

# **MONTANA FY 2005 CAR NARRATIVE**

## **Executive Summary**

The Montana Board of Regents is the Eligible Agency in the State of Montana for the administration of funds provided through the Carl D. Perkins Vocational Technical Education Act, 1998. This Consolidated Annual Report (CAR) submitted for Program Year 2005 provides quantitative and qualitative data relating to the progress of the State of Montana in implementing its Carl D. Perkins State Plan and the impact of these federally funded activities and programs to meet the State Performance Levels for each of the core indicators.

### **State Administration**

State Administration is addressed in relation to both the Office of Commissioner of Higher Education (OCHE) and the Office of Public Instruction (OPI), the agencies responsible for administration of the Perkins state allocation. This section focuses on staffing structure, continued implementation of the State Plan for the duration of Perkins III, and the relationship of Perkins and the State Workforce Investment Board.

### **State Leadership**

State Leadership is a shared responsibility between the two agencies and the narrative outlines the activities/programs that were implemented to address both the required and permissive uses of Perkins funds.

### **Implications**

Several topics/activities are identified to pursue during the next fiscal year, FY 2006. These areas primarily address the required uses of State Leadership. These initiatives continue the development of career pathways models emphasizing specific career clusters. These initiatives will be assessed to determine effectiveness, continuing need and therefore, expanded funding.

### **Program Performance**

A standardized database format ensures that the state level of performance is grounded upon reliable and valid data. The State continues to monitor local performance levels, and to renegotiate as appropriate.

Outlined in this portion of the report are the activities the State undertook to collect data for core indicators; track special populations; maintain procedures to assure that the fiscal requirements under Section 122 were met; and summarizes the strategies undertaken to achieve statewide performance criteria.

### **Definitions of Students**

This section defines concentrators at both the secondary and postsecondary level as well as Tech Prep.

### **Measurement Approaches and Data Quality Improvement**

A listing of the measurement approaches utilized by both agencies is included as well as the process by which the performance levels were determined. Continued efforts to improve data quality have ensured that the state level of performance was based on reliable and valid data.

Effectiveness of Improvement Strategies in Previous Program Year

Monitoring by the State Eligible Agency of its sub grantees has been effective in maintaining and/or exceeding the state levels of performance on each sub indicator.

Improvement Strategies for Next Program Year

A plan for activities that would improve all core indicators focuses on continued professional development, statewide interaction, connecting to business and industry and increased interaction between state level staff and local projects.

**Narrative**

**I. Program Administration**

**a. Report on State Administration (roles/responsibility summary)**

**• Roles and Responsibilities of State Agencies**

- The Montana Board of Regents is the eligible agency for Perkins. The Perkins Advisory Committee established through SB 425 has met to discuss issues pertinent to career and technical education at both the secondary and postsecondary level. Topics of discussion included: development of career clusters model, partnerships formed through initiatives to enhance healthcare programs and improve rural access to training; and, efforts to promote the needs of a rural state in the reauthorization of Perkins.
- Staffing required to support the administration of Perkins within the Office of the Commissioner of Higher Education includes a director, accountability/grants management specialist, a State Leadership and Reserve grant management specialist, Tech Prep coordinator, federal accountant and, program coordinator.
- Staff within the Office of Public Instruction includes a division administrator, an assistant division administrator, five program specialists representing the technical areas of agriculture, business and marketing, family and consumer sciences, health occupations and industrial technology, an accountability specialist, and fiscal/clerical/technical support staff.

- Staffing structure allows for the provision of technical assistance to the field; review of Local Plans, monitoring and evaluating of program effectiveness to ensure compliance with federal laws; and maintaining and modifying as necessary a data collection process to evaluate the State's progress in meeting the required performance levels established in the State Plan.
- Implementation of the State Plan for the Program Year 2005 included the following activities:
  - Convening the Perkins Advisory Committee
  - Providing a quarterly report regarding committee activities to the Board of Regents, the Eligible Agency
  - Targeting State Leadership funds to develop model curriculum in four cluster areas that required partnerships with business and industry, secondary education, other postsecondary institutions and WIA providers
  - Dissemination of these models statewide
- Administration of the State Plan throughout the duration of Perkins III requires the Eligible Agency and its sub-grantee, the Office of Public Instruction, to continue communicating with the U.S. Department of Education, Office of Vocational and Adult Education to assure that the data collected to establish state performance levels meet the established standards of quality. It is also the responsibility of both agencies to institute procedures for assuring project compliance with federal legislation. This process includes:
  - providing technical assistance to local projects to assure data quality
  - providing onsite audits of 25% of the local projects on a rotational basis each year to assure fiscal and programmatic compliance
  - maintaining a website and a Perkins listserv specifically for Project Directors.
- **Reserve Grants**

