SECONDARY PLAN EXAMPLES

INTRODUCTION

The following examples are designed to help you when writing your CTE Plan for Program Improvement. They are representative of most sections of the plan, and in several sections there are multiple examples for you to review.

These examples are based on actual submissions made by local school systems and community colleges, but details and names have been modified. The examples do not represent the only acceptable response, they are only intended to provide you with some ideas and references as you work through your individual plans.

We hope you find the examples helpful. If you have any questions about these examples please contact your regional coordinator.
CERTIFICATION OF PARTICIPATION
(Required Plan Element 5)

1. Describe how parents, students, teachers, representatives of business and industry, labor organizations, representatives of special populations and other interested individuals are involved in the:

   **1a. Development** of Career and Technology Education (CTE) programs of study assisted under this title, including providing students with strong experience in, and understanding of, all aspects of an industry, developing programs that lead to industry certification and increased articulation opportunities with postsecondary programs.

   **1b. Implementation** of CTE programs of study while supporting academic success for program participants, helping to ensure access and attainment of technical skills, and movement of programs toward those requirements for industry certification or other standardized assessments.

   **1c. Evaluation** of CTE programs of study by considering: academic achievement, graduation rates, technical attainment measured by certification exams, post high school transition to work or college. Describe the evaluation process.

<table>
<thead>
<tr>
<th>Group</th>
<th>Development</th>
<th>Implementation</th>
<th>Evaluation</th>
<th>Method of Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>Parents are invited to attend information sessions on CTE programs to learn more about the enrollment process and benefits to their child. It is important for parents to be aware of all aspects of the program and the need for their child to become a completer. Parents attend annual review of programs to provide their input and suggestions for program improvements. Parents also serve on program advisories to provide industry input for program development. They receive a copy of the annual local CTE program report of data and student outcomes.</td>
</tr>
<tr>
<td>Students</td>
<td>√</td>
<td>√</td>
<td></td>
<td>It is important that students get a sense of ownership and involvement in program development. Equally important, students must recognize the value of programs toward their academic success and future plans. Student focus groups will be conducted to solicit student feedback/suggestions to improve the quality of programs.</td>
</tr>
<tr>
<td>Teachers</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>Teacher involvement is critical in all phases of the effort to provide quality programs. CTE plans to conduct a survey to gain teacher awareness and assessment of the schools’ readiness to support programs of study. Teachers are involved in curriculum development, student retention, implementation strategies, and participate in review of data to identify possible solutions to improve performance outcomes on all measures, including pass rates for industry certifications and transition to postsecondary education. Teachers participate in ongoing professional development to enhance technical skills in delivery of instructions.</td>
</tr>
</tbody>
</table>
## Secondary Examples

<table>
<thead>
<tr>
<th>Stakeholder Groups</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Professional School Counselors</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Organizations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Special Pops Reps.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School System Senior Leadership/Board of Education</td>
<td>✓</td>
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<td>✓</td>
</tr>
</tbody>
</table>

Administrator support at the school level is crucial. CTE intends to establish a Memorandum of Agreement with each school to define the expectations for development and implementation of programs at their schools. Administrators will be expected to sign MOAs to acknowledge their understanding and commitment to CTE programs. They receive a copy of the annual local CTE program report to review data and student outcomes, particularly related to their school.

Professional School Counselors play an important role in enrollment and student retention. CTE collaborates with counselors to implement Individual Learning Plans and scheduling of students into CTE programs, along with appropriate academic subjects. CTE staff and Professional School Counselors regularly meet to discuss strategies for transitioning students through completion of programs of study into postsecondary studies and/or employment.

Government, business, and industry representatives are involved in all aspects of programs. Representatives of the Local Advisory Council and Program Advisory Committees provide their input and feedback on program development and implementation in areas such as curriculum design, equipment purchase, facility improvements, instructor selection, industry certifications and internships. They receive a copy of the annual CTE program report, participate in planning retreats and professional development conferences, and review of performance data and student outcomes.

Labor organizations are solicited to become active participants in all aspects of programs pertaining to their industry. As such, they serve on the Local Advisory Council to provide input and feedback on program development and implementation in areas such as curriculum design, equipment purchase, facility improvements, instructor selection, industry certifications and internships. They receive a copy of the annual CTE program report to review performance data and student outcomes.

CTE and Special Population representatives collaborate to develop strategies to make programs more user-friendly. The intent is to create a seamless system in which students can receive the necessary support to excel in CTE programs and continue to postsecondary education or self-sustaining employment; and to leverage resources to expand opportunities to students. The input ensures that CTE programs meet the needs of all students.

School System Senior Leadership and Board of Education are vital to CTE’s ability to provide state-of-the-art programs. They provide input on program development and feedback to assist in the evaluation process of CTE. This group has approval authority for local policies and funding. They receive the annual CTE program report to review performance data and student outcomes.
VISION, MISSION, AND ACCOUNTABILITY STATEMENTS

You may use the information from the current year’s plan and update as necessary.

1. **CTE Vision**: The DCCR vision for Career and Technology Education (CTE) to be the premier provider of career focused educational solutions in Maryland. It is critical that these programs are challenging, aligned with industry standards and academics, add value to education, and engage students in learning. Describe the vision for CTE students within your local school system.

   The Western County School System has adopted the following vision statement for 2007 through 2012: “Better Schools/Brighter Future”

   The CTE programs complement the school system’s mission and vision:
   a. Students completing Career and Technology Education programs and graduating from Western County Public Schools will be prepared with the academic and technical skills to enter further education and/or work and become productive citizens.
   b. Every student will have the opportunity to be a dual completer by meeting the University System and the Occupational Completer requirements.
   c. Career and Technology Education staff will provide coordinated services to all students.
   d. Career and Technology Education staff will develop partnerships with local businesses that will provide for the development of student work-based learning opportunities, teach externships, and provide business and industry tours for school staff.
   e. Career and Technology Education staff will implement dynamic curriculum which is developed by staff with input from business and industry representatives.
   f. Programs and curriculum will meet the needs of the local labor market.
   g. Students completing Career and Technology programs will have the opportunity to gain an industry-recognized credential as appropriate to the skill training.
   h. Students enrolled in Career and Technology education programs will have a rigorous academic program integrated with the CTE training.

3. **Accountability**: Describe how you will measure, monitor and document the outcomes for CTE programs of study to ensure they achieve the vision and mission stated above, including the non-discrimination and achievement of special populations and non-traditional students?

   Student progress, including the progress of students who are members of special populations, and program outcomes will be measured in several ways. Each program maintains an active advisory committee that will provide program feedback related to curriculum, facilities, and program alignment to industry standards on an annual basis. Staff examines student outcome data using the PQI and HSA data provided by MSDE. Each year additional CTE programs have licensure or certification attached to them. Student results will be analyzed and shared with school administration and staff to measure and document student performance. Employer and graduate follow-up results are another source of data to be used to examine program outcomes and student success. Eastern County is extremely fortunate to have a strong working relationship between the public school system and Eastern Community College. Programs are continuously evaluated through articulation meetings, regular meetings with the LAC and PACs and through follow up of student success at the postsecondary level through articulated programs.
VISION, MISSION, AND ACCOUNTABILITY STATEMENTS

You may use the information from the current year’s plan and update as necessary.

1. **CTE Vision**: The DCTAL vision for CTE to be the premier provider of career focused educational solutions in Maryland. It is critical that these programs are challenging, aligned with industry standards and academics, add value to education, and engage students in learning. Describe the vision for CTE students within your local school system.

   The vision for CTE within the Central School System (CSS) is that when the mission is fulfilled, the following will have been achieved:

   - Greater numbers of students will graduate from high school and go on to college.
   - CSS’s unemployment rate will be reduced.
   - Pressing workforce needs will be ameliorated.
   - Median household income will improve.

2. **Accountability**: Describe how will you measure, monitor and document the outcomes for CTE programs of study to ensure they achieve the vision and mission stated above, including the non-discrimination and achievement of special populations and non-traditional students?

   **Systemic Support for CTE Accountability**

   a. The Department of Technology Services assigned CTE data collection and reporting services to one staff member who has made a priority of learning about CTE needs for measuring, monitoring, and documenting outcome data. One current example of efficient collaboration between CTE staff and the assigned staff person for CTE data is the recent identification of the new concentrator courses, which required several meetings to identify, refine, and enter the new course codes.

   b. The Central School System (CSS) Data Warehouse system provides access by all administrators and curriculum staff to data from the student system to assist instructional personnel in preparing instructional interventions for all students including special populations and non-traditional students. This easy-to-use web-based reporting system that provides information on:

      - MSA and HSA data, including sub scores
      - Attendance Data
      - Student demographics
      - Student grades and schedule information

   All curriculum staff has access to the Cognos reporting system which enables desk-top access to reports on program enrollment, demographic information, and grades.
VISION, MISSION, AND ACCOUNTABILITY STATEMENTS

You may use the information from the current year’s plan and update as necessary.

2. CTE Mission: The DCTAL Mission: Career and technology education programs are developed and implemented to increase the academic, career and technical skills of students in order to prepare them for careers and further education.

CTE Mission and Career Clusters: How do your Career and Technology Education (CTE) cluster pathway programs of study provide students with value-added opportunities that fulfill the vision of CTE in your local school system?

Career and Technical Education assists schools in the development and implementation of rigorous, state-of-the-art career cluster/programs of study that empower all students with the academic, technical, and career-readiness skills to pursue post secondary education and/or high-wage, high-demand employment opportunities after graduation. Students within all high schools will be afforded the opportunity to participate in career clusters/programs of study primarily beginning in grades 11 and 12.

In Midland County Public Schools (MCPS), CTE is offered through the implementation of 10 career cluster programs of study, adopted from the 10 Career Clusters identified by the Maryland State Department of Education. Along with these career cluster programs, students are also afforded an opportunity to participate in other work-based learning activities. The Career Clusters provide students with the greatest opportunity to combine both academic rigor and career readiness as they prepare to transition from high school.

Enrollment in CTE programs is available to students in all high schools. Along with strong academic rigor, students participate in a sequence of elective career-themed courses that may enable them to earn college credit and/or industry recognized certification prior to graduation. Students enrolled in CTE programs have a tremendous advantage on their peers whether planning to go on to college or seek meaningful employment when leaving high school.

The Superintendent considers CTE to be an integral component of the vision to prepare every child for college. A major initiative to make this vision a reality is to transform high schools into smaller learning communities. The Office of CTE is fully engaged in the ongoing discussion to restructure the high schools into smaller learning communities as a means to enhance academic achievement and career readiness. In doing so, students are expected to become more engaged in learning while receiving more personalized attention. An initial group of high schools began restructuring into smaller learning communities in FY2009. The second group will begin the process in FY2011. These schools are expected to afford students access to programs of study from among all 10 career clusters. However, it is anticipated that programs will not be replicated among the schools. This initiative is expected to have a significant impact on the development and implementation of CTE programs over the next five years.

3. Accountability: Describe how you will measure, monitor and document the outcomes for CTE programs of study to ensure they achieve the vision and mission stated above, including the non-discrimination and achievement of special populations and non-traditional students?

CTE’s ability to meet this vision and mission will be determined by its capacity to impact student achievement and produce positive outcomes for students. Program effectiveness will be based on results of the Program Quality Index (PQI) performance indicators. Current PQI data indicate that
CTE in Midland County Public Schools (MCPS) has an average overall low rating of quartile 1 out of a possible 4. The expectation is to elevate performance outcomes from a rating of quartile 1 to quartile 4 within all performance indicators within the next 5 years.

A. Students demonstrate mastery of reading/language arts and mathematics. CTE staff will review and monitor student academic performance on a quarterly basis to identify deficient and/or low performing students in these core subject areas. CTE staff will review HSA English II and Algebra test results and use data to encourage students to take advantage of available HSA Bridge preparatory initiatives.

