



# Performance Monitoring Report: Apprenticeship

February 16, 2021

## Apprenticeship Purpose

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

# 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 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 50 students in 2019-20 as compared to 2018-19. The projected data for 2020-21 show similar levels of apprenticeship enrollments to the prior year, with fluctuations in some areas. Construction apprenticeship headcounts have increased, while industrial trade apprenticeships declined.

## 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 local advisory 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.



Coursework is state-approved with an 80% common core curriculum.



Construction trades have local and/or regional advisory committees who review the progress of current apprentices toward the successful completion of requirements of their apprenticeship, review curriculum, discuss enrollments, and advise equipment purchases.



FVTC faculty and staff participate with the local advisory committees that are composed of equal numbers of employees (labor) and employers (contractors).



Employer advisory committees meet at least twice a year to discuss enrollments, curriculum, technology, and equipment purchases.

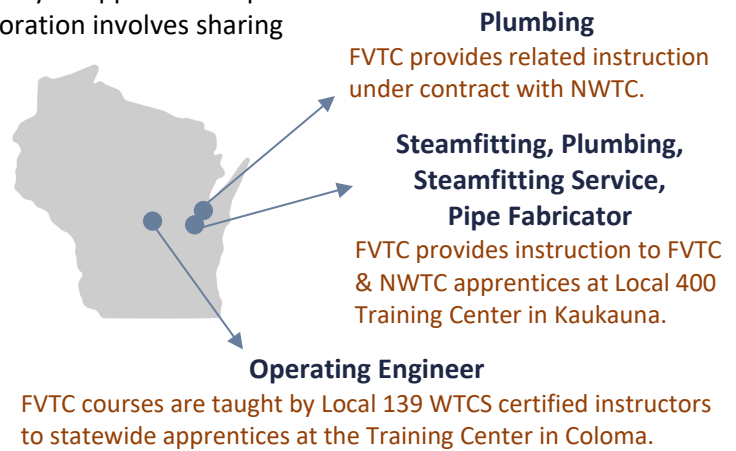


Training organizations that are directly involved with FVTC apprenticeships include:

- Pipe Trades UA Local 400
- Operating Engineers Local 139
- Associated Builders and Contractors (ABC) of Wisconsin

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. 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 advisory committee meetings and is evident in state policy directions.



## For Whom

In the 2019-20 academic year, our college experienced healthy increases in the number of apprentices served in all three categories; Service, Construction, and Industrial. Overall, our number served increased 4.9%, and the number of employers increased 6.2%. The table below shows enrollment details of each apprenticeship program for the past three years.

**Number of FVTC Apprenticeship Students & Employers by Program**

Apprenticeship Programs	Students				Employers
	2017-18	2018-19	2019-20	2020-21 YTD	2019-20
50-502-1 - Cosmetology	19	14	24	12	13
<b>Service Trade Subtotal</b>	<b>19</b>	<b>14</b>	<b>24</b>	<b>12</b>	<b>13</b>
50-413-9 - Electrician (ABC)	156	120	137	148	27
50-447-1 - Operating Engineer	431	581	576	550	177
50-427-5 - Plumbing	104	124	140	143	58
50-435-2 - Steamfitter (Construction)	95	101	97	78	26
50-435-4 - Steamfitter (Service)	34	28	34	34	9
<b>Construction Trades Subtotal</b>	<b>820</b>	<b>954</b>	<b>984</b>	<b>953</b>	<b>297</b>
50-414-2 - Electrical & Instrumentation			13	18	4
50-413-1 - Industrial Electrician	101	99	106	112	40
50-420-9 - Industrial Manufacturing Technician			13	19	3
50-423-7 - Lubrication Technician		1	1	2	1
50-420-2 - Machinist	51	44	36	29	19
50-423-1 - Maintenance Mechanic/Millwright	114	103	117	115	38
50-464-1 - Maintenance Technician	51	62	73	58	28
50-423-3 - Millwright – Pipefitter	14	18	14	8	2
50-442-2 - Pipe Fabricator	99	86	69	51	9
50-435-1 - Pipefitting	12	11	5	4	5
50-439-3 - Tool & Die Maker	12	2	7	1	6
<b>Industrial Trades Subtotal</b>	<b>454</b>	<b>426</b>	<b>454</b>	<b>417</b>	<b>155</b>
<b>Grand Total</b>	<b>1,294</b>	<b>1,394</b>	<b>1,462</b>	<b>1,382</b>	<b>465</b>

