



Registered Apprenticeships in Michigan



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and Analytics

Registered Apprenticeships in Michigan

April 2025

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About This Report

This report is the product of a partnership between the Michigan Center for Data and Analytics and the Michigan Department of Labor and Economic Opportunity. It is designed to examine current and historical Registered Apprenticeship numbers and characteristics across the state. This report details demographic, occupation, wage, industry, and program information, and builds and expands upon previous reports published by the Michigan Center for Data and Analytics in 2016, 2019, 2021, and 2022.

The Michigan Center for Data and Analytics would like to particularly thank Director Stephanie Beckhorn from the Michigan Department of Labor and Economic Opportunity's Office of Employment and Training for her support and assistance in this work.

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Executive Summary



Registered Apprenticeships are critical workforce development pathways that help develop a skilled workforce across a diverse range of opportunities. Registered apprentices who go through these programs often experience very favorable employment outcomes upon completion.

There were a record 20,600 active registered apprentices in Michigan in 2024. The traditional Registered Apprenticeship industries of *Construction* and *Manufacturing* accounted for 83.4 percent of active registered apprentices.

Among active registered apprentices, 10.5 percent were women, and 14.4 percent were people of color. Veterans accounted for 5.4 percent of active registered apprentices, while youth represented 40.5 percent.

In 2024, there were a record 8,400 new registered apprentices statewide. The previous record was set in 2018 with just under 7,500 new registered apprentices.

Several industries also saw record numbers of new registered apprentices. *Health care and social assistance* and *Public administration*, both nontraditional industries, each set record marks for new registered apprentices in 2024.

Nearly 94 percent of 2022 Registered Apprenticeship completers were employed within Michigan one year after completing their program. These completers had a median one-year-after annual wage of \$80,700, significantly greater than the median annual wage for all occupations in Michigan in 2024.

The completion rate among those scheduled to finish their Registered Apprenticeship program in 2024 was 43.9 percent. People of color had a completion rate of 36.1 percent, significantly below the rate for white registered apprentices (46.6 percent).

Data and Methodology

Data for Registered Apprenticeships in Michigan is provided by the Registered Apprenticeship Partners Information Data System (RAPIDS), managed by the U.S. Department of Labor's Office of Apprenticeship. This is one of the largest databases of its kind. This report follows methodology set by the Office of Apprenticeship to achieve comparable results to what is published by the U.S. Department of Labor. Because of this, there may be additional apprenticeships across Michigan that are not captured within the data. **Any references to apprentices throughout this report are referencing those that are registered with the U.S. Department of Labor's Office of Apprenticeship.**

Administrative wage record data are used for determining employment outcomes of Registered Apprenticeship completers. These data allow for analysis on employment and

wages one year after program completion. This report summarizes these outcomes by occupations, industries, and demographics. To protect confidentiality, fields with fewer than 10 observations are suppressed. The analysis in this report focuses on those who have completed their program during the 2022 Registered Apprenticeship fiscal year. The most recent year of data, 2024, includes information from October 1, 2023, through September 30, 2024, which follows the typical Registered Apprenticeship program fiscal year.

All analysis in the report is based on the physical program location determined by the program address. Registered apprentices who list a home address in Michigan but are registered to a program based outside of Michigan are not included. This methodology is consistent for analysis on Michigan's 10 Prosperity Regions.

The categories of Registered Apprenticeships used in this report are set by the Office of Apprenticeship:

- **"Active"** registered apprentices are defined as those who are either registered, suspended, or reinstated. These conditions also hold for "active" programs.
- **"New"** registered apprentices must have entered a Registered Apprenticeship during the fiscal year of analysis. "New" programs also must meet this condition.
- **"Completers"** are those who finished their Registered Apprenticeship during the fiscal year.



Statewide Trends

In 2024, there were almost 20,600 active registered apprentices across nearly 1,200 programs in Michigan. This is a 12.0 percent increase (2,200) from 2023.

According to the U.S. Department of Labor, Michigan had the eighth most active registered apprentices in 2024 based on program location. By registered apprentice location, the state ranked fourth.

Over 80 percent of active registered apprentices are in the *Construction* (65.4 percent) and *Manufacturing* (18.1 percent) industries. However, active registered apprentices are distributed across a wide variety of occupations. *Electricians* led the way with just under 4,000 (19.4 percent) followed by *Construction laborers* with 3,500 (17.2 percent). *Plumbers, pipefitters, and steamfitters* and *Carpenters* were the only other occupations

This report focuses on fiscal year 2024 registered apprentices enrolled in programs within Michigan. Data

in this report may differ from the U.S. Department of Labor (USDOL) which also captures registered apprentices enrolled in nationwide programs and continuously updates data. These differences may cause USDOL data to vary from numbers in this report, though both are correct.

with more than 1,000 active registered apprentices with 2,000 and 1,800, respectively. In total, more than 130 occupations had at least one registered apprentice in 2024.

In 2024, over 40 percent of active registered apprentices were in four-year Registered

Apprenticeship programs, making it the most common program length. Two-year programs were the second most common (18.5 percent). Programs that were 2.5 years had the third greatest share at 11.4 percent.

There were more than 8,400 new registered apprentices in Michigan in 2024, setting a new state record. The previous record was set in 2018 when there were just under 7,500 new registered apprentices. This also marked the seventh straight year that the state has had more than 6,000 new registered apprentices.