In developing the Perkins State Plan for the current law Montana chose to exercise the Rural Reserve option of the Perkins Basic Grant funding. In PY 05 thirteen reserve grants were awarded to the following institutions:

Postsecondary: Miles Community College, Miles City; Montana State University – Billings College of Technology; Montana State University Great Falls College of Technology Bozeman Campus; Montana Tech College of Technology, Butte; University of Montana Helena College of Technology (2 grants); University of Montana College of Technology, Missoula (2 grants);

Secondary: Wolf Point Public Schools, Livingston High School, Superior Public Schools; Wibaux High School and Great Falls Public Schools.

It is important to note that all of the Postsecondary Reserve Grants were used by the various colleges listed to fund work done by Community

Based Organizations. The Secondary grants were used directly by the various schools listed. Each of the grants was for the amount of \$35,000.

- **Summary**

- o The Office of Commissioner of Higher Education is the administrative branch of the Montana Board of Regents. Leadership to the field is a joint agency effort. The Office of Commissioner of Higher Education is the liaison between the national office and the state.
- o The State Director reports quarterly to the Montana Board of Regents as to progress of implementing the state plan and related activities promoting career and technical education
- o The Office of Commissioner of Higher Education coordinates the activities of the postsecondary institutions receiving Perkins funds with the State Workforce Investment Board. The State Director for Carl D. Perkins and the Division Administrator for Adult Education under the Office of Public Instruction are members of the State Board. Representatives of two-year institutions receiving Perkins funds are members of the Community Management Team within their service area.
- o The Office of the Commissioner of Higher Education maintains a strong relationship with other state agencies such as the Department of Public Health and Human Resources (DPHHS), the Department of Labor and Industry (DOLI), the Governor's Office and the Department of Commerce (DOC) through joint meetings focused on workforce development issues, especially those affecting disadvantaged populations throughout the state, and the relationship of these activities to economic development in Montana.
- o The State Director represents career and technical education at the postsecondary level on the State Agency Management Team
- o The State Director also staffs the Workforce Development Committee for the Montana Board of Regents.

- b. **Report on State Leadership**

- **Required Activities (Secondary and Postsecondary)**

- o **Assessment of Career and Technical education programs**
  - Continued use of the Access database at the postsecondary level for collection and analysis of information to determine student outcomes and continuous progress on state performance levels
  - Implemented a new data management system housed at the Office of Public Instruction
  - Continued review of institutional needs assessments in relation to student outcomes to determine effectiveness of objectives and areas needing improvement

- **Expand use of technology in career and technical education**
  - Maintain websites (OPI and OCHE) to provide better communication link to the field and general public
  
- **Provide professional development (postsecondary)**
  - Continued technical assistance for Project Directors and data staff to increase understanding of Perkins Legislation, accountability and meeting performance levels for continuous improvement
  - Continued Tech Prep Directors' meetings focusing on the development of career pathways and collection of data
  - Participated in national conferences focusing on Tech Prep, workforce development, economic development, career clusters, accountability, and quality data to expand the networking capacity and knowledge base of individuals providing administrative and/or direct services to students enrolled in Perkins funded institutions and schools.
  
- **Professional Development (secondary)**
  - Continued grant for the Montana Association of Career and Technical Education to provide professional development focusing on relevant industry standards and current technology for career and technical education associations
  - Continued summer updates for teachers
  
- **Support career and technical education programs that improve academic, career and technical skills**
  - Promoted the integration of contextual academic and technical instruction in Career Pathways programs
  - Continued the process of engaging secondary teachers, both academic and technical, to update program-area-specific standards and guidelines to enhance curricula.
  
- **Prepare students for nontraditional training and employment**
  - Coordinated the competitive process for allocating funds to both secondary and postsecondary educational organizations to provide nontraditional training and employment programs in a variety of formats.
  - Two Nontraditional Grants and eight mini-grants were awarded in 2005 from Perkins funds. These grants funded employment projects that introduce high school women to nontraditional employment through career assessment, "hands-on" career exploration, mentoring and networking with women already employed ("We Can Do It!", Career Development Workforce

Center at Miles City and the “Jobs for Tomorrow”, Women’s Opportunity and Resource Development at Missoula). Funding was also allocated in the mini-grants to include high school projects that involved women in carpentry, welding and an introduction for high school men and women to nontraditional careers available via distance learning at Great Falls College of Technology.

