Performance Monitoring Report:

Associate Degree Programs, Technical Diplomas, and Certificates

October 21, 2014

Discussion and Analysis

The statutory purpose of credit programming is central to the mission of Fox Valley Technical College encompassing Associate Degrees, Technical Diplomas, and Certificates. Through this programming, FVTC serves its District by providing employers with an educated workforce that works to address the health, safety, and business needs of local residents.

Historically FVTC has reported on core benchmarks such as FTEs, enrollments, graduate numbers, job placement, and tuition cost, which remain very important bellwether measurements of our mission. However, the changing dynamics of the workplace, along with new state funding parameters, have created reforms resulting in a new statewide performance-based model. This model shifts emphasis from the traditional data review to more of a focus on meeting workplace benchmarks and aligning state funding to performance, based on benchmark results. To meet this new requirement, FVTC is taking appropriate actions to align College strategic measurements and reports, including changes you will see in this report.

This new model is based on nine performance criteria of which each WTCS college can choose seven. The indicators highlighted in this report include Job Placement, High Demand Fields and Industry Validated Curriculum. In the first indicator of Job Placement, FVTC is ranked first among the WTCS colleges in this funding category during the three-year analysis timeframe. This result is certainly a testament to the effectiveness of our occupational training programs and talented instructional staff. As the outlook on the economy continues to brighten, increasing numbers of our graduates are finding employment. Eighty-nine percent (89%) of FVTC graduates from 2012-13 were employed six months after graduation. Other FVTC performance-based rankings related to this purpose and included in this report are second in High Demand Fields, and first in Industry-Validated Curriculum.

The following updated report provides information on these categories and their alignment with the FVTC Strategic Plan of 2013-16. As FVTC prepares to enact this new model, we continue to hold student success as vital to our core mission to assist students in reaching their goals and securing jobs that are essential to our economy.

As part of our continuing commitment to student and program success, the College also takes fiscal responsibility very seriously amid fluctuating economic cycles, shifting enrollment levels, increasing technological advances, and global competitive pressures. With these considerations in mind, along with meeting the new benchmarks, FVTC maintains relevancy through investing in facilities, capital equipment, and instructional resources necessary to meet changing workplace needs.

Christopher J. Matheny, Ph.D.
Vice President Instructional Services/Chief Academic Officer

Associate Degree Programs, Technical Diplomas, Certificates Purpose Defined
To deliver associate degree, technical diploma, and certificate level programs which provide the skills and knowledge necessary to address occupational competencies from initial job-entry to advanced certification.

Performance Scorecard – Staff Rating

PURPOSE	SCORE
What we do (Products and Services)	⬆ (Full Green Arrow)
For whom (Constituents)	⬆ (Partially Green Arrow)
At what cost (Financial)	⬆ (Full Green Arrow)

FVTC Scorecard Legend

Symbol	Description
(Full Green Arrow)	Full Green Arrow: Results are meeting or exceeding expectations and no action is required.
(Partially Green Arrow)	Partially Green Arrow: Results are progressing, but not at the expected levels. No action on the plan/efforts is required; however, there will be an increase in the monitoring of the plan.
(Yellow Arrow)	Yellow Arrow: Results are indicating caution with the existing plan/efforts and there is a need to review the existing plan.
(Partially Red Arrow)	Partially Red Arrow: Results are below the expected levels and the existing plan is not working, but efforts are under way to take corrective actions and revise the plan.
(Full Red Arrow)	Full Red Arrow: Results are well below the expected levels and actions need to be taken immediately.

What We Do

Fox Valley Technical College programming is developed and conducted within Wisconsin Technical College System (WTCS) guidelines and in collaboration with district business and industry needs to effectively meet skill and employment demands. In servicing the needs of the five-county district, the College's primary educational program offerings include Associate in Applied Science degree programs, Technical Diploma programs, and Certificates defined as:

Associate in Applied Science (AAS) degree programs – An AAS degree assists individuals in preparing for, or advancing in, a particular occupation or field. AAS degree completion typically requires 60-70 credits in the program and consists of technical studies, general studies, and electives. Students pursuing a degree full time will take approximately two years to complete. Time to completion varies widely for part-time students.

Technical Diploma (TD) programs – Technical diplomas are based on local needs of business and industry and are designed to help individuals prepare for a targeted occupation – typically at the entry level. Technical diploma credit requirements vary widely, involving anywhere from 3 to 70 credits; therefore, time to completion varies widely depending on the program.

Certificates – A certificate involves a focused set of courses for skills needed in the workplace. Completed certificates can serve as enhancements to an individual's resume, as targeted training beyond the attainment of a degree or diploma, i.e., AAS, BS, MS. Credit courses from certificates may also be applied to a related technical diploma or associate degree program, encouraging people to continue their education in these programs. Some certificates may serve as entry points to attract people into programs (i.e., exploring careers series.)

Types of Associate Degrees, Technical Diplomas, and Certificates
FVTC currently offers 65 associate degree programs, 50 technical diploma programs, and about 200 certificates. Among the new degree offerings are technical diplomas that are "embedded" into an associate degree that can provide a credential for completion of a smaller segment of the associate degree. Examples of this credentialing model are the Law Enforcement and Aeronautics –Professional Pilot technical diplomas. Appendix A has a complete listing of all 2014-15 programs (associate degree and technical diploma) and certificates.

Nearly 200 certificates are offered of which 7 are new and 38 are targeted to a specialized audience or purpose. Ten certificates are part of a career pathway continuum that can build to a technical diploma or associate degree. Every year certificates undergo continuous review to align with market needs. The top five certificate enrollments for 2013-14 were:

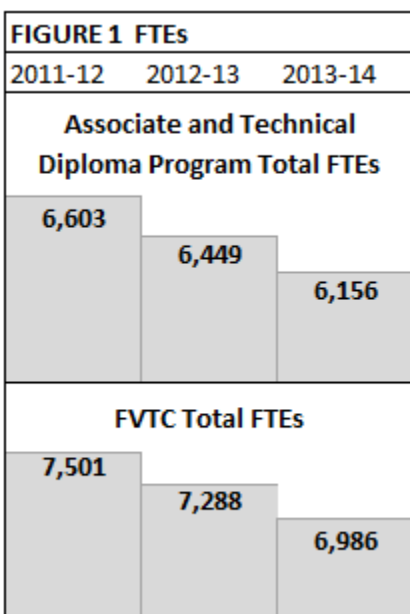| Enrollments	Certificates
144	General Studies Transfer (UW-Oshkosh)
128	Automation: Industrial Equipment Machine Operator/Maintenance Helper
115	Advanced Manual Machining
90	General Education
81	Basic Machine Tool

For Whom

Associate Degree and Technical Diploma Enrollment

Full Time Equivalents (FTEs) are a common measure of student enrollment for FVTC. In relation to the waning effects of the Great Recession, associate degree and technical diploma enrollments are declining. Calculating a full time equivalent (FTE) from enrollments is defined as 30 credits per student in an academic year. Figure 1 displays FTE data for a three-year period, in which the College served 6,156 program-declared FTEs in 2013-14 compared to 6,449 in 2012-13. This decline is similar for most WTCS colleges as high enrollments of previous years stabilize with the strengthening of the economy. The total FTEs include non-program course takers, basic skills and other enrollments.

FIGURE 1 FTEs

2011-12	2012-13	2013-14

Associate and Technical Diploma Program Total FTEs

6,603

6,449

6,156

FVTC Total FTEs

7,501

7,288

6,986

Associate Degree and Technical Diploma programs continue to provide an ***average*** *of 88% of total annual FTEs.*

Source: FVTC Report SASR00000165.

Program Enrollments Aligned With High Demand Fields

Students are attracted to FVTC for a number of reasons including cost, academic reputation, location, personalized attention, and program offerings that match their career interests. Faculty and staff continue to work to meet these student needs and to bring not only exciting opportunities but facilities and resources to match.

Program enrollments are an important college measure, as well as an important factor in the pathway to a credential for the performance-based model for degrees awarded in high demand fields. There is greater emphasis on affecting the skills gap to meet employer needs and for individuals to have the skills necessary for workplace demands. Specific occupations have been identified by the Wisconsin Department of Workforce Development (DWD) as being high demand fields based upon occupational projections through 2020. Tables A and B outline the College's top ten enrolled programs in both associate degree and technical diploma programs, and their alignment with the DWD high demand fields.