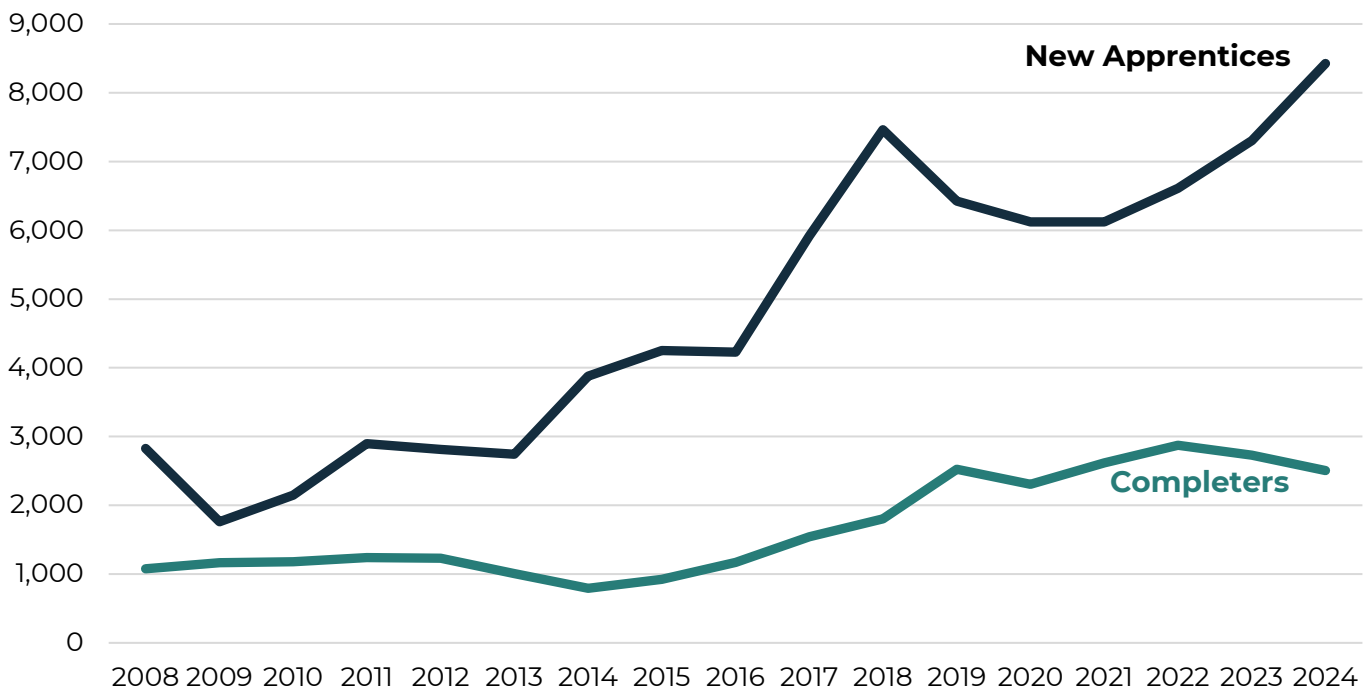
Michigan registered new apprentices across 123 different occupations in 2024, also a record. This was an increase from 108 in 2023 and 103 in 2022. Prior to 2022, the state never had more than 90 occupations represented by new registered apprentices.

While there were a record number of new apprentices this past year, 2024 was the third straight year that completers have decreased across Michigan. There were just 2,500 completers in 2024, the fewest since 2020. This, however, has coincided with a slight dip in new registered apprentices during the pandemic. The number of completers is expected to grow as the increasing number of new registered apprentices complete their programs.

Those who completed a Registered Apprenticeship in 2022 faced favorable employment outcomes one year after completing. These completers had an employment rate of 93.9 percent and a median one-year-after wage of \$80,720.

The number of completers has decreased slightly the past few years because of fewer new registered apprentices registering during the pandemic.

New Registered Apprentices and Completers by Year in Michigan, 2008–2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Occupations

Nearly 60 percent of all active registered apprentices in Michigan were spread across just five occupations. These included *Electricians* (19.4 percent), *Construction laborers* (17.2 percent), *Plumbers, pipefitters, and steamfitters* (9.6 percent), *Carpenters* (8.7 percent), and *Millwrights* (4.5 percent).

Electricians saw nearly 1,500 new registrants, surpassing 2023's record total of 1,365, while *Plumbers, pipefitters, and steamfitters* also registered a record 600 new registered apprentices in 2024. In total, there were 37 occupations that added a record number of new registered apprentices in 2024.

In 2024, 17 occupations registered new apprentices for the first time since at least 2008. The two occupations with the greatest number of new registered apprentices included *Registered nurses* and *Outdoor power equipment and other small engine mechanics* which combined to

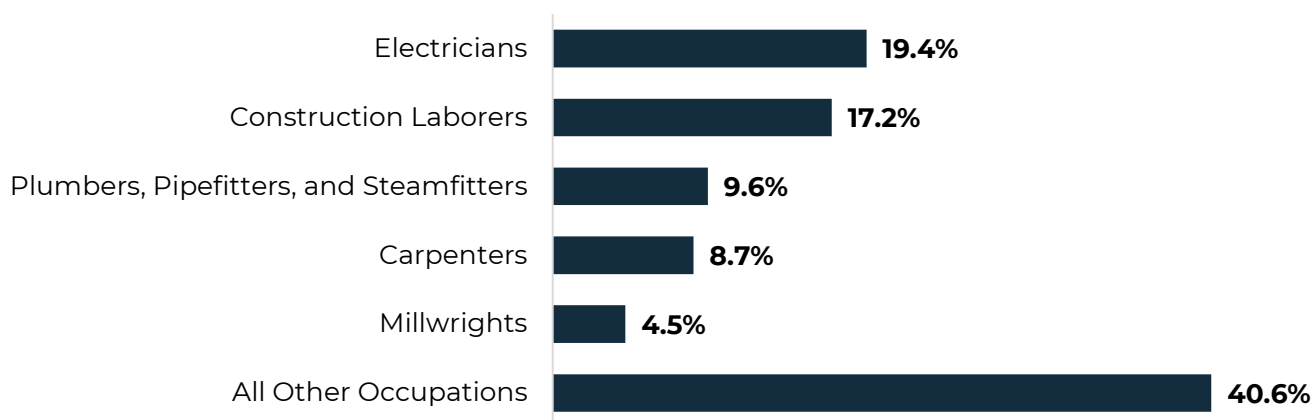
welcome nearly 60 new registered apprentices. Other occupations with a record number of new registered apprentices in 2024 included *Sheet metal workers* (216), *Operating engineers and other construction equipment operators* (157), and *Structural iron and steel workers* (156).

Childcare workers had more than 200 new registered apprentices in 2024. This was the first time the occupation has registered more than 100 new registered apprentices. Similarly, *Medical assistants* registered more than 100 new registered apprentices for the first time in 2024.

There were 89 occupations that had a registered apprentice complete their program in 2024. *Electricians* accounted for about one-fifth of all Registered Apprenticeship completers while *Plumbers, pipefitters, and steamfitters* had the second largest share at 8.9 percent. The number of occupations with completers has come down slightly from 91 in 2023.

The top five Registered Apprenticeship occupations combined to represent nearly 60 percent of all active registered apprentices in Michigan.

Share of Active Registered Apprentices by Occupation, 2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Note: All other occupations represented 129 different occupations which reported at least one active registered apprentice in 2024. Of these occupations, 117 had a share of total statewide active registered apprentices less than 1 percent.

Traditional and Nontraditional Industries

Traditional Registered Apprenticeship industries consist of both the *Construction* and *Manufacturing* sectors. These two industries typically account for most of Michigan's registered apprentices. Nontraditional Registered Apprenticeship industries have been a key focus in expansion efforts to help diversify the opportunities that Registered Apprenticeships can offer. This diversification can create more opportunities for job seekers and strengthen talent pipelines for employers. Industries in this grouping include, but are not limited to, *Educational services*, *Health care and social assistance*, and *Utilities*.