- **Support of partnerships to enable students to achieve state academic standards and vocational technical skills**
  - Showcased the four Career Pathways curriculum models in national, state and regional conferences/workshops.
  - Provided funding to convert pharmacy technician courses to an online format for students residing in rural underserved areas
  
- **Support for programs that serve individuals in institutions.**
  - The Boyd Andrew Pre-Release Center and Career Training in Helena was again awarded the Institutions Grant. Emphasis on this grant was instructing pre-release inmates basic financial management skills, familiarity with the Internet, and entrepreneurial skills. Long-term goals of the program were for participants to gain and retain employment for at least three months using their newly acquired skills.
  
- **Support for programs that serve special populations.**
  - The Career and Technology Education Division at the Office of Public Instruction (OPI) collaborates with the Special Education Division thru State Improvement Grant (SIG) to recruit and/or facilitate the entrance and retention of special populations and disadvantaged persons into existing programs of vocational education, employment or other education and training; provided an access point for the targeted special populations of students for a seamless, linked system that promotes their successful attainment of educational and vocational goals.
  - Women’s Opportunity and Resource Development, Inc. of Missoula in cooperation with the University of Montana College of Technology and Missoula County Public schools was again awarded the Special Populations Grant. The *Bridges to Learning Project* assisted young low-income mothers and fathers to plan and prepare for enrollment in vocational and educational programs that lead to high skill, high wage careers. The program also endeavored to develop a seamless system of services and support for young parents as they made the

transition to postsecondary institutions and programs.

- **Permissible Activities**

- **Technical assistance for eligible recipients**

- Provided ongoing technical assistance to all eligible recipients through quarterly meetings of project directors to address accountability, training on the Access database program (postsecondary). Secondary technical assistance was provided through a variety of methods, including but not limited to, teleconferences, on-site visits, teacher updates, phone calls, and workshops.

- **Support for vocational and technical student organizations**

- Connected with Career and Technical Student Organizations (CTSOs)— FFA, Business Professionals of America (BPA), DECA, Family, Career and Community Leaders of America (FCCLA), Health Occupations Students of America (HOSA), SkillsUSA, and Technology Students Association (TSA)

- **Support for education and business partnerships**

- Monitored the development of advisory councils to ensure representation of business, education and workforce system partners.
- Utilized advisory boards to guide curriculum development to enhance the delivery of programs in secondary schools and postsecondary institutions
- Presented information on Montana’s postsecondary career and technical education to business associations, community leaders, and state workforce board
- Expanded Business and Education Councils to four regional areas

- **Core Indicator Related Activity**

- **Secondary**

- **Data collection**

- Collected data using standardized instruments for Core Indicators 1, 2, 3 and 4 and distributed to schools
- Entered data into an Accountability System in Microsoft Access
- Reviewed data for accuracy; school reporting errors were noted and schools were contacted to correct data
- Queried the data to determine performance levels for each sub indicator

- **Improvement of data collection**

- The postsecondary agency regularly schedules technical assistance training sessions to assist local grant coordinators and data personnel with data quality issues.
  - The secondary agency ~~is revising~~ has revised its Access database to improve efficiency and collect information on sub-groups that was not previously collected. The was first used for concentrator data collection in the spring of 2005. This information will be available for reporting in the 2006 CAR.
  - Participated in state and federal accountability workshops and meetings.
- **Improvement of program standards**
    - continued technical assistance to field for implementing career and technical education standards and guidelines
  - **Professional development**
    - Summer update workshops held with program area educators.
    - Technical assistance visits to schools

#### **Postsecondary**

- Improved data quality
  - Continued technical assistance to the field in order to improve data quality and program performance including visiting campuses as needed and working with technical program staff to improve data quality
  - Continued participation in OVAE's technical assistance by state staff to help Montana to continue to improve its performance measures and data quality
  - Provided training on Access for new staff in order to utilize this position for initial data quality review and individual technical assistance to the field

- **Outcomes**

#### **Secondary**

- Data collection:
  - Collected core indicator information from all participating schools: Concentrator identification in May, Concentrator follow-up in November/December.
- Improvement of data collection:
  - Held annual technical assistance teleconference where state officials explained data collection procedures and answered questions from the field.
  - Designed and implemented a new concentrator data collection system in Access that allows the OPI to collect disaggregated special populations data that was not previously collectible.

