information available to students
- Links to WorkSource
- Others (*please specify*)

Continued education strategies/activities:

- Written information to students regarding educational pathways linked to career pathway
- Written information to students about opportunities within CTCs for continued education
- Written information to students about articulation agreements with four-year colleges and universities
- Written information to students about articulation agreements with apprenticeship programs
- Others (*please specify*)

**SECTION 4 – Special Populations** (Special populations include low-income, People of Color, non-traditional genders within an occupation, displaced homemakers, single parents, and people with disabilities)

- 1. What outcomes will be accomplished in the next five years that will decrease barriers and increase access for student success in high wage, high demand programs that lead to self-sufficiency?**

Example

*Sunshine College will leverage funds from Opportunity Grant, Workfirst, Worker Retraining, and other sources to increase access and decrease barriers for students. This will result in a 10% increase in retention of special population students.*

**Describe first year strategies that will assist in accomplishing your outcome(s) in the following areas:**

- Describe strategies your college will use with Perkins funds to overcome barriers that impact educational access and success for special populations.
- Describe strategies your college will use with Perkins funds to increase the number of special population students enrolled in and who successfully complete high wage, high demand programs that lead to self-sufficiency.
- How will your college ensure that members of special populations are not discriminated against based upon their status?
- Describe strategies your college will use with Perkins funds to increase recruitment, retention, program completion of non-traditional students (gender only) in non-traditional fields.

Recruitment:

Retention:

Program completion:

**SECTION 5 – Continuous Improvement**

- 1. Describe your college’s process for professional and technical program assessment/review to ensure viability, relevance, and industry -standard curriculum.**
- 2. What outcomes will you accomplish through your program review process over the next five years?**

Examples

- *Through information gathered in program review processes, Sunshine College will strive to increase student retention and completion by 5%*
- *Through information gathered in program review processes, Sunshine College will ensure that programs meet industry needs.*

**Please list the programs you plan to review in the next academic year.**

Name of programs


**3. How are your internal (student services, business administration, academic transfer) and external (WDCs, WorkSource, Business and Industry, Labor) stakeholders involved in professional and technical program improvement?**

	Program Development	Program Implementation	Program assessment
Internal college units (student services, business serves, etc)			
WDCs and EDCs			
WorkSource			
Program specific advisory committee members			
Organized Labor			
Program Accreditation Agencies			

Skill panel members			
Others (Please specify)			

**4. How are stakeholders informed about and assisted in understanding Perkins requirements and programs of study?**

- Formal and informal orientation presentations
- Regular electronic updates
- Quarterly or other regularly scheduled meetings
- Newsletters
- Website postings
- Personal visits
- Other (please specify)



# **Post-secondary One-year Plan Document**



**Carl Perkins  
Planning Document 2008**

**This document is intended to be an update to your five-year plan. Please describe what you will be doing in the next year to meet your five-year outcomes.**

**SECTION 1 – Professional and Technical Programs**

4. List your currently approved programs of study *(You may provide a separate attachment)*

Program name	Courses articulated (if appropriate)	High school articulation partner

5. List programs for which you will seek approval as programs of study in 2007-08

Program name	Courses articulated (if appropriate)	High school articulation partner

6. How will your college improve the academic and technical skills of professional and technical students and ensure that professional and technical students are taught to the same academic rigor as all other students? *(Please check all that apply and add activities not included on the list)*

- Integration of basic skills and technical skills development (I-BEST or I-BEST-Like activities)
- Tutoring services
- Integration of core employability skills –Multicultural competency, information literacy, technology literacy, business literacy, communication, teamwork, responsibility, ethics, and critical thinking/problem solving.
- Use of formalized industry skill standards
- Use of industry-based assessments/tests /credential

- Integration of academic components across the curriculum (math, writing, speaking, etc.)
- College-level academic courses required as part of the professional and technical program (math, science, English, Sociology, Psychology etc.)
- Skill competence tracking (industry certification, industry skill standard assessments)
- Outcome and assessment based program and course curriculum
- Formal program accreditation standards
- Use of industry trend data
- Formal program review or evaluation processes
- Integration of college-wide core abilities or college outcomes or general education outcomes.
- Related instruction—communication, computation, and human relation courses
- Other activities – please describe

7. How will your college provide students with strong experience in, and understanding of, all aspects of industry? *(Please check all that apply and add activities not included on the list)*
- Internships
  - Job shadow experiences
  - Clinical experiences
  - Externships
  - Student participation in college job search activities
  - Cooperative learning experiences
  - Use of industry-standard equipment and tools
  - In-class simulations
  - Industry tours
  - Industry as guest speakers
  - Other activities – please describe

## **SECTION 2 –Faculty, Staff, and Administrators**

1. Describe your college activities to recruit and retain high quality professional and technical faculty, advisors, and administrators representing the ethnic diversity of your region.

Recruit:

Retain:

2. What are your college strategies/activities for transitioning faculty members who come from business and industry into strong facilitators of learning?
- Faculty orientation workshops *(Please list workshop titles)*
  - Faculty workshops that assist in meeting initial certification standards under WAC... *(Please list workshop titles)*
  - Professional and Technical “Boot Camp” for faculty
  - On-going professional development through a campus teaching and learning center *(please list workshop titles)*
  - Peer faculty mentoring program
  - *Other, please specify*
3. How will your college provide professional development for professional and technical faculty, advisors, and administrators to ensure that rigor and high quality academic and technical standards are maintained in programs? *(Please check all that apply and add activities not included on the list)*

- Leadership training
- Outcomes and assessment workshops
- Integrating academics into technical skill development workshops (i.e. math, science, writing across the curriculum etc.)
- Integrating cultural competency across the curriculum workshops
- I-BEST system training
- Intensive workshops on teaching and learning (more than 1 day trainings and workshops that provide changes in teaching and learning)
- Technical assistance workshops (workshops and conferences lasting 1 day or less)
- Other, please specify

### **SECTION 3 – Advising**

3. Describe college strategies used to ensure that professional and technical students understand education pathways linked to career pathways.
  
4. How will your college help students find jobs and continue their education?

#### Job finding strategies/activities:

- Job search opportunities
- Career exploration workshops/classes
- Employment preparation workshops/classes (i.e. mock interviews, “dress for success” etc.)
- Job Shadowing
- Internship/cooperative learning
- Externships
- Clinical Placements
- Job or career fairs
- On-campus interviews with employers
- Job posting information available to students
- Links to WorkSource
- Others (*please specify*)

#### Continued education strategies/activities:

- Written information to students regarding educational pathways linked to career pathway
- Written information to students about opportunities within CTCs for continued education
- Written information to students about articulation agreements with four-year colleges and universities
- Written information to students about articulation agreements with apprenticeship programs
- Others (*please specify*)

### **SECTION 4 – Special Populations** (Special populations include low-income, People of Color, non-traditional genders within an occupation, displaced homemakers, single parents, and people with disabilities)

1. Describe strategies your college will use with Perkins funds to overcome barriers that impact educational access and success for special populations.

2. Describe strategies your college will use with Perkins funds to increase the number of special population students enrolled in and who successfully complete high wage, high demand programs that lead to self-sufficiency.
  
3. How will your college ensure that members of special populations are not discriminated against based upon their status.
  - Inform students about and follow formal student grievance policies
  - Inform students about and follow formal non-discrimination policies and practices
  - Faculty and staff training on cultural competency and special population issues
  - Other (*please specify*)
  
4. Describe strategies your college will use with Perkins funds to increase recruitment, retention, program completion of non-traditional students (gender only) in non-traditional fields.

Recruitment:

Retention:

Program completion:

**SECTION 5 – Continuous Improvement**

5. Describe your college’s process for professional and technical program assessment/review to ensure viability, relevance, and industry -standard curriculum.
  
6. Describe the specific program improvements you plan to make using Perkins funds over the next year.

Name of program	Planned improvement

7. How are your internal (student services, business administration, academic transfer) and external (WDCs, WorkSource, Business and Industry, Labor) stakeholders involved in professional and technical program improvement?

	Program Development	Program Implementation	Program assessment
Internal college units			
WDCs and EDCs			
WorkSource			
Program specific advisory committee members			
Organized Labor			
Program Accreditation Agencies			
Skill panel members			
Others (Please specify)			

8. How are stakeholders informed about and assisted in understanding Perkins requirements and programs of study?

- Formal and informal orientation presentations
- Regular electronic updates
- Quarterly or other regularly scheduled meetings
- Newsletters
- Website postings
- Personal visits
- Other (please specify)

# **Tech Prep Application**

**State Board for Community and Technical Colleges  
2008-13 TECH PREP CONSORTIUM  
Five-year / One-year Planning Document**

This document is intended to facilitate strategic planning related to Tech Prep efforts and funding.

**SECTION 1 – Programs of Study and Articulations**

1. Over the next five years, what actions will you take to assist colleges and secondary partners in developing new programs of study in high wage, high demand areas? Programs of study provide a non-duplicative, sequential course of study beginning in 11th grade and articulating with a post-secondary two-year degree.

*Examples*

- *ABC Consortium will convene secondary and post-secondary partners in areas of Information Technology, Travel and Tourism, Healthcare, and Industrial trades to build programs of study.*
- *ABC Consortium will develop a task force of secondary and post-secondary partners to oversee programs of study efforts for our consortium.*
- *ABC Consortium will develop necessary systems and forms to track and monitor the development and modifications of programs of study.*
- *ABE Consortium will work with the Tech Prep statewide association to advance statewide articulation agreements.*

- 1a. Of the actions listed above, what actions will you take in the first year?

2. Over the next five years, what actions will you take to ensure that programs of study:

Criteria	Actions
Integrate academic and CTE instruction	
Utilize work-based and worksite learning experiences	
Advance contextualized learning for CTE students	
Lead to an industry recognized credential, a certificate, or degree	
Meet state academic standards (Essential Learning Goals)	

- 2b. Of the above actions, which actions will you take in the first year?



## SECTION 2 – Informing Others

1. At the end of five years, what outcomes will insure that faculty, guidance counselors and students have a clear understanding of educational pathways and Tech Prep programs of study?

### Examples

- *ABC Consortium will ensure that all 10<sup>th</sup> and 11<sup>th</sup> grade career and technical students and their associated guidance counselors, and CTE faculty members in consortium high schools have been oriented to visual diagrams of regional educational pathways and programs of study.*
- *ABC Consortium will work with the statewide Tech Prep Association to develop a website that hosts all educational pathway and programs of study information from all consortium areas. Website information will be disseminated to all CTE students, guidance counselors, and CTE faculty members at secondary and post-secondary institutions.*

- 1a. What are the first year activities that will support your five year outcomes listed above?