Source: Student counts from WTCS Client Reporting Cube. Employer counts provided by FVTC's Apprenticeship Administrative Assistant. 2017-18 grand total includes 1 Electronic Systems Technician student not listed in the details. In addition to the grand total counts, FVTC also serves a small number of students each year who enroll in apprenticeship classes but who are not in an apprenticeship program.

Some employers hold instruction for their apprentices at off-campus training centers, while others have apprentices participate in instruction on the FVTC campus. All instruction is delivered by FVTC certified instructors.

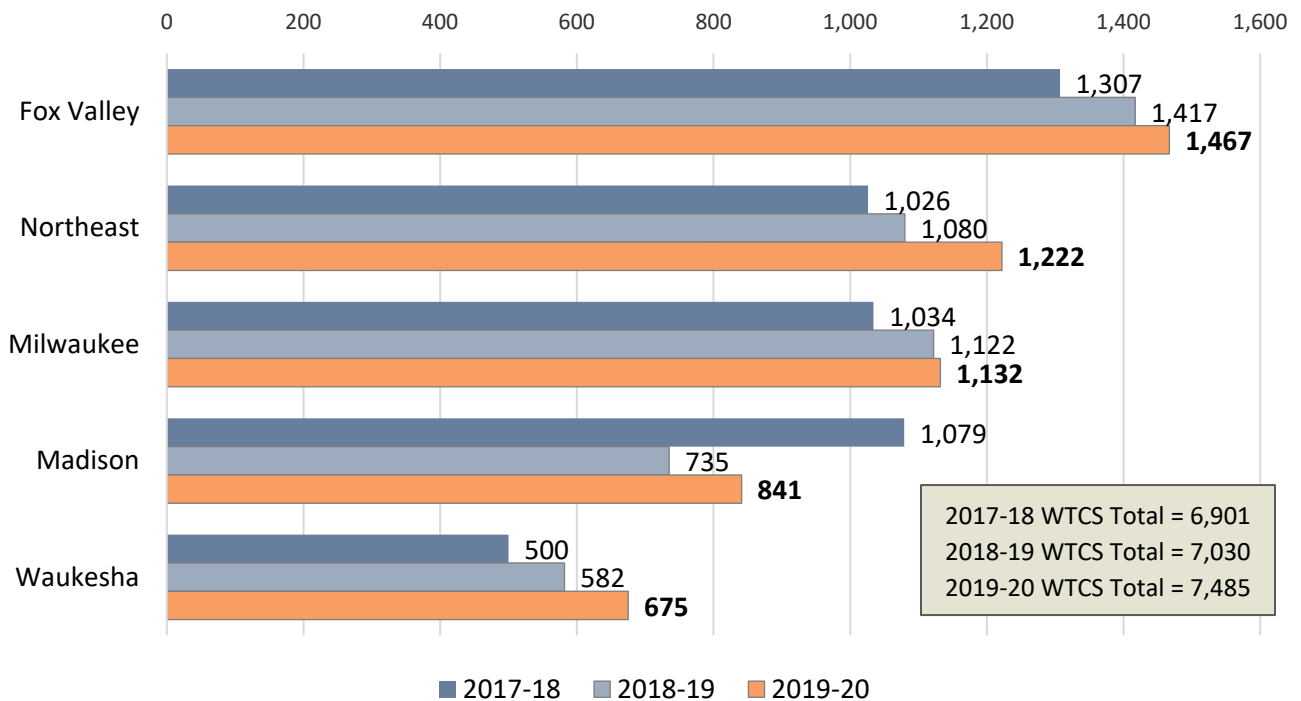
**Employers with the Highest Number of Apprentices (2019-20 Academic Year)**