The data collected via the new system will be reported in the 2006 CAR.

- Improvement of program standards:
  - Standards and Guidelines for Career and Vocational Technical Education in Montana, including program-area-specific guidelines, (revised summer 2002), are posted on the OPI website. The program assessment portion of the annual Carl Perkins local application is based on these standards.
  - Program area specialists provided technical assistance to schools as they implemented the new standards.
  - Montana Administrative Rule requires updating the Standards and Guidelines for Montana on a regular cycle.

**Postsecondary**

- Data collection
  - Montana's local project directors understand the importance of data quality and are committed to the training and time it takes to ensure success with Perkins III accountability.

**Secondary**

- Data collection
  - Computer programmer to maintain the Accountability System for data entry and analysis, and for queries and reports to be made for determining sub-indicator baselines
  - Data analyst and technician to enter, analyze and prepare data for Final Reports
  - Technical Assistance
    - Technical assistance teleconference.
    - Onsite meetings
    - Printed materials, which are also available on the Agency's website
  - Program standards
    - Telecommunications
    - Distributing costs

**Postsecondary**

- State leadership funds have been used to provide technical assistance to the field in the use of the Perkins Access database and to refine the database to improve data quality.

**c. Implications for next fiscal year/State Plan**

- Objectives for fiscal year 2006
  - Conduct a Career Clusters State Conference utilizing nationally recognized experts in developing a statewide model and

process for implementation

- Convene a Career Clusters Steering Committee made up of participants of the Clusters Conference to determine goals for adopting Career Clusters as the framework for organizing instructional programs and advisement
- Implement strategies for achieving Steering Committee goals
- Regionalize Cluster professional development
- Encourage the interaction of state secondary and postsecondary staff in regard to program implementation and innovation
- Utilize the Perkins Advisory Committee to identify trends and needs of career and technical education and expand interaction between secondary and postsecondary education
- Monitor and modify as necessary the Access Database to improve data collection and analysis
- Continue partnership with other state agencies to enhance coordination of workforce development programs
- Continue professional development of management staff
- Continue monitoring and evaluating Access database collection system and modify as necessary to assure reliability and validity of information
- Continue development of career pathways in applicable career clusters

## II. Program Performance

- **Performance Accountability – Core Indicators**
  - Secondary - Standardized instruments were created and distributed to schools for reporting data for Core Indicators 1, 2, 3 and 4. These instruments were then collected and the data was entered and analyzed to determine performance levels.
  - Postsecondary – The statewide Perkins Access database generates the information on core indicator performance.
- **Special Populations**
  - **Secondary**
    - Special populations, with the exception of Tech Prep students, are not individually identified, as stated in the Montana Perkins State Plan, section IV. However, our data system has been revised to allow collection of special populations starting in the Spring of 2005. (The data will be reported on the 2006 CAR).
  - **Postsecondary**
    - Tracking special populations in the database allows the state to review where there are successes and where there is need for improvement so resources can be better utilized.

- Providing student support programs assist students in achieving academic and vocational technical skill proficiency and enhance retention.
  - Establishing partnerships with postsecondary institutions and community-based organizations provides needed services to enhance the ability of special populations students to access further education and training and subsequently meet state performance levels.
  - For performance targets not met, Montana extend improvement efforts to all members of the special populations.
- **Tech Prep**
- Tech Prep in Montana is organized into Five Regions. The regions are centered in the Northwest area of the State at Flathead Valley Community College, in the Central area at Montana State University Great Falls College of Technology, in the Southwest area at Montana Tech College of Technology in Butte, in the South Central area at Montana State University Billings College of Technology in Billings and in the Eastern area at Dawson Community College in Glendive.
  - Several of the regional Tech Prep Directors have persons in charge of Tech Prep at other postsecondary institutions as well as those above. These positions are at Blackfeet Community College in Browning, Salish-Kooteni College in Pablo (both are tribal colleges) The University of Montana College of Technology in Missoula and Miles Community College at Miles City. All regions have Tech Prep responsible persons at virtually all high schools throughout the state.
  - Formerly Tech Prep in Montana had its own website. Tech Prep information is now available on the website of the Workforce Development Unit of the Office of the Montana Commissioner of Higher Education at [www.montana.edu/wochewd](http://www.montana.edu/wochewd).
  - The development of Career Clusters in Montana has begun and this is clearly associated with Tech Prep. Several of the regional directors have attended national and regional career clusters meetings. Tech Prep directors are also active participants in advisory boards and among stakeholders directly involved in the career clusters development.
  - Professional Development Activities in Montana during PY05 included the following:
    - Four Regional Tech Prep Conferences replaced the statewide Montana Tech Prep conference this year. These conferences were devoted to: An Overview of Pending Perkins Legislation and Career Clusters; An Overview of Pending Perkins Legislation and Parent Involvement In Career and Technical Education;