Traditional

In 2024, there were nearly 17,200 active registered apprentices in traditional Registered Apprenticeship industries statewide. *Construction* accounted for 64.5 percent of all active registered apprentices while *Manufacturing* held 18.1 percent. In 2024, there were about five traditional registered apprentices for every one nontraditional apprentice.

From 2008 to 2017, more than 80 percent of new registered apprentices each year (except 2010) were in traditional industries. Since 2018, traditional industries have accounted for less than 80 percent of new registered apprentices, except for 2020. This has coincided with a push toward expanding nontraditional opportunities in the mid- to late-2010s.

In 2024, *Construction* set a record for new registered apprentices with more than 5,000. The previous record set in 2020 was 4,360. It also marked the fourth consecutive year of growth in new registered apprentices in the industry. *Manufacturing* had 1,130 new registered apprentices in 2024, down from nearly 1,500 in 2023.

Traditional industries accounted for 73.0 percent of completers in 2024. *Construction* was responsible for 51.4 percent of all completers, the first time since 2016 this share was 50 percent or greater. There was a total of 1,290 *Construction* completers in 2024, the lowest since 2021. *Manufacturing* saw 540 completers over the year, their lowest since 2017. Again, decreases in the number of completers is likely due to decreased participation during the COVID-19 pandemic.

Nontraditional

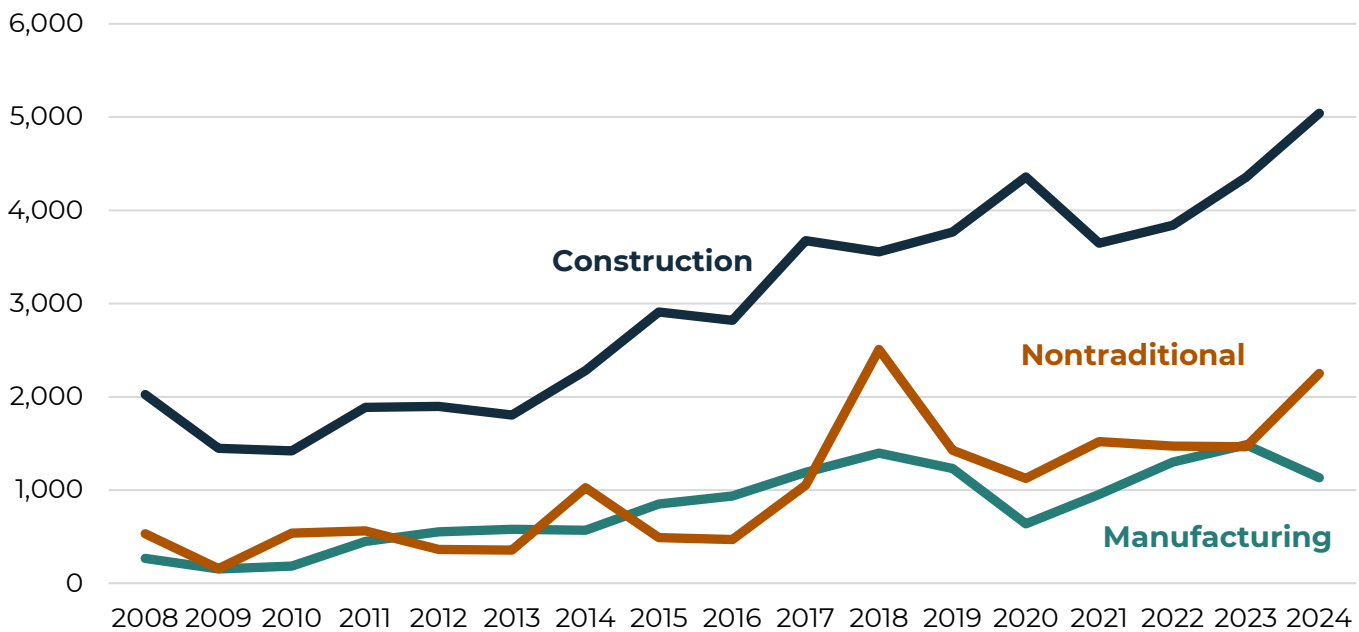
There were 3,410 nontraditional active registered apprentices in Michigan in 2024, accounting for 16.6 percent of all active registered apprentices statewide. Nearly three-quarters of active nontraditional registered apprentices were within four industries. These included *Utilities* (23.6 percent), *Health care and social assistance* (21.5 percent), *Public administration* (15.7 percent), and *Administrative and support and waste management and remediation services* (12.8 percent). There were an additional 11 nontraditional industries with active registered apprentices, which when combined, accounted for just 4.4 percent of total statewide registered apprentices.

Nontraditional industries have seen a significant increase in new registered apprentices since 2017, registering more than 1,000 each year. In 2024, there were 2,250 new registered apprentices in nontraditional industries which accounted for 26.7 percent of all new registered apprentices in Michigan. This was the second largest cohort behind 2018 (2,510).

Health care and social assistance saw a record number of new registered apprentices in 2024 with 815. The industry has seen a significant spike in new registered apprentices since 2018, registering more than 3,600 new registered

Construction saw a record number of new registered apprentices in 2024 while growth among nontraditional industries has outpaced that of Manufacturing over the year.

New Registered Apprentices by Industry, 2008–2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

apprentices in total over the past seven years. From 2008 to 2017, the industry only registered 70 new registered apprentices.

Many other nontraditional industries have also seen notable increases in new registered apprentices recently. *Utilities* registered more than 100 new registered apprentices one time prior to 2017 and had more than that each year since. *Public administration* had more than 100 new registered apprentices each year since 2022, never hitting that mark prior. *Educational services* had more than 200 new registered apprentices in both 2023 and 2024, having never registered more than 100 new registered apprentices in prior years.

There were about 680 completers in nontraditional industries in 2024. This was the lowest amount since 2020, however, marked the sixth consecutive year with more than 600 completers. Prior to 2019, this number had peaked at 400 completers in a single year. It is expected that the number of nontraditional completers will increase as new registered apprentices in these industries have time to complete their programs.

Industry and Occupation Demographics

Four key demographics have been identified to monitor the progress toward increasing representation in Michigan's Registered Apprenticeships. These demographic categories include women, people of color, veterans, and youth (ages 16 to 24). As more data become available, hopefully future editions of this report can include analysis on those with disabilities.