B. Students successfully earn industry certifications and licenses to validate technical skills attainment. Preparation for technical skills attainment is integrated into classroom curricula to ensure students are adequately prepared for assessment at the conclusion of programs. Technical skills assessments will be available in all CTE programs where appropriate.

C. Students successfully graduate as dual completers and meet the University of Maryland admission requirements. All programs are a sequence of courses that are aligned with industry and postsecondary opportunities.

D. Students successfully transition into a 2- or 4-year college, apprenticeship, professional school or are gainfully employment in a field related to a program of study. Results of the follow up survey, letters of acceptance prior to graduation, and hires will be used to substantiate student transition. The Individual Learning Plan will assist them in developing a plan of action for transition from high school.

E. Students from under-represented populations are aggressively enrolled in non-traditional programs of study. Enrollment data will be used to substantiate student participation in non-traditional career fields such as construction trades, automotive technology, health, pre-engineering, and information technology.

F. Students from special populations are afforded the opportunity to excel in all programs of study. CTE will establish linkages with other stakeholders to ensure students from diverse populations are directed and encouraged to enroll in programs of study. Enrollment data will be used to substantiate the level of participation by students from special populations as defined by MSDE.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this section is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

1. Provide a description of how CTE programs are administered, and decisions are made regarding those programs, within the structure of the local school system.

   - Career and Technology Education is an integral part of educational offerings in the Western County Public Schools.
   - Occupational completer programs are offered in the comprehensive schools and the Center for Career and Technical Education.
   - The Board of Education includes funding for CTE teachers and administrators.
   - The CTE Supervisor/Principal serves on all LEA committees that involve curriculum and instruction.
   - The organizational chart for the Western County Public School System is attached.

A. How are CTE program improvement priorities and the elimination of performance gaps by subpopulations included within your Bridge to Excellence Master Plan? Include in your response how you will ensure that CTE students are taught to the same coherent and rigorous content aligned with challenging academic standards as are taught to all other students.

   - The CTE Supervisor/Principal serves on the Bridge to Excellence Master Plan team.
   - The PQI data is shared during the committee meetings and considered as the Master Plan is reviewed, evaluated, and revised.
   - As a result of the review, funding to CTE programs from these funds has increased over the original Categorical funding.
   - CTE students are included in all LEA improvements aimed at the elimination of academic performance gaps.

B. What factors exist within the local school system such as support for CTE, and other local funding sources, including those that might impact services for special populations and non-traditional students, that influence and determine how Perkins funds are allocated for program improvement?

   - Central office instructional leaders play a vital role in the support of CTE programs.
   - Local funding is used for instructional materials, CTE teacher salaries and maintenance of programs.
   - Additional academic teachers have been added to the Career Center in recent years.
• The additional staff includes teachers for foreign language and math as well as special education staff for support to students needing extra assistance.
• Support from the school system is demonstrated by the active participation of the Superintendent of Schools, the Assistant Superintendent of Schools and the Director of Secondary Education on the Local Advisory Council and the Building Trades Foundation.

2. **Describe the processes used by your school system to prepare students, including special populations, to successfully transition from middle school into CTE programs at the high school level and from CTE programs to further education, training and/or employment.**

   Address the following in your response: How the school system:

   A. **Provides information on CTE programs to faculty, teachers, school counselors and support staff**
      • Updates are given on a regular basis at all meetings of guidance counselors, administrators and supervisors and faculty.
      • Emphasis on new programs and plans for recruiting and awareness activities are presented at the beginning of each school year at opening meetings of faculty and support staff.
      • Brochures and media presentations are updated and distributed annually to all school system employees.
      • Brochures describing career and course sequences for each career cluster is developed and updated annually.

   B. **Informs students at the middle school and high school levels about Career Clusters and CTE programs of study in order to help them make appropriate academic and career choices**
      • The Program of Studies booklet for Western County Public Schools (WCPS) includes descriptions for all courses with special emphasis on career completer programs and the articulated agreements available for each one.
      • This booklet is distributed to all eighth graders and is also available on the WCPS website.
      • All eighth grade students visit the Career Center prior to completing the four year high school plan.
      • Students choosing a Career Center program visit the Career Center in selected programs in the 9th grade and again in the 10th grade prior to enrolling as a high school junior.
      • The Career Center staff visits all high school 10th grade English classes and in cooperation with the comprehensive high school guidance counselors, they discuss the career programs available.
      • A variety of activities are conducted throughout the middle and senior high schools including career camps, STEM initiatives, Focus on the Future, guest speakers, job shadowing, etc.

   C. **Aligns with the postsecondary system to prepare students for postsecondary education by providing college-ready assessments (Accuplacer, Compass and PSAT) to CTE students and ensuring that central office personnel are aware of college entrance criteria**
• The Program of Study booklets for Western County include the course sequences for high school through and including postsecondary training in articulated programs.

• All CTE programs with the exception of Cosmetology, have approved or in development, articulation agreements with postsecondary schools or apprenticeship training programs. The WCPS system administration will not consider any new CTE programs without this “value added” component.

• The Local Advisory Council and each Program Advisory Council includes active members from postsecondary training institutions. These members play a vital and collaborative role in assisting students to transition to the postsecondary training.

• All CCTE students take the accuplacer college assessment at the end of the 11th grade. The results are used to assist the counselor, parents and students in determining course selections for the senior year.

• Staff members have also taken the accuplacer test in order to understand the expectations for students and to improve upon academic instruction.

D. Collaborates with the postsecondary system for preparation and follow-up for students who are in need of remediation based on college-ready assessment test scores to help eliminate the need for remediation after enrollment at the community college

• With funding from an Incentive Grant, the WCPS has employed a “college coach” for the past three years.

• Local funding has been requested to continue this program.

• The college coach works with Western College staff and the public school staff to collaborate for the preparation and follow-up for students who are in need of remediation based on the college assessment tests.

• In addition to the college coach, the Tech Prep Coordinator and the Support Service Team staff work to assist students with college readiness and retention after enrolling at Western College.

E. Develops and updates articulation and/or transcripted credit agreements with its community college partner(s)

• The collaborative team consisting of the Tech Prep Coordinator, the Supervisor/Principal of CTE and the Assistant to the Dean at Western College meet on a regular basis to revise current articulation agreements and to design new ones as deemed necessary.

F. Documents, with its community college partner, CTE student’s participation in early college experiences such as dual enrollment and/or transcripted credit

• WCPS is working with the staff at Western College to gain better record keeping for students getting articulated and transcripted credit including students who are dual enrolled.

• The college coach and the Tech Prep Coordinator work to assist with this data collection.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this section is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

2. Describe the processes used by your school system to prepare students, including special populations, to successfully transition from middle school into CTE programs at the high school level and from CTE programs to further education, training and/or employment.

   Address the following in your response: How the school system:

   E. Develops and updates articulation and/or transcripted credit agreements with its community college partner(s)

   - Eastern County Public Schools (ECPS) currently has 25 articulation agreements with Eastern Community College (ECC). The articulation agreements are reviewed and updated on a yearly basis. ECC hosts an annual articulation meeting inviting ECPS faculty to represent each program. At this event ECPS and ECC faculty review each program to discuss changes and updates. Feedback from this meeting is then incorporated into the new articulation agreements.

   F. Documents, with its community college partner, CTE student’s participation in early college experiences such as dual enrollment and/or transcripted credit

   - Eastern County Public Schools and Eastern Community College document and share all data regarding student participation in early start, dual enrollment, and articulation requests. A dual-enrollment agreement has been developed between ECPS and ECC to allow high school students an opportunity to receive dual credit for college courses taken. This opportunity was offered to Evening High School students during the Spring 08 semester and was offered for the first time to all students who met the criteria during the 2008-2009 school year. Baseline data was collected for 2009 we have shown our progress on the strategy worksheets. (see Worksheet B-1 Transition) The list of approved dual credit courses is attached.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this section is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

1. Provide a description of how CTE programs are administered, and decisions are made regarding those programs, within the structure of the local school system.

A. How are CTE program improvement priorities and the elimination of performance gaps by subpopulations included within your Bridge to Excellence Master Plan? Include in your response how you will ensure that CTE students are taught to the same coherent and rigorous content aligned with challenging academic standards as are taught to all other students.

In the Bridge to Excellence Master Plan the priorities and objectives set forth in the Perkins plan are reinforced through the cross program themes and activities that support objectives for graduation from high school and community partnerships.

The following strategies are a part of the Master Plan to improve student achievement with special attention to the elimination of performance gaps by subpopulation:

- Facilitate developmentally appropriate work-based learning experiences in partnerships with local businesses, industries, agencies, and trade or labor associations.
- Maintain articulated programs between Northern County Public Schools (NCPS) and postsecondary institutions and encourage students to earn postsecondary credit during their high school program.
- Provide challenging curriculum, materials, equipment and other resources to support career and technology education programs and initiatives for all students.
- Collaborate to update technical skills and validate course and program competencies in various industries utilizing teachers, employers, trades representatives, and higher education partners, through the Local Advisory Council for Career and Technology Education and program advisory committees.
- Provide additional resources to special population students and career and technology students needing academic support.
- Provide staff development to all stakeholders on career development content and processes.
- Continue to collaborate with businesses, industries, agencies, and trade or labor associations to provide classroom speakers, facilitate work-based learning experiences, provide mock interviews, and evaluate senior projects and portfolios.
The strategies above are administered through the office of Career and Technology Education (CTE) of the Northern County Public Schools with the input of community stakeholders as noted. The CTE office is housed in the Division of Instruction in the department of Curriculum, Instruction and Staff Development and is led by a supervisor, assistant supervisor and career development coordinator. This process is described more fully on page 4 in the description of the development, implementation and evaluation of CTE programs.

NCPS works hard to support all students and help each find success. In general, connections are made throughout the instructional process to help students relate all that they learn. Core content and career and technical content are integrated to help increase rigor and provide relevance in all learning. Part of the Perkins funds is used each year to provide academic and career development support to students who are in programs at Northern County Career and Technology Center. A support team also assists special education students at that school. Prior to enrollment in any of the programs, special education students have the opportunity to participate in an assessment process of interest and skills related to the available programs in career and technology education. Students are most successful in programs for which they have interest and aptitude. Currently students who still need to pass HSA tests are provided remediation in a number of ways. Pull-out programs and extended day programs are among the options for students. These opportunities exist both at the comprehensive high schools and at Northern County Career and Technology Center.

B. What factors exist within the local school system such as support for CTE, and other local funding sources, including those that might impact services for special populations and non-traditional students, that influence and determine how Perkins funds are allocated for program improvement?

Northern County Public Schools has shown strong support for career and technology education. We are proud of our programs, students and teachers. Career and technology education is expensive, but we believe that it is an investment for the future, in workforce development and student and employer satisfaction. Statistics show the level of local support for career and technology education programs. Clearly, it is important to manage this funding carefully in working to improve our programs. The majority of the Perkins funds are spent for the purchase of equipment that will bring programs in alignment with industry standards. It is the one opportunity each year to identify and focus on one or two programs for improvement. The funding is enough to provide a significant impact for program improvement. We believe this to be the most effective way to manage the funds since the transactions are uncomplicated and straightforward. This is ideal for grant funding since it reduces our system costs in administering the grant. With good planning, there is little need for amendments and less chance to make an unintended error. Other needs such as professional development or services to support special populations can be requested through other funding sources or provided locally. The result of this method for using Perkins funds in conjunction with strong local support is strong programming that is rigorous, relevant and aligned with industry standards. These programs serve a high percentage of the secondary school population who graduate from Northern County Schools prepared for further education and careers.