College Annual Objective for Enrollments

College enrollments and degrees in high demand fields are important to FVTC and employers in need of skilled workers. To meet these high visibility indicators, the College had established an annual objective for 2013-14 to achieve the goal of 7,530 FTEs primarily through the targeted divisional growth goals of the enrollment management plan.

Table A. Top Associate Degree Program Declared Enrollments

HIGH DEMAND FIELDS/PROGRAMS	NUMBER OF STUDENTS ENROLLED	
	2012-13	2013-14
Business/Administrative*		
101023 Business Management	1202	1064
101043 Marketing	284	234
101011 Accounting	334	283
Childcare*		
103071 Early Childhood Education	306	289
Food Preparation*		
103161 Culinary Arts	423	363
Health Care*		
105431 Nursing - Associate Degree	832	811
105141 Occupational Therapy Assistant	334	262
Public Safety		
105041 Criminal Justice - Law Enforcement	620	571
105032 Fire Protection Technician	284	240
Technology*		
101521 IT - Software Developer	263	221

High Demand Fields   *Source: FVTC Data Warehouse*

Table B. Top Technical Diploma Program Declared Enrollments

| HIGH DEMAND FIELDS/PROGRAMS	NUMBER OF STUDENTS ENROLLED	
	2012-13	2013-14
Fabrication*		
314571 Welding/Metal Fabrication	191	172
Health Care*		
305431 Nursing Assistant	1086	939
311602 Medical Office Assistant	261	235
315091 Medical Assistant	291	180
315302 Medical Coding Specialist	90	142
315081 Dental Assistant	154	125
315431 Nursing, Practical	193	121
Machinists*		
324201 Machine Tool Technician	168	172
Public Safety		
305041 Criminal Justice-Law Enforcement Academy	100	111
Transportation*		
304581 Truck Driving	279	249
314121 Diesel Equipment Mechanic	121	111

High Demand Fields   *Source: FVTC Data Warehouse*

WTCS Benchmarking of High-Demand Degrees
Looking at the top five comparable WTCS colleges, Figure 2 shows FVTC as ranking second in the WTCS for degrees awarded in high demand fields in the three year timeframe. Madison College ranks first among all sixteen WTCS colleges.

Figure 2: Top Five WTCS Rankings for Degrees Awarded in High Demand Fields
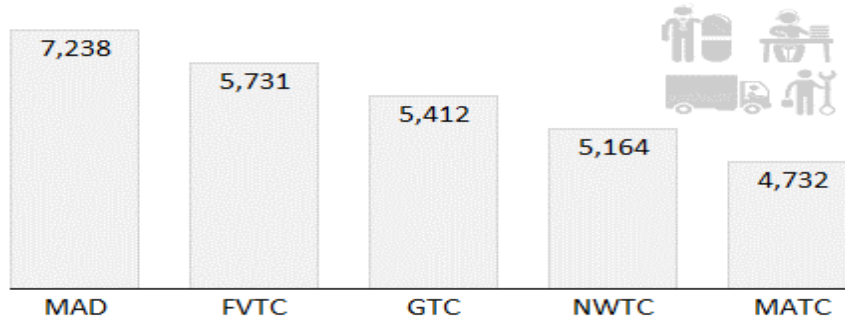

Student Demographics
An individual's multi-decade career lifecycle brings students to FVTC from various stages in their employment and non-employment history. A number of factors are affecting the need for continuous learning such as workplace competition among new hires, and employees seeking to retain or advance in their positions. Entry into the workforce, downsizing, dislocation, rapid advancement, industry innovation, and increasing technology are all reasons students find themselves approaching our College doors and online portals for new or improved skills.

The unique and challenging needs of this diverse set of skill levels and demographics can be overwhelming. However, FVTC thrives on this challenge to meet each student at the intersection of their educational needs and their future potential.

Average Age
There is an assumption that the average age of our occupational program students has increased as a result of the Great Recession and increased numbers of dislocated workers. To the contrary, the average age of students in occupational programs, and in fact all categories, has declined in recent years. The average age of associate degree and technical diploma students in recent years is around 27

years of age. Certificate students tend to be a bit older, averaging about 31 years old, suggesting an interest in short term credentials which enhance career skills particularly for working adults.
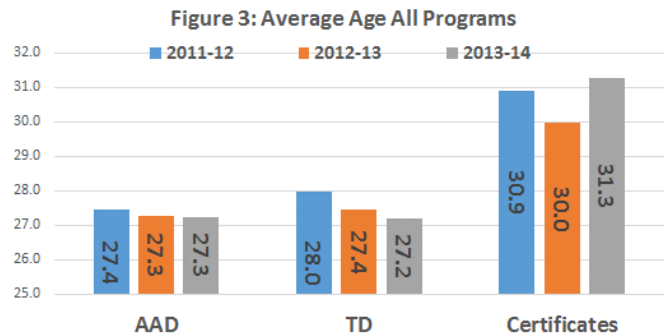
Student Status
Part-time students (those taking less than 12 credit hours per semester) make up the majority of FVTC students (Figure 4). In the Fall of 2013, there were 4,735 degree-declared part-time students; a decrease of 357 over the same timeframe in the prior year. Full-time degree seeking enrollments (Fall, 2013) decreased by 110 to 3,006 students compared to the previous year. A total of 7,741 full and part-time degree-declared students were enrolled in Fall 2013.

Figure 4: Student Status - Part Time and Full Time
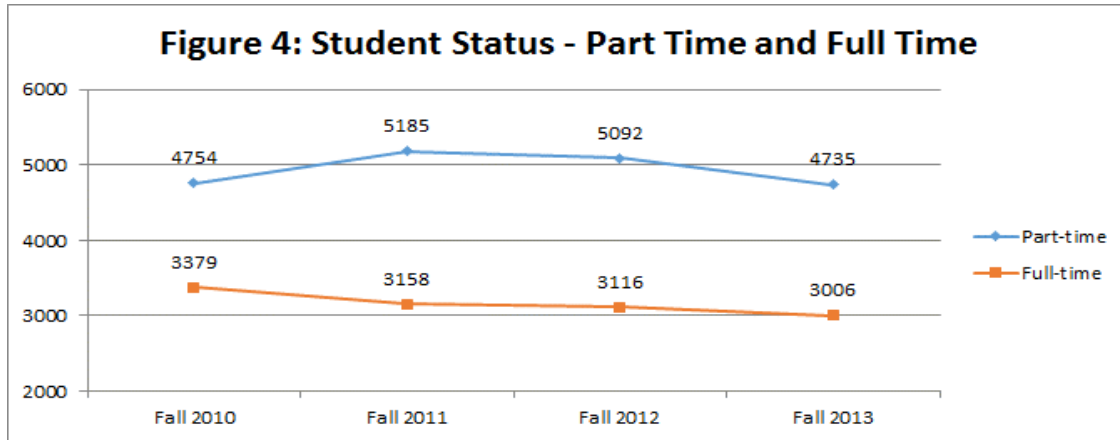
Source: FVTC Data Warehouse

Advisory Committee Effectiveness

Occupational program advisory committees are a requirement of the WTCS and are organized to provide advice and counsel to instructional leaders and faculty regarding specific associate degree and technical diploma programs offered by the College. The primary purpose of a program advisory committee is to help the College ensure that the program is relevant to the community, addresses current industry standards, meets workforce needs, and has appropriate resources to support high quality student outcomes.

To accomplish this purpose, program advisory committees focus on the specific functions of program outcome review, curriculum updates, industry trends, and a public information role. The committee makes recommendations for program improvements, expansions, or changes. A seven point effectiveness rating was implemented in 2013-14 for each program based on items such as number of active business members, meeting attendance, and industry-trend analysis. The average strategic direction rating for Measure 4.1 of employer advisory committee effectiveness is 5.32 on the seven-point scale for 2013-14. Strategic Measure 4.2 represents targeted conversations, to involving industry and college representatives, to discussing current challenges and future trends related to workforce skills in focused industries such as manufacturing, health care and transportation.

SD Robust Partnerships

Measures	2013-14 Actual	2014-15 Target	2015-16 Target
Measure 4.1: Employer advisory committee effectiveness average rating	5.32 of 7	5.0+ of 7	5.0+ of 7
Measure 4.2: Number of industry sector dialogues	6	5	5

FVTC Program Accreditation and Licensure Requirements

Some FVTC programs prepare students to complete examinations that are required in order to work in their field of study. Appendix B outlines the programs in the Service, Health and Public Safety divisions that have accreditation, and those programs in the Transportation and Service divisions requiring certification.