Update of Classroom Technology for Teachers in Areas of Power Point And Data Management; Economic Forces Shaping Education.

- The continuing program of expanding secondary teacher endorsements was directed to the area of Agricultural Sciences and a 3-year program was launched with the cooperation of Texas Instruments, Flathead Valley Community College, Montana State University Northern at Havre, and the Montana Office of Public Instruction. This project is on going.
- As this year ended Tech Prep in Montana was actively involved in jointly planning for the first Montana Career Clusters Conference. This conference will be an outgrowth of the formerly held Montana Tech Prep Conference.
- **Fiscal Requirements**
  - o State purchasing policy ensures that acquisitions do not benefit any individual or organization, at both the state and local levels.
  - o Funds received by the Eligible Agency, the Montana Board of Regents, were allocated among secondary and postsecondary vocational technical education as follows:
    - Eighty-five percent (85%) of the funds were allocated under Section 131 and Section 132. Ten percent (10%) of the eighty-five percent (85%) was used in accordance with Section 112 c. (Reserve).
    - The Montana Board of Regents, the eligible agency, allocated seventy-five percent (75%) of the funds used in accordance with Section 112 as follows: sixty-five percent (65%) to secondary vocational technical education and thirty-five percent (35%) allocated to postsecondary vocational technical education. This distribution has been past practice in the state of Montana and reflects the general trend of other states.
    - Ten percent (10%) reserve was used to serve those areas that are rural and/or negatively impacted by changes in the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1998. The grants were awarded to educational institutions in the ten regions of the state as outlined in the Perkins State Plan. The use of funds focused on serving special populations at the secondary and postsecondary level.
  - o The Office of Public Instruction obtained a waiver under Section 131 (d) (2) (A) (I). The rationale for this waiver was based upon the fact that Montana is the fourth largest state in the nation in terms of square miles of area, but ranks 44<sup>th</sup> in the nation in population according to the 2000 Census. Of the 172 secondary schools, 136 schools have been identified by the U.S. Department of Education as high schools with “Rural Locale” designations according to NCES CCD data. This

verified that any school with the rural designation achieved the waiver criterion.

**a. State Performance Summary**

- **Secondary**—Note: Montana implemented a new data collection system that allows us to collect disaggregated special populations information for the first time. However, because of the lag time between collecting and reporting this data, we will not be able to report disaggregated data until the 2006 CAR.
  - **1S1 – Academic Skills Attainment:** Montana’s performance level exceeds the negotiated level
  - **1S2 – Vocational Skills Attainment:** Montana’s performance level exceeds the negotiated level
  - **2S1 – Completion:** Montana’s performance level exceeds the negotiated level
  - **3S1 – Placement:** Montana’s performance level exceeds the negotiated level
  - **4S1 – Nontraditional Participation:** Montana’s performance level exceeds the negotiated level
  - **4S2 – Nontraditional Completion:** Montana’s performance level did not meet the negotiated level. This is an area we need to concentrate on and develop improvement strategies for. We need to look at how non-traditional funds could be better utilized to address the issue.
  
- **Postsecondary**
  - **1P1 – Academic Attainment:** Montana’s performance level exceeds the negotiated level. All but the Native American special population, achieved at a level higher than the state level.
  - **1P2/2P – Vocational and Skill Attainment and Completion:** Montana met the level negotiated for this core indicator in 2005. Due to inconsistent application of the measurement approach at our PS schools, we errantly established a baseline in FY2000 that is exceedingly high. We have a rigid definition of completion, compared to other states, and do not filter the student cohort as other states do. Montana conducted additional training to implement more uniform reporting, to reestablish an accurate baseline. We have renegotiated our performance targets to more accurately reflect this and are now able to meet the goal.
  - **3P1 –Placement:** Montana’s performance level exceeds the negotiated level. The Tech Prep also exceeded the negotiated level. As a result of better data quality efforts and implementing additional placement monitoring strategies, Montana has significantly improved on this performance measure.
  - **3P2 – Retention:** Montana’s performance level does not meet the negotiated level of 88.58%. Due to low population numbers (630 retained out of 713 placed), and incomplete UI data records (approximately 70% of Montana businesses are required to report

wage record information) Montana may well be at a maximum achievable level of performance. We are seeking ways to obtain national employment data to accurately reflect both the placement and retention numbers.