## SECTION 3 - Professional Development

1. Over the next five years, what outcomes will be accomplished to ensure that secondary and post-secondary instructors, counselors, and administrators:
  - Understand the purpose of and processes associated with Tech Prep programs
  - Are updated on the needs of business and industry so that students may be placed in appropriate employment or further postsecondary education.
  - Are able to access and use Tech Prep data, occupational and employment information, and information on student achievement, including assessments to improve programs and advance student success.

### Examples

- *ABE consortium will provide annual orientations to Tech Prep – either in groups or one-to-one- with counselors, instructors and administrators. At the completion of the five years, 80% of all CTE related personnel will have had in-person overview of Tech Prep.*
- *ABC consortium will hold annual business/industry and education an increase faculty, guidance counselors, and administrator participation each year. Specifically, attendance at events will grow by 40%% over the course of five years.*
- *ABE consortium will provide ongoing data training to counselors, instructors and administrators. At the completion of the five years, 80% of all CTE related personnel will have attended data training.*

1a. What first-year actions will your consortium take to meet five year outcomes described above?

#### SECTION 4 – Program and Performance Improvement

1. At the end of five years, what outcomes will you have met for increasing or maintaining the number of students (including special populations and non-traditional students) who participate in programs of study that meet Tech Prep definitions?

*Example*

*ABC consortium will improve the Tech Prep enrollment and transition rate of students to meet the state benchmark. If ABC consortium exceeds the state benchmark before five years, we are committed to continue to increase student Tech Prep enrollment and transition by 2% annually.*

1a. Describe first-year strategies that apply toward your outcome(s):

2. At the end of five years, what outcomes will you have met for student transition to employment or to further education, include any special outcomes targeting at high-skill, high-wage/high-demand career.

*Example*

*ABC consortium will increase the transition rate of students to meet the state benchmarks for employment and transition to further education. If our consortium exceeds the state benchmark before five years, we will attempt to increase transitions by 3% annually.*

2a. Select first year strategies that apply toward your outcome(s)  
(Check boxes)

Job finding strategies/activities:

- Job search opportunities
- Career exploration workshops/classes
- Employment preparation workshops/classes (i.e. mock interviews, “dress for success” etc.)
- Job Shadowing
- Job or career fairs
- Others (*please specify*)

Continued education strategies/activities:

- Written information to students regarding educational pathways linked to career pathway
- Written information to students about opportunities within CTCs for continued education
- Written information to students about articulation agreements with four-year colleges and universities
- Written information to students about articulation agreements with apprenticeship programs
- Others (*please specify*)

**SECTION 5 – Stakeholder Involvement**

1. At the end of five years, what outcomes will you have achieved to increase the involvement of stakeholders in the decision making processes and strategic planning of the Tech Prep consortium?

Example

- *ABC consortium will expand the number and diversity of constituents involved in all aspect of decision making and strategic planning.*
- *ABE consortium leadership will adopt and annually review a strategic plan that will guide the direction and activities, as consistent with Perkins.*

1a. Describe your first year activities toward accomplishing the outcomes listed above.

# **Programs of Study**

## **Guidelines**

## Program of Study Assurances

### Minimum Criteria

- The secondary CTE, academic, and appropriate elective courses are included, as well as the state and local graduation requirements.
- The secondary Program of Study includes leadership standards where appropriate.
- The secondary Program of Study includes employability standards where appropriate.
- The Program of Study includes coherent and rigorous coursework in a non-duplicative sequence of courses from secondary to postsecondary.
- Completion of the secondary Program of Study prepares students for entry into the postsecondary program or apprenticeship.
- Program of Study courses include appropriate state standards and industry skills standards, where applicable.
- Program of Study leads to an industry recognized credential; academic certificate or degree; or employment.

### Exceeds Minimum Criteria

- There is a dual credit articulation agreement on file for this secondary/postsecondary Program of Study.
- The Program of Study includes multiple entry and/or exit points at the post-secondary level.
- The Program of Study offers course work and skill development for self-employment and/or entrepreneurial opportunities.
- The Program of Study is linked to a comprehensive school counseling program, such as Navigation 101.
- There is program alignment between the community and technical college Program of Study and a baccalaureate program, with a signed articulation agreement on file.
- The Program of Study is linked to a skill panel or a Center of Excellence.

Secondary Institution:

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CTE Director:

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Postsecondary Institution:

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Workforce Dean:

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Tech Prep Facilitator:

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Date:

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## Programs of Study Process

*2007-08 Tech Prep directors will be asked to identify those high schools that do not currently have a tech prep articulation or dual credit agreement. We will then have an idea of how large the Programs of Study development process may become.*

For high schools that are currently active in a Tech Prep consortium:

1. For each postsecondary program, where there is an articulation or dual credit agreement in place, the Tech Prep directors will be asked to complete the appropriate template (based on cluster).
2. Once complete, this template should be signed by the secondary CTE director and the postsecondary Workforce dean.
3. The completed and signed form will then be held on file by the Tech Prep director. Programs of Study on file will be included in the secondary and postsecondary annual Perkins plan.

For high schools that are not currently active in a Tech Prep consortium:

1. The secondary institution/district can initiate this process for their proposed Program of Study, by completing the appropriate cluster template for their education level.
2. Once the secondary portion has been completed, this form will then be sent to OSPI.
3. OSPI staff will forward it to the appropriate Tech Prep director, who will then facilitate the process as above.

*Signed assurances will be maintained at the Tech Prep or at the operating agency office, as determined by OSPI and SBCTC.*

*(We anticipate that this entire process will eventually be handled through a web-application. However, until that has been developed, the process will be via hardcopy).*

# **Programs of Study**



This Program of Study can serve as a guide, along with other education and/or career planning materials, as learners continue on a career path. Courses listed within this program are only recommended coursework and should be individualized to meet each learner's education and career goals. This Program of Study should be customized with course titles and appropriate high school graduation and college entrance requirements.

Education Level	Grade	English / Language Arts	Math	Science	Social Studies	Other courses required for graduation	Career & Technical Courses and/or Degree Major Courses	Pathway (if known)	
								Occupation (if known)	
Secondary	9							<b>State Board of Education minimum high school graduation requirements:</b> 3 credits - English/Language Arts 3 credits – Math 2 credits – Science 2½ credits – Social Studies 2 credits – Health & Fitness 1 Credit – Visual/Performing Arts 1 Credit – Career & Technical Education 5 credits – Electives	
	10								
	11								
	<input type="checkbox"/> College placement Assessments – Academic/Career advisement provided								
	12								

Secondary Leadership standards are included.

Secondary Employability standards are included.

Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							





The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

**Cluster knowledge and skills**

◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology ◆ Systems ◆ Safety, Health and Environment ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills

Cluster K&S	<p><b>Cluster knowledge and skills</b></p> <p>◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology ◆ Systems ◆ Safety, Health and Environment ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills</p>						
Pathways	<p><b>Food Products and Processing Systems</b> (Food Processing and preserving, Packaging, Distribution, Government monitoring &amp; regulation)</p>	<p><b>Plant Systems</b> (Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.)</p>	<p><b>Animal Systems</b> (Large animals, small animals, wildlife animals, and research animals)</p>	<p><b>Power, Structural &amp; Technical Systems</b> (Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.)</p>	<p><b>Natural Resources Systems</b> (Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.)</p>	<p><b>Environmental Service Systems</b> (Pollution Prevention, Water &amp; Air Quality, Hazardous Materials, Solid Waste Management, Health &amp; Safety Sanitation, etc.)</p>	<p><b>Agribusiness Systems</b> (Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.)</p>
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>●Agricultural Sales</li> <li>●Agricultural Communications Specialists</li> <li>●Business-Educators</li> <li>●Food Scientists</li> <li>●Meat Processors-Toxicologists</li> <li>●Biochemists-Nutritionists-Dieticians</li> <li>●Food Brokers-Food Inspectors</li> <li>●Meat Cutters-Meat Graders</li> <li>●Meat Science Researchers</li> <li>●Food Meal Supervisors</li> <li>●Cheese Makers</li> <li>●Microbiologists</li> <li>●Produce Buyers</li> <li>●Bacteriologists</li> <li>●Food &amp; Drug Inspectors</li> <li>●Bioengineers</li> <li>●Biochemists</li> <li>●Food &amp; Fiber Engineers</li> <li>●Food Processors</li> <li>●Storage Supervisors</li> <li>●Fieldman</li> <li>●Quality Control Specialists</li> </ul>	<ul style="list-style-type: none"> <li>●Bioinformatics Specialists</li> <li>●Plant Breeders and Geneticists</li> <li>●Biotechnology Lab Technician</li> <li>●Soil &amp; Water Specialists</li> <li>●Crop Farm Managers</li> <li>●Agricultural Educators</li> <li>●Plant Pathologists</li> <li>●Aquaculturalists</li> <li>●Sales Representatives</li> <li>●Botanists</li> <li>●Tree Surgeons</li> <li>●Education &amp; Extension Specialists</li> <li>●Agricultural Journalists</li> <li>●Commodity Marketing Specialists</li> <li>●Grain Operations Superintendents</li> <li>●Custom Hay/Silage Operators</li> <li>●Forest Geneticists</li> <li>●Golf Course Superintendents</li> <li>●Greenhouse Mangers</li> <li>●Growers</li> <li>●Farmers</li> <li>●Ranchers</li> </ul>	<ul style="list-style-type: none"> <li>●Agricultural Educators</li> <li>●Livestock producers</li> <li>●AI Technicians-</li> <li>●Aquaculturalists</li> <li>●Animal Caretakers</li> <li>●Poultry Managers</li> <li>●Equine Managers-</li> <li>●Veterinarians</li> <li>●Veterinary Assistants-</li> <li>●Feedlot Specialists</li> <li>●Animal Scientists</li> <li>●Embryo Technologists</li> <li>●Livestock Buyers</li> <li>●Feed Sales Representatives</li> <li>●Vivarian Technicians</li> <li>●Wildlife Biologists</li> <li>●Livestock Geneticists</li> <li>●Animal Nutritionists</li> <li>●Dairy Producers</li> <li>●Livestock Inspectors</li> <li>●Feed Sales Specialists</li> <li>●Animal Health Salespersons</li> <li>●Meat Science Researcher</li> <li>●Reproductive Physiologists</li> <li>●Embryo Transfer Technicians</li> <li>●Pet Shop Operators</li> <li>●USDA Inspectors</li> </ul>	<ul style="list-style-type: none"> <li>●Machine Operators</li> <li>●Electronics Systems Technicians</li> <li>●Agricultural Engineers</li> <li>●Agricultural Extension Engineering Specialists</li> <li>●Heavy Equipment Maintenance Technicians</li> <li>●Recycling Technicians</li> <li>●Waste Water Treatment Plant Operators</li> <li>●Equipment/Parts Mangers</li> <li>●Welders</li> <li>●Machinists</li> <li>●Communication Technicians</li> <li>●Agricultural Applications Software Developers/Programmers</li> <li>●Database Administrators</li> <li>●Computer Service Technical Support Technicians</li> <li>●Information Lab Specialists</li> <li>●GPS Technicians</li> <li>●Remote Sensing Specialists</li> </ul>	<ul style="list-style-type: none"> <li>●Cartographers</li> <li>●Wildlife Managers</li> <li>●Range Technicians</li> <li>●Ecologists</li> <li>●Park Mangers</li> <li>●Environmental Interpreters</li> <li>●Fish and Game Officers</li> <li>●Loggers</li> <li>●Forest Technicians</li> <li>●Log Graders</li> <li>●Pulp and Paper Manager</li> <li>●Soil Geology Technician</li> <li>●Geologists</li> <li>●Mining Engineers</li> <li>●Fisheries Technicians</li> <li>●Water Monitoring Technician</li> <li>●Hydrologists</li> <li>●Fish Hatchery Manager</li> <li>●Commercial Fishermen</li> <li>●Fishing Vessel Operators</li> <li>●Vessel Crew</li> </ul>	<ul style="list-style-type: none"> <li>●Pollution Prevention and Control Managers</li> <li>●Pollution Prevention and Control Technicians</li> <li>●Environmental Sampling and Analysis Scientists/Technicians</li> <li>●Health and Safety Sanitarians</li> <li>●Environmental Compliance Assurance Managers</li> <li>●Hazardous Materials Handlers</li> <li>●Hazardous Materials Technicians / Managers</li> <li>●Water Environment Managers</li> <li>●Water Quality Managers</li> <li>●Waste Water Managers</li> <li>●Toxicologists</li> <li>●Solid Waste Disposers / Recyclers</li> <li>●Solid Waste Technician</li> <li>●Solid Waste Managers</li> <li>●Solid Waste Specialists</li> </ul>	<ul style="list-style-type: none"> <li>●Salesperson</li> <li>●Sales Manager</li> <li>●Banker/Loan Officer</li> <li>●Field Representative for Bank, Insurance Company or Government Program</li> <li>●Farm Investment Manager</li> <li>●Agricultural Commodity Broker</li> <li>●Agricultural Economist</li> <li>●Farmer /Rancher/Feedlot Operator</li> <li>●Farm Manager</li> <li>●Livestock Rancher / Breeder</li> <li>●Dairy Herd Supervisor (DHIA)</li> <li>●Agricultural Products Buyer</li> <li>●Animal Health Products Distributor</li> <li>●Livestock Seller</li> <li>●Feed and Supply Store Manager</li> <li>●Produce Commission Agent</li> <li>●Ag Lenders</li> <li>●Agricultural Chemical Dealer</li> <li>●Field Service Representative</li> <li>●Chemical Sales Representative</li> </ul>