Instruction at Training Centers		Instruction on Campus	
Employer	Number of Apprentices	Employer	Number of Apprentices
Northeast Asphalt	68	Suburban Electrical Engineers	44
Team Industries	30	Northland Electrical Services	24
Payne & Dolan Inc	27	Neenah Foundry	22
New Berlin Grading	26	Quad	19
Ryan Inc Central	26	Essity	17
Hoffman Construction	24	Walker Forge	17
Dawes Rigging & Crane	23	Ahlstrom Munksjo	15
Edgerton Contractors	23	AriensCo	13
Bassett Mechanical	20	Grande Cheese	12
JF Ahern	17	Hoffmaster	10

Source: FVTC's Apprenticeship Administrative Assistant

FVTC continues to serve more total apprentices than any other WTCS district. All the benchmark colleges, and the state as a whole, experienced an upward trend in 2019-20 apprentice headcounts. The larger Wisconsin urban centers served by Milwaukee Area Technical College and Madison College combined had 26% of the total WTCS apprenticeship headcount, with Milwaukee at 1,132 and Madison at 841. At 1,467 students, FVTC had 20% of the statewide apprenticeship total.

**WTCS Apprenticeship Student Counts**



Source: WTCS Client Reporting Cube

FVTC apprenticeship completers are reporting wages averaging \$76,161 annually, with an average workweek of approximately 49 hours.

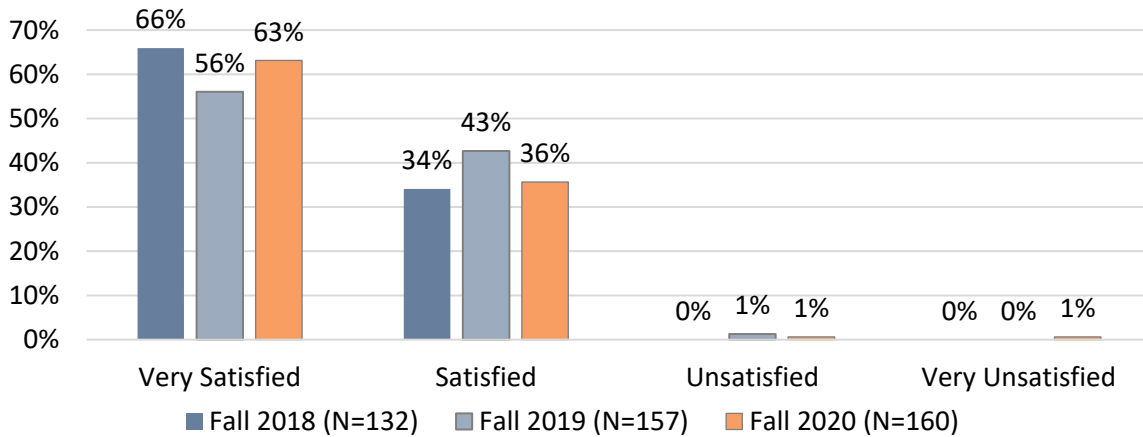
**Wage Data for 2018-19 Apprenticeship Completers**

Apprenticeship Programs	Hourly Wage	Annual Wage	Hours Per Week
Pipe Fabricator	\$ 43.16	\$ 89,781	41
Steamfitting Apprentice	\$ 41.03	\$ 85,332	43
Steamfitting Service Apprentice	\$ 40.94	\$ 85,160	43
Operating Engineer Apprentice	\$ 40.33	\$ 83,894	57
Plumbing Apprentice	\$ 34.08	\$ 70,883	43
Electrician Apprentice (ABC)	\$ 31.61	\$ 65,753	44
Industrial Electrician Apprentice	\$ 31.56	\$ 65,648	44
Maintenance Technician Apprentice	\$ 31.01	\$ 64,505	NA
Maintenance Mechanic/Millwright	\$ 29.31	\$ 60,957	44
Machinist Apprentice	\$ 27.41	\$ 57,002	43

Source: Apprenticeship Completer Survey conducted Fall 2020

Apprenticeship completers continue to be satisfied with the training they receive through FVTC. Nearly all graduates report being “Satisfied” or “Very Satisfied” with FVTC’s paid-related apprenticeship instruction.

