

Performance Monitoring Report: Apprenticeship

Apprenticeship Purpose Statement

Offer related academic and technical support courses for joint labor/management apprenticeship programs.

February 19, 2019

Apprenticeship

What We Do

6 Construction Trades
8 Industrial Trades
1 Service Trade



Apprenticeship Program Offerings

For Whom



1,176
Apprentices

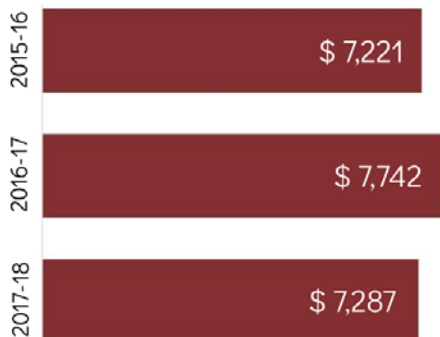


399
Employers

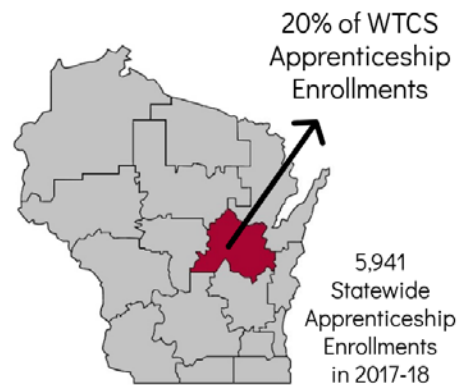
Apprentices & Employers Served
2017-18

At What Cost?

Apprenticeship Cost Per FTE



State Performance



4.6

OF
5.0

2017-18 FVTC Board Rating
of Performance



Apprenticeship Report Details

Overview

Apprenticeship has been a cornerstone of technical education and a viable post-secondary learning option in Wisconsin for over a century. “On-the-job learning” of an employed apprentice, coupled with the applied learning at the technical college, continues to be a productive way for employers to train their workforce and for employees to gain crucial knowledge and skills in their career field.

Total enrollments increased by 72 students in 2017-18 as compared to 2016-17. The projected data for 2018-19 shows increasing enrollments. Efforts to increase the awareness of the value of apprenticeship across the trades are among many contributing factors to the forecasted growth as well as the 2017 Wisconsin Act 273 allowing high school seniors to work as apprentices.

What We Do

The Bureau of Apprenticeship Standards (BAS), a branch of the Wisconsin Department of Workforce Development, regulates the training and certification for apprenticed trades in conjunction with employers, the Wisconsin Technical College System and trade advisory committees. Employers and Joint Apprenticeship Committees sponsor apprentices in selected industrial, construction and service trades for two to six years as paid employees and are responsible for teaching trade skills on the job.

Additional FVTC Apprenticeship facts:

- Coursework is state-approved with an 80% common core curriculum.
- Employer advisory committees meet twice a year to discuss enrollments, curriculum, technology, and equipment purchases.
- Apprenticeship instruction is provided in 15 active programs.
- Construction trades have local and/or regional Joint Apprenticeship Committees (JACs) who review the progress of current apprentices toward the successful completion of requirements of their apprenticeship, review curriculum, discuss enrollments, and advise regarding equipment purchases.
- FVTC faculty and staff participates with the local JACs that are composed of equal numbers of employees (labor) and employers (contractors).
- Union training organizations that are directly involved with FVTC apprenticeships include Local 400 (plumbers and steamfitters) and Local 139 (Wisconsin Operating Engineers).
- FVTC has served both union and non-union affiliated apprenticeships since 1987 with the organization of the Association of Builders and Contractors (ABC) of Wisconsin as a non-union committee focused on the construction trades.

Collaborations

FVTC apprenticeship staff work to enhance the quality of apprenticeship through active partnerships. One important collaboration involves sharing instructional staff with other technical college districts as outlined in Table A. FVTC is also an active partner with training centers enhancing and maximizing the resources available for apprenticeship training.

Sustaining and growing the future workforce is a focal point in today's apprenticeship related trades. The replacement of aging workers in local companies looms as a critical concern voiced by representatives at program advisory and Joint Apprenticeship Committee meetings and is evident in state policy directions.