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								Occupation (if known)	
Secondary	9							<b>State Board of Education minimum high school graduation requirements:</b>  3 credits - English/Language Arts 3 credits – Math 2 credits – Science 2½ credits – Social Studies 2 credits – Health & Fitness 1 Credit – Visual/Performing Arts 1 Credit – Career & Technical Education 5 credits – Electives	
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	11								
	<input type="checkbox"/> College placement Assessments – Academic/Career advisement provided								
	12								

Secondary Leadership standards are included.

Secondary Employability standards are included.

Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							



Careers in designing, planning, managing, building, and maintaining the built environment

Cluster K&S	<p align="center"><b>Cluster Knowledge and Skills</b></p> <p align="center">◆ Academics ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>		
Pathways	Design/Pre-Construction	Construction	Maintenance/Operations
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>● Architect ● Architectural and Civil Drafter ● Drafter ● Regional and Urban Planner/Designer ● Industrial Engineer ● Materials Engineer ● Mechanical Drafter ● Environmental Designer ● Civil Engineer (structural, geotechnical, transportation, etc.) ● Programmer ● Mechanical Engineer (HVAC, plumbing, fire protection, etc.) ● Electrical Engineer (electronics, security, telecommunications) ● Preservationist ● Environmental Engineer (hydro engineering, acoustical, etc.) ● Landscape Architect ● Surveyor ● Fire Prevention and Protection Engineer ● Cost Estimator ● Electrical and Electronic Engineering Technician ● Civil Engineering Technician ● Environmental Engineering Technician ● Surveying and Mapping Technician ● Interior Designer ● Landscaping Designer ● Specifications Writer ● Building Code Official ● Computer Aided Drafter (CAD) ● Recorder (traditional and computer) ● Modeler (traditional and computer)</li> </ul>	<ul style="list-style-type: none"> <li>● General Contractor/Builder ● Specialty Contractor ● Construction Engineer ● Construction Manager ● Superintendent ● Project Manager ● Construction Foreman ● Estimator ● Project Inspector ● Manufacturer's Representative ● Sales and Marketing Manager ● Equipment and Material Manager ● Scheduler ● Education and Training Director/ Coordinator ● Safety Director ● Construction Inspector ● Subcontractor ● Preservationist Service Contractor ● Field Supervisor ● Specialty Trades Subcontractor ● Mason ● Construction Craft Laborer ● Iron Metalworker (structural and reinforcing) ● Carpenter ● Sheetmetal Worker ● Security and Fire Alarm Systems Installer ● Concrete Finisher ● Glazier ● Tile and Marble Setter ● Landscaper/Groundskeeper ● Elevator Installer ● Roofer ● Painter ● Explosives Worker ● Plasterer/ Drywall ● Paperhanger ● Insulation Worker ● Drywall Installer ● Plumber ● Pipe Fitter ● Millwright ● Heating, Ventilation, Air Conditioning and Refrigeration Mechanic ● Carpet Installer ● Electrician ● Steamfitter ● Terrazzo Worker and Finisher</li> </ul>	<ul style="list-style-type: none"> <li>● General Maintenance Contractor ● Specialty Contractor ● Construction Engineer ● Construction Manager ● Superintendent ● Project Manager ● Construction Foreman ● Estimator ● Facilities Engineer ● Reliability Engineer ● Environmental Engineer ● Demolition Engineer ● Project Inspector ● Operating Engineer ● Manufacturer's Representative ● Sales and Marketing Manager ● Equipment and Material Manager ● Scheduler ● Maintenance Planner/ Scheduler ● Maintenance Estimator ● Security Controls Manager ● Preservationist ● Remodeler ● Safety Director ● Construction Inspector ● Subcontractor ● Service Contractor ● Field Supervisor ● Specialty Trades Subcontractor ● Mason ● Iron Metalworker (structural and reinforcing) ● Carpenter ● System Installer ● Electrician ● Boilermaker ● Cost Estimator ● Sheetmetal Worker ● Security and Fire Alarm System Installer ● Concrete Finisher ● Glazier ● Tile and Marble Setter ● Hazardous Materials Remover ● Landscaper/Groundskeeper ● Elevator Installer ● Paperhanger ● Insulation Worker ● Drywall Installer ● Insulation Worker ● Plumber ● Pipe Fitter ● Millwright ● Heating, Ventilation, Air Conditioning and Refrigeration Mechanic ● Carpet Installer ● Electrician ● Steamfitter ● Terrazzo Worker and Finisher ● Refractory Technician ● Wastewater Maintenance Technician ● Highway Maintenance Worker</li> </ul>



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								Occupation (if known)	
Secondary	9							<b>State Board of Education minimum high school graduation requirements:</b> 3 credits - English/Language Arts 3 credits – Math 2 credits – Science 2½ credits – Social Studies 2 credits – Health & Fitness 1 Credit – Visual/Performing Arts 1 Credit – Career & Technical Education 5 credits – Electives	
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	<input type="checkbox"/> College placement Assessments – Academic/Career advisement provided								
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Secondary Leadership standards are included.

Secondary Employability standards are included.

Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							



Careers in designing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Cluster K&S	<p align="center"><b>Cluster Knowledge and Skills</b></p> <p align="center">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>					
Pathways	Audio and Video Technologies	Printing Technologies	Visual Arts	Performing Arts	Journalism and Broadcasting	Telecommunications Technologies
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>●Video Systems Technicians</li> <li>●Video Graphics, Special Effects, and Animation</li> <li>●Audio-Video Designers and Engineers</li> <li>●Technical Computer Support Technicians, State, Film, Video, and DVD</li> <li>●Audio-Video System Service Technicians</li> <li>●Audio Systems Technicians</li> </ul>	<ul style="list-style-type: none"> <li>●Graphics and Printing Equipment Operators</li> <li>●Lithographers and Platemakers</li> <li>●Computer Typography and Composition Equipment Operators</li> <li>●Desktop Publishing Specialists</li> <li>●Web Page Designers</li> </ul>	<ul style="list-style-type: none"> <li>●Commercial Photographers, Digital, Still, Video, Film</li> <li>●Interior Designers, Commercial/Residential and Home Furnishings coordinators</li> <li>●Graphic Designers, CAD Technicians, and Fashion Illustrators</li> <li>●Textile Designers</li> <li>●Commercial Artists, Illustrators, and Artists, all Media</li> <li>●Curators and Gallery Managers</li> <li>●Fashion Designers</li> </ul>	<ul style="list-style-type: none"> <li>●Production Managers</li> <li>●Digital, Video, Stage Cinematographers</li> <li>●Film/Video Editors</li> <li>●Dancers</li> <li>●Play Writers</li> <li>●Screen Writers</li> <li>●Screen Editors</li> <li>●Script Writers</li> <li>●Directors and Coaches</li> <li>●Performers</li> <li>●Actors</li> <li>●Musicians</li> <li>●Make-Up Artists</li> <li>●Costume Designers</li> <li>●Stagecraft Designers</li> <li>●Lighters</li> <li>●Sets</li> <li>●Sound Effects</li> <li>●Acoustics</li> <li>●Painters</li> <li>●Composers</li> <li>●Conductors</li> <li>●Music Instructors</li> </ul>	<ul style="list-style-type: none"> <li>●Audio/Video Operations</li> <li>●Control Room Technician</li> <li>●Station Mangers and Radio &amp; TV</li> <li>●Publishers</li> <li>●Editors</li> <li>●Journalists</li> <li>●Reporters</li> <li>●Print Broadcast Technicians</li> </ul>	<ul style="list-style-type: none"> <li>●Telecommunication Technicians</li> <li>●Telecommunication Equipment</li> <li>●Cable and Line Repairers/Installers</li> <li>●Telecommunication Computer Programmers, and Systems Analysts</li> </ul>



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Secondary	9							<b>State Board of Education minimum high school graduation requirements:</b> 3 credits - English/Language Arts 3 credits – Math 2 credits – Science 2½ credits – Social Studies 2 credits – Health & Fitness 1 Credit – Visual/Performing Arts 1 Credit – Career & Technical Education 5 credits – Electives	
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Secondary Employability standards are included.

Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							

Business, Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

Cluster K&S	<p align="center"><b>Cluster Knowledge and Skills</b></p> <p align="center">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>					
Pathways	Management	Business Financial Management & Accounting	Human Resources	Business Analysis	Marketing and Communications	Administrative & Information Support
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•Entrepreneurs •Chief Executives • General Managers</li> <li>•Accounting Manager •Accounts Payable Manager •Assistant Credit Manager • Billing Manager</li> <li>•Business &amp; Development Manager •Compensation &amp; Benefits Manager •Credit &amp; Collections Manager •Payroll Manager •Risk Manager</li> <li>•Operations Managers •Public Relations Managers •Human Resource Managers</li> <li>•Management Analysts</li> <li>•Facilities Managers •Association Managers •Meeting &amp; Convention Planners •Administrative Services Managers •Sports &amp; Entertainment Managers</li> <li>•Hospital Management</li> <li>•Government Management</li> <li>•Public Organization Management •Manufacturing Management •Purchasing Management •First Line Supervisors •Public Relations Specialists •Senior Managers</li> <li>•Management Trainees</li> </ul>	<ul style="list-style-type: none"> <li>•Accountants •Accounting Clerk •Accounting Supervisor •Adjuster</li> <li>•Adjustment Clerk</li> <li>•Assistant Treasurer</li> <li>•Auditor •Bookkeeper</li> <li>•Budget Analyst •Budget Manager •Billing Supervisor •Cash Manager •Controller</li> <li>•Merger &amp; Acquisitions Manager •Price Analyst</li> <li>•Top Collections Executive •Top Investment Executive</li> <li>•Treasurer •Chief Financial Officer •Finance Director •Certified Public Accountant •Accounts Receivable Clerk •Cost Accountant •Financial Accountant •Billing Clerk</li> <li>•Payroll Accounting Clerk</li> </ul>	<ul style="list-style-type: none"> <li>•Human Resources Managers •International Human Resources Managers •Human Resources Coordinators •Industrial Relations Director</li> <li>•Compensation &amp; Benefits Managers</li> <li>•Employment &amp; Placement Managers •Employee Assistance Plan Managers •Training &amp; Development Managers •Human Resources consultant •Corporate Trainer •Training &amp; Development Specialists</li> <li>•Conciliators/Mediators/Arbitrators •Employer Relations Representatives •Labor &amp; Personnel Relations Specialists •Affirmative Action Coordinators •Equal Employment Opportunity Specialists •OSHA/ADA Compliance Officer •Pay Equity Officers •Interpreters &amp; Translators</li> <li>•Organizational Behaviorists •Occupational Analysts •Compensation, Benefits &amp; Job Analyst Specialists •Human Resources Information Systems Specialists •Meeting &amp; Convention Planners •Employment Interviewers, Private or Public Employment Service •Personnel Recruiters •Human Resources Assistants</li> <li>•Payroll Professional •Assignment Clerks</li> <li>•Identification Clerks •Human Resources Generalist •Human Resources Clerks</li> </ul>	<ul style="list-style-type: none"> <li>•Systems Analyst •E-Commerce Analyst</li> <li>•Requirements Specialist</li> <li>•Marketing Analyst</li> <li>•Operations Research Analyst</li> <li>•Business Consultant</li> <li>•Business Analyst •Budget Analyst •Product Manager</li> <li>•Price Analyst</li> </ul>	<ul style="list-style-type: none"> <li>•Marketing Manager •Assistant Marketing Manager •Sales Engineer •Sales Manager</li> <li>•Sales Representative •Broker •Agents</li> <li>•Assistant Store Manager •Department Manager •Assistant Department Manager</li> <li>•Salesperson •Customer Service Supervisor •Customer Service Consultant</li> <li>•Counter Person •Customer Service Clerk</li> <li>•Product Manager •Project Manager</li> <li>•Research &amp; Development Manager</li> <li>•Research &amp; Management Supervisor</li> <li>•International Marketing Manager &amp; Supervisor •International Merchandising Manager &amp; Supervisor •Marketing Manager</li> <li>•Property, Real Estate and Association Manager &amp; Supervisor •Small Business Owner &amp; Entrepreneur •E-commerce Manager &amp; Entrepreneur •Wholesale &amp; Retail buyer •International Distribution Manager •Warehouse Manager •Logistics Manager/Supervisor •Logistics Manager/Coordinator •Market Researcher</li> <li>•Marketing Information Manager •Public Relations Specialist •Public Relations Writer</li> <li>•Copywriter •Media coordinator •Art Director •Graphic Designer •Event Manager •Advertising Salesperson •Route Salesperson •Distribution Worker</li> <li>•Wholesale ,Freight, Stocking, Handling, Material Moving and Packing Worker</li> <li>•Traffic, Shipping, &amp; Receiving Clerk</li> <li>•Demonstrators and Product Promoter</li> <li>•Retail Salespeople &amp; Associate</li> <li>•Telemarketer</li> </ul>	<ul style="list-style-type: none"> <li>•Administrative Assistant •Executive Assistant •Office Manager</li> <li>•Administrative Support •Medial Front Office Assistant •Information Assistant</li> <li>•Desktop Publisher •Customer Service Assistant •Data Entry Specialists •Receptionist</li> <li>•Communications Equipment Operator •Computer Operator •Court Reporter •Stenographer •Dispatcher</li> <li>•Shipping &amp; Receiving Personnel</li> <li>•Records Processing Occupations including Library Assistant &amp; Order Processor •Word Processor •Typists</li> <li>•Medical Transcriptionist •Legal Secretaries •Paralegals</li> </ul>





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Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							





**Planning, managing and providing education and training services, and related learning support services.**

<p><b>Cluster K&amp;S</b></p>	<p align="center"><b>Cluster knowledge and skills</b></p> <p align="center">           ♦ Academic Foundations ♦ Communications ♦ Problem Solving and Critical Thinking ♦ Information Technology Applications ♦ Systems            ♦ Safety, Health and Environmental ♦ Leadership and Teamwork ♦ Ethics and Legal Responsibilities            ♦ Employability and Career Development ♦ Technical Skills         </p>		
<p><b>Pathways</b></p>	<p align="center">Administration and Administrative Support</p>	<p align="center">Professional Support Services</p>	<p align="center">Teaching/Training</p>
<p><b>Sample Career Specialties / Occupations</b></p>	<p>•Superintendents •Principals •Administrators •Supervisors and Instructional Coordinators •Education Researchers •Test Measurement Specialists •College Presidents •Deans •Curriculum Developers •Instructional Media Designers</p>	<p>•Psychologists - Clinical, Developmental, Social •Social Workers •Parent Educators •Counselors •Speech-Language Pathologists •Audiologists</p>	<p>•Preschool, Kindergarten Teachers •Aides •Elementary Teachers •Aides •Secondary Teachers •Aides •Special Education Teachers •Aides •College/University •Lecturers •Professors •Human Resource Trainers •Physical Trainers •Coaches •Child Care Directors •Child Care Workers •Child Life Specialist •Nanny •Early Childhood Teachers and Assistants •Teacher Aides •Group Workers and Assistants</p>



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Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)	
	Year 14								
	Year 15								
	Year 16								



**Planning, services for financial and investment planning, banking, insurance, and business financial management.**

<b>Cluster K&amp;S</b>	<p><b>Cluster knowledge and skills</b></p> <ul style="list-style-type: none"> <li>◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems</li> <li>◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities</li> <li>◆ Employability and Career Development ◆ Technical Skills</li> </ul>			
<b>Pathways</b>	Financial & Investment Planning	Business Financial Management	Banking & Related Services	Insurance Services
<b>Sample Career Specialties / Occupations</b>	<ul style="list-style-type: none"> <li>•Personal Financial Advisor •Tax Preparation</li> <li>•Sales Agents, Securities, Commodities</li> <li>•Investment Advisors •Brokerage Clerk (Assistant) •Development Officers</li> </ul>	<ul style="list-style-type: none"> <li>•Accountants •Financial Analysts •Treasurers, Controllers and Chief Revenue Agents</li> <li>•Auditor •Economists •Tax Examiners</li> <li>•Collectors •Revenue Agents</li> </ul>	<ul style="list-style-type: none"> <li>•Credit Analyst •Loan Officers •Bill and Account Collectors •Tellers •Loan Processors</li> <li>•Customer Service Reps •Data Processors</li> <li>•Accounting •Internal Auditors •Compliance Officers •Title Researchers &amp; Examiners</li> <li>•Abstractors •Credit Report Providers</li> <li>•Repossession Agents •Network Services</li> <li>•Operations Managers •Debt Counselors</li> </ul>	<ul style="list-style-type: none"> <li>•Claims Agents, Examiners, and Investigators</li> <li>•Claims Clerks •Insurance Appraisers</li> <li>•Underwriters •Actuaries •Sales Agents</li> <li>•Customer Service Agents •Processing Clerks</li> <li>•Direct Marketing</li> </ul>



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Education Level	Grade	English / Language Arts	Math	Science	Social Studies	Other courses required for graduation	Career & Technical Courses and/or Degree Major Courses	Pathway (if known)	
								Occupation (if known)	
Secondary	9							<b>State Board of Education minimum high school graduation requirements:</b> 3 credits - English/Language Arts 3 credits – Math 2 credits – Science 2½ credits – Social Studies 2 credits – Health & Fitness 1 Credit – Visual/Performing Arts 1 Credit – Career & Technical Education 5 credits – Electives	
	10								
	11								
	<input type="checkbox"/> College placement Assessments – Academic/Career advisement provided								
	12								

Secondary Leadership standards are included.

Secondary Employability standards are included.

Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							



Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

Cluster K&S	Cluster knowledge and skills						
	◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology ◆ Systems ◆ Safety ◆ Health and Environment ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills ◆ Fiscal Responsibilities						
Pathways	Governance	National Security	Foreign Service	Planning	Revenue and Taxation	Regulation	Public Management and Administration
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•President •Vice President •Governor</li> <li>•Lieutenant Governor</li> <li>•Mayor •Cabinet Level Secretary (Fed./ State)</li> <li>•Representative (Fed/State) •Senator (Fed/State) •Assistants, Deputies, and Chiefs of Staff •Commissioner (County, Parish, City)</li> <li>•Commissioner (State Agency) •Congressional Aide •Legislative Aide</li> <li>•Legislative Assistant</li> <li>•Specialist •Lobbyist</li> <li>•Policy Advisor</li> </ul>	<ul style="list-style-type: none"> <li>•National Security Advisor</li> <li>•Staff or Field Officer •Officer/ Specialist: •Electronic Warfare Operations •Combat Operations</li> <li>•Infantry Field Artillery •Air Defense Artillery •Special Forces •Armor •Munitions</li> <li>•Nuclear Weapons •Missile and Space Systems •Military Intelligence •Signals Intelligence</li> <li>•Surface Ship Warfare Officer</li> <li>•Submarine Officer •Combat Control Officer •Combat Engineer •Combat Aircraft Pilot/Crew •Airborne Warning/Control Specialist</li> <li>•Intelligence/Counterintelligence</li> <li>•Agent/Specialist •Intelligence Analyst •Cryptographer</li> </ul>	<ul style="list-style-type: none"> <li>•Ambassador •Foreign Service Officer</li> <li>•Consular Officer</li> <li>•Administrative Officer</li> <li>•Political Officer</li> <li>•Economic Officer</li> <li>•Diplomatic Courier</li> </ul>	<ul style="list-style-type: none"> <li>•Business/Enterprise Official •Chief of Vital Statistics •Commissioner</li> <li>•Director (Various Agencies) •Economic Development Coordinator •Federal Aid Coordinator •Census Clerk •County Director</li> <li>•Census Enumerator</li> <li>•Planner •Program Associate •Global Imaging Systems Specialist</li> </ul>	<ul style="list-style-type: none"> <li>•Assessor •Tax Auditor •Internal Revenue Investigator</li> <li>•Revenue Agent/Officer •Tax Examiner</li> <li>•Assistant/Clerk</li> <li>•Inspector General</li> <li>•Tax Attorney •Tax Policy Analyst</li> </ul>	<ul style="list-style-type: none"> <li>•Business Regulation Investigator •Chief of Field Operations</li> <li>•Code Inspector/ Officer •Director</li> <li>•Equal-Opportunity Officer •Inspector Investigator/ Examiner</li> <li>•Chief Bank Examiner</li> <li>•Bank Examiner</li> <li>•Aviation Safety Officer •Border Inspector •Cargo Inspector •Election Supervisor</li> <li>•Enforcement Specialist</li> <li>•Immigration Officer</li> </ul>	<ul style="list-style-type: none"> <li>•City Manager •City Council •City or County Clerk •Court Administrator or Clerk</li> <li>•Executive Director</li> <li>•Officer/ Associate</li> <li>•Foundation Association</li> <li>•Charitable Organization</li> <li>•Industrial Foundation</li> <li>•Chamber of Commerce</li> <li>•General Service Officer</li> <li>•Management Analysis Officer •Program Administration Officer</li> </ul>



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	Year 14							
	Year 15							
	Year 16							



Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Cluster K&S	<p style="text-align: center;"><b>Cluster Knowledge and Skills</b></p> <p style="text-align: center;">◆ Academic Foundation ◆ Communications ◆ Systems ◆ Employability Skills ◆ Legal Responsibilities ◆ Ethics ◆ Safety Practices ◆ Teamwork ◆ Health Maintenance Practices ◆ Technical Skills ◆ Information Technology Applications</p>				
Pathways	Therapeutic Services	Diagnostics Services	Health Informatics	Support Services	Biotechnology Research and Development
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•Acupuncturist •Anesthesiologist Assistant •Art / Music / Dance Therapist(s) •Athletic Trainer</li> <li>•Audiologist •Certified Nursing Assistant •Chiropractor •Dental Assistant / Hygienist •Dental Lab Technician •Dentist •Dietician</li> <li>•Dosimetrist •EMT •Exercise Physiologist •Home Health Aide</li> <li>•Kinesiotherapist •Licensed Practical Nurse •Massage Therapist</li> <li>•Medical Assistant •Mortician</li> <li>•Occupational Therapist / Asst</li> <li>•Ophthalmic Medical Personnel</li> <li>•Optometrist •Orthotist / Prosthetist</li> <li>•Paramedic •Pharmacist / Pharmacy Tech •Physical Therapist / Assistant •Physician (MD/DO)</li> <li>•Physician's Assistant</li> <li>•Psychologist •Recreation Therapist •Registered Nurse</li> <li>•Respiratory Therapist •Social Worker •Speech Language Pathologist •Surgical Technician</li> <li>•Veterinarian / Vet Tech</li> </ul>	<ul style="list-style-type: none"> <li>•Cardiovascular Technologist</li> <li>•Clinical Lab Technician</li> <li>•Computer Tomography (CT) Technologist •Cytogenetic Technologist •Cytotechnologists</li> <li>•Diagnostic Medical Sonographers</li> <li>•Electrocardiographic (ECG) Technician • Electronic Diagnostic (EEG) Technologist •Exercise Physiologist •Geneticist</li> <li>•Histotechnician •Histotechnologist</li> <li>•Magnetic Resonance (MR) Technologist •Mammographer</li> <li>•Medical Technologist / Clinical</li> <li>•Laboratory Scientist •Nuclear Medicine Technologist •Nutritionist</li> <li>•Pathologist •Pathology Assistant</li> <li>•Phlebotomist •Positron Emission Tomography •(PET) Technologist</li> <li>•Radiologic Technologist/Radiographer •Radiologist</li> </ul>	<ul style="list-style-type: none"> <li>•Admitting Clerk •Applied Researcher •Community Services Specialists •Data Analyst</li> <li>•Epidemiologist •(SHSMD Stratsocieety.org) •Ethicist •Health Educator •Health Information Coder</li> <li>•Health Information Services</li> <li>•Healthcare Administrator •Medical Assistant •Medical Biller/Patient Financial •Services •Medical Information Technologist •Medical Librarian/Cybrarian •Patient Advocates •Public Health Educator</li> <li>•Reimbursement Specialist (HFMA)</li> <li>•Risk Management •Social Worker</li> <li>•Transcriptionist •Unit Coordinator</li> <li>•Utilization Manager</li> </ul>	<ul style="list-style-type: none"> <li>•Biomedical / Clinical Engineer</li> <li>•Biomedical / Clinical Technician</li> <li>•Central Services •Environmental Health and Safety •Environmental Services •Facilities Manager •Food Service •Hospital Maintenance Engineer •Industrial Hygienist</li> <li>•Materials Management •Transport Technician</li> </ul>	<ul style="list-style-type: none"> <li>•Biochemist •Bioinformatics Associate •Bioinformatics Scientist</li> <li>•Bioinformatics Specialist</li> <li>•Biomedical Chemist</li> <li>•Biostatistician •Cell Biologist</li> <li>•Clinical Trials Research Associate</li> <li>•Clinical Trials Research Coordinator •Geneticist •Lab Assistant-Genetics •Lab Technician</li> <li>•Microbiologist •Molecular Biologist</li> <li>•Pharmaceutical Scientist •Quality Assurance Technician •Quality Control Technician •Regulatory Affairs Specialist •Research Assistant •Research Associate</li> <li>•Research Scientist •Toxicologist</li> </ul>



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Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)
	Year 14							
	Year 15							
	Year 16							





Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.

Cluster K&S	<p style="text-align: center;"><b>Cluster knowledge and skills</b></p> <p style="text-align: center;">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>			
Pathways	Restaurants and Food/Beverage Services	Lodging	Travel & Tourism	Recreation, Amusements & Attractions
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•General Manager •Food &amp; Beverage Manager</li> <li>•Kitchen Manager •Catering &amp; Banquets Manager</li> <li>•Service Manager •Maitre'd •Restaurant Owner</li> <li>•Baker •Brewer •Caterer •Executive Chef •Cook</li> <li>•Pastry &amp; Specialty Chef •Bartender •Restaurant Server</li> <li>•Banquet Server •Cocktail Server •Banquet Set-Up Employee</li> <li>•Bus Person •Room Service Attendant •Kitchen Steward</li> <li>•Counter Server •Wine Steward •Host</li> </ul>	<ul style="list-style-type: none"> <li>•Front Office Manager •Executive Housekeeper</li> <li>•Director of Sales &amp; Marketing •Chief Engineer</li> <li>•Director of Human Resources •Rooms Division Manager</li> <li>•Director of Security •Controller •Food &amp; Beverage Director</li> <li>•Resident Manager •Director of Operations</li> <li>•General Manager •Regional Manager •Quality Assurance Manager</li> <li>•Corporate Management •Lodging Management</li> <li>•Owner/ Franchisee Administrative Support</li> <li>•Uniformed Services Support •Communications Supervisor</li> <li>•Front Desk Supervisor •Reservations Supervisor</li> <li>•Laundry Supervisor •Room Supervisor</li> <li>•Bell Captain •Shift Supervisor •Sales Professional</li> <li>•Night Auditor •Front Desk Employee</li> <li>•Valet Attendant •Bell Attendant •Door Attendant</li> <li>•Concierge •PBX Operator •Reservationist</li> <li>•Guestroom Attendant •Public Space Cleaner</li> <li>•Laundry Attendant •House Person •Maintenance Worker</li> <li>•Van Driver</li> </ul>	<ul style="list-style-type: none"> <li>•Executive Director •Assistant Director</li> <li>•Director of Tourism Development •Director of Membership Development</li> <li>•Director of Communications •Director of Visitor Services</li> <li>•Director of Sales •Director of Marketing and Advertising</li> <li>•Director of Volunteer Services •Director of Convention and Visitors Bureau</li> <li>•Market Development Manager •Group Sales Manager</li> <li>•Events Manager •Sales Manager •Destination Manager</li> <li>•Convention Services Manager •Heritage Tourism Developer</li> <li>•Travel Agent (Commercial &amp; Vacation)</li> <li>•Event Planner •Meeting Planner</li> <li>•Special Events Producer •Nature Tourism Coordinator</li> <li>•Tour and Travel Coordinator •Tourism Marketing Specialist</li> <li>•Transportation Specialist •Welcome Center Supervisor</li> <li>•Visitor Center Counselor •Tourism Assistant</li> <li>•Executive Assistant •Tour Guide •Tour Operator</li> <li>•Motor Coach Operator •Tour and Ticket Reservationist</li> <li>•Interpreter</li> </ul>	<ul style="list-style-type: none"> <li>•Club Manager •Club Assistant Manager</li> <li>•Club Instructor •Club Equipment &amp; Facility Maintenance</li> <li>•Club Scheduler •Club Event Planner</li> <li>•Club Membership Developer •Parks &amp; Gardens Director</li> <li>•Parks &amp; Gardens Activity Coordinator</li> <li>•Parks &amp; Gardens Access Management</li> <li>•Parks &amp; Gardens Safety &amp; Security</li> <li>•Parks &amp; Garden Ranger •Resort Trainer</li> <li>•Resort Instructor •Resort Equipment Maintenance</li> <li>•Resort Scheduler •Gaming &amp; Casino Manager</li> <li>•Gaming &amp; Casino Supervisor</li> <li>•Gaming &amp; Casino Dealer</li> <li>•Gaming &amp; Casino Slot Supervisor and Maintenance</li> <li>•Gaming &amp; Casino Security &amp; Safety</li> <li>•Fairs/Festival Event Planner</li> <li>•Fairs/ Festival Set up Supervisor</li> <li>•Fairs/ Festival Facility Manager</li> <li>•Fairs/Festival Promotional Developer</li> <li>•Theme Parks/Amusement Parks Resale Department Manager</li> <li>•Theme Parks/Amusement Parks Area Retail Manager</li> <li>•Theme Parks/Amusement Parks Area Ride Operations Manager</li> <li>•Theme Parks/ Amusement Parks Group Events Manager</li> <li>•Family Centers Equipment Operator/ Maintenance</li> <li>•Historical / Cultural/Architectural Ecological Industrial Sites Guides/ Ranger</li> <li>•Historical/Cultural/ Architectural Ecological Industrial Sites Exhibit Developer</li> <li>•Museums/ Zoos/Aquariums Docent</li> <li>•Museum/ Zoos/Aquariums Animal Trainer and Handler</li> <li>•Museums/Zoos/ Aquariums Exhibit Developer</li> </ul>