The Health programs typically have a competency exam at the end of the program of study allowing students to become registered or certified in order to work in Wisconsin. FVTC students have performed well or are showing improvement in the health areas. For example, the Dental Hygienist program exceeds the 2012 national pass rate of 82% with a college pass rate in 2014 of 100%. The Practical Nursing program also exceeds the national pass rate of 84% with a 100% rate in 2014.

All programs with accreditation, certification, and licensure requirements are compliant with the established passing scores. FVTC faculty and staff monitor this compliance very closely and take appropriate measures to meet or exceed the minimum requirements. In addition, some FVTC educational offerings follow a program curriculum that provides certification or prepare graduates for pursuing other state and local licensures and certifications.

Technical Skill Attainment
In 2013-14, FVTC continued to implement the three-phase process of designing a Technical Skill Attainment (TSA) assessment for each of its 100+ associate degrees, technical diplomas and apprenticeship programs and to receive the appropriate approval from the Wisconsin Technical College System (WTCS).

Program teams have worked with their local teams or statewide teams of similar programs to design an assessment that is comprehensive in gauging student mastery of intended program outcomes, as well as Employability Essentials (soft skills). To date, 78 programs are approved at the Phase 1 level with another 7 in the Phase 1 process, 57 programs are approved at the Phase 2 level with another 8 in process or pending approval, and 58 are at Phase 3 level and reporting TSA data on student performance to the WTCS. FVTC is on pace to meet the targets for Measure 1.2 in 2014-15 and 2015-16, which are incorporated into industry-validated curriculum calculations discussed next.

SD Learning Agility

Measures	2013-14 Actual	2014-15 Target	2015-16 Target
Measure 1.2: Number of programs reporting Technical Skill Attainment (TSA) data to the WTCS (PBF*)	58	75	100

*Linked to WTCS Performance-Based Funding (PBF) measure

Industry-Validated Curriculum
"Industry-validated curriculum means a curriculum that is developed with business or industry input and that is based on competencies and assessments that reflect the skills and knowledge necessary for a specific job or jobs within a specific type of business or industry" (WTCS definition). In assessing industry validated curriculum, FVTC compiles information from various sources such as advisory committee input, program accreditation and licensure requirements, and program technical skill attainment. This means that curriculum was
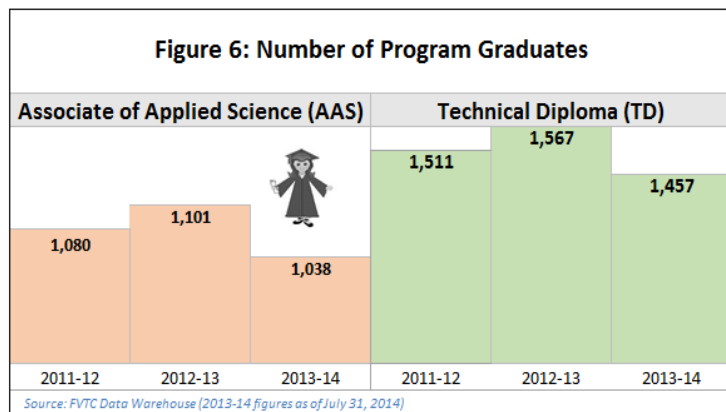
Figure 5: 2013 Top Five Rankings--Number of Programs with Industry Validated Curriculum

MILWAUKEE AREA	162
FOX VALLEY	127
NORTHEAST WISCONSIN	119
MORAINE PARK	97
LAKESHORE	73
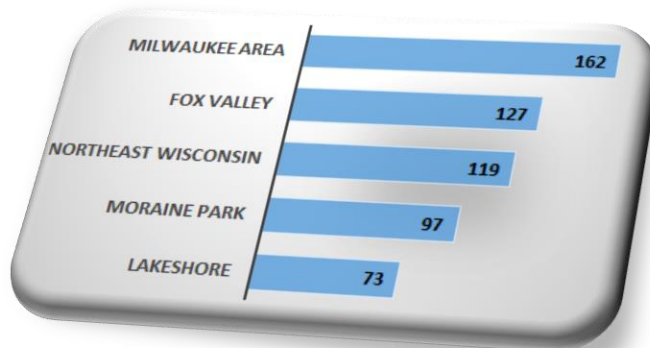
developed with business or industry input for the competencies necessary for specific skills within the workplace.

Performance-based funding calculations for this category are determined by the number of each college's active degree/diploma programs (weighted 75%) plus the number of programs completing technical skill attainment (weighted 25%). FVTC ranks second among the WTCS colleges in 2012-13 (Figure 5) with 127 programs (weighted 75%), and ranked first in TSAs (weighted 25%) with 58 programs reporting data on student performance. The two scores are then averaged for statewide ranking, which places FVTC in first place in the category for industry-validated curriculum.

Graduation

Figure 6: Number of Program Graduates

Associate of Applied Science (AAS)			Technical Diploma (TD)		
1,080	1,101	1,038	1,511	1,567	1,457
2011-12	2012-13	2013-14	2011-12	2012-13	2013-14

Source: FVTC Data Warehouse (2013-14 figures as of July 31, 2014)

The new statewide performance-based model places emphasis on graduation and job placement. In 2013-14, FVTC had 1,038 associate degree graduates and 1,457 technical diploma graduates (Figure 6) for a total of 2,495 graduates. The three programs with the most graduates were; Nursing Assistant (669), Truck Driving (163), and Business Management (104); indicative of great marketplace demand by both students and employers in these areas.

Benchmarking with other WTCS colleges in 2013, FVTC ranked second with 1,944 degrees in high demand fields, and Madison ranked first with 2,255 degrees awarded in high demand fields. Figure 7 below provides information on the top five rankings within WTCS colleges.

Persistence and Graduation

Students who do not persist in coursework through to graduation represent the loss of key skills needed in the workplace. Many students face personal and academic barriers to continuing in college. FVTC is committed to finding new ways to help more students complete all the classes needed to graduate. Student success, as measured by successful course completion, student persistence and graduation, is an integral indicator of FVTC's strategic directions.   The Strategic Direction table below highlights the results of our student success efforts in 2013-14 and the targets for future years for Measures 3.1, 3.2, 3.3, 3.6 and 3.7

Figure 7: 2013 Top Five Rankings for Number of Degrees Awarded in High Demand Fields

MADISON	2,255
FOX VALLEY	1,944
GATEWAY	1,715
NORTHEAST WISCONSIN	1,682
MILWAUKEE	1,616
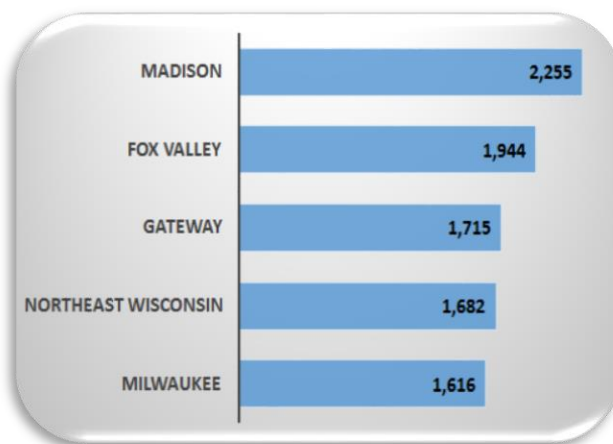
Student success is a major issue at the state and national levels. More than ever, a college education provides graduates with opportunities which are not as available to those who do not have a higher education credential. As employers move to more advanced technologies, FVTC provides well-trained individuals for occupations to meet the demands of a global marketplace.