- **4P1 – Nontraditional Participation:** Montana does not meet the level negotiated for this core indicator. The Tech Prep population did not meet the negotiated level, small numbers and rural attitudes on traditional values seem to be the chief cause. The primary fields for underemployment of women in Montana are construction, IT networking and agriculture related jobs. We will focus this year on opportunities to improve outreach and marketing to women for these jobs.
- **4P2 – Nontraditional Completion:** Montana’s performance level did not meet the negotiated level for nontraditional completion. 4P2 continues to be problematic for frontier states like Montana, as we have small PS student populations, which lead to volatile reporting of our performance. In many of our institutions, a few (or even one) students account for wide swings in the completion performance measurement. Additionally, we see greater challenges for female students and have dedicated more resources to increase female success in nontraditional programs.

#### **b. Definition of Vocational Concentrator and Tech Prep students**

- **Secondary Vocational Concentrator**
  - A student who will have received at least three units of vocational course credit during a high school career. These credits may be earned in multiple vocational program areas. (A unit of credit is two semesters of study.)
  - This definition has not changed from the previous program year
- **Postsecondary Vocational Concentrator**
  - A student who declares a vocational technical program of study
  - This definition has not changed from the previous program year
- **Tech Prep Students**
  - A s secondary Tech Prep student is any high school senior career education concentrator receiving a grad of “B” or better in an articulated course. A postsecondary Tech Prep student is any student having applied for TP articulated credits and who receives them after successfully completing (grade of “C” or better) 12 credits at that institution.

#### **c. Measurement Approaches and Data Quality Improvement**

##### **Measurement Approaches**

## Secondary

### • 1S1 Secondary Academic Attainment

- Measure:
  - Numerator: Total number of vocational concentrators who attained a high school diploma in Montana.
  - Denominator: Total number of vocational concentrators in Montana.
- Measurement Approach:
  - State/Local Administrative Data - Secondary Completion and State Definition of Vocational Concentrator: Completion based on attainment of a high school diploma and receipt of credit for three units (six semesters) of state-defined vocational education program coursework.
- Assessment of Data Quality: Data is valid and reliable.

### • 1S2 Secondary Vocational and Technical Skill Attainment

- Measure:
  - Numerator: Total number of vocational concentrators who attained a high school diploma in Montana
  - Denominator: Total number of vocational concentrators in Montana.
- Measurement Approach:
  - State/Local Administrative Data - Secondary Completion and State Definition of Vocational Concentrator: Completion based on attainment of a high school diploma and receipt of credit for three units (six semesters) of state-defined vocational education program coursework.
- Assessment of Data Quality: Data is valid and reliable.

### • 2S1 Secondary Completion

- Measure:
  - Numerator: Total number of vocational concentrators who attained a high school diploma in Montana.
  - Denominator: Total number of vocational concentrators in Montana.
- Measurement Approach:
  - State/Local Administrative Data - Secondary Completion and State Definition of Vocational Concentrator: Completion based on attainment of a high school diploma and receipt of credit for three units (six semesters) of state-defined vocational education program coursework.
- Assessment of Data Quality: Data is valid and reliable.

### • 3S1 Secondary Placement

- Measure:
  - Numerator: Number of vocational concentrators in Montana who were placed in postsecondary education or advanced

training, employment, and/or military service within six (6) months of graduation

- Denominator: Total number of vocational concentrator completers in Montana.

NOTE: Students that could not be contacted during the follow-up survey were coded, as “Unknown” and these students were not counted in the numerator or the denominator.