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Postsecondary	Year 13							<b>Postsecondary Goals:</b> (Check as many as applicable) <input type="checkbox"/> Enter workforce <input type="checkbox"/> Enter Military <input type="checkbox"/> Apprenticeship <input type="checkbox"/> Community or Technical College <input type="checkbox"/> Industry Certification <input type="checkbox"/> Associate Degree <input type="checkbox"/> Baccalaureate Degree <input type="checkbox"/> Masters Degree <input type="checkbox"/> Doctoral Degree <input type="checkbox"/> Other (please describe)	
	Year 14								
	Year 15								
	Year 16								



Preparing individuals for employment in career pathways that relate to families and human needs.

Cluster K&S	<p align="center"><b>Cluster Knowledge and Skills</b></p> <p align="center">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>			
Pathways	Early Childhood Development & Services	Counseling & Mental Health Services	Family & Community Services	Personal Care Services
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•Clinical and Counseling Psychologists</li> <li>•Industrial-Organizational Psychologists</li> <li>•Sociologists</li> <li>•School Counselors / Psychologists</li> <li>•Substance Abuse and Behavioral Disorder Counselors</li> <li>•Mental Health Counselors</li> <li>•Vocational Rehabilitation Counselors</li> <li>•Career Counselors</li> <li>•Employment Counselors</li> <li>•Residential Advisors</li> <li>•Marriage, Child and Family Counselors</li> </ul>	<ul style="list-style-type: none"> <li>•Community Service Directors</li> <li>•Adult Day Care Coordinators</li> <li>•Coordinators of Volunteers</li> <li>•Licensed Professional Counselors</li> <li>•Religious Leaders</li> <li>•Directors, Religious Activities / Education Programs</li> <li>•Human Services Workers</li> <li>•Social Services Workers</li> <li>•Vocational Rehabilitation Counselors</li> <li>•Employment Counselors</li> <li>•Career Counselors</li> <li>•Vocational Rehabilitation Service Workers</li> <li>•Leisure Activities Coordinators</li> <li>•Dieticians</li> <li>•Geriatric Service Workers</li> <li>•Adult Day Care Workers</li> <li>•Residential Advisors</li> <li>•Emergency and Relief Workers</li> <li>•Community Food Service Workers</li> <li>•Community Housing Service Workers</li> <li>•Social and Human Services Assistants</li> </ul>	<ul style="list-style-type: none"> <li>•Barbers</li> <li>•Cosmetologists, Hairdressers, &amp; Hairstylists</li> <li>•Shampooers</li> <li>•Nail Technicians, Manicurists &amp; Pedicurists</li> <li>•Skin Care Specialists/Estheticians</li> <li>•Electrolysis Technicians</li> <li>•Electrologists</li> <li>•Funeral Directors/Morticians</li> <li>•Embalmers</li> <li>•Funeral Attendants</li> <li>•Personal and Home Care Aides</li> <li>•Companions</li> <li>•Spa Attendants</li> <li>•Personal Trainers</li> <li>•Massage Therapists</li> </ul>	<ul style="list-style-type: none"> <li>•Consumer Credit Counselors</li> <li>•Consumer Affairs Officers</li> <li>•Consumer Advocates</li> <li>•Certified Financial Planners</li> <li>•Insurance Representatives</li> <li>•Bankers</li> <li>•Real Estate Services Representatives</li> <li>•Financial Advisors</li> <li>•Investment Brokers</li> <li>•Employee Benefits Representatives</li> <li>•Hospital Patient Accounts Representatives</li> <li>•Customer Service Representatives</li> <li>•Consumer Research Department Representatives</li> <li>•Consumer Goods or Services Retailing Representatives</li> <li>•Market Researchers</li> <li>•Account Executives</li> <li>•Sales Consultants</li> <li>•Event Specialists</li> <li>•Inside Sales Representatives</li> <li>•Field Merchandising Representatives</li> <li>•Buyers</li> <li>•Small Business Owners</li> </ul>



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	Year 14								
	Year 15								
	Year 16								

Cluster K&S	Cluster knowledge and skills			
Pathways	Network Systems	Information Support and Services	Interactive Media	Programming and Software Development
Sample Career Specialties / Occupations	<p><b>Network Design and Administration:</b>            Communications Analyst •Data Communications Analyst •Information Systems Administrator •Information Systems Operator •Information Technology Engineer  <b>Network:</b> Administrator •Analyst •Architect •Engineer •Manager •Operations Analyst •Security Analyst •Specialist •Technician •Transport Administrator •PC Support Specialist  <b>Systems:</b> Administrator •Engineer •Support Lead •Technical Support Specialist •User Support Specialist •Telecommunications Network Technician</p>	<p><b>Database Development and Administration:</b>  <b>Data:</b> Administrator •Analyst •Architect •Management Associate •Modeler •Modeling Specialist •  <b>Database:</b> Administration Associate •Administrator •Analyst •Developer •Manager •Modeler •Security Expert •DSS (Decision Support Services) •Knowledge Architect •Senior: Database Administrator •Senior Systems Analyst •Systems Administrator •Systems Analyst •Tester  <b>Technical Writer:</b> Desktop Publisher •Document Specialist •Documentation Specialist •Editor •Electronic Publications Specialist • Electronic Publisher •Instructional Designer •Online Publisher •Technical Communicator •Technical Editor •Technical Publications Manager •Technical Writer  <b>Technical Support:</b> Analyst •Call Center Support Representative •Content Manager  <b>Customer:</b> Liaison •Service Representative •Service Professional  <b>Help Desk:</b> Specialist • Help Desk: Technician •Maintenance Technician •PC Support Specialist •PC Systems Coordinator •Product Support Engineer •Sales Support Technician •Systems Analyst  <b>Technical:</b> Account Manager • Support Engineer •Support Representative •Testing Engineer  <b>Enterprise Systems Analysis and Integration:</b> Application Integrator •Business Continuity Analyst •Cross-Enterprise Integrator  <b>Data:</b> Systems Designer •Systems Manager •Warehouse Designer •E-Business Specialist •Electronic Transactions Implementer  <b>Information Systems:</b> Architect •Planner  <b>Systems:</b> Analyst •Architect •Integrator</p>	<p><b>Digital Media:</b>            •2D/3D Artist •Animator •Audio/Video Engineer •Designer •Media Specialist •Media/Instructional Designer  <b>Multimedia:</b> Author •Authoring Specialist •Developer •Specialist •Producer •Production Assistant •Programmer •Streaming Media Specialist •Virtual Reality Specialist  <b>Web:</b> Designer •Producer •Specialist Administrator •Architect •Page Developer •Site Developer •Specialist •Webmaster</p>	<p><b>Programming / Software Engineering:</b>  <b>Applications:</b> •Analyst •Engineer •Business Analyst •Computer Engineer •Data Modeler  <b>Operating System:</b> •Designer/Engineer •Programmer Analyst •Program Manager •Programmer •Programmer/Analyst •Project Lead  <b>Software Applications:</b> •Specialist •Architect •Design Engineer •Development Engineer •Engineer •QA Specialist •Tester  <b>Systems:</b> •Analyst •Administrator •Test Engineer • Tester</p>



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Secondary	9							<b>State Board of Education minimum high school graduation requirements:</b> 3 credits - English/Language Arts 3 credits – Math 2 credits – Science 2½ credits – Social Studies 2 credits – Health & Fitness 1 Credit – Visual/Performing Arts 1 Credit – Career & Technical Education 5 credits – Electives	
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	11								
	<input type="checkbox"/> College placement Assessments – Academic/Career advisement provided								
	12								

Secondary Leadership standards are included.

Secondary Employability standards are included.