Table A: 2017-18 Apprenticeship Collaborations

Apprenticeship Programs	Collaborations with Other Colleges	Location
Steamfitting Steamfitting Service Pipe Fabricator Plumbing	FVTC provides instruction to FVTC and NWTC apprentices at Local 400 Training Center in Kaukauna.	Local 400 Appleton Steamfitters and Plumbers Training Center
Operating Engineer	FVTC courses are taught by Local 139 WTCS certified instructors to statewide apprentices at Training Center in Coloma.	Coloma Training Center
Plumbing	FVTC provides related instruction under contract with NWTC.	FVTC – Appleton Campus NWTC – Green Bay Campus

For Whom

In 2017-18, FVTC had a 6.5% increase in the number of apprenticeship students served. Table B shows the enrollment details of each apprenticeship program for the past three years. For the 2017-18 school year, 399 distinct employers had apprentices in the various trades at FVTC.

Table B: Number of FVTC Apprenticeship Students & Employers by Program

Apprenticeship Programs	Students				Employers
	2015-16	2016-17	2017-18	2018-19 YTD	2017-18
50-502-1 Cosmetology	24	19	19	12	10
Service Trade Subtotal	24	19	19	12	10
50-413-9 Electrician (ABC)	176	166	156	119	33
50-427-5 Plumbing	78	90	104	124	58
50-435-2 Steamfitter (Construction)	53	78	92	95	25
50-435-4 Steamfitter (Service)	17	28	32	26	11
50-442-2 Pipe Fabricator	104	121	98	84	11
50-447-1 Operating Engineer	398	314	353	650	165
Construction Trades Subtotal	837	803	835	1,098	303
50-413-1 Industrial Electrician	84	82	101	99	35
50-420-2 Machinist	43	44	50	42	25
50-439-3 Tool & Die Maker	13	11	12	2	7
50-423-1 Maintenance Mechanic/Millwright	105	101	107	99	38
50-423-3* Millwright/Pipefitter	*	*	*	*	2
50-423-7 Lubrication Technician	-	-	11	N/A	4
50-435-1 Industrial Pipefitter	9	8	11	9	6
50-464-1 Maintenance Technician	21	36	41	48	16
Industrial Trades Subtotal	275	282	322	299	133
Grand Total	1,136	1,104	1,176	1,409	446**

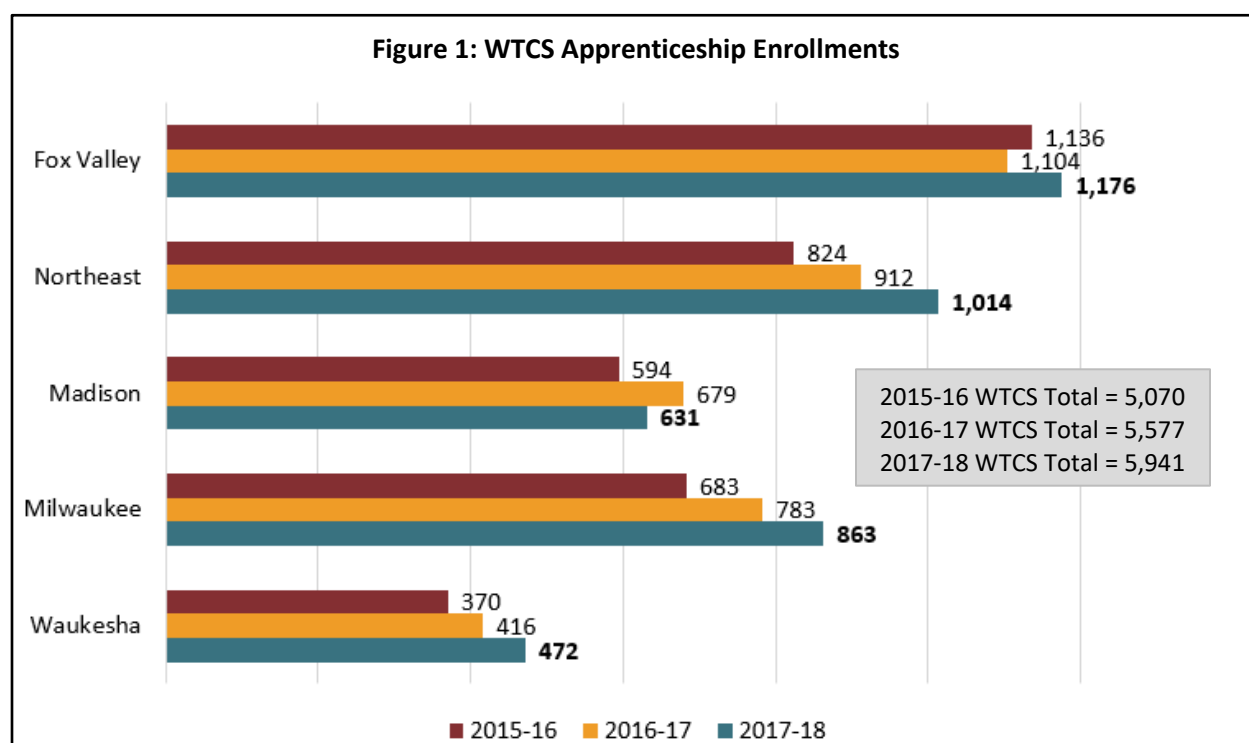
Source: Student counts from WTCS Report CL1330 as of November 16, 2018. Employer counts from FVTC Apprenticeship Administrative Assistant. 2015-16 Construction Trades Subtotal includes 11 Electronic System Technician apprentices, and 2016-17 includes 6 Electronic System Technician apprentices not listed in the details. * 50-423-3 Millwright – Pipefitter is reported under 50-423-1 in the WTCS reporting system
 **Grand Total contains duplication for employers that sponsored apprenticeship students in more than one area. The distinct count of apprenticeship employers for 2017-18 was 399.