**Apprenticeship Completer Satisfaction**



Source = 2018, 2019, & 2020 Apprenticeship Completer Surveys



**Where do FVTC apprenticeship completers work?**

**97%** work in Wisconsin

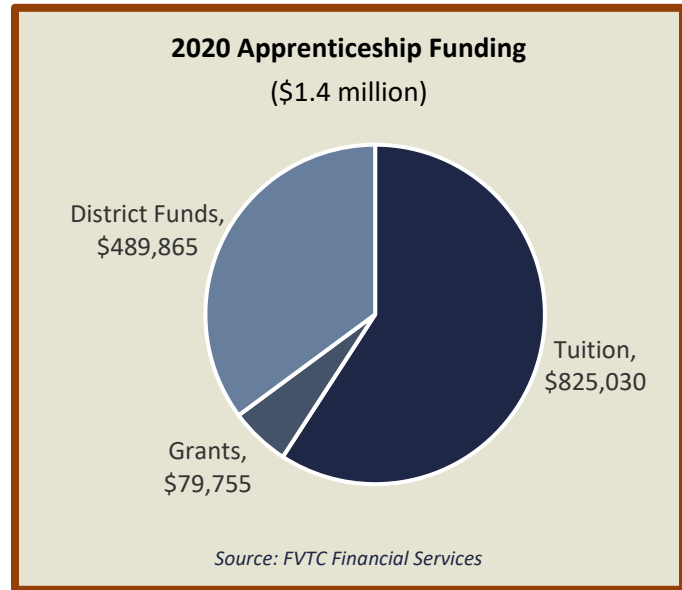
**73%** work in FVTC’s District

*(excludes Operating Engineers)*

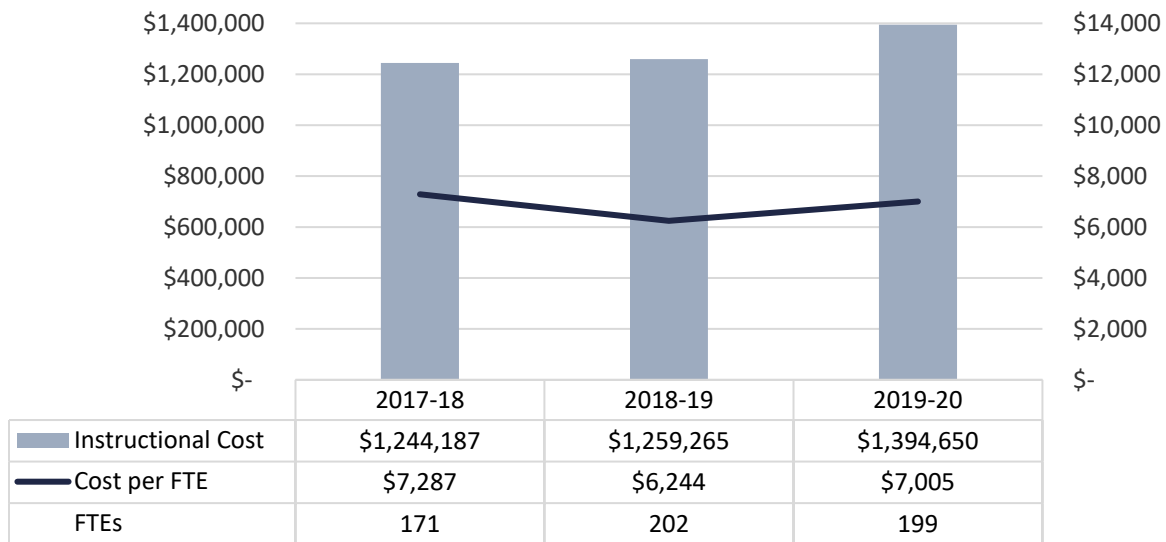
## At What Cost

From 2018-19 to 2019-20, there was a 1.3% decrease in apprenticeship FTEs, from 202 FTEs to 199 FTEs. Instructional cost grew by 10.8% from the previous year, resulting in a 12.2% increase in the cost per FTE. 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
- 38 instructors employed through training centers supported through a reimbursement arrangement (Local 139 and Local 400) and certified with FVTC



## Apprenticeship Instructional Cost and Cost Per FTE



*Source: Internal Staff Accounting (Instructional Expenditures)*

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.