Women

In 2024, there were just under 2,200 active registered apprentices who were women,* accounting for 10.5 percent of the statewide total. Women accounted for half of Michigan's statewide population in 2023.

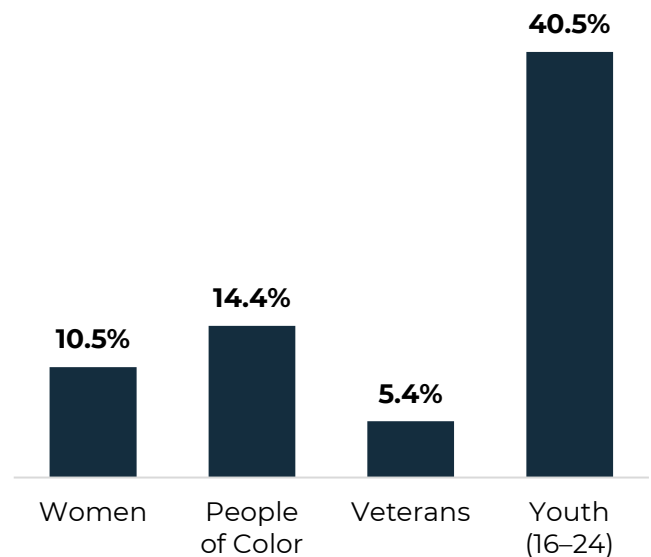
Electricians had the most women of any occupation with more than 250, or 11.7 percent of the total. *Construction laborers* and *Childcare workers* each accounted for 10.1 percent. In total, women were represented in over 100 occupations.

Women made up the majority of active registered apprentices in 45 occupations. Larger occupations with majority-women active registered apprentices included *Childcare workers* (92.4 percent), *Nursing assistants* (90.6 percent), and *Medical assistants* (84.5 percent).

Among industries, *Construction* accounted for about one-third of active women in 2024. *Health care and social assistance* had about one-quarter of women within the industry followed by *Manufacturing* at 18.2 percent. No other industry accounted for more than 7 percent of women. While the largest share of women was in *Construction*, women made up just 5.4 percent of active registered apprentices within the industry. *Health care and social assistance* had the largest

Women represented 10.5 percent of active registered apprentices in Michigan in 2024.

Share of Active Registered Apprentices by Demographic, 2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

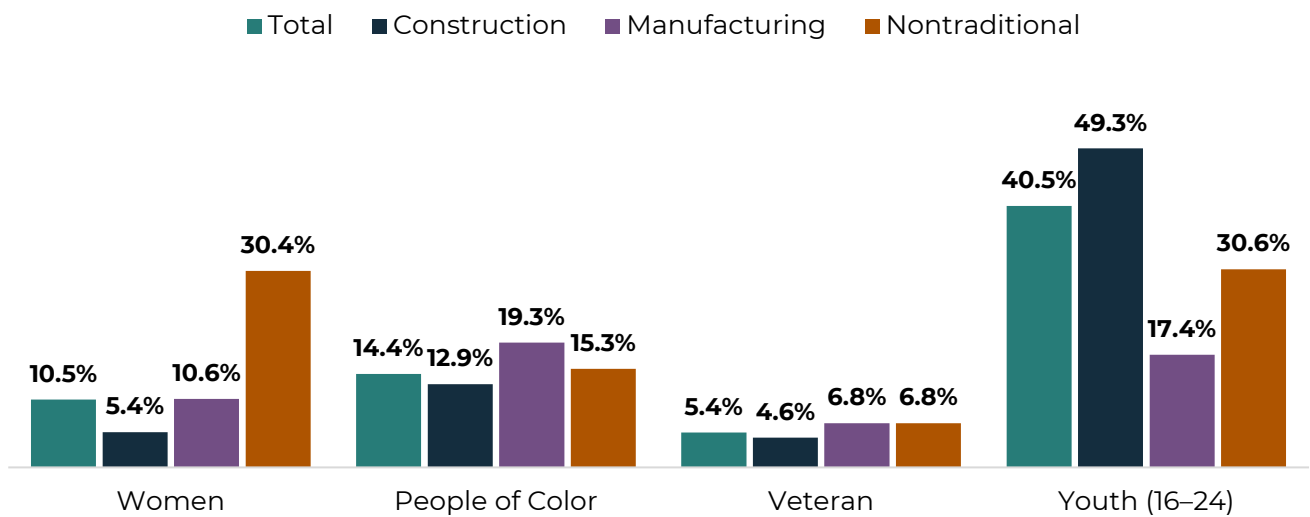
share at 72.4 percent followed by *Professional, scientific, and technical services* at 48.1 percent. Women accounted for 43.5 percent of active registered apprentices in the *Educational services* industry.

In 2024, there were nearly 1,500 new women registered apprentices in Michigan. This accounted for 17.4 percent of all new registered apprentices and was the second largest contingent on record (after 2016). *Childcare workers*, *Nursing assistants*, and *Medical assistants* had the largest number of new women registered apprentices in 2024, combining for 31.3 percent of all new women in Registered Apprenticeships.

*2.8 percent of active apprentices were listed without a gender.

Women accounted for over 30 percent of active registered apprentices in nontraditional industries. *Manufacturing* had an overrepresentation of people of color.

Share of Active Registered Apprentices by Industry and Demographic, 2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

People of Color

People of color include those who are American Indian or Alaska Native, Asian, Black or African American, and Native Hawaiian or Pacific Islander. In 2024, there were just under 3,000 active registered apprentices in Michigan that were people of color (14.4 percent).* In 2020, people of color made up 26.1 percent of Michigan’s population.

Construction laborers had the greatest number of people of color who were active registered apprentices with 650, or 22.0 percent of all people of color. This was followed by *Carpenters* at 450 (15.3 percent) and *Electricians* at 420 (14.0 percent).

Among larger occupations, *Nursing assistants* had people of color account for 32.7 percent of their 170 active registered apprentices. Similarly,

people of color made up 25.3 percent of active registered apprentices who were *Carpenters*, 22.5 percent of *Childcare workers*, and 21.7 percent of *Brickmasons and blockmasons*.

People of color accounted for 12.9 percent of active registered apprentices within *Construction* and 19.3 percent within *Manufacturing*. Furthermore, people of color made up 28.9 percent of active registered apprentices within *Health care and social assistance* and 24.6 percent of *Educational services*.

In 2024, there were a record 1,200 new registered apprentices in Michigan that were people of color. This broke the record set in 2023 (1,100) and was the fourth time there were more than 1,000 people of color newly registered. *Carpenters* (17.4 percent), *Construction laborers* (15.0 percent), and *Electricians* (8.8 percent) had the largest share of new apprentices who were people of

*12.6 percent of registered apprentices Michigan were listed without a racial identity.



color in 2024. In total, there were 77 occupations that had new apprentices who were people of color in 2024.