- Measurement Approach:
  - State-Developed, School-Administered Surveys/Placement Records - Six months after graduation, guidance counselors, administrators and teachers conduct structured telephone follow-up interviews with vocational concentrator completers who have attained a high school diploma using standardized survey instrument. Interviewers determine placement beyond high school.
- Assessment of Data Quality: reliable data dependent upon interviewer following the state developed interview protocol for questions and responses; dissemination of protocol and training of interviewers prior to conducting interviews

- **4S1 Participation in Secondary Nontraditional Programs**

- Measure:
  - Numerator: Number of participants of the under represented gender in programs defined as non-traditional.
  - Denominator: Number of participants defined as non-traditional.
- Measurement Approach:
  - State/Local Administrative Data - Vocational programs are identified as nontraditional for a specific gender.
    - Female concentrators in Industrial Technology
    - Male concentrators in Family and Consumer Sciences Education
- Assessment of Data Quality: Data is valid and reliable.

- **4S2 Completion of Secondary Nontraditional Programs**

- Measure:
  - Numerator: Number of nontraditional vocational concentrators who attained a high school diploma in Montana.
  - Denominator: Total number of vocational concentrators in non-traditional programs who attained a high school diploma in the reporting year.
- Measurement Approach:
  - State/Local Administrative Data - Nontraditional vocational concentrators who attained a high school diploma in Montana will be counted.
- Assessment of Data Quality: Data is valid and reliable.

**Postsecondary**—The below information does not represent a change in Montana's FAUPL. It is presented in this manner only for accurate reporting of our measures and approaches for the CAR Narrative.

- **1P1 Postsecondary Academic Attainment**
  - Measure:
    - Numerator: Number of 2004-05 concentrators attaining a 2.0 cumulative GPA
    - Denominator: Number of 2004-05 concentrators enrolled in certificate, AAS and designated AS degree programs
  - Measurement Approach:
    - Overall Grade Point Average
  - Assessment of Data Quality: Data is valid and reliable.
  
- **1P2 Postsecondary Vocational and Technical Skill Attainment**
  - Measure:
    - Numerator: Number of concentrators entering in 2002-03 and completing a postsecondary degree or certificate within 3 years (a degree or certificate in a Perkins appropriate program of study)
    - Denominator: Number of concentrators entering in 2002-03 enrolled in postsecondary degree or certificate programs (a degree or certificate in a Perkins appropriate program of study)
  - Measurement Approach:
    - Program Completion
  - Assessment of Data Quality: Data is valid and reliable.
  
- **2P1 Postsecondary Degree or Credential**
  - Measure:
    - Numerator: Number of concentrators entering in 2002-03 and completing a postsecondary degree or certificate within 3 years (a degree or certificate in a Perkins appropriate program of study)
    - Denominator: Number of concentrators entering in 2002-03 enrolled in postsecondary degree or certificate programs (a degree or certificate in a Perkins appropriate program of study)
  - Measurement Approach:
    - State/Local Administrative Data
  - Assessment of Data Quality: Data is valid and reliable.
  
- **3P1 Postsecondary Placement**
  - Measure:
    - Numerator: Number of 2004-04 completers placed in employment, the military or further postsecondary education
    - Denominator: Number of 2003-04 completers of postsecondary degree or certificate programs

- Measurement Approach: Administrative Record Exchange with Unemployment Insurance, Department of Defense and the Montana University System Data Warehouse
- Assessment of Data Quality: Administrative records valid and reliable although the information does not include out-of-state employment or further postsecondary education at an institution that is not part of the Montana University System
- **3P2 Postsecondary Retention**
  - Measure:
    - Numerator: Number of 2002-03 completers placed in employment that were retained in the following quarter
    - Denominator: Number of 2002-03 completers placed in employment
  - Measurement Approach:
    - Administrative Wage Record Exchange with Unemployment Insurance
  - Assessment of Data Quality: Data is valid and reliable, but does not include out-of-state employment
- **4P1 Participation Postsecondary in Nontraditional Programs**
  - Measure:
    - Numerator: Number of 2004-05 enrolled students of the underrepresented gender participating in programs defined as nontraditional
    - Denominator: Number of 2004-05 enrolled students in programs defined as nontraditional
  - Measurement Approach:
    - State/Local Administrative Data
  - Assessment of Data Quality: Data is valid and reliable.
- **4P2 Completion of Postsecondary Nontraditional Programs**
  - Measure:
    - Numerator: Number of enrolled students entering in 2002-03 who are of the underrepresented gender in programs defined as nontraditional and who complete a postsecondary degree or certificate within 3 years (a degree or certificate in a Perkins appropriate program of study)
    - Denominator: Number of enrolled students entering in 2002-03 enrolled in nontraditional postsecondary degree or certificate programs (a degree or certificate in a Perkins appropriate program of study)
  - Measurement Approach:
    - State/Local Administrative Data
  - Assessment of Data Quality: Data is valid and reliable.