3. What is the process used for keeping current with changes in industry and economic demand in your region? In your response please include the following:
A. The local advisory council and program advisory council’s role in helping you keep pace with the changes in industry and economic demand, including examples of recommendations.

The Local Advisory Council on Career and Technology Education (LAC) meets quarterly to participate in the development of annual program plans by providing advice on current job needs, local economic development and on the relevancy of the curriculum being offered in meeting such needs. This advisory group is comprised of at least one industry representative for each of our career and technology education programs, postsecondary partners, economic development representatives and chamber of commerce staff. They advise on an overall basis for the system-wide program. In addition, each program meets at least yearly with their program advisory council (PAC). These industry representatives provide specific feedback on plans for each program such as equipment needed, textbooks and curriculum.

An example of a program recommendation came from the PAC for Machine Technology. The teacher has spent considerable time recently attending meetings related to the Manufacturing, Engineering and Technology (MET) cluster. After conferring with the PAC, it was recommended that the model program being proposed for Maryland did not meet the needs of the local manufacturing employers in Northern County. This group has recommended that our program continue to offer a deeper set of technical skills to our students that will require six credits, to provide the practice and skill development that will not be possible in a four credit program, and specific equipment. One of the business partners even provided a floor plan and materials to redesign the instructional area for an upgrade of the program. Specific recommendations for new equipment were made in order to improve the program to meet industry standards and local employment needs.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this section is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

1. Provide a description of how CTE programs are administered, and decisions are made regarding those programs, within the structure of the local school system.

   A. How are CTE program improvement priorities and the elimination of performance gaps by subpopulations included within your Bridge to Excellence Master Plan? Include in your response how you will ensure that CTE students are taught to the same coherent and rigorous content aligned with challenging academic standards as are taught to all other students.

   In the 2009 Annual Progress Report for the Southwest County Public Schools (SWCPS) Master Plan, pages 101-104 address the CTE program improvement priorities and the elimination of the performance gaps by subpopulations. The CTE response is focused on the SWCPS priority to implement career clusters. This includes a full page devoted to the 2006-2008 efforts on cluster development for the Health and Bioscience cluster, as well as Information Technology, Transportation Technology, and Environmental, Agricultural and Natural Resource Systems. A section is devoted to systemic CTE efforts to improve cluster and pathway program development for all clusters. The next section connects CTE to its involvement in strategic initiatives within the county in STEM education and workforce development. Under the section “success for all students in CTE programs” the Master Plan addresses a new initiative in SWCPS, the now operational Early College Academy at Southwest Community College (SWCC) for high school students enrolled in an Information Technology course who are the first in their families to attend college. These students receive high school and college credit while attending SWCC. The second initiative is the ongoing effort to expand articulation agreements with Southwest Community College and other institutions to encourage more students to attend college.

   B. What factors exist within the local school system such as support for CTE, and other local funding sources, including those that might impact services for special populations and nontraditional students, that influence and determine how Perkins funds are allocated for program improvement?

   It is important to note these particularly strong supports for Career and Technology Education in SWCPS:

   Collaborative Career and Technology Education
Southwest County has a wealth of business and postsecondary education agencies that participate in planning with CTE and provide ongoing support through both human and fiscal resources.

i. The Executive Director of the newly formed Southwest County Business Roundtable for Education, the President of the Chamber of Commerce, and representatives from the Farm Bureau, Office of Economic Development, and Workforce Services all have representation on the CTE Advisory Council.

ii. Program Advisory Committee members and PLTW Partnership Teams advise on instructional program resource needs.

iii. Southwest Community College, Clement University, and Mt. Hood College all play collaborative roles with CTE, from jointly-funded projects that impact CTE to program advisory committees, to articulation agreements.

Personnel from the local military base and several government contractors work collaboratively with the school system and CTE to improve and upgrade programs and opportunities for students.

2. Describe the processes used by your school system to prepare students, including special populations, to successfully transition from middle school into CTE programs at the high school level and from CTE programs to further education, training and/or employment.

Address the following in your response: How the school system:

A. Provides information on CTE programs to faculty, teachers, school counselors and support staff

CTE program information is found in a variety of methods and documents. These documents include the high school and middle school course catalogs, the CTE program completer requirement booklet, and the CTE pages on the SWCPS WEB site.

The High School Course Catalog is organized by Cluster and all students are required to take three elective credits in one of the six Southwest Career Clusters. This catalog also includes a “Career Planning Tool” organized by career cluster.

B. Informs students at the middle school and high school levels about Career Clusters and CTE programs of study in order to help them make appropriate academic and career choices

The High School Course Catalog is given to all high school students and all eighth graders, which includes special population students and is also available online. The Middle School Guide is distributed to all middle school students.

C. Aligns with the postsecondary system to prepare students for postsecondary education by providing college-ready assessments (Accuplacer, Compass and PSAT) to CTE students and ensuring that central office personnel are aware of college entrance criteria

All tenth grade students, which include special population students, take the PSAT to assist in determining academic placement.

D. Collaborates with the postsecondary system for preparation and follow-up for students who are in need of remediation based on college-ready assessment test scores
scores to help eliminate the need for remediation after enrollment at the community college

Southwest County has a Collaboration Council—a joint initiative between SWCC and SWCPS—that issues collaborative grants to facilitate the secondary to post-secondary transition. As one example, the Early College Academy is a joint program developed with Collaboration Council funding to jump-start students with no family history of college attendance into college.

E. Develops and updates articulation and/or transcripted credit agreements with its community college partner(s)

SWCPS annually updates the agreements and has used Collaboration Council and CTE funds to facilitate the process.

F. Documents, with its community college partner, CTE student’s participation in early college experiences such as dual enrollment and/or transcripted credit

Within the High School Course Catalog is a section entitled “Fast Forward” that lists the courses and programs that are articulated. An application form to facilitate the process of articulated credit is included within this catalog.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this section is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

2. Describe the processes used by your school system to prepare students, including special populations, to successfully transition from middle school into CTE programs at the high school level and from CTE programs to further education, training and/or employment.

A. Provides information on CTE programs to faculty, teachers, school counselors and support staff

- Student Education Planning Guide- this booklet identifies all high school courses and programs as organized around career clusters and pathways; CTE programs are identified and described; contains six-year plan
- CTE staff present information at faculty meetings, principal meetings, counselor meetings

B. Informs students at the middle school and high school levels about Career Clusters and CTE programs of study in order to help them make appropriate academic and career choices

- Student Education Planning Guide- this booklet identifies all high school courses and programs as organized around career clusters and pathways; CTE programs are identified and described; contains six-year plan that all students are expected to complete
- North East Technical High School (NETHS) Open House- programs are explained to all 8th grade students and their parents
- Magnet Program presentations- information on all magnet programs is consolidated into one presentation provided at each high school for parents/students; information is also disseminated through public broadcasting and the Internet
- Tech Prep/CTE program brochures- brochures are developed for every articulated program and many other CTE programs and are available to all students
- Career Fair at North East Community College (NECC)-highlights local employers in each career cluster
- Embedded career information in middle school CTE curriculum and freshman seminar course
- Subscription to Choices Explorer/Bridges program in all middle and high schools
- BRAC relocation fairs and tours
Local Perspective and Program Data Analysis

Local Perspective:

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1. Provide a description of how CTE programs are administered, and decisions are made regarding those programs, within the structure of the local school system.

Middle County Public Schools (MCPS) CTE is part of the Department of Enriched and Innovative Programs that reports to the Office of Curriculum and Instructional Programs which is administered by the Office of the Deputy Superintendent of Schools. CTE decisions are made in collaboration with the Office of Curriculum and Instructional Programs and are aligned to the MCPS vision, mission, goals, and measures.

The MCPS CTE staff collaborates with supervisors of English, Mathematics, Science, Social Studies, and Fine Arts to ensure that programs relate directly to High School Assessments (HSAs) and core curriculum as appropriate.

A. How are CTE program improvement priorities and the elimination of performance gaps by subpopulations included within your Bridge to Excellence Master Plan?

The MCPS Strategic Plan for 2009–2014, Our Call to Action: Pursuit of Excellence, is aligned to the Bridge to Excellence Master Plan. The following table lists several examples from the MCPS strategic plan that address CTE program initiatives and the elimination of performance gaps by subpopulations.

<table>
<thead>
<tr>
<th>MSDE Bridge to Excellence (BTE) Goals</th>
<th>MCPS Call to Action Goals (2009–2014)</th>
<th>CTE Measures/Data Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. By 2013–2014, all students will reach high standards, at a minimum attaining proficiency or better in reading/language arts and mathematics.</td>
<td>• Ensure success for every student. • Provide an effective instructional program.</td>
<td>• CPP completion rate • Dual completion rate • High School Assessment (HSA) pass rate • Credentialing pass rate • Student graduation rate • Student dropout rate • GPA and grade distribution • The percentage of students recommended for remedial work at MC</td>
</tr>
</tbody>
</table>

*** Note: This chart will be included as an appendix in the web-based plan. ***
<table>
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<tr>
<th><strong>MSDE BTE Goals</strong></th>
<th><strong>MCPS Call to Action Goals (2009–2014)</strong></th>
<th><strong>CTE Measures/Data Points</strong></th>
</tr>
</thead>
</table>
| 2. All limited English proficient students will become proficient in English and reach high academic standards, at a minimum attaining proficiency or better in reading/language arts and mathematics. | • Ensure success for every student.  
• Provide an effective instructional program.  
• Strengthen productive partnerships for education | • Student graduation rate  
• HSA pass rate  
• Credentialing pass rate  
• Enrollment in smaller learning communities/CPPs/career academies  
• Parent and student satisfaction survey results  
• Participation in MCPS MCCB and CABs |
| 3. By 2005–2006, all students will be taught by highly-qualified teachers. | • Ensure success for every student.  
• Provide an effective instructional program. | Completed |
| 4. All students will be educated in learning environments that are safe, drug-free, and conducive to learning. | • Ensure success for every student.  
• Provide an effective instructional program. | • Student satisfaction survey results  
• Number of incident reports  
• Suspension rate |
| 5. All students will graduate from high school. | • Ensure success for every student.  
• Provide an effective instructional program.  
• Strengthen productive partnerships for education | • See data points from BTE Goals 1 and 2. |
| 1. By 2013–2014, all students will reach high standards, at a minimum attaining proficiency or better in reading/language arts and mathematics. | • Ensure success for every student.  
• Provide an effective instructional program. | • CPP completion rate  
• Dual completion rate  
• High School Assessment (HSA) pass rate  
• Credentialing pass rate  
• Student graduation rate  
• Student dropout rate  
• GPA and grade distribution  
• The percentage of students recommended for remedial work at MC |

***Note: This chart will be included as an appendix in the web-based plan.***
2. Describe the processes used by your school system to prepare students, including special populations, to successfully transition from middle school into CTE programs at the high school level and from CTE programs to further education, training and/or employment.

Address the following in your response: How the school system:

A. Provides information on CTE programs to faculty, teachers, school counselors and support staff

MCPS CTE staff provides information about CTE CPPs to all school-based staff in a number of ways including leadership and professional development, the CTE Web site and related online outreach tools.

The publication that was developed for the primary purpose of assisting staff in helping students access a CTE Career Pathway Program (CPP) is the College Tech Prep Career Pathways Toolkit for middle and high school staff. This comprehensive resource was created and compiled by the MCPS Tech Prep coordinator to provide a systemic approach to helping each student, including special populations, achieve a successful transition from high school to college and careers. MCPS staff members receive the toolkit when they attend interactive professional development to ensure they understand and know how to use the resources provided. The toolkit supports Standard 3, Indicators A-4 and A-5 of the Career Development Framework.