Table C highlights the employers that have the highest number of apprentices. The left side of the table lists employers that hold instruction for their apprentices at off-campus training centers while the right side lists employers that have apprentices participate in instruction on the FVTC campus. All instruction is delivered by FVTC certified instructors.

Table C: Employers with the Highest Number of Apprentices (2017-18)

Employers with Apprentice Instruction at Training Centers	Number of Apprentices	Employers with Apprentice Instruction On Campus	Number of Apprentices
Team Industries	63	Faith Technologies	45
JF Ahern	31	Suburban Electrical Engineers	42
Payne & Dolan, Inc.	25	Neenah Foundry	33
Northeast Asphalt	22	Northland Electrical Services	17
Bassett Mechanical	20	Walker Forge	17
August Winter & Sons	16	Neenah Paper	16
Michels Corporation	16	Northern Electric	15
Musson Brothers, Inc.	15	Kimberly Clark	14
Piping Systems	15	Expera Specialty Solutions	13

FVTC continues to serve more total apprentices than peer benchmark colleges (Figure 1). Nearly all the benchmark colleges, and the state as a whole, are experiencing an upward trend in apprentice enrollments which mirror the improving economy in many areas of Wisconsin. Apprenticeship enrollments at FVTC increased by 6.5% compared with the statewide overall increase of 7.1% from 2016-17 to 2017-18. The larger Wisconsin urban centers served by Milwaukee Area Technical College and Madison College combined had 25% of the total WTCS apprenticeship enrollments with Milwaukee at 863 and Madison at 631. At 1,176, FVTC alone had 20% of the statewide apprenticeship enrollments.