SD Student Success

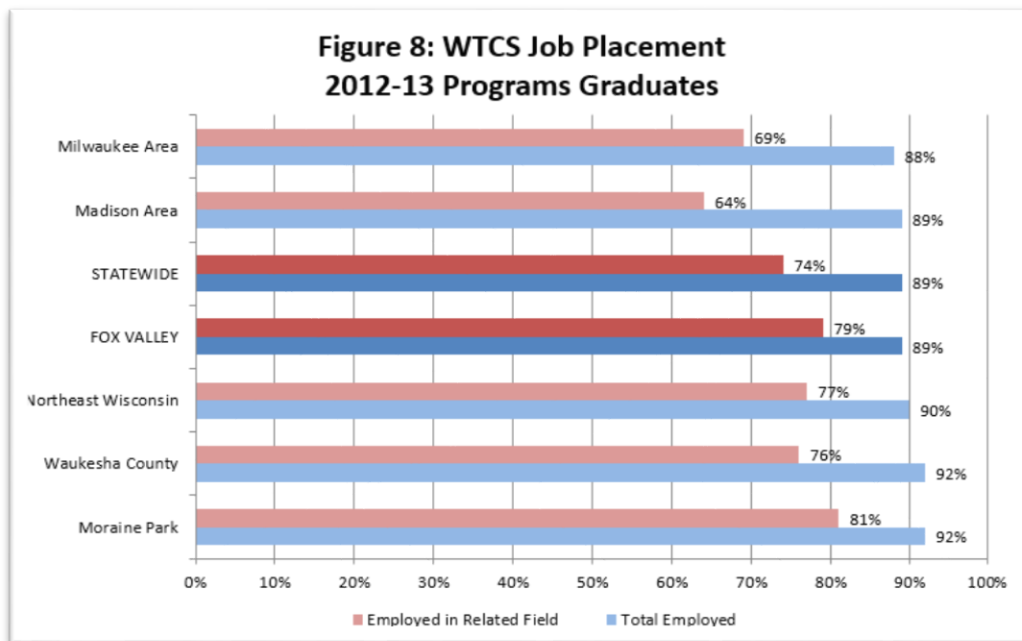| Measures	2013-14 Actual	2014-15 Target	2015-16 Target
Measure 3.1 % of successful course completion	82%	83%	84%
Measure 3.2 % of students persisting from Fall to Spring term	78%	79%	80%
Measure 3.3 % of program students graduating in 3 years	38%	39%	40%
Measure 3.6 % of graduates employed in a relted field within 6 months (PBF)	79%	>76%	>76%
Measure 3.7 Number of program graduates in high demand fields (PBF)	1,852	1,800 - 1,900	1,800 - 1,900

The College provides many support and wrap around services to help students succeed which translates into course completion, student persistence and graduation. FVTC is very proud of the new Student Success Center to offer even greater support to our student base now and in the years ahead.

Job Placement

The 2013-14 report of previous year graduates (2012-13) six months after graduation shows that 89% of FVTC graduates were employed, and 79% of placements were in jobs related to their programs of study. For peer benchmark colleges, job placement rates that are related to graduates' field of study range from a high of 86% at Chippewa to a low of 58% at Nicolet. The statewide average for placement in jobs related to program of study is 74% up from 73% in the previous year (Figure 8).

These results suggest that the FVTC Strategic Direction Measure 3.6 related to improving graduate placement is showing progress with continued improvement efforts focused on this critical outcome. Additionally, this information is used for the job placement category in the new performance-based model (Figure 8). Compared with other WTCS colleges, FVTC received the highest percentage of funding, ranking first in a three-year calculation of job placement related to program of study.

Figure 8: WTCS Job Placement 2012-13 Programs Graduates

	Employed in Related Field	Total Employed
Milwaukee Area	69%	88%
Madison Area	64%	89%
STATEWIDE	74%	89%
FOX VALLEY	79%	89%
Northeast Wisconsin	77%	90%
Waukesha County	76%	92%
Moraine Park	81%	92%

Graduate Wages

Job placement of graduates is experiencing an upswing as employers recover from the losses during the economic downturn. Even with the difficult economy, 38 programs of the college's 115 programs with graduates responding to the survey had 100% employment with another 13 at 90% employment or higher. The average annual salary was reported at $33,808 which is a 2.4% increase reported by 2012 graduates from the previous year.

In the five year follow-up study (the Class of 2008), 34% of the 1,011 graduates responding to the survey had completed an additional degree by 2012. After five years, 60% of those employed reported working in the FVTC district. In 2008, six months after graduation, these graduates reported an average annual salary of $33,848. In the five-year follow-up, they reported an average annual salary of $44,680. This is a 32% increase as compared to a 6.71% increase in the consumer price index during the same time period. In addition, over 84% reported that their FVTC technical education was important in launching their career and for career advancement.

Class of 2008 Average Salary Increase
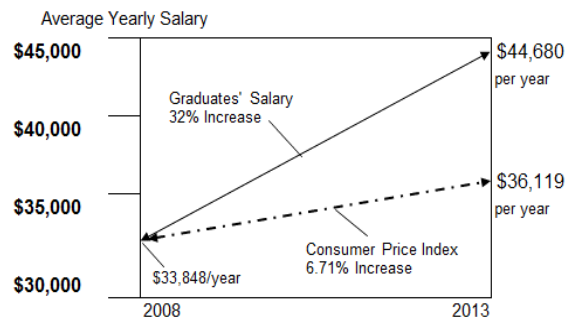
Source: Consumer Price Index for Urban Areas (CPIU) as reported

Graduate Satisfaction

Ultimately, the fulfillment of this statutory purpose is measured by the satisfaction of our graduates with their education and employers with their performance in the workplace. Individuals and employers recognize the power of a credential through:

- increased earning potential
- better benefits
- improved recession protection
- higher job satisfaction
- increased efficiency and performance
- fewer social costs

The 2014 graduate survey shows 97% graduate satisfaction with their FVTC education.

Employer Satisfaction
FVTC has a strong employer network across the district for hiring graduates with an emphasis in health care, transportation and manufacturing positions, which is in alignment with high demand fields. Each year, FVTC conducts a survey with graduate employers and a summary of responses is provided below. The full results of 220 employers in the 2013 Employer Satisfaction Survey regarding 2012-13 graduates are reported in Appendix C.

Employer responses are a valuable component in the process of obtaining feedback on programs offered by FVTC. To gather input, the employer satisfaction research is based on a four-point scale related to meeting expectations with 4 being "exceeds" expectations (Figure 9). Employers rated all areas above the "meets expectations" rating (3). Employers posted a mean rating of 3.27 regarding the importance of the local technical college to overall business success. Employers' satisfaction with graduates' technical education posted a 3.44 mean rating. The results of Employability Essentials demonstrate the continued employer focus on "soft skills" and the strong performance of our graduates in most areas. Each of the skills listed below under this category experienced an increased mean rating in the 2014 report as compared to the 2013 report.

Figure 9: Employers' Satisfaction with Graduates' Entry Level Skills
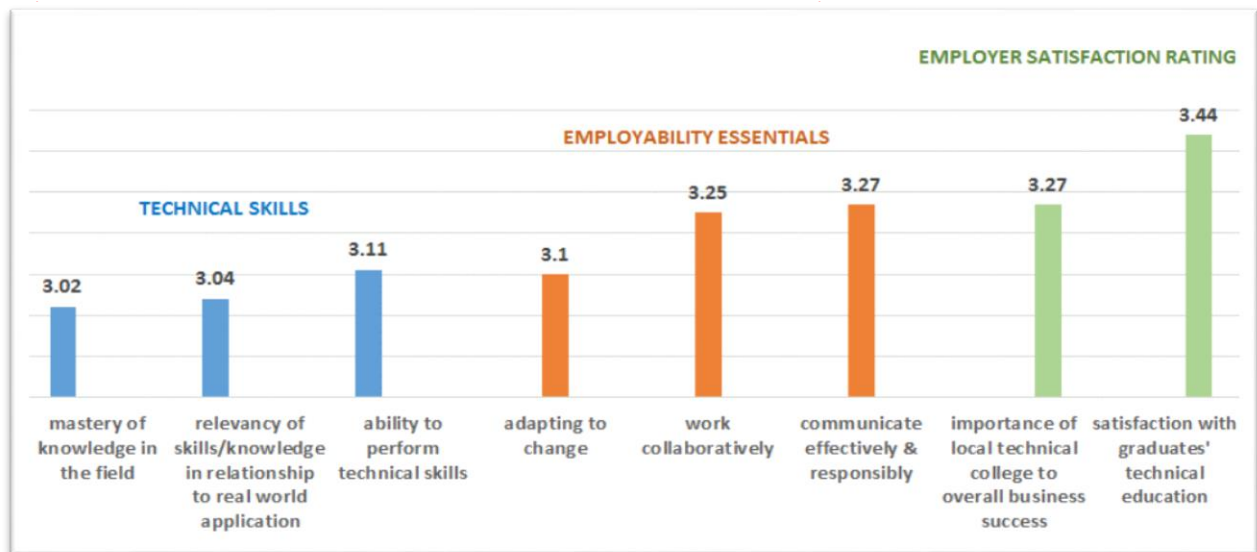
WTCS Peer Benchmarks
As a comparison with other Wisconsin technical colleges' ratings for employer satisfaction with graduates' education, FVTC ranks fourth with a mean of 3.44 and Madison ranks highest with a mean of 3.52. Comparing to an overall sixteen college benchmark mean of 3.42, FVTC's mean of 3.44 ranks above the sixteen college average.