In FY 2007, the Maryland Career Development Framework was cross-referenced with the MCPS counseling policy, regulation, and standards to help counselors and teachers easily determine correlations, emphases, and instructional implications. The format of the toolkit was revised and the information was updated in FY 2008. A one-page document for each MCPS CPP and its corresponding program at Middle County College (MCC) was created to provide a concise overview of the seamless transitions that are available for students from MCPS to MCC. See Attachment B for a sample page from the toolkit. Courses for which MCPS students receive articulated college credit at MC are indicated in the red/pink color.

In addition to the MCPS School Counseling Programs and Services Policy, related regulations, and the Counseling Student Standards, the toolkit includes the Maryland Career Development Framework. The framework is followed by one section for each of the 11 MCPS career clusters. Detailed in each of these cluster sections is a career arrow graphic that illustrates various career paths from high school through post-baccalaureate studies. See Attachment C for a sample career arrow. The one-page document provided in Attachment B includes a description of each MCPS CPP, and required courses for program completion. Also included are the corresponding articulation agreements with the necessary forms to complete the articulation process and a description of MCC’s corresponding programs and related requirements.

The final section of the toolkit contains a summary of MCPS schools offering the various programs as well as contacts for more information at both MCPS and MCC. The toolkit is a well-received resource that has been distributed in hard copy to administrators, school counselors, English for Speakers of Other Languages (ESOL), CTE resource teachers, and classroom teachers in every middle and high school in addition to supervisory MCPS and MCC staff.
B. Informs students at the middle school and high school levels about Career Clusters and CTE programs of study in order to help them make appropriate academic and career choices

The following are two examples of how students at the middle and high school levels are informed about career clusters and CTE programs of study:

- Plans for FY 2011 include an extension of the toolkit to further market CTE CPPs to all middle and high school students. A cluster-specific, student-focused two-sided publication will be created for each CPP by the MCPS Tech Prep coordinator. Each career cluster publication will contain specific information about the CPPs that include pertinent details related to articulation, rigor and relevance, and career opportunities. There will be a detachable fold-out card for students or parents to request more information related to any CPP. Middle and high schools will be given copies of the publications (which also will be available in Spanish) for the CPPs that are provided at their respective schools or feeder middle schools. These will be distributed to students and parents as recruitment tools with an emphasis on underrepresented populations within nontraditional CPPs.

- To further publicize postsecondary opportunities, a brochure entitled, *College Articulation Agreements for MCPS Students*, was created during FY 2008 by the MCPS Tech Prep coordinator. (See Attachment E.) The contents of this brochure include a description of the career cluster model, a definition of articulation and its guiding principles, an explanation of the benefits of articulating college Tech Prep credits, the procedure to articulate college credits with MCC, a listing of the available articulation agreements with their associated MCPS and MCC courses by career cluster, and a sample articulation credit award form. The brochure will be revised and updated annually to reflect the current status of all articulation agreements. This brochure is mailed to the homes of students in Grades 7 and 8. Additional copies are distributed to central office staff as well as each middle and high school so that counselors and teachers can share the information with students. Counselors, recruiters, and teaching faculty at MCC also receive copies of the articulation brochure to share with students.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this Worksheet is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

2. Describe the processes used by your school system to prepare students, including special populations, to successfully transition from middle school into CTE programs at the high school level and from CTE programs to further education, training and/or employment.

Address the following in your response: How the school system:

A. Provides information on CTE programs to faculty, teachers, school counselors and support staff

Information on CTE programs of study is made available to all students, faculty, teachers, counselors and support staff through the Administrative Procedure 6150. This handbook provides a brief description of programs of study along with course requirements. The Office of Career and Technology further recognizes the need to further educate the broader community on the availability and benefits of CTE programs within Central County Public Schools (CCPS). Therefore, a communication plan will be implemented to include the revitalization of website, publishing of brochures for each career cluster, quarterly newsletters, and promotion of programs at both the middle and high school levels.

B. Informs students at the middle school and high school levels about Career Clusters and CTE programs of study in order to help them make appropriate academic and career choices

The Office of Career and Technical Education and the Department of Professional Counselors will collaborate to establish a career advisement system starting at the middle school level to assist students with their academic and career decision making process. The career advisement system will introduce students to career clusters and programs of study through the development of the Individual Learning Plans (ILP). While this tool is already accessible to students, CTE teachers and Counselors have not determined how to make this process serve the needs of both entities. It is anticipated that ILPs will be reviewed on an annual basis throughout high school to ensure they remain up-to-date. There is also a recognized need for a more integrated career assessment tool that could be used as a linkage between middle and high school transition. This information will be used to further assist students in course selection and career decision making process.

C. Aligns with the postsecondary system to prepare students for postsecondary education by providing college-ready assessments (Accuplacer, Compass and PSAT) to CTE students and ensuring that central office personnel are aware of college entrance criteria
Goals 5 and 7 of the Master Plan describe CCPS’ strategies to use college-ready assessments in preparing students to make a successful transition into post-secondary education. For instance, Goal 5 indicates that “All students will graduate from high school prepared for post-secondary education”. Objective 5.2 of the plan advocates for an annual increase in students meeting high graduation requirements. CCPS is committed to provide a continuum of programs and interventions aligned with the Maryland Content Standards and Core Learning Goals to prepare students to pass the high school assessments. Goal 7 indicates that CCPS will strengthen relationships with family, schools, business, community, and institutions of higher education to support improved student achievement. This goal advocates for increased opportunities for dual-enrollment courses at the secondary level. The school district is committed to increase the number of student support activities to promote enrollment in PSAT, SAT, AP, IB, CTE Programs, and college requirements by 100%. CTE staff will ensure CTE students are directed and encouraged to participate in all available college-ready assessment activities provided by CCPS. As such, the existing college-ready assessment consists of the following initiatives:

1) Increased Advanced Placement offerings in all high schools—CTE will support advanced placement programs by providing instructional assistance in all CTE classrooms.

2) The PSAT is coordinated through the CCPS Department of Test Administration. Through College Board Testing, the PSAT or National Merit Scholarship Qualifying Test (NMSQT) is provided for CTE concentrators and completers preparing to take the SAT II or SAT I. CCPS incurs the cost for students taking the PSAT test.

3) SAT Prep is offered through CCPS’ Cable TV Channel. Through this medium CTE students can improve their scores by learning to work the types of problems on the test. SAT Prep for the math and verbal sections of the SAT is offered at various times TV. SAT preparation courses are also available to students during the regular school year.

D. **Collaborates with the postsecondary system for preparation and follow-up for students who are in need of remediation based on college-ready assessment test scores to help eliminate the need for remediation after enrollment at the community college**

CCPS uses a variety of strategies to prepare and follow-up with students who are in need of remediation based on college-ready assessment test scores to help eliminate the need for remediation after enrollment at the community college. Those strategies are as follows:

1) Accuplacer is used to determine the strengths and weaknesses of students applying to Central Community College. Students identified in CTE programs will be administered the Accuplacer exam to determine the academic strengths and needs. Those students scoring below proficient levels will participate in various interventions (i.e. summer enrichment programs) to develop academic skills.

2) Extended Learning Opportunities (ELOs) -- ELOs offer after school and Saturday classes that provide targeted instruction in core academic areas, as well
as enrichment opportunities in CTE to prepare students for postsecondary experiences. ELO programs reflect the collaboration between school system and community-based partners.

3) Twilight and Saturday School -- These initiatives provide an extended learning opportunity for students who need added support to successfully pass the HSAs and academic courses. These programs create an opportunity for students to graduate from high school on time.

E. Develops and updates articulation and/or transcripted credit agreements with its community college partner(s)

CCPS established the Office of Post-Secondary Partnerships to assist in the development and renewal of articulation and/or transcript credit agreements on a system-wide level. CTE is collaborating with this office to review and discuss procedures for renewal of outdated agreements. CTE currently has 12 articulation agreements in place and 4 additional are pending approval. The agreements are updated annually. The intent is to use articulation agreements to align as many programs as possible with Prince George’s Community College, Montgomery College, Towson University, and Community College of Baltimore County.

F. Documents, with its community college partner, CTE student’s participation in early college experiences such as dual enrollment and/or transcripted credit

(How does CCPS document student receipt of dual enrollment and/or transcript credit?)

According to Administrative Procedure 6150, CCPS affords students the opportunity for concurrent enrollment with a post-secondary institution. As such, a student may apply credit earned in college courses toward elective high school graduation requirements. To do this, the following procedures must be followed:

1) The high school principal must approve all requests prior to student enrollment in a college course.
2) The student, parent/guardian, counselor, and principal must sign the Concurrent Enrollment Form PS-109, Request for Concurrent Course Enrollment Form.
3) In order to apply college credit towards high school credit, the college (content, not title) must be different from courses available at the student’s home school. The student will be responsible for submitting a copy of the course outline or syllabus to the Chief Academic Officer.
4) Supervisory staff will assist in recommending whether such college courses meet state criteria for application towards fine arts or Certificate of Merit credit on a course-by-course basis. The student will be responsible for submitting a copy of the course outline or syllabus to the Chief Academic Officer.
5) The student is responsible for requesting that the college records office send an official college transcript to the principal at his/her home school immediately upon completion of course.
6) A student will earn one-half (.50) high school credit per semester, per college course, no matter how many credits the college rewards.
7) A student may earn a maximum of two high school credits per year, including summers, through college course work.
8) In recognition that the conditions presented above may not be appropriate for particularly exceptional students, a request for exemption from any of these
conditions may be made in advance of enrollment in a college course. The exemption must be requested in writing and approved by the high school principal and the Director of Curriculum and Instruction.

9) The grade earned from course(s) taken at institution for higher learning will be included in the computation of the high school grade point average.
Local Perspective and Program Data Analysis

Local Perspective:

The purpose of this Worksheet is to provide the reviewers with an understanding of how CTE is organized and funds allocated within your school system. In addition, responses to the data analysis questions should inform the readers on current and planned program improvement based on an analysis of the data. Programs referenced in the responses should be included in the Five-Year Planned Program Improvement Chart and strategy worksheets. Responses to the questions should provide a clear picture of CTE in your system, the current status, strengths, and opportunities for improvement. Include the responses with the local CTE Plan for Improvement submission.

1. Provide a description of how CTE programs are administered, and decisions are made regarding those programs, within the structure of the local school system.

B. What factors exist within the local school system such as support for CTE, and other local funding sources, including those that might impact services for special populations and non-traditional students, that influence and determine how Perkins funds are allocated for program improvement?

The Northwest County Public School (NWCPS) Career and Technology programs receive outstanding support from our local Superintendent, local Assistant Superintendents, local Directors, and Central Office Staff. An example of this support can be seen this year in the manner in which the Supervisor was enabled to convert the existing method (using a variety of CTE courses) for students to achieve the Technology Literacy graduation requirement to the requirement for all students to take the Foundations of Technology (FOT) course or the Principles of Engineering course. This was accomplished through the hiring of five new staff members and the support for training a total of eleven staff members in the FOT curriculum. In addition, the supervisor was permitted to spend an additional $675,000 in new money to purchase equipment, furniture, re-fit classrooms, and purchase support materials and textbooks for the FOT program. The charge to the supervisor was to accomplish the addition of this program without impacting NWCPS’ ability to offer broad variety of pathways for all students.

In addition, several of our Program Advisory Councils developed ways to raise funds for some of our Academy students to attend additional opportunities and competitions beyond the school day. For example, our Local Advisory Council for the Northwest County Technical High School petitioned our Superintendent, through the supervisor, to provide financial assistance for the twelve students to attend the National Skills USA program this summer. While they had raised some funds they were not able to raise enough to fund all twelve students and the advisors for each Skill Area, to attend. The Superintendent directed the Supervisor and Assistant Superintendent to seek funds within the current budget to support this effort.