Source: WTCS Portal Report – CLI330

Student Satisfaction and Wage Information

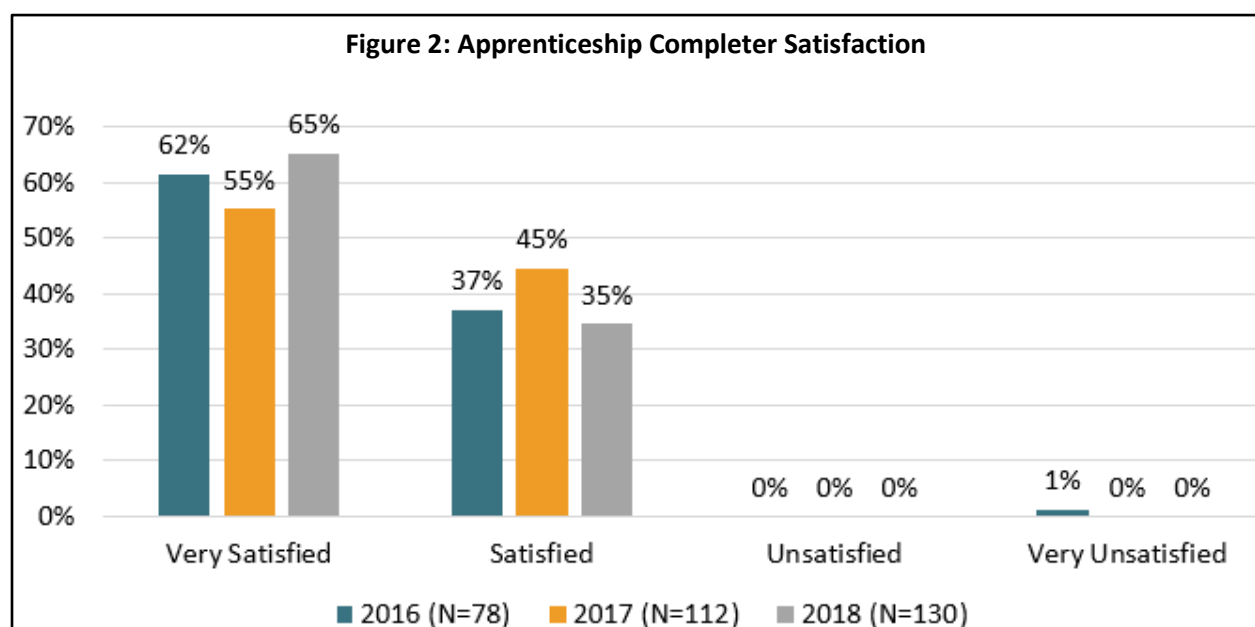
Workers are reporting wages averaging \$64,740 annually, with average workweek of over 46 hours, in 2017-18 because of their apprenticeship completion as noted in Table D. Apprenticeship completers

continue to be satisfied with the training they receive through FVTC (Figure 2). Survey research conducted in Fall 2018 showed an increase in the number of respondents stating they were “very satisfied.”

Table D: 2017-18 Wage Data for Apprenticeship Completers

Apprenticeship Programs	Hourly Wage	Annual Wage	Hours Per Week
Operating Engineer Apprentice	\$37.04	\$77,039	55
Industrial Electrician Apprentice	\$32.67	\$67,960	47
Electrician Apprentice (ABC)	\$30.71	\$63,867	45
Maintenance Mechanic/Millwright	\$30.59	\$63,618	41
Maintenance Technician Apprentice	\$29.26	\$60,869	43
Machinist Apprentice	\$26.48	\$55,088	46

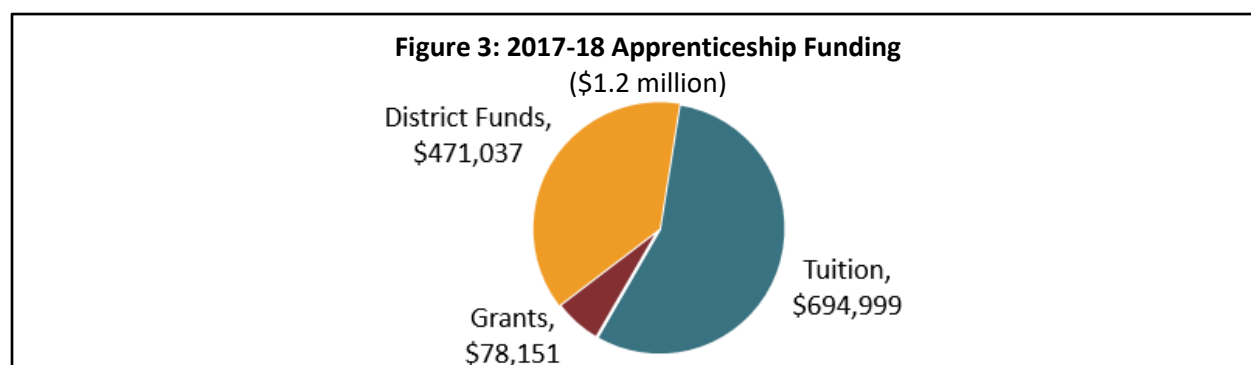
Source: Apprenticeship Graduate Survey conducted Fall 2018