Figure 10: Employer Response to Satisfaction with Graduates' Technical Education
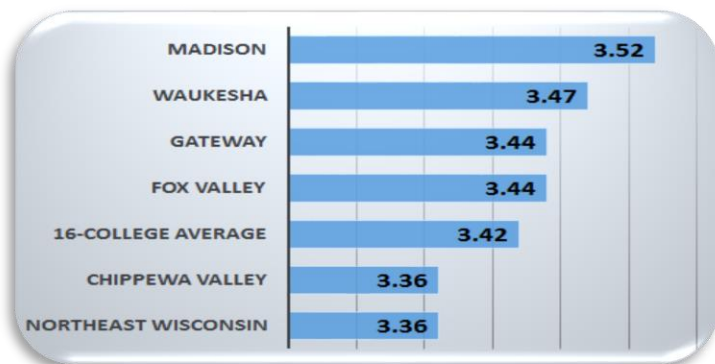
Opportunities for Improvement
The opportunities for improvement related to this statutory purpose are prominently reflected in the College's 2013-16 Strategic Plan particularly in four Strategic Directions along with the Areas of Focus that relate to occupational programming (see below). The plan was revised for 2014-15 to reflect the WTCS Performance-Based Funding (PBF) measures that determine a portion of FVTC state funding level for next year. FVTC competes with the other WTCS colleges for a portion of the funding allotted to each PBF measure.

In addition, the need to focus college-wide energy on increasing enrollment is one of the twelve 2014-15 College Annual Objectives. Work continues in targeted recruitment and retention through the Student Enrollment Plan.

Appendix D outlines FVTC Strategic Plan measures beginning with the baseline year of 2012-13, actual results for 2013-14, and measureable improvement targets for each of the next three years. The Strategic Plan is monitored at mid-year and annually for performance and matched to the College's continuous environmental scan efforts to assure alignment with emerging trends.

<u>Learning Agility – Offer multiple access and delivery avenues to build and refine knowledge and skills</u>
Areas of Focus
- Expand flexible delivery options for students
- Advance the assessment of technical skill attainment into more programs

<u>Innovation Leader – Focus our entrepreneurial spirit on new designs for education linked to emerging opportunities</u>
Areas of Focus
- Strategic investment proposals
- New initiative requests
- Benchmark best practices with other colleges
- Explore new programs and certificate offerings

<u>Student Success – Improve learning outcomes through the redesign of organizational practices</u>
Areas of Focus
- Strengthen course completion rates
- Support student persistence to complete credentials
- Improve graduation rates
- Assist basic skills students in completing post-secondary courses
- Strengthen graduate employment rates in related fields
- Graduate more students in high demand fields

<u>Robust Partnerships – Energize regional economic potential through strong and dynamic partner connections</u>
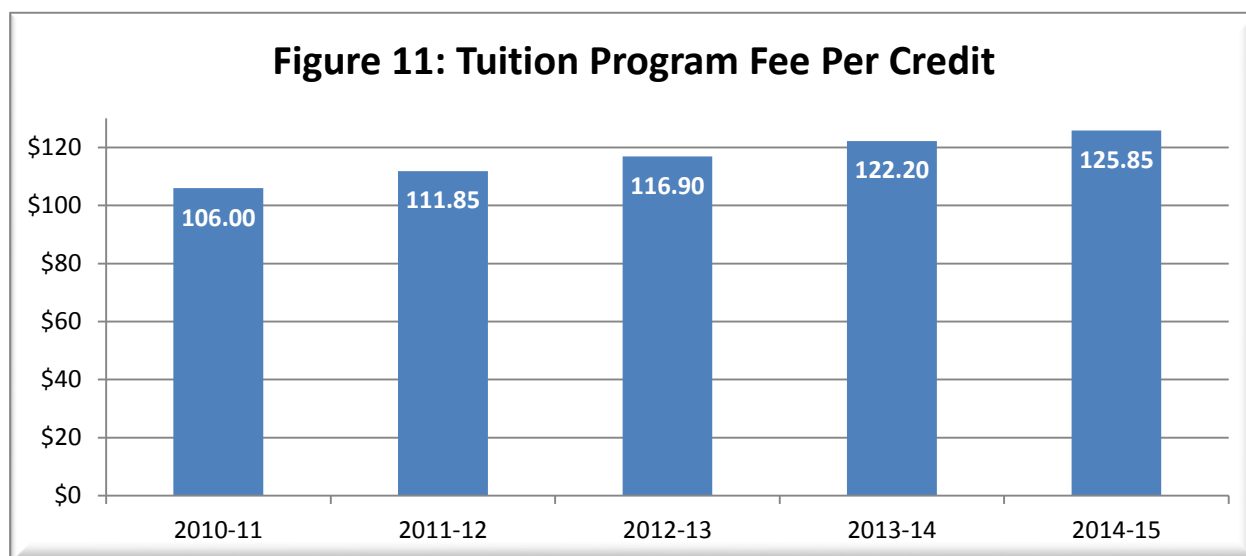*Areas of Focus*
- Connect with today's workplace through active advisory committees
- Target dialogues with key industry sectors
- Design more program pathways for K-12 students

At What Cost

Cost to the Student

Figure 11 shows the five-year annual trend in student tuition as set by the WTCS Board. Tuition does not include any materials or additional fees. An analysis of these annual increases shows that tuition increases have ranged from 2.99% to 5.52% over a five-year period.
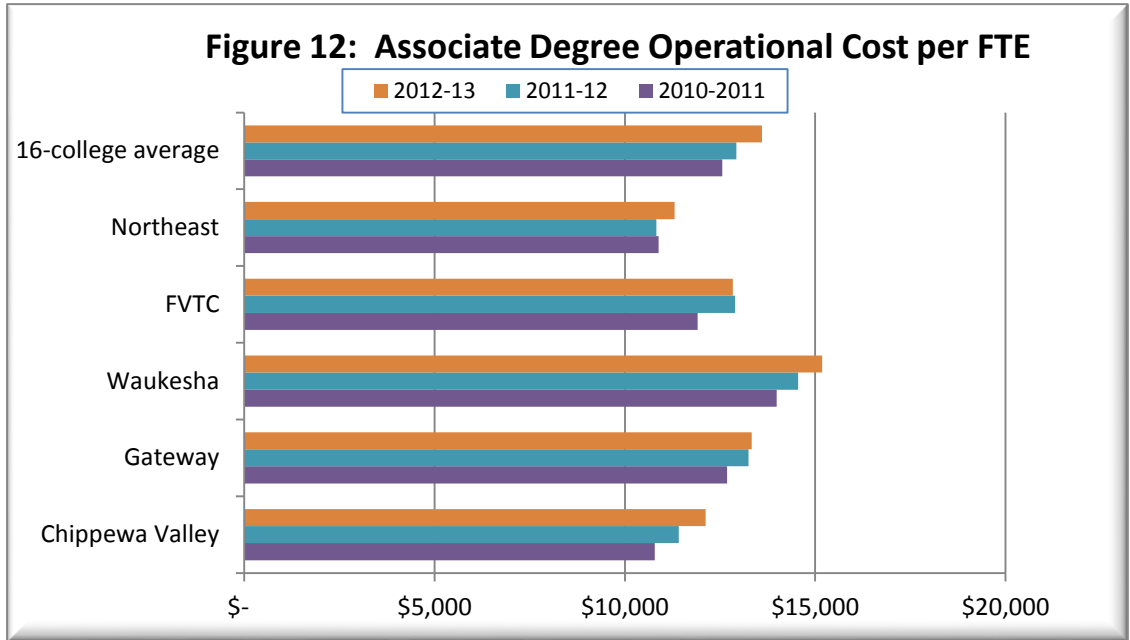
Figure 11: Tuition Program Fee Per Credit