The above are two examples of the local system going above and beyond to support CTE programs in order to permit these changes in programs to proceed. Therefore, NWCPS was permitted to develop a Perkins spending plan to fund...
new initiatives, changes to existing programs to upgrade the quality of the pro-
gram spend money to publicize programs to attract additional student enroll-
ments (including increased emphasis on recruitment of non-traditional and spe-
cial populations), and support instructor and staff professional development in 
anticipation of pending changes in the overall Career Cluster Pathways plan.

Finally, the LSS Director of High Schools has agreed to place the position of 
VSST coordinator at the NWCTHS into his budget for the FY ’11 school year. 
This will free up anticipated Perkins funds for future program improvement.
Program Data Analysis:

3. Using the Program Quality Index, review program concentrator numbers in comparison with completion numbers, and provide an explanation of the current ratio (top three and lowest three). What strategies will be or are in place to increase the number of completers?

- An examination of enrollment trends for Western County indicates that enrollment in CTE programs by cluster has increased or remained consistent. This is a true accomplishment as Western County Public Schools (WCPS) continue to decrease in overall student population.
- The enrollment data for cooperative education showed a significant drop from 2007 to 2008, and 2008 to 2009. This is a result of the change in Maryland Graduation requirements for seniors. The school system eliminated this program for the 2009-10 school year.
- The majority of CTE completer programs remain at the Center for Career and Technical Education. The percentage of the student population choosing to enroll in the Career Center programs is relatively high and remains consistent. The current senior enrollment “spiked”. A chart with the enrollment trends at the Career Center is attached.
- The business/community involvement within the CTE programs is the main reason for the increase and/or maintenance of the students choosing to take a CTE pathway to graduation.
- The Career Center guidance counselor meets with counselors at the middle and senior high schools on a regular basis. They are included in all updates on CTE programs. In addition, their input is requested as career awareness activities are planned and implemented for the CTE programs.
- Guidance counselors and comprehensive high school teachers accompany students during visits to the Career Center. The knowledge gained through these visitations is crucial as these staff members work with students on choosing career pathways.

4. Using the PQI and local data, describe the effectiveness of local CTE programs in preparing students, including special populations and non-traditional students, for careers in high skill, high wage and high demand occupations, non-traditional fields, and postsecondary success. Include the following in your response:

A. Along with Perkins outcome data, what other criteria are used to determine if programs are exemplary and if students are performing well?

- In addition to the Perkins outcome data, WCPS staff conducts a graduate follow-up on all completers of approved programs at the Career Center. Skill instructors are responsible for making contact with each student during the spring semester following graduation. Information is recorded and used for program improvement.
- Another data collection on individual students at the Career Center is completed by the VSST personnel. Information on incoming students for academic and technical attainment, attendance, school suspensions is compiled and compared to their progress during the second year in the program.
- Business and industry partners serve on the Program Advisory Committees and constantly provide verbal evaluations of students hired by their respective industries.
B. Based on the data, what programs have made the most significant gains (e.g. completion, student performance)? Identify reasons as to why this occurred and how these successes could be used as models for other low performing programs.

- Improvement is occurring and/or being maintained in: Health Occupations, Law Enforcement, Electrical and Auto Tech. This is based on the analysis of local data gathered by the CTE staff and the PQI data. This success is due to teachers participating in quality staff development and the implementation of some of the new Program of Studies developed by MSDE.
- In addition, all of these programs have business community partnerships, including articulated agreements, with active participation on the Program Advisory Committees.
- All of these programs can be used as model programs for the CTE programs at the Center for Career & Technical Education.
Program Data Analysis:

1. How accurate are the following: (1) data collections process, (2) List A, (3) designation of concentrator and completer and (4) designation of technical skill attainment by program? If these data points are not accurate, what process will be put in place to ensure accurate data collection?

   - Ensuring the accuracy of data has been a priority this year. The office of CTE has worked closely with both the Division of Technology and the office of student data-SASI to ensure accuracy.
     1) We have worked to improve the process of data collection and reporting by reviewing the program design for each completer. Several errors were identified and corrected.
     2) Currently List A is accurate with the exception of one school number; we are in the process of correcting that. However, ECPS does plan to focus on updating several programs and will be submitting program of study proposals during the 2010-2011 school year.
     3) All course files in the database have been updated to ensure the accuracy of concentrator and completer designation for each course.
     4) ECPS is working to add a field (in the student file of the database) to address the need to keep accurate records of technical skill attainment as measured by the Perkins IV law.
Program Data Analysis:

3. Using the Program Quality Index, review program concentrator numbers in comparison with completion numbers, and provide an explanation of the current ratio (top three and lowest three). What strategies will be or are in place to increase the number of completers?

After using the PQI to review concentrators and completers, the top three performing programs were Early Childhood Education, Cabinet Making, and PLTW. With respect to concentrators compared to completers, Early Childhood Education had a performance level of 76.30% with 135 concentrators and 103 completers. Cabinet Making had a performance level of 92.86% with 14 concentrators 13 completers. Project Lead the Way, had a performance of 100.00% with 7 concentrators and 7 completers.

The success of these programs can be attributed to a few variables. Several programs received program upgrades which included new curriculums, equipment, and supplies. Another variable that can be attributed to the success of these programs was a work-based experience. Students received relevant experience in their areas of study.

With respect to concentrators compared to completers, the lowest performing programs were Criminal Justice, Electronics, and Maryland Teacher Academy. Criminal Justice had a performance level of 51.46% with 103 concentrators and 53 completers. The Maryland Teacher Academy had a performance level of 42.86% with 7 concentrators and 3 completers. Computer Installer and Repairer had a performance level of 14.29% with 7 concentrators and 1 completer.

To increase the success of the lowest performing programs, NCPS has eliminated the Criminal Justice program and has upgraded it to the new model Law and Leadership Program. The Maryland Teacher Academy program is located in two schools, Western and Southside Academy; however students and parents are not aware of the program at Southside Academy. We need to increase awareness of both program locations in hopes of attracting more students.

4. Using the PQI and local data, describe the effectiveness of local CTE programs in preparing students, including special populations and non-traditional students, for careers in high skill, high wage and high demand occupations, non-traditional fields, and postsecondary success. Include the following in your response:

B. Based on the data, what programs have made the most significant gains (e.g. completion, student performance)? Identify reasons as to why this occurred and how these successes could be used as models for other low performing programs.

According to the LPAR, 78.19% of NCPSS completers enter either postsecondary education, employment or the military; special needs students have a placement rate of 66.67%. Increased work based learning opportunities for all students, including special populations and non-traditional students, will help to increase the placement rate.

In addition to Perkins outcome data, we used the work-based learning data report to determine if programs are exemplary and if students, including special populations, are properly prepared in their areas of study. There were 242 students who participated in either an internship, mentorship, general coop work experience or a capstone coop work experience. There were 60 students from Health and Biosciences, 49 students in Human
Resources, 40 students in Consumer Services, Hospitality and Tourism, and 33 students in Business Management Finance that participated in a work-based experience.

Employers were asked to complete surveys about interns. Overall, business partners were pleased with the performance of NCPS students with respect to their job performance and their ability to make critical decisions, use technology, and work effectively with others.

Another indication of an exemplary program is a program that has students who sit for and pass industry certifications. Certification has become an important career credential for students. For employers, certification serves as a means of validating expertise and attracting the most qualified individuals.

**Significant Gains**

The programs that achieved significant increases in Academic Attainment from 2008 to 2009 were Early Childhood, Baking and Pastry, and Media Production. Early Childhood Education increased its performance percentage from 15.63% in 2008 to 87.32% in 2009, Baking and Pastry increased its performance by 58.10 percentage points, and Media Production increased its performance by 49.90 percentage points.

The only program that achieved significant increases in Skill Proficiencies from 2008 to 2009 was Early Childhood Education. This particular program increased from 40.63% in 2008 to 76.98% in 2009.

The programs that achieved significant increases in Program Completion from 2008 to 2009 were Early Childhood Education and Media Production. Early Childhood Education increased its performance percentage from 40.70% in 2008 to 93.33% in 2009. Media Production increased its performance percentage from 66.67% in 2008 to 89.29% in 2009.

The programs that achieved significant increases in Program Placement from 2008 to 2009 were Electrical Construction, Plumbing, and Baking. From 2008 to 2009, Electrical Construction increased its performance from 68.75% in 2008 to 90.00% in 2009, Plumbing increased its performance from 62.50% in 2008 to 100.00% in 2009, and Baking increased its performance from 56.25% in 2008 to 90.00% in 2009.

The success of these programs may be attributed to few different variables. Several programs were closed in low performing schools. Teachers were provided with professional development training and this in turn allowed the high performing programs to focus on properly preparing students in their areas of study. Another reason for significant gains was programs upgrades. Many programs received new curriculums, equipment, and supplies.
Program Data Analysis:

3. **Using the Program Quality Index, review program concentrator numbers in comparison with completion numbers, and provide an explanation of the current ratio (top three and lowest three). What strategies will be or are in place to increase the number of completers?**

- All programs had 100% completion except Food Production and Management (FPM) (91.67%), Computer Programming (91.94%), and Early Childhood Education (ECE) (92.24%).
- Explanation: students are often placed in FPM and ECE programs as a means to meet graduation requirements. They are often struggling academically and do not graduate. As the typical student who enrolls in the Computer Programming program is successful academically, we know of no reason why they would not graduate. The only explanation is that students are being incorrectly captured in this program data.
- Strategies to improve: NCPS just upgraded to the ProStart foods program, to be implemented fall 2010. This should raise the academic and technical expectations of students. In addition, during the 2010-2011 school year, all students will be required to meet the new local graduation requirements of a fourth math credit and four courses in a career pathway. Systemic intervention programs are in place to help all students be successful on HSAs.

4. **Using the PQI and local data, describe the effectiveness of local CTE programs in preparing students, including special populations and non-traditional students, for careers in high skill, high wage and high demand occupations, non-traditional fields, and postsecondary success. Include the following in your response:**

   B. **Based on the data, what programs have made the most significant gains (e.g. completion, student performance)? Identify reasons as to why this occurred and how these successes could be used as models for other low performing programs.**

- Best programs: Health Occupations, Computer Programming, Computer and Networking Technology, Printing and Graphic Communication, CADD—all of these programs were high on 1S1, 1S2, and graduation rate. Some were also high on rigorous math and science. These programs appeal to students with higher academic abilities so they are being successful on the HSAs. We need to upgrade low performing programs to appeal to higher academic students or provide support (curriculum accommodations/modifications and/or systemic intervention programs) for struggling students.
## Secondary Technical Skills Proficiencies Exams
### Core Indicator of Performance (2S1)

**Instructions:** The purpose of this chart is to record information on the technical assessments that are available to students, to determine how many students take and pass each assessment on an annual basis. The number of students taking each assessment is optional, but the number passing is to be recorded in column 4. Column 5 is to be used to identify strategies to increase the number of technical assessments available, and to accurately determine which students are taking technical assessments before leaving high school. As this form is updated annually, the goal is to collect data on the number of students taking assessments in addition to having a higher number of students passing assessments.