Like active registered apprentices, most (51.9 percent) new apprentices who were people of color were in *Construction*. This was followed by *Health care and social assistance* (18.1 percent) and *Manufacturing* (15.6 percent).

Completers who were people of color edged down 7.0 percent from 2023 with just under 270 in 2024. This marked the sixth straight year with more than 200 people of color who completed a Registered Apprenticeship in Michigan.

Veterans

In 2024, Michigan had just over 1,100 active registered apprentices who were veterans (5.4 percent of all active apprentices).^{*} Compared to 2023, this share dipped 0.1 percentage

points. According to the U.S. Census Bureau, veterans accounted for 3.3 percent of Michigan's population between the ages of 18 and 64 in 2023.

In total, veterans were represented across 62 occupations and 12 industries in 2024. Among occupations, one-third of all active veteran registered apprentices were *Electricians* (20.2 percent) and *Plumbers, pipefitters, and steamfitters* (13.0 percent). There were five other occupations that accounted for an additional 30 percent of veterans. These included *Carpenters*, *Millwrights*, *Construction laborers*, *Electrical power-line installers and repairers*, and *Tool and die makers*.

Veterans accounted for 12.4 percent of all active *Electrical power-line installers and repairers* registered apprentices. Other larger occupations such as *Security and fire alarm systems installers* (12.7 percent), *Aircraft mechanics and service technicians* (16.5 percent), and *Brickmasons*

^{*}16.6 percent of all active registered apprentices in Michigan were listed with an unknown veteran status.

and blockmasons (10.2 percent) all had an overrepresentation of veterans among their active registered apprentices.

While most veterans were in *Construction*, they accounted for just 4.6 percent of all active registered apprentices within the industry in 2024. *Manufacturing* had a slightly larger share at 6.8 percent. *Utilities* and *Transportation and warehousing* had much greater shares at 12.3 percent and 14.9 percent, respectively.

In 2024, there were 419 new veteran registered apprentices. This was the third time there were more than 400 new veterans, and second most on record, just behind 2017 when there were 429. 2024 also marked the third straight year of increasing numbers of new apprentices who were veterans.

Veterans accounted for 5.0 percent of all new registered apprentices in 2024, tied with 2022 for the second lowest share. Prior to 2022, veterans accounted for a minimum of 5.4 percent of all new registered apprentices. In both 2016 and 2017, veterans accounted for more than 7.0 percent of all new registered apprentices.

There were 144 veteran completers in 2024. This was the fewest since 2019 when there were 118, however, it marked the eighth consecutive year with more than 100 veteran completers.

Youth (Ages 16 to 24)

Those ages 16 to 24 accounted for more than 8,300 active registered apprentices in 2024, or 40.5 percent of all active registered apprentices across the state. While not a perfect match, those ages 15 to 24 made up 20.5 percent of Michigan's population between the ages of 15 to 64 in 2020.

In total, there were 102 occupations supporting youth registered apprentices in Michigan in 2024. More than 60 percent of all youth were in the top four most populous occupations. These included *Electricians* (21.4 percent), *Construction laborers*

(20.1 percent), *Carpenters* (10.7 percent), and *Plumbers, pipefitters, and steamfitters* (9.8 percent).

Several occupations had a majority of active registered apprentices who were youth. Roughly 55 percent of the more than 180 active *Tree trimmers and pruners* across the state were youth. Additionally, *Operating engineers and other construction equipment operators* and *Structural iron and steel workers* had a slight majority of youth registered apprentices.

Nearly 80 percent of youth were in *Construction*. This was followed by *Manufacturing* (7.8 percent) and *Utilities* (2.9 percent). Just under half of all active registered apprentices in *Construction* were ages 16 to 24. Meanwhile, youth accounted for just 17.4 percent of *Manufacturing*.

Michigan had a record 3,380 new youth registered apprentices in 2024, breaking 3,000 for the first time. Recently, this age group has accounted for about 35 to 39 percent of all new registered apprentices. In 2024, the state peaked at 40.1 percent of new registered apprentices who were youth.

There were 780 youth completers in 2024, the lowest number since 2020. In 2023, youth had a record 890 completers. Except for 2020 when there were 615, there have been at least 700 youth completers each year since 2019.

Additionally, youth ages 16 to 18 are a key demographic for Registered Apprenticeship expansion efforts, offering alternatives to postsecondary education while still being able to access high-wage careers. In Michigan, there were about 190 active registered apprentices ages 16 to 18. This represented about 1 percent of all active registered apprentices in Michigan. Nearly 60 percent of youth registered apprentices ages 16 to 18 were distributed across three occupations: *Construction laborers*; *Electricians*; and *Carpenters*.

Employment Outcomes

Combining administrative wage record data with data from RAPIDS is vital to understand post-Registered Apprenticeship completion success. These two data sources combined allow for a variety of analyses. This section will focus on two: median wages earned one-year-after completion of a Registered Apprenticeship program, and the percentage employed within Michigan after one year.

To protect confidentiality, analysis can only be published if 10 or more completers were employed one year after completion. This report uses Registered Apprenticeship completers from 2022 and looks at wages four quarters after completion. Meaning, wages reported could be earned between fourth quarter 2022 through third quarter 2023, lining up with the Registered Apprenticeship year. Employment outcomes are only available for those who are employed within Michigan. There may be cases where Michigan Registered Apprenticeship completers are employed outside of Michigan after one year. This analysis also relies on complete and accurate Social Security Number (SSN) fields. Out of nearly 2,900 completers in 2022, nearly 1,600 were eligible for this analysis, or 54.6 percent. More consistent submission of SSNs and other data variables would allow for more completers to be included in this analysis.

Nearly 94 percent of 2022 Registered Apprenticeship completers were employed one year after completing their program. This is a slight increase from the 93.3 percent employment for 2021 completers.

In 2022, completers had a median one-year-after wage of \$80,720. This was an improvement of \$6,040 (8.1 percent) compared to 2021 completers. Typically, median one-year-after wages for completers are significantly higher than the 25th percentile wage (a proxy for an entry-level wage)

in Michigan and are often more competitive with the median wage for the state. In 2024, the 25th percentile wage in Michigan for all occupations measured \$36,430 and the statewide median wage was \$48,300.

Occupations

Administrative wage records do not include the wage earner's current occupation. Instead, this section examines employment outcomes based on the occupation the registered apprentice was trained for.