## **Data Quality Improvement**

- **Secondary**
  - ~~Due to elimination of statewide testing, high school completion rather than assessment is utilized.~~ At this time, diploma completion is the best indicator we have for academic attainment.
- **Postsecondary**
  - All of the eligible institutions enter their student information into the database and electronically submit it to the state office, therefore data quality issues vary to some degree from campus to campus. Two technical assistance sessions were provided to project directors and data managers. Technical assistance was provided onsite to 75% of participating institutions, as well as via phone, email and a listserv throughout the year.
  - Technical assistance on data quality is seen as an ongoing activity and is evolving as schools change the way classes are offered. An example is campuses sharing program providing ½ the courses at one school and half at another and courses offered collaboratively with high schools or through distance learning.
  - The data quality checklist developed in 2002 continues to be a valuable tool for improved data quality. This has made communication with institutions on data quality issues clear, and easy to document.
  - The Office of the Commissioner of Higher Education, Workforce Development Unit attends all technical assistance offered by OVAE for data quality improvement and uses the Peer Collaborative Network extensively.

**d. Effectiveness of Improvement Strategies in Previous Program Year**

**Secondary**

- 1S1, 1S2, 2S1, and 3S1: The data for this measure is substantial. No improvement strategies are required.
- 4S1: A revision of the CTE Enrollment reports allowed us to collect gender information for two years. Now that we have the information, we will be able to track progress.
- 4S2: A change in measurement approach has allowed us to report the correct information for this sub-indicator. Now that we have correct data, we are tracking progress.

**Postsecondary**

- 1P1, 1P2, 2P1 - Academic Attainment, Vocational Skill Attainment and completion
  - Implemented retention plan on each campus with opportunities to share best practices across institutions and disciplines thus establishing a baseline for determining effectiveness
  - Orchestrated a Career Clusters conference to initiate Career Clusters in

Montana.

- Utilized computer-based instructional software to provide remedial instruction in basic academics which has improved the success rate for students in passing courses by an average of over 30 %.
- **3P1 and 3P2 – Placement and Retention**
  - Assessing each institution's database to determine that the information being submitted was accurate improved the quality of data resulting in a positive outcome for most institutions
  - Researching the possibility of utilizing national databases to increase the accuracy of these measures. This is important so we are not fixing an issue that is not broken, but the information used is not all inclusive.
  - Montana is just beginning to tap into the data warehouse in the Office of the Commissioner of Higher Education for needed information.
  - Partnering with local Workforce Centers enhanced placement of graduates
- **4P1 and 4P2 – Nontraditional Training and Completion**
  - Publication of a Best Practices document and use of the Perkins Listserve was beneficial to Project Directors and state staff in addressing questions relating to data collection and or resources to help field better define nontraditional
  - Use of student scholarships for nontraditional students promoted recruitment and
  - Identifying barriers to participation provided institutions a plan for improvement

#### e. Improvement Strategies for Next Program Year

##### Secondary

- **1S1 and 1S2 Attainment & Completion** - The data for this measure are substantial. No improvement strategy is required at this time.
- **2S1 Diploma Credential** - Montana does not award certificates/diplomas before or in addition to high school graduation certificates.
- **3S1 Placement** - Because of small schools, low population, and method of collecting data, there is excellent response and good data quality for this measure. No improvement strategy is necessary at this time.
- **4S1 Participation Non-Traditional** - Engage Perkins Advisory Committee to review uses of non-traditional funds and make suggestions to target this area for improvement.
- **4S2 Completion Non-Traditional** - Engage Perkins Advisory Committee to review uses of non-traditional funds and make suggestions to target this area for improvement.

### **Postsecondary**

- **All Indicators** - Compile best practices from each campus for each sub indicator
- **1P2, 2P1** - Institute targeted technical assistance on retention strategies.
- **3P2** - Work with national experts to identify and obtain MOUs for national databases for employment and postsecondary information. Strategies to raise performance levels for 1P2 and 2P1 are 1) continue refining the baseline, and 2) re-negotiate target to reflect new baseline.
- **4P1, 4P2** – Identify and market course where women are under represented. Pay will be a particular selling point since networking, construction and agriculture are the three occupational areas where Montana needs to focus our efforts.