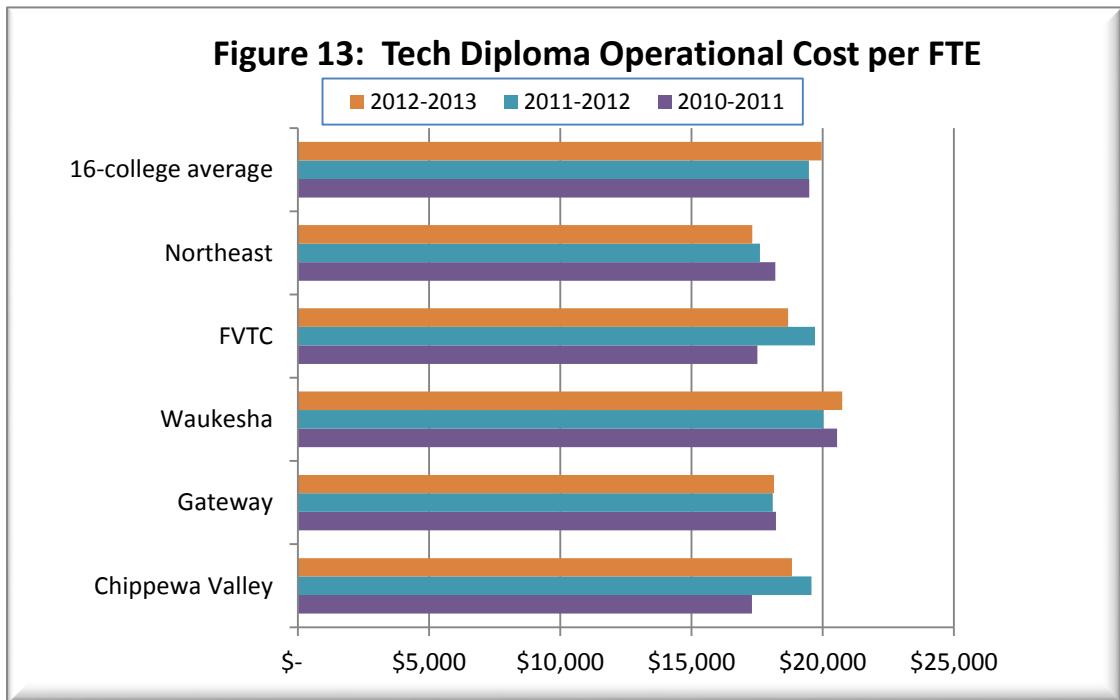| Year	Tuition Program Fee Per Credit
2010-11	106.00
2011-12	111.85
2012-13	116.90
2013-14	122.20
2014-15	125.85

Source: WTCS

Peer Benchmarks

Operational cost per FTE is defined as all operating fund expenditures (General, Contract Training, & Grant funds) except Criminal Justice federal grant expenditures, which have been excluded to ensure comparability across the system. FTEs generated in the Criminal Justice grants have also been excluded in the cost calculations. The College consistently maintains a cost per FTE that aligns closely with the statewide average (Figures 12 and 13).

Comparisons with other WTCS colleges are provided for peer benchmarks. However, critical analysis is difficult due to multiple variations by district. These district variations can include the cost of living, demographics, local faculty contracts, types of programs, number of program offerings, staffing patterns, level of contracting activity, and other differences from college to college.

One potential explanation for the lower Associate Degree cost per FTE attributed to NWTC and CVTC is the greater emphasis that these two colleges have placed on offering general education courses as part of their transfer efforts (Figure 12). General education courses are more economical to offer, thus bringing down the overall cost per FTE. Technical diploma cost per FTE (Figure 13) is typically higher than associate degree cost per FTE due to intensive laboratory class time resulting in more contact hours for faculty with students, and the supplies and minor equipment needed for a higher level of hands-on experience in technical diplomas.

Figure 12: Associate Degree Operational Cost per FTE

Legend: 2012-13, 2011-12, 2010-2011

- 16-college average
- Northeast
- FVTC
- Waukesha
- Gateway
- Chippewa Valley

X-axis: $-, $5,000, $10,000, $15,000, $20,000

Figure 13: Tech Diploma Operational Cost per FTE

Legend: 2012-2013, 2011-2012, 2010-2011

- 16-college average
- Northeast
- FVTC
- Waukesha
- Gateway
- Chippewa Valley

X-axis: $-, $5,000, $10,000, $15,000, $20,000, $25,000

Data Note: 2012-13 is the most recent year available for the benchmark colleges. For 2012-13, FVTC cost per FTE increased 0.8% for associate degree and 2.3% for technical diploma areas. When total enrollments decline, as they did in 2013-14, the operational cost per FTE increases.

Appendix A – FVTC Associate Degree, Technical Diploma and Certificate Offerings for 2014-15

Agriculture, Horticulture & Natural Resources
AGRICULTURE
Agribusiness Agronomy Technician (TD)
Agribusiness Dairy Technician (TD)
Agribusiness Management Technician (TD)
Agribusiness/Science Technology (AAS)
Agriculture Equipment Service Technician (TD)
Agriculture Power Equipment (AAS)
Crop Application Specialist (C)
Exploring Agriculture, Horticulture & Natural Resources Careers (C)
Farm Business & Production Management (TD)
Farm Operation (TD)
Precision Agriculture Technician (TD)[New]
Precision Farming (C)

HORTICULTURE
Golf Course Turf & Equipment Technician (C)
Greenhouse Grower/Plant Propagation Technician (C)
Horticulture Technician (TD)
Horticulture/Landscape Specialist (TD)
Landscape Construction Technician (C)
Landscape Maintenance Technician (C)
Landscape Series, Home Owners (C)
Natural Food Production Technician (C)
Outdoor Power Equipment Technician (TD)
Power Sports Technology (C)

LABORATORY SCIENCE
Laboratory Science - Environmental (C)
Laboratory Science - Food (C)
Laboratory Science - Introduction (C)
Laboratory Science - Paper & Packaging (C)
Laboratory Science Assistant (TD)
Laboratory Science Technician (AAS)

NATURAL RESOURCES
Natural Resources Technician (AAS)
Urban Forestry Technician (C)

Aviation
AVIATION
Aeronautics-Pilot Training (AAS)
Aeronautics-Professional Pilot (TD)
Aircraft Electronics (AAS)
Airframe & Powerplant Mechanics (TD)

Business, Management & Finance
BUSINESS & MANAGEMENT
Administrative Professional (AAS)
Broadcast Captioning (AAS)
Business Fundamentals 1 (C)
Business Fundamentals 2 (C)
Business Management (AAS)
Court Reporting (AAS)
Entrepreneurs Starting an Online Business (C)
Entrepreneurs' Start-up Venture (C)
Entrepreneurship, Business Owners' (C)
Event Planning (C)
Exploring Business, Management & Finance Careers (C)
Human Resources (AAS)
Management Development (AAS)

Medical Administrative Professional (AAS)[New]
Medical Office Assistant (TD)
Meeting & Event Management (AAS)
Microsoft Office Suite (C)
Office Assistant (TD)
Office Skills, Basic (C)[New]
Organizational Leadership, Advanced (C)
Organizational Leadership, Basic (C)
Paralegal (AAS)

COMMUNICATIONS
Communications, Professional (AAS)
Digital Media (C)
Technical Illustrator (C)
Writing for the Web (C)
Writing, Grant/Proposal (C)

FINANCE
Accounting (AAS)
Accounting Assistant (TD)
Banking & Financial Services (AAS)
Financial Fraud Detection, Fundamentals of (C)
Peachtree (C)
QuickBooks (C)

Construction
CONSTRUCTION
Building Information Modeling (BIM) (C)
Construction Management Technology (AAS)
Construction Project Coordinator (C)[New]
Construction Project Supervision (C)
Construction, Residential Building (TD)
Electrical Code, National (C)
Electrician Apprentice (ABC) (A)
Electricity (TD)
Electronic Systems Technician Apprentice (A)
Operating Engineer Apprentice (A)
Photovoltaic Installation Technician (C)
Plumbing Apprentice (A)
Sheet Metal Construction (A)
Steamfitting Apprentice (A)
Steamfitting Service Apprentice (A)

Culinary & Hospitality
CULINARY & HOSPITALITY
Culinary Arts (AAS)
Food Service Production (TD)
Food Service Sales Professional (C)
Hotel & Restaurant Management (AAS)