<table>
<thead>
<tr>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster</td>
<td>Maryland CTE Programs of Study</td>
<td>Name of Industry or National Assessment Options</td>
<td>Number of Students Taking/ Passing Assessment 2008</td>
<td>Number of Students Taking/ Passing Assessment 2009</td>
</tr>
<tr>
<td>Arts, Media &amp; Communication</td>
<td>Printing Technologies (PrintED)</td>
<td>PrintED Certification based on scores in industry based end-of-course exams.</td>
<td>n/a</td>
<td>Introduction to Graphic Communications 21/16</td>
</tr>
<tr>
<td>Interactive Media Production (IMP)</td>
<td>Adobe Creative Suite Including: Adobe Certified Associate (ACA) and Adobe Certified Expert (ACE) World Organization of Webmasters (WOW) Web Designer, Webmaster &amp; Web Developer (Apprentice and Associate Levels)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
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<td>1</td>
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<td>Cluster</td>
<td>Maryland CTE Programs of Study</td>
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<td>Number of Students Taking/ Passing Assessment 2008</td>
<td>Number of Students Taking/ Passing Assessment 2009</td>
</tr>
<tr>
<td><strong>Business Management &amp; Finance</strong></td>
<td>Finance Academy (NAF)</td>
<td>N/A -- program includes emphasis on dual enrollment in college course during senior year</td>
<td>n/a</td>
<td>n/a</td>
</tr>
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<td></td>
<td>Business Management</td>
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<td>0 21/18</td>
<td>0 (exam upcoming)</td>
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<td>Finance and Accounting</td>
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<td>Marketing</td>
<td>Microsoft Offices Suite (MOS) CLEP Exam</td>
<td></td>
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<tr>
<td></td>
<td>Administrative Services</td>
<td>Microsoft Office Suite/Excel (X-MOS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Construction &amp; Development</strong></td>
<td>Construction Trades</td>
<td>National Center for Career Education – (NCCER)</td>
<td>NCCT Carpentry 17/7 NCCT Electrical 11/5 NCCT Masonry 9/3</td>
<td>NCCT Carpentry 19/11 NCCT Electrical 13/7 NCCT Masonry 10/3</td>
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<td>Carpenter</td>
<td>National Center for Career Education – (NCCER)</td>
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<td></td>
<td></td>
<td>Electrical</td>
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<td></td>
<td>Masonry</td>
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<td>Construction Trades Building Maintenance</td>
<td>National Center for Career Education – (NCCER)</td>
<td>NCCT HVAC 18/8 NCCT Welding 14/0 NCCT CORE 9/3</td>
<td>NCCT HVAC 20/2 NCCT Welding 18/8 NCCT CORE 6/6</td>
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<td>Name of Industry or National Assessment Options</td>
<td>Number of Students Taking/Passing Assessment 2008</td>
<td>Number of Students Taking/Passing Assessment 2009</td>
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<td>Consumer Services, Hospitality &amp; Tourism</td>
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<td>ServSafe and NRAEF Certificate of Completion</td>
<td>n/a</td>
<td>n/a</td>
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<td></td>
<td>Culinary Arts</td>
<td>Program must be accredited by the American Culinary Federation (ACF)</td>
<td>n/a</td>
<td>n/a</td>
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<td>Lodging Management Program</td>
<td>Certified Rooms Division Specialist (CRDS)</td>
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<td>(exam upcoming)</td>
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<td>MD State Board of Barbers License</td>
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<td>n/a</td>
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<td>Certified Professional Horticulturalist Exam</td>
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<td>n/a</td>
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<td>Health &amp; Biosciences</td>
<td>Health Occupations</td>
<td>Certified Nursing Assistant (CNA) CPR Basic Life Support—Health Care Provider</td>
<td>58/58</td>
<td>66/66</td>
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<td></td>
<td></td>
<td>Geriatric Nursing Assistant (GNA) Written—9/9 Skills—9/8</td>
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<td>66/66</td>
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<td>Cluster</td>
<td>Maryland CTE Programs of Study</td>
<td>Name of Industry or National Assessment Options</td>
<td>Number of Students Taking/ Passing Assessment 2008</td>
<td>Number of Students Taking/ Passing Assessment 2009</td>
</tr>
<tr>
<td>Human Resource Services</td>
<td>Fire Science (MFRI)</td>
<td>- EMT-B, Fire Fighter I/II, Rescue Tech, Confined Space, Haz-Mat Operations - CPR</td>
<td>EMT-B 10/4 EMT-B 12/12</td>
<td>FFI 10/10 FFI 12/12</td>
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<td>Teacher Academy of Maryland Early Childhood Education</td>
<td>ParaPro</td>
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<td>17/17</td>
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<td>Homeland Security &amp; Emergency Preparedness</td>
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<td>Information Technology</td>
<td>Database Academy (Oracle)</td>
<td>- Oracle Certified Associate I - Oracle Certified Associate II</td>
<td>n/a</td>
<td>n/a</td>
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<td></td>
<td>Cisco</td>
<td>- Cisco Certified Entry Networking Technician - Cisco Certified Network Associate (CCNA) - Cisco Certified Network Professional (CCNP)</td>
<td>no available information</td>
<td>no available information</td>
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<td></td>
<td>Cluster</td>
<td>Name of Industry or National Assessment Options</td>
<td>Number of Students Taking/ Passing Assessment 2008</td>
<td>Number of Students Taking/ Passing Assessment 2009</td>
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<td>Management, Engineering &amp; Technology</td>
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<td>POE 43/42</td>
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<td>Transcribed Credit with the University of Maryland Baltimore County based on test scores and review of student portfolio or Rochester Institute of Technology (RIT) based on test scores</td>
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<td>IED 43/42</td>
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<td>DE 29/25</td>
<td>DE 27/20</td>
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<td></td>
<td>CIM 31/30</td>
<td>CIM 46/46</td>
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<td>Transportation Technologies</td>
<td>Automotive Technology Education Foundation (NATEF) or Automotive Youth Education Systems (AYES) for programs who are AYES affiliated</td>
<td>AYES Brakes 45/31</td>
<td>AYES Brakes 48/39</td>
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<td></td>
<td></td>
<td>Elect./Electronics 45/30</td>
<td>Elect. Electronics 48/35</td>
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<td></td>
<td></td>
<td>Engine Perf. 45/26</td>
<td>Engine Perf. 48/32</td>
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<td></td>
<td>Suspension/Steer. 45/33</td>
<td>Suspension/Steer. 48/36</td>
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<td></td>
<td></td>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Auto Body/Collision Repair Technician</td>
<td>NATEF (first course exam will be ready for administration Sp ’08)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Medium-Heavy Truck</td>
<td>None available at this time</td>
<td></td>
<td></td>
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<td>3</td>
<td>Cooperative Education</td>
<td>Career Research &amp; Development</td>
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<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None available at this time</td>
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</tbody>
</table>
Secondary Technical Skills Proficiencies Exams
Core Indicator of Performance (2S1)

**Instructions:** The purpose of this chart is to record baseline information on the technical assessments that are available to students, to determine how many students take and pass each assessment on an annual basis. The number of students taking each assessment is optional, but the number passing is to be recorded in column 4. Column 5 is to be used to identify strategies to increase the number of technical assessments available, and to accurately determine which students are taking technical assessments before leaving high school. As this form is updated annually, the goal is to collect data on the number of students taking assessments in addition to having a higher number of students passing assessments.

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<th>Cluster</th>
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<th>Name of Industry or National Assessment Options</th>
<th>Number of Students Taking Assessment 2008</th>
<th>Number of Students Passing Assessment 2008 (May Be Self Reported)</th>
<th>Action to be Taken in FY ’10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, Media &amp; Communication</td>
<td>Printing Technologies (PrintED)</td>
<td>PrintED Certification based on test scores in industry based end-of-course exams.</td>
<td></td>
<td></td>
<td>Upgrade program to include PrintED exam</td>
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<td></td>
<td>Interactive Media Production (IMP)</td>
<td>Adobe Creative Suite Including: Adobe Certified Associate (ACA) and Adobe Certified Expert (ACE)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>World Organization of Webmasters (WOW) Web Designer, Webmaster &amp; Web Developer (Apprentice and Associate Levels)</td>
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<tr>
<td>Business Management &amp; Finance</td>
<td>Finance Academy (NAF)</td>
<td>N/A – program includes emphasis on dual enrollment in college course during senior year</td>
<td></td>
<td></td>
<td>Establish baseline data on # of students taking and passing MOS exams</td>
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<td>Business Management</td>
<td>Microsoft Offices Suite (MOS)</td>
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<td>Finance and Accounting</td>
<td>Microsoft Offices Suite (MOS)</td>
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<td>Marketing</td>
<td>Microsoft Offices Suite (MOS)</td>
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<td>Administrative Services</td>
<td>Microsoft Office Suite/Excel (X-MOS)</td>
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<td>Cluster</td>
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<td>Action to be Taken in FY '10</td>
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<td><strong>Construction &amp; Development</strong></td>
<td>Construction Trades</td>
<td>National Center for Career and Education – (NCCER)</td>
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<tr>
<td></td>
<td>Construction Trades Building Maintenance</td>
<td>National Center for Career and Education – (NCCER)</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Consumer Services, Hospitality &amp; Tourism</strong></td>
<td>Food &amp; Beverage Management (ProStart)</td>
<td>ServSafe and NRAEF Certificate of Completion</td>
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<tr>
<td></td>
<td>Culinary Arts</td>
<td>Program must be accredited by the American Culinary Federation (ACF)</td>
<td></td>
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</tr>
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<td></td>
<td>Lodging Management Program</td>
<td>Certified Rooms Division Specialist (CRDS)</td>
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<td></td>
<td>Careers in Cosmetology</td>
<td>MD State Board of Cosmetologist License</td>
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<td>Barbering</td>
<td>MD State Board of Barbers License</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Environmental, Agricultural &amp; Natural Resources</strong></td>
<td>Certified Professional Horticulturist (CHP)</td>
<td>Certified Professional Horticulturalist Exam</td>
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<td><strong>Health &amp; Biosciences</strong></td>
<td>Health Occupations</td>
<td>Certified Nursing Assistant (CNA)</td>
<td>23</td>
<td>23</td>
<td>Increase # of students passing CNA/GNA exams</td>
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<td></td>
<td>Geriatric Nursing Assistant (GNA)</td>
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<td>23 written 20 skills</td>
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<td><strong>Human Resource Services</strong></td>
<td>Fire Science (MFRI)</td>
<td>- EMT-B, Fire Fighter I/II, Rescue Tech, Confined Space, Haz-Mat Operations - CPR</td>
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<td>Establish baseline data on # of students taking and passing MFRI exams First students in program to take exams (ParaPro and STARS)</td>
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<td>Teacher Academy of Maryland</td>
<td>ParaPro</td>
<td></td>
<td></td>
<td></td>
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<td>Cluster</td>
<td>Maryland CTE Programs of Study</td>
<td>Name of Industry or National Assessment Options</td>
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<td>Action to be Taken in FY ‘10</td>
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<td>------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
| Information Technology                   | Database Academy (Oracle)                | - Oracle Certified Associate I  
- Oracle Certified Associate II  
- Cisco Certified Entry Networking Technician  
- Cisco Certified Network Associate (CCNA)  
- Cisco Certified Network Professional (CCNP)  
- CompTIA A+  
- CompTIA Server +  
- CompTIA Network+                                                                                   |                                          |                                                                                  | Establish baseline data on # of students taking and passing CISCO exams |
| Manufacturing, Engineering & Technology  | Pre-Engineering: Project Lead The Way (PLTW) | Transcripted Credit with the University of Maryland Baltimore County based on test scores and review of student portfolio or Rochester Institute of Technology (RIT) based on test scores |                                          |                                                                                  |                               |
| Transportation Technologies              | Automotive Technology                    | National Automotive Technology Education Foundation (NATEF)  
or  
Automotive Youth Education Systems (AYES) for programs who are AYES affiliated |                                          |                                                                                  | Establish baseline data on # of students taking and passing NATEF exams |
|                                          | Autobody/Collision Repair Technician     | NATEF (first course exam will be ready for administration Sp ’08)                                                                                                             |                                          |                                                                                  |                               |
|                                          | Medium-Heavy Truck                       | None available at this time                                                                                                                                                    |                                          |                                                                                  |                               |
| Cooperative Education Development        | Career Research & Development            | None available at this time                                                                                                                                                    |                                          |                                                                                  |                               |
Secondary Strategy Worksheet A
Strategy Worksheets for Program Improvement and Development Organized by Cluster

A. Strategy Worksheets for Program Improvement and Development organized by Cluster: These worksheets should address programs of study within one cluster. These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform decisions about CTE Program improvement. Your activities may relate to one program, or more than one, as long as they are in the same cluster.