Twenty-four occupations had enough observations to be included in this report. An additional 10 occupations met the minimum threshold for number of completers, however, they did not have enough completers with a reported SSN. In total, there were 41 additional occupations that were not publishable due to missing observations or program size.

Of the 24 occupations that could be analyzed, five had an employment rate of 100 percent one year after completion. These included *Cement masons and concrete finishers*, *Childcare workers*, *Insulation workers, floor, ceiling, and wall*, *Power distributors and dispatchers*, and *Security and fire alarm systems installers*. There were six occupations with an employment rate lower than 90 percent. *Roofers* had the lowest rate at 78.7 percent. It is possible that these individuals are employed in a different state or are self-employed and not required to report wages to the Unemployment Insurance Agency.

Most occupations had median one-year-after wages significantly greater than the 2024 25th percentile wage for the occupation. Only two occupations (*Childcare workers* and *Aircraft mechanics and service technicians*) had a median one-year-after wage that was lower. *Childcare*

Michigan Registered Apprenticeship program completers often have very favorable employment outcomes.

Median One-Year-After Wages of 2022 Completers by Occupation

Occupation	Median One-Year-After Wage	Employed in Michigan	Total Completers	Emp. Rate
Aircraft Mechanics and Service Technicians	\$58,300	21	24	87.5%
Cement Masons and Concrete Finishers	\$70,300	15	15	100.0%
Childcare Workers	\$19,710	12	12	100.0%
Construction Laborers	\$55,210	25	28	89.3%
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$88,760	23	26	88.5%
Electrical Power-Line Installers and Repairers	\$196,730	47	48	97.9%
Electricians	\$87,690	392	418	93.8%
Glaziers	\$80,820	22	23	95.7%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$78,940	23	24	95.8%
Industrial Machinery Mechanics	\$82,730	56	58	96.6%
Insulation Workers, Floor, Ceiling, and Wall	\$65,360	11	11	100.0%
Machinists	\$64,460	19	21	90.5%
Millwrights	\$83,560	52	59	88.1%
Nursing Assistants	\$36,730	14	17	82.4%
Painters, Construction and Maintenance	\$53,580	21	22	95.5%
Plumbers, Pipefitters, and Steamfitters	\$89,080	213	223	95.5%
Power Distributors and Dispatchers	\$186,320	16	16	100.0%
Roofers	\$67,980	37	47	78.7%
Security and Fire Alarm Systems Installers	\$61,980	37	37	100.0%
Sheet Metal Workers	\$93,780	70	73	95.9%
Structural Iron and Steel Workers	\$79,300	48	52	92.3%
Telecommunications Equipment Installers and Repairers, Except Line Installers	\$54,880	13	14	92.9%
Tool and Die Makers	\$73,410	101	107	94.4%
Tree Trimmers and Pruners	\$77,120	44	46	95.7%

Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor; Unemployment Insurance Agency, Michigan Department of Labor and Economic Opportunity

workers had the lowest median one-year-after wage of the 24 occupations at \$19,710, roughly \$7,300 lower than the 25th percentile wage for the occupation.

The two occupations with the greatest median one-year-after wage were *Electrical power-line installers and repairers* (\$196,730) and *Power distributors and dispatchers* (\$186,320). Both wages were at least \$77,000 greater than the respective median wage in 2024 for the occupations. Occupations like these may have workers traveling out of state for longer periods, and those just entering the field may be more likely to pick up additional shifts. Both hazard and overtime pay are included in total wages.

Occupations such as *Electricians* (\$87,690), *Plumbers, pipefitters, and steamfitters* (\$89,080), and *Tool and die makers* (\$73,410) also had median one-year-after wages greater than the median wage for the occupation in 2024.

Industries

In total, there were nine industries with employment outcomes that could be analyzed. *Construction* had an employment rate (93.0 percent) just below the total employment rate. *Utilities* had an above-average rate at 98.5 percent along with *Manufacturing* at 95.3 percent. Two industries (*Health care and social assistance* and *Professional, scientific, and technical services*) had rates of 100 percent. No industry had an employment rate less than 90 percent.

Utilities had a median one-year-after wage of \$193,860 for completers, by far the greatest of any industry. This was followed by *Construction* (\$82,110), *Manufacturing* (\$78,190), and *Educational services* (\$76,670). *Health care and social assistance* had the lowest median one-year-after wage of \$39,950. The only other industry with a wage under \$50,000 was *Administrative and support and waste management and remediation services* (\$48,840).

Utilities had the greatest median annual one-year-after wage among 2022 Registered Apprenticeship completers.

Median One-Year-After Wages of 2022 Completers by Industry

Industry	Median One-Year-After Wage	Employed in Michigan	Total Completers	Emp. Rate
Administrative and Support and Waste Management and Remediation Services	\$48,840	27	30	90.0%
Construction	\$82,110	923	992	93.0%
Educational Services	\$76,670	26	28	92.9%
Health Care and Social Assistance	\$39,950	26	26	100.0%
Manufacturing	\$78,190	326	342	95.3%
Professional, Scientific, and Technical Services	\$53,460	17	17	100.0%
Transportation and Warehousing	\$58,720	27	30	90.0%
Utilities	\$193,860	65	66	98.5%
Wholesale Trade	\$76,730	13	14	92.9%

Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor; Unemployment Insurance Agency, Michigan Department of Labor and Economic Opportunity

Note: Data for *Other services* and *Public administration* were suppressed due to confidentiality.

Demographics

While women accounted for 10.5 percent of active registered apprentices in 2024, just 5.2 percent of 2022 completers included in the wage analysis were women. A total of 440 completers were women in 2022 and roughly 80 listed an SSN (18.9 percent). Meanwhile, 61.1 percent of men had a listed SSN. Women were the demographic group most impacted by the limited number of SSNs. The only other group with less than 50 percent reporting were people of color at 39.1 percent, while the share measured 58.0 percent for white completers.

In 2022, women had a 91.6 percent employment rate while men had a rate of 94.0 percent. More significant was the gap in median one-year-after wages, with women earning just \$46,370 while men earned \$82,400. The median one-year-after wage for women still was above the statewide 25th percentile wage of \$36,430 in 2024. As discussed later in this report, this could be due to the lower wages seen in many women-dominated occupations and the much more limited data available for women.