Engineering & Electronic Related Technologies
AUTOMATION
Automated Manufacturing Systems Technology (AAS)
Automation & Maintenance, Advanced (C)
ControlLogix PLCs (C)
Electro-Mechanical Technology (AAS)
Industrial Equipment Fundamentals (C)
Instrumentation & Process Control (C)
Motors & Variable Speed Drives (C)
Programmable Logic Controllers (PLCs) (C)

Appendix A – FVTC Associate Degree, Technical Diploma and Certificate Offerings for 2014-15

ENERGY & ENVIRONMENTAL
Emergency Preparedness Specialist (C)
Energy & Environmental Engineering Technology (AAS)
Energy & Environmental Management (C)
Energy Management & Control for Buildings (C)
Environmental Compliance Specialist (C)
Environmental Health & Safety (C)
Safety Engineering Technology (AAS)
Wind Energy Technology (AAS)

ENGINEERING & ELECTRONICS
Broadband Cable Installer (C)
Computer Rendering & Animation (C)
Electrical Engineering Technology (AAS)
Electronic Engineering Technology (AAS)[New]
Electronics Principles (C)
Electronics, Biomedical (C)
Electronics, Practical Fundamental (C)
Intelligent Interface Design & SCADA (C)
Telecommunications Field Service (C)
Telecommunications, Advanced (C)

MECHANICAL DESIGN
CAD Management (C)
Digital Manufacturing (C)
Mechanical CAD Drafting (TD)
Mechanical Design Technology (AAS)

Health Science
HEALTH SCIENCE
Dental Assistant (TD)
Dental Hygienist (AAS)
Exploring Health Careers (C)
Gerontology (C)
Health Information Technology (AAS)
Medical Assistant (TD)
Medical Coding Specialist (TD)
Nursing - Associate Degree (AAS)
Nursing Assistant (TD)
Nursing Pathway, LPN to ADN (AAS)
Nursing, Licensed Practical Nurse Refresher (C)
Nursing, Practical (TD)
Nursing, Registered Nurse Refresher (C)
Occupational Therapy Assistant (AAS)
Personal Care Worker (C)
Pharmacy Technician (TD)
Therapeutic Massage (C)

Human Services
ALCOHOL & OTHER DRUG ABUSE
Alcohol & Other Drug Abuse Associate (AAS)
AODA Specialty Education (C)
Substance Abuse Counselor Education (C)
Substance Abuse Counselor in Training (C)

EARLY CHILDHOOD EDUCATION
Child Care Administrator (C)
Early Childhood Education (AAS)
Family Child Care (C)
Understanding Autism Spectrum Disorder (C)

Information Technology
NETWORK/COMPUTER SUPPORT
Computer Support Specialist (AAS)
Desktop Support (C)
Exploring IT Careers (C)
Help Desk Support Specialist (TD)
Network Administration (C)
Network Infrastructure (C)
Network Specialist (AAS)
Network Systems Administration (AAS)
Security (C)

SOFTWARE DEVELOPMENT/WEB
Database (C)
Mobile Applications Development (C)
PC Programming (C)
Software Developer (AAS)
Web Design (C)
Web Development (C)
Web Development & Design Specialist (AAS)

Manufacturing
INDUSTRIAL MAINTENANCE
Industrial Electrician Apprentice (A)
Industrial Maintenance (C)
Industrial Maintenance Basic (C)[New]
Industrial Maintenance Mechanic (TD)[New]
Maintenance Mechanic/Millwright Apprentice (A)
Maintenance Technician Apprentice (A)
Pipe Fabricator Apprentice (A)
Pipefitting Apprentice (A)
Technical Studies-Journeyworker (AAS)

MANUFACTURING PROCESSES
Exploring Manufacturing Careers (C)
Industrial/Manufacturing Engineering (C)
Industrial/Manufacturing Engineering Technician (AAS)
Lean/Six Sigma (C)
Lean/Six Sigma Practitioner (AAS)[New]
Quality Assurance (C)
Quality Assurance Technician (AAS)[New]
Supply Chain Management (AAS)

METAL MACHINING, FABRICATION & WELDING
Machine Tool Technician (TD)
Machinist Apprentice (A)
Tool & Die Apprentice (A)
Welding Technician, Industrial (AAS)
Welding, Production (TD)
Welding/Metal Fabrication (TD)

WOOD MANUFACTURING
Wood Manufacturing Technology (TD)

Marketing, Sales & Service
INTERIOR DESIGN
Commercial Design (C)
Interior Design (AAS)
Interior Design - Commercial Design (AAS)
Interior Design - Kitchen & Bath Design (AAS)
Kitchen & Bath Design (C)

Appendix A – FVTC Associate Degree, Technical Diploma and Certificate Offerings for 2014-15

MARKETING
Exploring Marketing & Sales Careers (C)
Marketing (AAS)
Web Marketing (C)

SALES & SERVICE
Call Center Sales & Customer Service (C)
Cosmetology Apprentice (A)
Selling Techniques, Advanced (C)
Selling Techniques, Introductory (C)

Printing Technologies
PRINTING TECHNOLOGIES
Corrugated Press Operation (C)[New]
Flexographic Press Operation, Narrow Web (C)[New]
Flexographic Press Operation, Wide Web (C)[New]
Package & Label Printing (TD)
Package & Label Printing Technician (AAS)
Printing (TD)
Printing & Publishing (AAS)

Public Safety
EMERGENCY MEDICAL SERVICES (EMS)
Emergency Medical Technician (TD)
Emergency Medical Technician - Advanced (C)
Emergency Medical Technician - Paramedic (TD)
Paramedic Technician (AAS)

FIRE PROTECTION
Fire Investigator (C)
Fire Protection Technician (AAS)

LAW ENFORCEMENT
Child Protection Investigator (C)
Corrections (C)
Crime Prevention (C)
Criminal Investigator (C)
Criminal Justice - Law Enforcement (AAS)
Criminal Justice - Law Enforcement 520 Academy (TD)
Cyber Crime Investigation (C)
Evidence Technician (C)
Evidence Technician - Advanced (C)
Exploring Public Safety Careers (C)
Forensic Science (AAS)
Homeland Security & Asset Protection Management (AAS)
Law Enforcement (TD)
Loss Prevention Specialist (C)
Private Investigation Specialist (C)
Public Safety Executive Development Institute (C)
Security (C)
Security Management (C)

WILDLAND FIRE
Wildland Fire Advanced Equipment Training (C)
Wildland Fire Crew (TD)
Wildland Firefighter (AAS)

Transportation
AUTOMOTIVE
Auto Collision Repair & Refinishing Technician (TD)
Automotive GM Technician (C)

Automotive Maintenance Technician (TD)
Automotive Service Management (C)
Automotive Technician (TD)
Automotive Technician - Imports (TD)
Automotive Technology (AAS)
Automotive Technology - Imports (AAS)
Automotive Technology GM ASEP (AAS)
Exploring Automotive Careers (C)
Vehicle Refinishing & Repair Technology (AAS)

DIESEL
Diesel Advanced Technician (C)
Diesel Construction Equipment Service Technician (FABTECH) (TD)
Diesel Engine Service Technician (FABTECH) (TD)
Diesel Equipment Mechanic (TD)
Diesel Equipment Technology (AAS)
Diesel Power Generation & Marine Service Tech (FABTECH) (TD)
Electrical Power Generator Service Technician (C)
Transport Trailer Service Technician (C)[New]

TRUCK DRIVING
CDL Straight Truck (C)
Truck Driving (TD)
Truck Driving Refresher (C)[New]

General, Global & Individualized Studies
GENERAL STUDIES
General Education (C)
General Studies Transfer (UW-Green Bay) (C)
General Studies Transfer (UW-Oshkosh) (C)

GLOBAL STUDIES
English Bilingual Business (C)
English Language Competency - Advanced (C)
English Language Competency - Intermediate (C)
English Language Teaching (C)
Global Business Professional (C)
Spanish (C)
Spanish - English Medical Interpretation (C)
Spanish Health Care (C)

INDIVIDUALIZED STUDIES
Individualized Technical Studies (AAS)