Program improvement activities that impact several programs and clusters should be listed on the separate strategy worksheets i.e., Transition and Alignment between Learning Levels (B-1), Professional Development (B-2), Career Development (B-3), and Services to Special Populations (B-4).

<table>
<thead>
<tr>
<th>LSS Cluster Name:</th>
<th>Transportation Technologies</th>
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</thead>
</table>

**Program Name and rationale for activities for each program:** Auto Body CIP 470603 is on the school systems low performing list due to poor performance on the academic indicators 1S1 and 1S2; no students have taken the industry certification exam. The LAC and the PAC identify the need for the program to be upgraded to industry standards with additional work-based learning opportunities available for students. Program improvements include migrating the program to the MSDE approved Auto Collision Program of Studies CIP 470635, providing professional development for the teacher and purchasing major equipment and supplies to meet industry standards.

<table>
<thead>
<tr>
<th>Site and CIP</th>
<th>Outcome</th>
<th>Description of the Planned Improvement Activity</th>
<th>Output</th>
<th>Amount Budgeted</th>
<th>Budget Narrative</th>
<th>Required Element</th>
<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCTE Auto Body 470603</td>
<td>• The number of students passing the NATEF certification exam will increase by 20% over the pass rate for FY10—15 students. • Work-based learning experiences will increase from _____ to ____ in FY12.</td>
<td>The instructor, the tech prep coordinator, the PAC and postsecondary representatives will complete the requirements to upgrade the Auto Body program to meet industry standards for implementation as the program of studies for Auto Collision.</td>
<td>• Implementation of Auto Collision Program of Studies. • Students have additional work-based learning opportunities. • The NATEF exam for industry certification is available to students. • Students can earn articulated credit upon completion of the program.</td>
<td>Local</td>
<td></td>
<td>3D, 3E</td>
<td>2S1, 5S1</td>
</tr>
</tbody>
</table>
**Cluster Name:** Transportation Technologies

**Program Name and rationale for activity for each program:** Auto Body 470603 – continued

<table>
<thead>
<tr>
<th>Site and CIP</th>
<th>Outcome</th>
<th>Description of the Planned Improvement Activity</th>
<th>Output</th>
<th>Amount Budgeted</th>
<th>Budget Narrative</th>
<th>Required Element</th>
<th>Core Indicator</th>
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<tr>
<td>CCTE Auto Body 470603</td>
<td>Pass rates on the HSAs increase from 41.1% to 47.42%, the local target on 1S1, and from 46.5% to 50.42%, the local target on 1S2.</td>
<td>Instructional support is provided to students, by Specialists and peer tutors, to assist with skills necessary for passing the English and Math HSAs.</td>
<td>Students, including those with IEPs, receive academic intervention to gain skills to help them pass the HSAs in English and Algebra.</td>
<td>Local</td>
<td></td>
<td>3B, 3D, 8A, 8B, 8C</td>
<td>1S1, 1S2</td>
</tr>
<tr>
<td>CCTE Auto Collision 470635</td>
<td>The number of students passing the NATEF exam will increase from ____ to ____.</td>
<td>All students enrolled in Auto Collision will take the industry certification for NATEF.</td>
<td>Provide intervention for students with IEPs to support knowledge and test taking skills needed for pass NATEF exams.</td>
<td>Local</td>
<td></td>
<td>3B, 3C, 3D, 8A, 8B, 8C</td>
<td>2S1</td>
</tr>
<tr>
<td>CCTE Auto Collision 470635</td>
<td>School system will increase from 72.8% to meet the target of 78.92% for core indicator 5S1.</td>
<td>With input from the PAC, provide equipment &amp; instructional materials to upgrade the auto body program to industry standards.</td>
<td>Students learn on state-of-the-art equipment and materials, which are used for instruction and preparation for technical certification and careers in the industry.</td>
<td>Title I $8,816</td>
<td>Major Equipment including brake lathe, and supplies to support update of scan tools, madis analyzer update &amp; CDX training.</td>
<td>3B, 3C, 5, 8B, 8C</td>
<td>5S1</td>
</tr>
</tbody>
</table>
Secondary Strategy Worksheet A
Strategy Worksheets for Program Improvement and Development Organized by Cluster

A. Strategy Worksheets for Program Improvement and Development organized by Cluster: These worksheets should address programs of study within one cluster. These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform decisions about CTE Program improvement. Your activities may relate to one program, or more than one, as long as they are in the same cluster.

Program improvement activities that impact several programs and clusters should be listed on the separate strategy worksheets i.e., Transition and Alignment between Learning Levels (B-1), Professional Development (B-2), Career Development (B-3), and Services to Special Populations (B-4).

<table>
<thead>
<tr>
<th>LSS Cluster Name: Manufacturing, Engineering, and Technology (MET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Cluster—Central County Public Schools</td>
</tr>
</tbody>
</table>

**Program Name and rationale for activities for each program: Machine Tool Operation, CIP 480503—**This program has not been fully updated in nearly 20 years. Currently, it is listed as one of the three lowest performing programs (66.67%) in core indicator 5S1, placement rate. This placement rate is more than 13% below the county placement rate. Our county has a unique labor market demand for skilled workers in the manufacturing industry. As a result, it is a priority to ensure a high quality program that is specific to the level of skill development demanded by local industry. The improvement of this program is the primary focus for CTE use of Perkins funds FY 10. The requested improvements will lead to the submission of a new program in Automated Manufacturing and Machine Technology. The program demands a more extensive set of skills, that require additional time and practice to achieve. The Program Advisory Council (PAC) made recommendations for program improvements that include the development of a program that aligns with the standards of the National Institute for Metalworking Skills (NIMS). These standards are the only standards for precision manufacturing approved by the American National Standards Institute (ANSI). The PAC seeks NIMS national accreditation in order to build and maintain a globally competitive workforce while providing viable career opportunities for students. The suggested certification program includes technical assessments for both theory and performance that can be reported to MSDE. An aligned curriculum, reconfigured classroom and laboratory space and professional development for faculty will lead to program accreditation. A high quality program and labor market demand should attract students who will enroll, concentrate and complete in the program. As valued-added, this program will provide industry certification in addition to current articulations with postsecondary partners.

<table>
<thead>
<tr>
<th>Site and CIP</th>
<th>Outcome</th>
<th>Description of the Planned Improvement Activity</th>
<th>Output</th>
<th>Amount Budgeted</th>
<th>Budget Narrative</th>
<th>Required Element</th>
<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>060709</td>
<td></td>
<td>• Program accreditation from NIMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td></td>
<td>• Baseline data is established for number of stu-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County</td>
<td></td>
<td>dents taking/passing NIMS certifica-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career</td>
<td></td>
<td>• Review curriculum pilot of Tooling U to check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and</td>
<td></td>
<td>for alignment with NIMS standards;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>• Update classroom and laboratory facility to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine</td>
<td></td>
<td>mirror local industry requirements;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tool Operation</td>
<td></td>
<td>• Purchase industry standard materials and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48.0503</td>
<td></td>
<td>• Students learn required skills on new, state-</td>
<td></td>
<td>$116,357</td>
<td>Equipment: 2</td>
<td>3B</td>
<td>2S1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of-the-industry equipment;</td>
<td></td>
<td></td>
<td>Dousan CNC</td>
<td>3C</td>
<td>5S1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Approved proposal for new program in Auto-</td>
<td></td>
<td></td>
<td>machines $50,000</td>
<td>3D</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>tomated Manufacturing and</td>
<td></td>
<td></td>
<td>= $100,000.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Title I</td>
<td></td>
<td></td>
<td>Tubing bender =</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• $116,357.</td>
<td></td>
<td></td>
<td>$7,800.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CNC machines, tubing bender and angle roll</td>
<td></td>
<td></td>
<td>English wheel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Equipment:</td>
<td></td>
<td></td>
<td>$4,000.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• $116,357.</td>
<td></td>
<td></td>
<td>Angle roll $8,557.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Secondary Examples
<table>
<thead>
<tr>
<th>LSS Cluster Name: Manufacturing, Engineering, and Technology (MET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Cluster—Central County Public Schools</td>
</tr>
</tbody>
</table>

- Baseline data established for enrollment (2010) to completion (2011) and placement (2012)
- Enrollment 38
- Concentrators ___
- Completers 2012___

<table>
<thead>
<tr>
<th>PDS Standard #</th>
<th>Machine Technology;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students study in an upgraded program aligned with national industry standards;</td>
</tr>
<tr>
<td></td>
<td>Students take and pass assessments leading to industry certification.</td>
</tr>
</tbody>
</table>

- Equipment to support NIMS aligned curriculum and instruction;
- Provide professional development for teachers on the new equipment and curriculum;
- Identify technical assessments (for technical and theory performance); and
- Develop and submit a program of study proposal for NIMS aligned and accredited Automated Manufacturing and Machine Technology program.

- Title II $18,509.
- Materials of instruction, Planishing hammer and English wheel
- Reserve Fund Grant
- Local Funds
- Planishing hammer $1,318.
- Materials of instruction $13,162.

Examples:
- Gibbs CAM site license @ $3,600.
- Laser color Printer@ $900.
- 6 Vices @ $580 = $3,480.
- 45 Tool holders @ $125. = $5,625.
Secondary Strategy Worksheet A
Strategy Worksheets for Program Improvement and Development Organized by Cluster

A. Strategy Worksheets for Program Improvement and Development organized by Cluster: These worksheets should address programs of study within one cluster. These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform decisions about CTE Program improvement. Your activities may relate to one program, or more than one, as long as they are in the same cluster.

<table>
<thead>
<tr>
<th>LSS Cluster Name: Business, Management, and Finance</th>
</tr>
</thead>
</table>

Program Name and rationale for activities for each program: Finance and Accounting, CIP 520354 – This was a new program in the 2008-2009 school year. The NAF Academy program is being eliminated in order to give students the opportunity to earn articulated credit with Eastern Community College by focusing in the area of accounting. Another goal is to have additional students complete the program in order to earn the articulated credit, as the current completion rate is only 18%.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>TCHS Finance &amp; Accounting</td>
<td>• The number of students passing the Accounting/Finance CLEP exam increase from 6 to 10.</td>
<td>• Purchase and use industry-focused Accounting Software to enable students to gain experience on programs that are required in the work world, or in postsecondary education. (the Accounting teacher is familiar with the content and use of this software)</td>
<td>• All Accounting students learn upgraded accounting software to prepare them for postsecondary program or joining the workforce.</td>
<td>$1,798</td>
<td>Accounting I Software for building license - $899, Accounting II Software for building license - $899 = $1,798</td>
<td>3S1</td>
<td>5S1</td>
</tr>
</tbody>
</table>
BUSINESS MANAGEMENT AND FINANCE
Secondary Strategy Worksheet A - Strategy Worksheets for Program Improvement and Development

A. Strategy Worksheets for Program Improvement and Development organized by Cluster: These worksheets should address programs of study within one cluster. These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform decisions about CTE Program improvement. Your activities may relate to one program, or more than one, as long as they are in the same cluster.