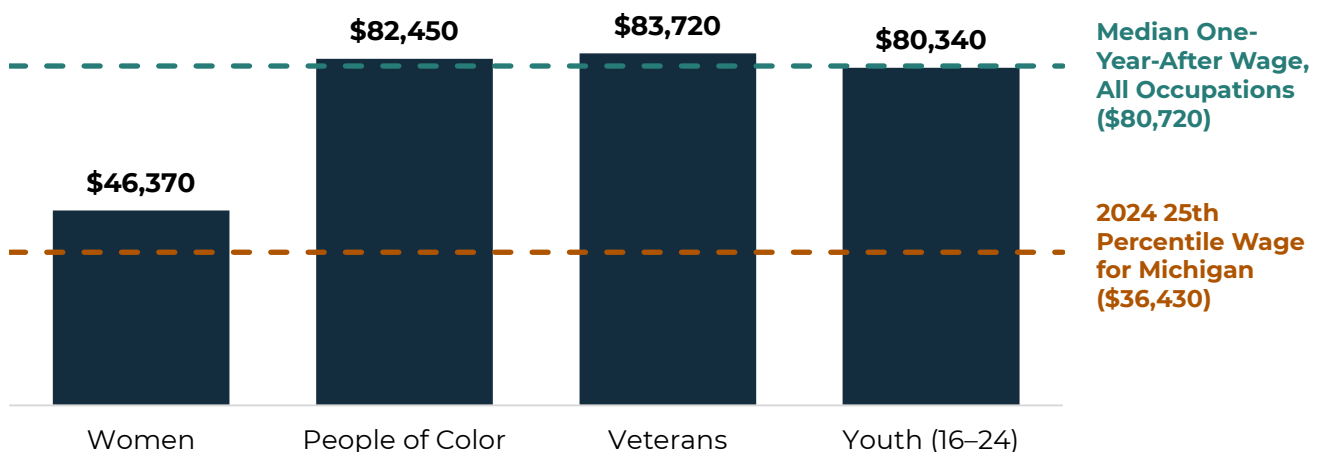
Like women, the number of people of color in this analysis was impacted by limited SSN availability. Their employment rate was the lowest of any demographic group at 89.8 percent while white completers saw a rate of 94.5 percent. People of color, meanwhile, had a slightly higher median one-year-after wage of \$82,450 compared to \$82,190 for white completers.

Veteran and nonveteran completers in 2022 enjoyed similarly strong employment outcomes one year after completion. Veterans had a slightly lower employment rate (92.5 percent) compared to nonveterans (93.9 percent). However, veterans had a marginally higher median one-year-after wage (\$83,720) than nonveterans (\$81,770).

Likewise, there were slight differences in employment outcomes between youth and non-youth. Both groups had an employment rate of 93.9 percent, matching the overall employment rate for all completers in 2022. Non-youth had a median one-year-after wage of \$80,820, marginally greater than the \$80,340 observed by youth completers.

While women had a lower median one-year-after wage than the wages observed among all completers, it was well above the 25th percentile wage for 2024 in Michigan.

Median One-Year-After Wages for 2022 Completers by Key Demographic



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor; 2024 Occupational Employment and Wage Statistics (OEWS), Michigan Center for Data and Analytics; Unemployment Insurance Agency, Michigan Department of Labor and Economic Opportunity

Completers and Completion Rates

Completion rates are a critical metric to help gauge the success of the Registered Apprenticeship training model in Michigan. Unlike employment rates, completion rates gauge the success within a program rather than outcomes following completion. These rates are measured as the percentage of new registered apprentices who complete their program within their expected time frame. This period is determined by taking the length of the program and adding a 50 percent extension to allow for ample time for the registered apprentice to complete.

For example, if a registered apprentice enrolled in a four-year program, they would be given six years to complete. This means that 2018 would be the earliest year a new registered apprentice would have started a four-year program.

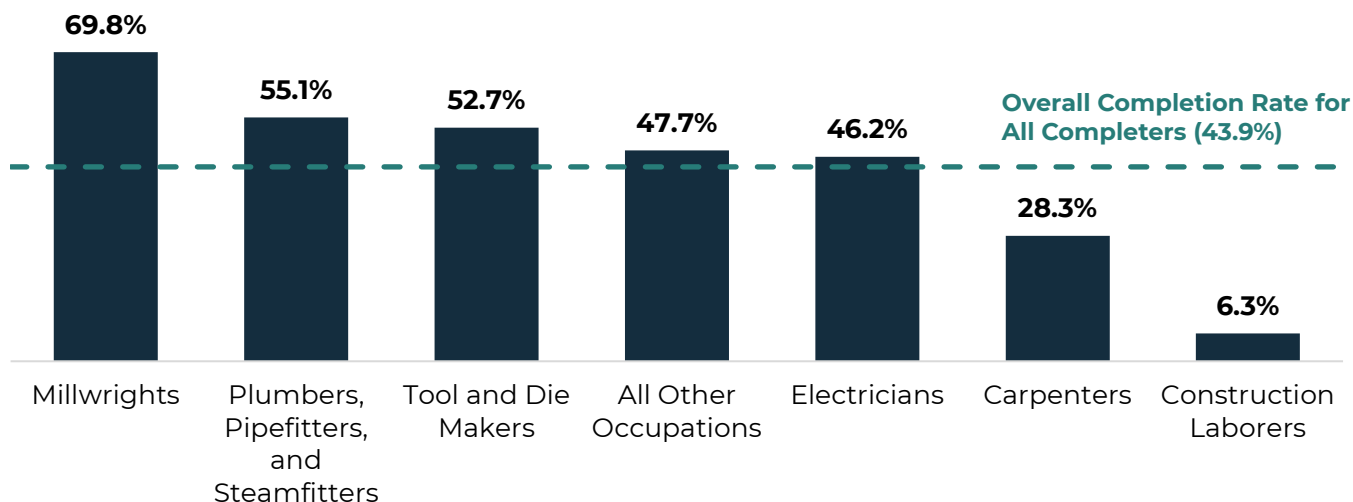
In 2024, the completion rate for the more than 6,500 Registered Apprenticeship completers was 43.9 percent. This section will look at completion rates across demographics, occupations, industries, and regions.

Occupations

Completion rates among occupations varied widely. There were 10 occupations with a 100 percent completion rate, however, each of these occupations had fewer than 10 total completers. Among occupations with 50 or more completers, *Electrical power-line installers and repairers* had the highest completion rate at 78.0 percent. Other occupations with higher completion rates included *Millwrights* (69.8 percent), *Medical assistants* (65.0 percent), *Sheet metal workers* (60.7 percent), and *Plumbers, pipefitters, and steamfitters* (55.1 percent).

Millwrights had the highest completion rate among occupations with the greatest number of registered apprentices. Construction laborers often feed into other occupations resulting in a much lower completion rate.

Completion Rates by Occupation, 2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Electricians, the occupation with the greatest number of completers, had a completion rate just above the total rate at 46.2 percent. *Carpenters* and *Roofers* had lower completion rates at 28.3 percent and 14.8 percent, respectively.