Appendix B – Program Accreditation, Licensure and Certification

Program Accreditations

Program	Accrediting Organization	Date of Next Site Visit	National Pass Rate	FVTC Pass Rate
Culinary Arts	American Culinary Federation (ACF)	Fall, 2015	N/A	N/A
Dental Assistant	American Dental Association Commission on Dental Accreditation (ADA)	Fall, 2017	85.2%	N/A
Dental Hygienist	American Dental Association Commission on Dental Accreditation (ADA)	Fall, 2013	82% (2012)	100% (2014)
Early Childhood Education	National Association for the Education of Young Children (NAEYC)	TBD - Candidacy Stage	N/A	N/A
Fire Protection	Fire and Emergency Services Higher Education (FESHE)	NA—no site visits, but we submit registration forms course outcomes, and grades for all FESHE-aligned courses	NA	NA
Health Information Technology	Commission on Accreditation of Allied Health Informatics and Information Management Education (CAHIIM)	TBD – Candidacy Stage	75% 2012	NA
Interior Design	National Kitchen & Bath Association (NKBA)	11/15/13 Candidacy Stage	N/A	N/A
Medical Assistant	Commission on Accreditation of Allied Health Education Programs (CAAHEP) and American Medical Technologists (AMT)	Fall, 2014 Spring 2014	78% (2013)	68% (2013)
Nursing, ADN	Accreditation Commission for Education in Nursing (ACEN formerly NLNAC)	Fall, 2019	85%	96% (Q1 & Q2 2014)
Nursing, Practical	Licensed Practical Nurse Wisconsin Department of Health/Board of Nursing	N/A	84%	100% (Q1 & Q2 2014)
Occupational Therapy	National Board for Certification in Occupational Therapy (NBCOT)	2018 – 19	85% (2013)	90% (2013)
Paramedic	Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP)	Initial accreditation awarded 07/31/14 Next site visit 2018-2019	NA	NA

Appendix B – Program Accreditation, Licensure and Certification

Program Certifications

Program	Certification Organization	Date of Next Visit/Renewal	Licensure Pass Score (if required)	FVTC Status
Airframe & Powerplant Mechanic	U.S. D.O.T.; Federal Aviation Administration, Regulation - Part 147 Certified	12/2014	70%	82% (2013)
Aeronautics -Pilot Training AAS -Professional Pilot TD	U.S. D.O.T.; Federal Aviation Administration, Regulation - Part 141 Certified	7/2016	80%	Newly certified, no data
Automotive Tech – GM - ASEP	Automotive Service Educational Program (ASEP) – General Motors, NATEF Certification	08/2018	N/A	NATEF Certified
Automotive Import	NATEF Certification National Automotive Technicians Education Foundation	05/2019	N/A	NATEF Certified
Automotive Comprehensive	NATEF Certification	11/2015	NA	NATEF Certified
Auto Collision	NATEF Certification	10/2017	NA	NATEF Certified
Diesel Technology	NATEF Certification	12/2017	NA	NATEF Certified
Outdoor Power Equipment Technician	Engine and Equipment Training Council (EETC)	No site visits required, 8/2014 is our next Accreditation. Accreditation is based on Instructor Certification.	70% min score on Instructor certification exam. Recertification is based on industry sponsored educational seminars.	Applied for recertification
Truck Driving	Professional Truck Driver Institute (PTDI) Certification	05/2017	NA	PTDI Certified

Appendix B – Program Accreditation, Licensure and Certification

Other Licensing and Certifications

Occupational Program Area	Agency/Organizations	License/Certification
Alcohol and other Drug Abuse (AODA)	Wisconsin Department of Health Services	Certified AODA Counselor
Criminal Justice AAS / Law Enforcement Academy / Corrections Academy	Wisconsin Department of Justice	State-certified law enforcement officer or jailer
Emergency Medical Services Programs	Wisconsin Department of Health Services	National Registry Exam
Fire Protection Service	State of Wisconsin certification	Multiple levels
Nursing Assistant	Wisconsin Department of Health Services	Certified Nursing Assistant
Therapeutic Massage	Wisconsin Department of Safety and Professional Services	Licensed Massage Therapist
Wildland Firefighter AAS and TD	U.S. Forest Service (USFS)	USFS classes and physical fitness test

Appendix C – 2014 Employer Comparison with Prior Year

Employer Survey Comparison Results			
	2013 (graduates from 2011-12) 66 respondents	**2014** (graduates from 2012-13) 220 respondents	**Change**
Mean rating based on: 4 = Exceeds 3 = Meets 2 = Nearly Meets 1 = Does Not Meet Expectations			
1. Mastery of knowledge in the field	3.10	3.02	-.08
2. Ability to perform technical skills of the profession	3.20	3.11	-.09
3. Ability to communicate effectively with co-workers and/or customers	3.18	3.17	-.01
4. Relevancy of graduates' skill and/or knowledge base in relationship to real world applications within the industry	3.05	3.04	-.01
5. Mastery of science, technology, engineering or math skills needed in the field	3.09	3.09	.00
6. Overall preparedness for employment at your company	3.13	3.10	-.03
7. Adapt to Change – Anticipate changes and positively react to them.	3.09	3.10	.01
8. Think Critically and Creatively – Apply independent and rigorous reasoning that leads to informed decisions, innovation and personal empowerment.	3.02	3.02	.00
9. Work Collaboratively – Work collaboratively with others to complete tasks, solve problems, resolve conflicts, provide information, and offer support.	3.23	3.25	.02
10. Communicate Effectively and Respectfully – Apply appropriate writing, speaking, and listening skills across various settings to engage diverse audiences.	3.15	3.27	.12
11. Act Responsibly – Apply ethical standards in both personal and professional behavior.	3.38	3.36	-.02
Mean rating based on: 4 = Very Satisfied 3 = Satisfied 2 = Unsatisfied 1 = Very Unsatisfied			
12. How satisfied are you with the graduates' technical college education?	3.40	3.44	.04
Mean rating based on: 3 = Yes 2 = Maybe 1 = No			
13. Would you recommend graduates of this program to another employer?	*2.86 out of 3*	*2.82 out of 3*	-.04
14. Would you hire a technical college graduate again?	*2.95 out of 3*	*2.91 out of 3*	-.04
Mean rating based on: 4 = Very Important 3 = Important 2 = Somewhat Important 1 = Not Important			
15. How important is your local technical college(s) to the overall success of your business?	3.30	3.27	-.03

Appendix D - FVTC 2013-16 Strategic Plan Measures related to Occupational Programs

Measures	2012-13 Baseline	2013-14 Actual	2014-15 Target	2015-16 Target
SD Learning Agility – Offer multiple access and delivery avenues to build and refine knowledge and skills.				
Measure 1.1: % of course offerings in multiple delivery formats/locations	70%	68%	70-75%	70-75%
Measure 1.2: Number of programs reporting Technical Skill Attainment (TSA) data to the WTCS [PBF]*	39	58	75	100
Measure 1.3 Number of credits earned by high school students in all types of dual enrollment programs [PBF]	5,945	6,540	7,193	7,913
SD Innovation Leader – Focus our entrepreneurial spirit on new designs for education linked to emerging opportunities.				
Measure 2.4: Investigate at least 2 new programs and 3 new certificates per division	NA	NA	16 programs 24 certificates	16 programs 24 certificates
SD Student Success – Improve learning outcomes through the redesign of organizational practices.				
Measure 3.1: % of successful course completion	82%	82%	83%	84%
Measure 3.2: % of students persisting from Fall to Spring term	77%	78%	79%	80%
Measure 3.3: % of program students graduating in 3 years.	43%	38%	39%	40%
Measure 3.4: % of program students graduating in 5 years.	51%	51%	52%	53%
Measure 3.5: Number of adult basic education students who successfully complete a post-secondary course [PBF]	128	130	150	170
Measure 3.6: % of graduates employed in a related field within 6 months [PBF]	76%	79%	>76%	>76%
Measure 3.7: Number of program graduates in high demand fields [PBF]	1,944	1,852	1,800 – 1,900	1,800 – 1,900
SD Robust Partnerships – Energize regional economic potential through strong and dynamic partner connections.				
Measure 4.1: Employer advisory committee effectiveness average rating	4.33 of 7	5.32 of 7	5.0+ of 7	5.0+ of 7
Measure 4.2: Number of industry sector dialogues	5	6	5	5
Measure 4.3: Number of K-12 student career and technical education pathways	NA	15	19	23

*PBF = Performance-Based Funding measure related to the WTCS funding criteria

	Meet/Exceed Target		Between Baseline and Target		Below Baseline