LSS Cluster Name: Business Management and Finance

Program Name and rationale for activities for each program: PQI data indicates low completion rates for students enrolled in existing BMF pathway options. On average, students in the BMF cluster achieved 39.85% for performance indicator 1S1, .51% above the Local 2007 Baseline of 39.34% and 25.17% for performance indicator 2S2, which is 1.63% above the Local 2007 Baseline Data. Our plan is to establish MOS Exam testing centers in our Business Education departments over the next five years to encourage more students to take the exam. We will begin with training teachers to use the Skills Assessment Manager software to assess students’ knowledge of the MS Office Suite application software. SAM software assesses students’ skills in the testing environment similar to the MOS Certification Exam. Activities in this section are designed for Business Management and Finance students who want an increased emphasis on business skills and the technology that directs students to careers or postsecondary options in the business field.

<table>
<thead>
<tr>
<th>Site and CIP</th>
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<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.0354</td>
<td>The number of students who pass the MOS/MCAS certification exam will increase from 18 to 24 by June 2012.</td>
<td>Use Skills Assessment Management (SAM) software to train business education teachers to incorporate the SAM “testing environment” as an instructional strategy to prepare students for the MOS/MCAS certification exam.</td>
<td>• Teachers are trained in the use of SAM software. • Students receive preparation for the MOS/MCAS certification exams through practice with Skills Assessment Management (SAM) software.</td>
<td>Title I $14,000</td>
<td>Title I Purchase SAM software after IT review for BE sites, consultant may be provided by vendor, $14,000</td>
<td>3B 3C 3D 8A 8C 10</td>
<td>2S1</td>
</tr>
</tbody>
</table>
CONSUMER SERVICE, HOSPITALITY AND TOURISM
Secondary Strategy Worksheet A - Strategy Worksheets for Program Improvement and Development

A. Strategy Worksheets for Program Improvement and Development organized by Cluster: These worksheets should address programs of study within one cluster. These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform decisions about CTE Program improvement. Your activities may relate to one program, or more than one, as long as they are in the same cluster.

<table>
<thead>
<tr>
<th>LSS Cluster Name: Consumer Services, Hospitality and Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name and rationale for activities for each program: Food and Beverage Management, Cosmetology, Lodging Management. PQI data indicates above average completion rates for students of 91.90% in the CSHT clusters. On average, students achieved 40.05% for performance indicator 1S1, .71% above the Local 2007 baseline of 39.34% and 21.62% for performance indicator 2S2 which is 1.92% below the Local Baseline Data. With regard to Technical Skills Attainment, performance indicator 2S1, we plan to provide professional development for teachers that will provide best practice strategies and skill sets reflective of the industry. Students will be provided with upgraded industry equipment, visit post secondary institutions and receive preparation for industry certification. These activities will help to leverage students into a career in the CSHT industry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site and CIP</th>
<th>Outcome</th>
<th>Description of the Planned Improvement Activity</th>
<th>Output</th>
<th>Amount Budgeted</th>
<th>Budget Narrative</th>
<th>Required Element</th>
<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment 3 12 High Schools</td>
<td>The number of students who acquire the Level 1 and Level 2 National ProStart Certification will increase from the pass rate for FY10: Level I 40 to 48 Level II 30 to 36</td>
<td>Food and Beverage Management Teachers, Year 1 and Year 2, will attend Professional Training conducted by the Maryland Hospitality Education Foundation for the ProStart curriculum of study.</td>
<td>Food and Beverage Management students gain knowledge and practical experience in the industry through instructional best practices.</td>
<td>Title I $10,200</td>
<td>Title I ProStart Level 1 and Level 2 training 12 teachers, 3 days@$500 each $6,000 Stipends 12 teachers@$116 @ 3 days $4,200</td>
<td>4 PDS 1a</td>
<td>2S1</td>
</tr>
</tbody>
</table>
**Cluster Name:** Human Resource Services (HRS)

Program Name and rationale for activity for each program: Academy of Teacher Education – This program is currently going into the third year of implementation. One instructor needs professional development for the last two courses of the program. Materials of instruction must be upgraded in order to maintain value-added instruction.

<table>
<thead>
<tr>
<th>Site and CIP</th>
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<th>Core Indicator</th>
</tr>
</thead>
</table>
| SMMHS 130150       | • The number of students who pass the ParaPro exam will increase by 20% each year from the base line set in FY09 of 8 students.  
• Increase the number of students by 15% who receive articulated credit from Towson University over the FY11 amount. | • Purchase Teacher Education Academy (TAM) materials of instruction and revise and update current curriculum for third and fourth course.  
• Professional Development for *Foundations of Curriculum & Instruction* and *Internship for TAM*.  
  
  PDS Content Standard I | • Students complete the Teacher Academy program of study, earn certification and articulated credit. | Title II  
  $2663  
  Local Funds  
  Stipend  
  2 instructors x 500 = $1000 | MOI  
  Textbooks replaced or purchased because of increased enrollment  
  $1663 | 3B, 3C, 3D | 2S1, 5S1 |
Secondary Strategy Worksheet B-1
Transition and Alignment between Learning Levels

**B-1 Transition and Alignment between Learning Levels:** These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform your decisions about CTE improvement. These activities impact various programs and clusters.

### B-1 Transition and Alignment between learning levels - Activities that prepare students to successfully transition from middle school into CTE programs at the high school level and to further education, training and/or employment.

<table>
<thead>
<tr>
<th>Site and CIP</th>
<th>Outcome</th>
<th>Description of the Planned Improvement Activity</th>
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<th>Core Indicator</th>
</tr>
</thead>
</table>
| All Sites-All Tech Prep CIPS | The number of CTE students needing math remediation will decrease from 73 to 10 by FY2012. Interim benchmarks FY10.57, FY11____ | • Provide the math Accuplacer exam to all 11th grade Tech Prep students.  
• Make Midstate Community College (MCC) math remediation course available based on Accuplacer results.  
• Develop a reliable tracking system for CTE graduates enrolling at MCC who need math remediation. | • Students are able to identify their math skills and enroll in the appropriate senior math course.  
• The number of students who need a remedial math course in college decreases. | Title II HCC | See attached | 3B, 3D, 3E, 8A, 8B, 8C, 11 | 1S2, 3S1, 4S1, 5S1 |

| All Sites-All CIPS | Completion rates in CTE programs will increase 5% annually from 2010, with a total increase of 20% by FY2013. Interim benchmarks: FY10 23.2%-27.5%, FY11____, FY12____, FY13____ | • Hold Open Houses to inform middle school students and parents about CTE program offerings.  
• Update and publish the CTE Program of Study brochures, which include information about non-traditional careers and College Articulation Agreements. | • Students make informed enrollment decisions for CTE Programs.  
• Student enrollment in nontraditional programs increases.  
• Students complete CTE programs to earn the articulated postsecondary credit. | Title II 1,360 | See attached | 8A, 8B, 8C, 10, 11 | 3S1, 6S1 |
### B-1 Transition and Alignment between learning levels- Activities that prepare students to successfully transition from middle school into CTE programs at the high school level and to further education, training and/or employment.

<table>
<thead>
<tr>
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<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Mail brochures to the homes of students in Grades 7 and 8, and have them available at the Open Houses.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Secondary Strategy Worksheet B-3
Career Development

B-3 Career Development: These strategy worksheets should align with the Career and Technology Education Self-Assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform your decisions about CTE improvement. These activities impact various programs and clusters.

<table>
<thead>
<tr>
<th>Site and CIP</th>
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</tr>
</thead>
</table>
| All List A programs | Increase the placement rate of CTE completers from FY11 _____ to FY12 ____. | • CTE students visit local colleges to meet with counselors and learn about CTE programs; i.e. Morgan State University, Towson University.  
  o Students complete career decision pre and post surveys to identify choices.  
  o Students identify careers to research based on information obtained in visits. | Students complete their secondary CTE programs and continue on to postsecondary education. | Title I  
Local Funds  
Bridge to Excellence | 11 | 3S1, 5S1 |
| By FY2013, as a result of using the Bridges program, student placement rate will increase from 63% to the system target of 80%. Interim Measures: FY10 69.5%  
FY11 _____  
FY12 _____  
FY13 _____ | Students in Grades 7-12 receive a broad range of career development information and services through the Bridges program, which is aligned with the Maryland Career Development model. | Students make informed CTE program selection decisions | Title I  
$16,551  
Local Guidance Funds | Partial fee for Bridges | 3E, 10, 11 | 5S1 |
B-3 Career Development – Activities may be aligned with the Maryland Career Development Framework Standards and include activities related to self-awareness, career awareness, career exploration, career preparation, job seeking and advancement and career satisfaction and transition and lead towards implementing a system of career guidance and advisement.

Secondary Strategy Worksheet B-4

Services to Special Populations

B-4 Services to Special Populations: These strategy worksheets should align with the Career and Technology Education Self-assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform your decisions about CTE improvement. These activities impact various programs and clusters. The description of the Planned Improvement Activity should address overcoming barriers to success; meeting local performance levels; preparation for high skill, high wage or high demand occupations that lead to self sufficiency; and preparation for non-traditional fields.

B-4 Services to Special Populations - Activities may include support services, such as supportive personnel and curriculum modifications. Special populations include individuals with disabilities; individuals from economically disadvantaged families, including foster children; individuals preparing for non-traditional careers; single parents, including single-pregnant women; displaced homemaker; and individuals with limited English proficiency.

<table>
<thead>
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<th>Budget Narrative</th>
<th>Required Element</th>
<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>060709 Central County Career and Technology Center</td>
<td>89.0003</td>
<td>• The number of special education students completing a career interest inventory will increase from 12 to 25. • There will be an increase from ____ to ____ in the number of CTE special</td>
<td>• Provide computers to run software programs for career assessment of special education students in career path programs. • Assess students for career interest and skill.</td>
<td>Special education students are appropriately placed in CTE programs. • Data on the students who follow the assessment recommendations are collected</td>
<td>Title 1 $3,141.</td>
<td>3 computers with 17 inch flat panel monitors @ $1,047. = $3,141.</td>
<td>8A 8B 8C</td>
</tr>
</tbody>
</table>
education students completing a Program of Study by June 2012.

- Produce a report to guide program and course selection.
- Implement a new system developed to collect data on program completion and graduation of those who follow the assessment recommendations.

Secondary Strategy Worksheet B-4
Services to Special Populations

B-4 Services to Special Populations: These strategy worksheets should align with the Career and Technology Education Self-assessment, data analysis, Secondary Five-Year Planned Program Improvement Chart, and any additional information that helps to inform your decisions about CTE improvement. These activities impact various programs and clusters. The description of the Planned Improvement Activity should address overcoming barriers to success; meeting local performance levels; preparation for high skill, high wage or high demand occupations that lead to self-sufficiency; and preparation for non-traditional fields.

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<th>Site and CIP</th>
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<th>Required Element</th>
<th>Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sites-All CIPS</td>
<td>• Increase in the number of CTE concentrators who attain a high school diploma from 88.53% to 91.75%.</td>
<td>Establish a process for early identification of CTE concentrators at risk of dropping out of school. • Coordinate efforts with the school counseling department and others</td>
<td>• A decrease in the number of CTE students dropping out of school. • Special population students receive early intervention and</td>
<td>Bridge to Excellence Funds</td>
<td>8A, 8B, 8C, 11S1, 1S2, 4S1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- The percentage of CTE concentrators passing the English HSA will increase from 58.66% to the target 62%.
- The percentage of CTE concentrators passing the Math HSA will increase from 48.04% to the target 51%.

<table>
<thead>
<tr>
<th></th>
<th>engaged in dropout prevention.</th>
<th>support in order to pass the HSAs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify CTE students who are in danger of not passing, or who have not passed the HSAs, and refer them for system-wide remediation or intervention programs.</td>
<td></td>
</tr>
</tbody>
</table>