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	Year 14							
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Cluster K&S	<p style="text-align: center;"><b>Cluster knowledge and skills</b></p> <p style="text-align: center;">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>				
Pathways	Correction Services	Emergency and Fire Management Services	Security & Protective Services	Law Enforcement Services	Legal Services
Sample Career Specialties / Occupations	<p>Warden• Jail Administrator• Mid-level Manager• Program Coordinator and Counselor• Public Information Officer• Correctional Trainer• Case Manager• Community Corrections Practitioner• Probation / parole officer• Corrections Educator• Corrections Officer• Detention Deputy• Youth Services Worker• Facility Maintenance Workers• Transport Officer• Food Service Staff• Medical Staff• Dietitian• Support Staff</p>	<p>Emergency Management and Response Coordinator •Emergency Planning Manager•EMT•Fire Fighter•Mgr / Supervisor Of Fire Fighters•Forest Fire Fighter• Mgr / Supervisor of Forest Fire Fighters•Forest Fire Inspector &amp; Investigator•Hazardous Materials Responder•Dispatcher•Training Officer •Grant Writer and Coordinator •Rescue Workers</p>	<p>Security Director•Corporate / Agency Security Director / VP•Corporate Director of Sales •Security Systems Designer / Consultant •Physical Security Specialist •Information Systems Security Specialist •Computer Forensics specialist •Private / Corporate Investigator•Loss Prevention/Security Manager (e.g. Store, hotel)•Security Trainer/Educator •Security Sales Representative/Manager• Loss Prevention Specialist •Physical Security Assistant•Security Systems Technician (Install/maintain) •Investigative Assistant (private sector) •Security Trainer (Basics) •Security Sales Assistant •Transportation Security Supervisor •Information Security Assistant (Document Control) •Personnel Security Assistant •Executive Protection Officer (Private • Supervisory Security officer (armed, unarmed) •Certified Security Officer (SPO, POST, Arrest Authority) •Armored Car Guard•Control Center Operator (e.g. ADT) (Monitoring Center) •Uniformed Security Officer (Unarmed -- proprietary and contract) •Security Clerk •Transportation Security Technician •Loss Prevention Assistant •Uniformed Security officer (armed) •Computer Security Specialist •Computer Forensics Examiner •Executive Protection Specialist•Gaming Surveillance Specialist•Information Security specialist •Information Technology Security•Armored Car Guards •Industrial Espionage Security•Life Guard, Ski Patrol, •Physical Property Security•Private Security Specialist</p>	<p>Animal Control Officer• Bailiffs•Child Support•Missing Persons•Unemployment Fraud Investigators•Criminal Investigators &amp; Special Agents•Gaming Investigator•Bomb Technician•Game Enforcement Officer•Highway Patrol Pilots•Immigration &amp; Customs Inspectors•Mgr/Supervisor Police &amp; Detectives•Police Detectives and Criminal Investigators•Police, Fire &amp; Ambulance Dispatchers•Police &amp; Patrol Officers•Private Detectives &amp; Investigators•Sheriffs &amp; Deputy Sheriffs•Training Officer•Transit &amp; Railroad Police•Park Ranger•Evidence Technician•Federal Marshall</p>	<p>•Administrative Law •Attorney •Case Management Specialist •Court Reporter •File and Document Manager •Information Officer •Investigator •Judge •Law Clerk •Legal Assistant •Legal Secretary •Magistrate •Mediator / Arbitrator •Negotiator •Paralegal</p>





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	Year 16							





Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

Cluster K&S	<p style="text-align: center;"><b>Cluster Knowledge and Skills</b></p> <p style="text-align: center;">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills</p>					
Pathways	Production	Manufacturing Production Process Development	Maintenance, Installation & Repair	Quality Assurance	Logistics & Inventory Control	Health, Safety and Environmental Assurance
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>◆ Assemblers</li> <li>• Automated Manufacturing Technicians</li> <li>• Bookbinders</li> <li>• Calibration Technicians</li> <li>• Electrical Installers and Repairers</li> <li>• Electromechanical Equipment Assemblers</li> <li>• Extruding and Drawing Machine Setters/Set-Up Operators</li> <li>• Extrusion Machine Operators</li> <li>• Foundry Workers</li> <li>• Grinding, Lapping, and Buffing Machine Operators</li> <li>• Hand Packers and Packagers</li> <li>• Hoist and Winch Operators</li> <li>• Instrument Makers</li> <li>• Large Printing Press Machine Setters and Set-Up Operators</li> <li>• Machine Operators</li> <li>• Managers, Supervisors</li> <li>• Medical Appliance Makers</li> <li>• Milling Machine Setters, Set-Up Operators</li> <li>• Millwrights</li> <li>• Operators, Tenders, Cutters/Brazers, Soldering, Machine Operations</li> <li>• Painters</li> <li>• Pattern &amp; Model Makers</li> <li>• Precision Layout Workers</li> <li>• Precision Optical Goods Workers</li> <li>• Production Associates</li> <li>• Sheet Metal Workers</li> <li>• Solderers and Brazers</li> <li>• Tool and Die Makers</li> <li>• Welders</li> </ul>	<ul style="list-style-type: none"> <li>• Design Engineers</li> <li>• Electrical and Electronic Technicians and Technologists</li> <li>• Electronics Engineers</li> <li>• Engineering and Related Technicians</li> <li>• Engineering Technicians</li> <li>• Industrial Engineers</li> <li>• Labor Relations Managers</li> <li>• Manufacturing Engineers</li> <li>• Manufacturing Technicians</li> <li>• Power Generating and Reactor Plant Operators</li> <li>• Precision Inspectors, Testers, and Graders</li> <li>• Process Improvement Technicians</li> <li>• Production Managers</li> <li>• Purchasing Agents</li> <li>• Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Biomedical Equipment Technicians</li> <li>• Boilermakers</li> <li>• Communication System Installers/Repairers</li> <li>• Computer Installers/Repairers</li> <li>• Computer Maintenance Technicians</li> <li>• Electrical Equipment Installers/Repairers</li> <li>• Facility Electricians</li> <li>• Industrial Electronic Installers/Repairers</li> <li>• Industrial Facilities Managers</li> <li>• Industrial Machinery Mechanics</li> <li>• Industrial Maintenance Electricians</li> <li>• Industrial Maintenance Mechanics</li> <li>• Industrial Maintenance Technicians</li> <li>• Instrument Calibration and Repairers</li> <li>• Instrument Control Technicians</li> <li>• Job/Fixture Designers</li> <li>• Laser Systems Technicians</li> <li>• Maintenance Repairers</li> <li>• Major Appliance Repairers</li> <li>• Meter Installers/Repairers</li> <li>• Millwrights</li> <li>• Plumbers, Pipe Fitters and Steam Fitters</li> <li>• Security System Installers/Repairers</li> </ul>	<ul style="list-style-type: none"> <li>• Calibration Technicians</li> <li>• Inspectors</li> <li>• Lab Technicians</li> <li>• Process Control Technicians</li> <li>• Quality Control Technicians</li> <li>• Quality Engineers</li> <li>• SPC Coordinators</li> </ul>	<ul style="list-style-type: none"> <li>• Communications, Transportation and Utilities Managers</li> <li>• Dispatchers</li> <li>• Freight, Stock, and Material Movers</li> <li>• Industrial Truck and Tractor Operators</li> <li>• Logistical Engineers</li> <li>• Logisticians</li> <li>• Material Associates</li> <li>• Material Handlers</li> <li>• Material Movers</li> <li>• Process Improvement Technicians</li> <li>• Quality Control Technicians</li> <li>• Traffic Managers</li> <li>• Traffic, Shipping, and Receiving Clerks</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental Engineers</li> <li>• Environmental Specialists</li> <li>• Health and Safety Representatives</li> <li>• Safety Coordinators</li> <li>• Safety Engineers</li> <li>• Safety Team Leaders</li> <li>• Safety Technicians</li> </ul>



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	Year 15								
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Cluster K&S	<p align="center"><b>Cluster Knowledge and Skills</b></p> <p align="center">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems            ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities            ◆ Employability and Career Development ◆ Technical Skills</p>						
Pathways	Management and Entrepreneurship	Professional Sales and Marketing	Buying and Merchandising	Marketing Communications and Promotion	Marketing Information Management and Research	Distribution and Logistics	E-Marketing
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•Entrepreneurs •Owners</li> <li>•Small Business Owners</li> <li>•Presidents •Chief Executive Officers</li> <li>•Principals •Partners</li> <li>•Proprietors</li> <li>•Franchisees</li> <li>•Independent X's (e.g., distributor) •Customer Service Representatives</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>	<ul style="list-style-type: none"> <li>•Inbound Call Managers</li> <li>•Channel Sales Managers</li> <li>•Regional Sales Managers</li> <li>•Client Relationship Managers</li> <li>•Business Development Managers •Territory Representatives / Managers</li> <li>•Key Account Managers</li> <li>•National Account Managers</li> <li>•Account Executives •Sales Engineers •Sales Executives</li> <li>•Technical Sales Specialists</li> <li>•Retail Sales Specialists (big ticket) •Outside Sales Representatives •Industrial Sales Representatives</li> <li>•Manufacturer's Representatives •Salespersons</li> <li>•Field Marketing Representatives •Brokers</li> <li>•Agents •Field Representatives</li> <li>•Solutions Advisors</li> <li>•Sales/Marketing Associates</li> <li>•Telemarketers •Customer Service Representatives</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>	<ul style="list-style-type: none"> <li>•Store Managers •Retail Marketing Coordinators</li> <li>•Merchandising Managers</li> <li>•Merchandise Buyers</li> <li>•Operations Managers</li> <li>•Visual Merchandise Managers •Sales Managers</li> <li>•Department Managers</li> <li>•Sales Associates</li> <li>•Customer Service Representatives •Clerks (e.g., stock, receiving, etc.)</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>	<ul style="list-style-type: none"> <li>•Advertising Managers</li> <li>•Public Relations Managers</li> <li>•Public Information Directors •Sales Promotion Managers •Co-op Managers</li> <li>•Trade Show Managers</li> <li>•Circulation Managers</li> <li>•Promotions Managers</li> <li>•Art/Graphics Directors</li> <li>•Creative Directors</li> <li>•Account Executives</li> <li>•Account Supervisors</li> <li>•Sales Representatives</li> <li>•Marketing Associates</li> <li>•Media Buyers/Planners</li> <li>•Interactive Media Specialists •Analysts</li> <li>•Contract Administrators</li> <li>•Copywriters •Research Specialists •Research Assistants •Customer Service Representatives</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>	<ul style="list-style-type: none"> <li>•Database Managers</li> <li>•Research Specialists / Managers •Brand Managers</li> <li>•Marketing Services Managers •Customer Satisfaction Managers</li> <li>•(Research) Project Managers •CRM Managers</li> <li>•Forecasting Managers Strategic Planners, Marketing •Product Planners •Planning Analysts •Directors of Market Development</li> <li>•Database Analysts</li> <li>•Analysts •Research Associates •Frequency Marketing Specialists</li> <li>•Knowledge Management Specialists •Interviewers</li> <li>•Customer Service Representatives</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>	<ul style="list-style-type: none"> <li>•Warehouse Managers</li> <li>•Materials Managers</li> <li>•Traffic Managers</li> <li>•Logistics Managers</li> <li>•Transportation Managers</li> <li>•Inventory Managers / Analysts •Logistics Analysts/ Engineers</li> <li>•Distribution Coordinators</li> <li>•Shipping / Receiving Administrators •Shipping / Receiving Clerks</li> <li>•Customer Service Representatives</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>	<ul style="list-style-type: none"> <li>• Fulfillment Managers •E-Merchandising Managers</li> <li>•E-Commerce Directors</li> <li>•Web Site Project Managers</li> <li>•Internet Project Directors</li> <li>•Brand Managers •Forum Managers •Web Masters</li> <li>•Web Designers</li> <li>•Interactive Media Specialists •Internet Sales Engineers •Site Architects</li> <li>•User Interface Designers</li> <li>•On-line Market Researchers •Copywriters-Designers •Account Supervisors •Customer Support Specialists</li> <li>•Customer Service Representatives</li> <li>•Administrative Support Representatives (e.g., human resources, clerical, finance, technical)</li> </ul>