Source = 2016, 2017 & 2018 Apprenticeship Surveys

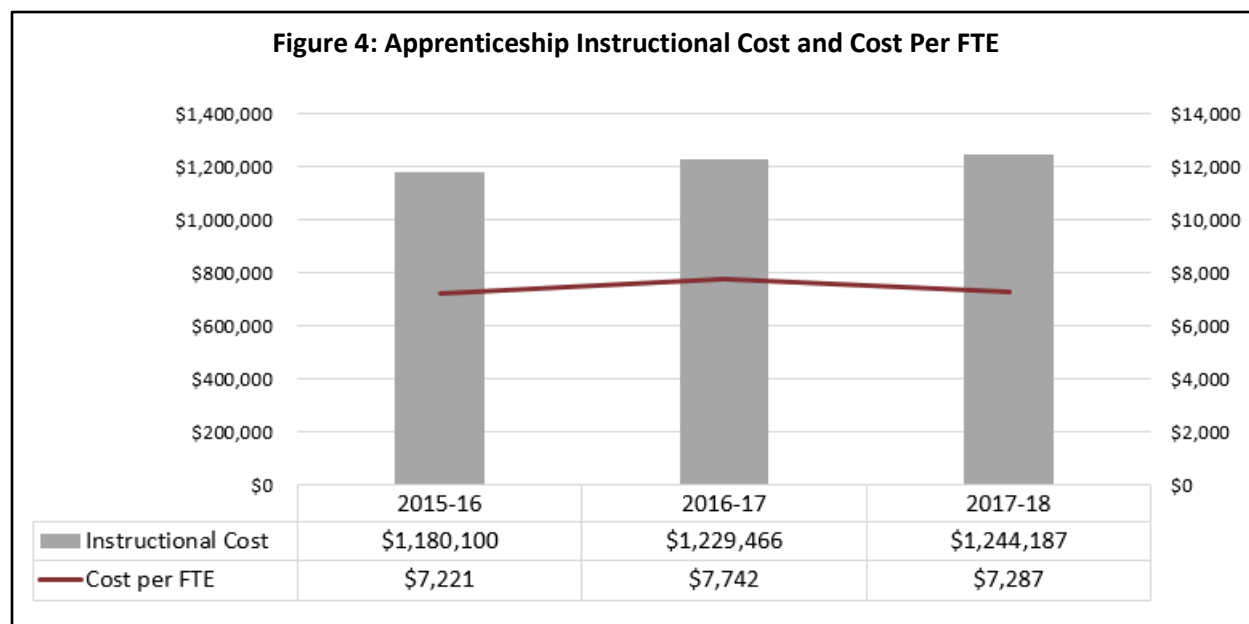
At What Cost

Figure 3 is a representation of apprenticeship funding and the combination of state and district funds and tuition.



Source: FVTC Financial Services

Figure 4 indicates a 1.2% increase in instructional costs for the apprenticeship purpose. From 2016-17 to 2017-18, there was a 7.5% increase in FTEs, from 159 FTE to 171 FTEs. The cost per FTE declined 5.9% from the previous year. Instructional cost per FTE declined because enrollments increased and classes ran closer to capacity, on average, than in the prior year.



Source: Internal Staff Accounting (Instructional Expenditures)

Costs reflect the following instructional staff who teach in a variety of the apprenticeship programs:

- 10 FVTC full-time apprenticeship instructors
- 8 FVTC full-time instructors with apprenticeship classes as part of their teaching load
- 40 instructors employed through training centers supported through a reimbursement arrangement (Local 139 and Local 400) and certified with FVTC

FVTC supports ongoing investments to maintain state-of-the-art dedicated laboratory facilities for apprenticeship programs. This level of service for district apprentice trades is frequently referenced as an effective model of apprenticeships and therefore helps FVTC remain a leader among apprentice programs in the WTCS.