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	Year 15								
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Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

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Pathways	Engineering and Technology	Science and Math
Sample Career Specialties / Occupations	<ul style="list-style-type: none"> <li>•Aerospace Engineer •Aeronautical Engineer •Agricultural Engineer •Agricultural Technician</li> <li>•Application Engineer •Architectural Engineer •Automotive Engineer •Biomedical Engineer</li> <li>•Biotechnology Engineer •Chemical Engineer •Civil Engineer •Communications Engineer</li> <li>•Computer Engineer •Computer Hardware Engineer •Computer Programmer •Computer Science Technician •Computer Software Engineer •Construction Engineer •Consultant</li> <li>•Development Engineer •Drafter •Electrical Engineer •Electrician •Electronics Technician</li> <li>•Energy Transmission Engineer •Environmental Engineer •Facilities Technician •Fire Protection Engineer •Geothermal Engineer •Hazardous Waste Engineer •Hazardous Waste Technician •Human Factors Engineer •Industrial Engineer •Industrial Engineering Technician</li> <li>•Licensing Engineer •Manufacturing Engineer •Manufacturing Technician •Manufacturing Processes Engineer •Marine Engineer •Materials Engineer •Materials Lab &amp; Supply Technician</li> <li>•Mechanical Engineer •Metallurgic Engineer •Mining Engineer •Naval Engineer •Network Technician •Nuclear Engineer •Ocean Engineer •Operations Research Engineer •Packaging Engineer •Packaging Technician •Petroleum Engineer •Pharmaceutical Engineer •Plastics Engineer •Power Systems Engineer •Product Design Engineer •Project Engineer •Project Manager •Prototype Engineer •Quality Engineer •Quality Technician •Radio/TV Broadcast Technician •Radiology Engineer •Researcher •Safety Engineer •Software Engineer •Sound Technician •Structural Engineer •Survey Technician •Systems Design Engineer •Technical Sales Manager •Technical Writer •Telecommunications Engineer •Textile Engineer</li> <li>•Transportation Engineer</li> </ul>	<ul style="list-style-type: none"> <li>•Analytical Chemist •Anthropologist •Applied Mathematician •Archeologist •Astronomer</li> <li>•Astrophysicist •Atmospheric Scientist •Biologist •Botanist •CAD Operator •Cartographer</li> <li>•Chemist •Communications Technologist •Conservation Scientist •Cosmologist</li> <li>•Cryptographer •Crystallographer •Demographer •Dye Chemist •Ecologist •Economist</li> <li>•Electronmicroscopist •Environmental Scientist •Expert Systems Scientist •Geneticist</li> <li>•Geologist •Geophysicist •Geoscientist •Herpetologist •Hydrologist •Ichthyologist •Inorganic Chemist •Laboratory Technician •Mammalogist •Marine Scientist •Materials Analyst •Materials Scientist •Mathematician •Mathematics •Metallurgist •Meteorologist •Microbial Physiologist</li> <li>•Mycologist •Nanobiologist •Nuclear Chemists •Nuclear Technician •Numerical Analyst</li> <li>•Nutritionist •Oceanographer •Organic Chemist •Ornithologist •Paleontologist •Physicist</li> <li>•Polymer Scientist •Programmer •Protein Scientist •Protozoologist •Quality-Control Scientist</li> <li>•Radio Chemist •Research Chemist •Research Technician •Science Teacher •Lab Technician</li> <li>•Scientific Visualization / Graphics Expert •Spectroscopist •Statistician •Technical Writer</li> <li>•Technologist •Toxicologist •Zoologist*</li> </ul>



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Pathways	Transportation Operations	Logistics Planning & Management Services	Warehousing & Distribution Center Operations	Facility & Mobile Equipment Maintenance	Transportation Systems Infrastructure Planning, Management, & Regulation	Health, Safety & Environmental Management	Sales & Service
Sample Career Specialties / Occupations	<p><u>Air/Space Transportation:</u> •Transportation Managers •Airplane Pilots /Copilots •Commercial Pilots •Flight Engineers • Flight Attendants •Dispatchers •Air Traffic Managers •Air Traffic Controllers •Aircraft Cargo Handling Supervisors •Airfield Operations Specialists</p> <p><u>Rail Transportation:</u> •Transportation Managers •Dispatchers•Traffic Managers •Locomotive Engineers •Locomotive Firers •Railyard Conductors &amp; Yardmasters •Railroad Brake, Signal * Switch Operators •Railyard Engineers, Dinky operators, &amp; Hostlers</p> <p><u>Water Transportation:</u> •Transportation Managers • Dispatchers •Traffic managers •Captains •Mates •Pilots of Water Vessels •Sailors &amp; Marine Oilers •Seamen •Ship &amp; Boat Captains •Ship Engineers •Motorboat Operators •Bridge &amp; Lock Tenders •Other Port, Harbor, Waterway, Marina Operations</p> <p><u>Road Transportation:</u> •Transportation Managers •Dispatchers •Truck, Bus, Taxi Traffic Managers •Truck Drivers (Heavy) •Truck Drivers (Tractor-Trailer) •Truck Drivers (Light or Delivery Services) •Bus Drivers (Transit &amp; Intercity) •Bus Drivers-(School) •Taxi Drivers &amp; Chauffeurs •Truck, Bus, Taxi Terminal Operations</p> <p><u>Transit Systems:</u> •Transportation Managers (Mass Transit) •Dispatchers •Traffic Managers • Bus Drivers (Transit &amp; Intercity) •Subway &amp; Streetcar Operators</p>	<ul style="list-style-type: none"> <li>•Logisticians</li> <li>•Logistics Managers</li> <li>•Logistics Engineers</li> <li>•Logistics Analysts</li> <li>•Logistics Consultants</li> <li>•International Logistics</li> </ul>	<ul style="list-style-type: none"> <li>•Warehouse Managers</li> <li>•Storage &amp; Distribution Managers •Industrial &amp; Packaging Engineers</li> <li>•Traffic, Shipping &amp; Receiving Clerks</li> <li>•Production, Planning, Expediting Clerks •First-line Supervisors/Managers</li> <li>•Laborers, &amp; Material Movers (hand) •First-line Supervisors/Managers of Transportation &amp; Material-Moving Machine &amp; Vehicle Operators</li> <li>•Laborers &amp; Freight, Stock &amp; Material Movers (hand) •Car, Truck &amp; Ship Loaders •Packers &amp; Packagers (hand) •Other Packaging, Packing, Material Handling &amp; Moving Jobs</li> </ul>	<p><u>Facility:</u> •Facility Maintenance Managers &amp; Engineers •Industrial Equipment Mechanics •Industrial Electricians, •Electrical/Electronic Technicians</p> <p><u>Mobile Equipment:</u> <u>General</u>—•Mobile Equipment Maintenance Managers •Electrical &amp; Electronic Installers &amp; Repairers (transportation equipment) •Mobile Heavy Equipment Mechanics</p> <p><u>Air/Space</u>—•Aerospace Engineering &amp; Operations Technicians •Aircraft Mechanics &amp; Service Technicians •Airframe Mechanics •Power Plant Mechanics •Aircraft Engine Specialists •Aircraft Body &amp; Bonded Structure Repairers •Avionics Technicians.</p> <p><u>Water</u>—•Motorboat Mechanics •Ship Mechanics &amp; Repairers •Motorboat Mechanics •Automotive, Truck Mechanics &amp; Body Repairers</p> <p><u>Rail</u>—•Rail Car Repairers •Signal &amp; Track Switch Repairers •Rail Locomotive &amp; Car Mechanics &amp; Repairers</p> <p><u>Road</u>—•Electronic Equipment Installers &amp; Repairers—Motor Vehicle •Automotive Body &amp; Related Repairers •Automotive Glass Installers &amp; Repairers •Automotive Service Technicians &amp; Mechanics •Automotive Master Mechanics •Automotive Specialty Technicians •Bus &amp; Truck Mechanics &amp; Diesel Engine Specialists •Motorcycle Mechanics •Bicycle Repairers •Tire Repairers &amp; Changers</p>	<p><u>General</u>—<u>Intermodal</u>—•Urban &amp; Regional Planners •Civil Engineers •Engineering Technicians •Surveying &amp; Mapping Technicians •Government Service Executives •Environmental Compliance Inspectors</p> <p><u>Air/Space</u>—•Air Traffic Controllers •Aviation Inspectors</p> <p><u>Road</u>—•Traffic Engineers •Traffic Technicians •Motor Vehicle Inspectors •Freight Inspectors,</p> <p><u>Rail</u>—•Railroad Inspectors</p> <p><u>Water</u>—•Marine Cargo Inspectors •Vessel Traffic Control Specialists</p> <p><u>Transit</u>—•Public Transportation Inspectors</p> <p><u>Other</u>—•Other Government Agency Managers •Regulators •Inspectors •Other Federal, State, Local Transportation Agency Jobs</p>	<ul style="list-style-type: none"> <li>•Health &amp; Safety Managers</li> <li>•Industrial Health &amp; Safety Engineers •Environmental Scientists &amp; Specialists</li> <li>•Environmental Science &amp; Protection Technicians</li> <li>•Environmental Managers &amp; Engineers •Environmental Compliance Inspectors • Safety Analysts</li> </ul>	<ul style="list-style-type: none"> <li>•Marketing Managers •Sales Representatives—Transportation, Logistics Services</li> <li>•Reservation, Travel &amp; Transportation Agents &amp; Clerks</li> <li>•Cargo &amp; Freight Agents •Customer Service Managers</li> <li>•Customer Service Representatives</li> <li>•Customer Order &amp; Billing Clerks</li> <li>•Cashiers, Counter &amp; Rental Clerks</li> </ul>