Construction laborers, one of the largest occupations, had a completion rate of just 6.3 percent in 2024. While this rate is much lower than most occupations, it should be noted that this occupation often lends its registered apprentices to other occupations, or they move to another occupation. As a result, registered apprentices in these situations do not complete their Registered Apprenticeships as *Construction laborers*.

Industries

Construction, the largest traditional industry, had a completion rate of 38.6 percent. This was 5.3 percentage points below the overall completion rate for 2024 and was largely impacted by the number of *Construction laborers* within the industry. *Manufacturing*, the other traditional industry, had a completion rate of 57.3 percent.

Among nontraditional industries, *Utilities* had the highest completion rate at 84.8 percent. Other notable nontraditional rates included *Educational services* (48.9 percent), *Health care and social assistance* (43.6 percent), *Public administration* (39.9 percent), and *Administrative and support and waste management and remediation services* (19.0 percent).

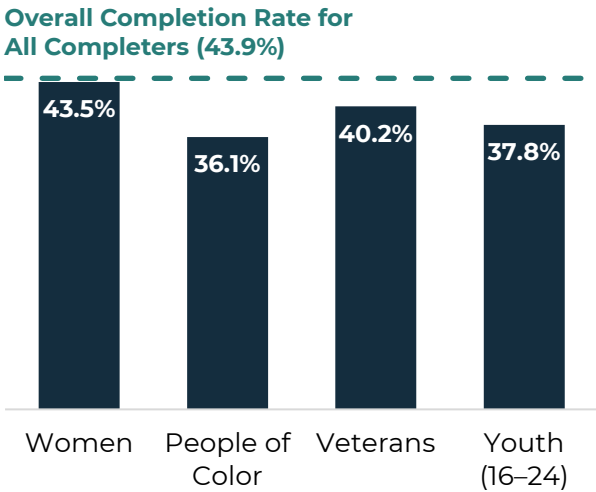
Demographics

There was not a large discrepancy in the completion rate between men and women among 2024 completers. The completion rate for men equaled the overall completion rate of 43.9 percent while women were slightly below that at 43.5 percent.

The gap between white completers and people of color was much more noticeable, however. In 2024, people of color saw a completion rate of

Among key demographics, people of color had the lowest completion rate at 36.1 percent. This was 10.5 percentage points lower than the rate for white completers.

Share of Active Registered Apprentices by Demographic, 2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

36.1 percent while white completers had a rate of 46.6 percent.

Nonveterans had a similar completion rate as those who are white at 46.6 percent. Veterans had a significantly lower rate at 40.2 percent. Youth also had a much lower completion rate than other groups in 2024. Their rate measured 37.8 percent while those older than 24 had a completion rate of 47.4 percent.

Prosperity Regions

The Upper Peninsula had a completion rate of 66.1 percent, the highest rate among Michigan's Prosperity Regions. Northeast Michigan had a rate of 54.8 percent followed by both Southeast Michigan and the Detroit Metro region at 51.0 percent. East Michigan had the lowest completion rate at 13.7 percent. Again, this was aided by the large number of *Construction laborers* in the region.

Regional Registered Apprentices

Registered Apprenticeships can be viewed based on the home location of the registered apprentice or the central location of the program. For this analysis, programs are based on the listed location of the program and grouped together for regional analysis. This section will focus on trends across Michigan's 10 Prosperity Regions.

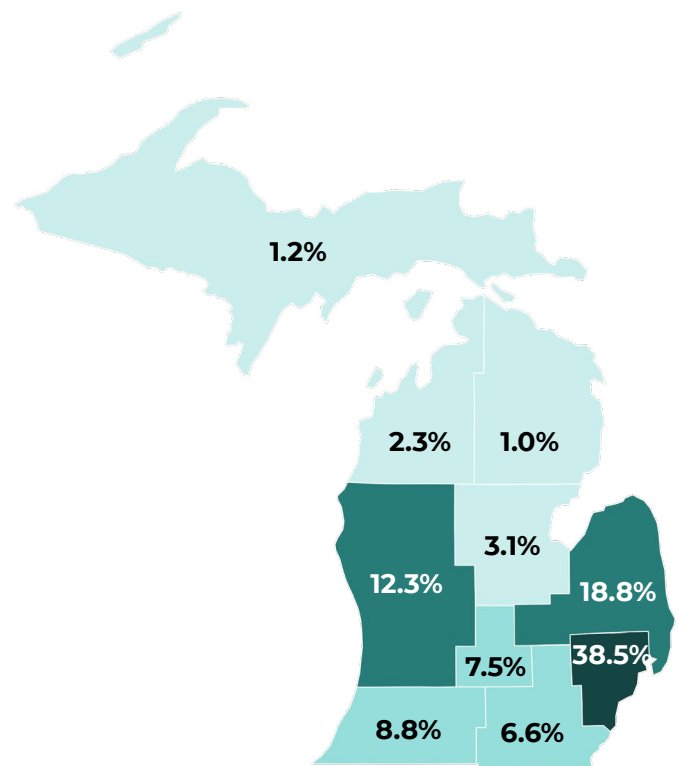
The Detroit Metro region accounted for more than 7,920 active registered apprentices in 2024, or 38.5 percent of all active registered apprentices in Michigan. This was in line with the Detroit Metro region's share of the state's population in 2024 (39.0 percent). This was followed by East Michigan (18.8 percent), West Michigan (12.3 percent), and Southwest Michigan (8.8 percent). On the other end, Northeast Michigan had the smallest share of active registered apprentices at 1.0 percent while the Upper Peninsula had a slightly higher share at 1.2 percent.

Seven regions registered a record number of new registered apprentices in 2024. The Detroit Metro region registered 3,030 new apprentices, exceeding 3,000 for the first time. Other regions with record numbers included West Michigan (1,110 new apprentices), Southwest Michigan (860), Southeast Michigan (570), East Central Michigan (300), Northwest Michigan (250), and Northeast Michigan (110).

West Michigan had the largest number of active Registered Apprenticeship programs in the state with 340. This represented 29.1 percent of all active programs in the state. The Detroit Metro region, home to the most active registered apprentices in the state, had the second greatest share of active programs at 22.5 percent. This was followed by Southwest Michigan (14.5 percent) and South Central Michigan (7.8 percent).

The Detroit Metro region had the greatest share of active Registered Apprentices at 38.5 percent.

Share of Statewide Active Registered Apprentices by Prosperity Region, 2024



Source: Registered Apprenticeship Partners Information Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Occupations

East Michigan had the greatest share of active registered apprentices in a single occupation. *Construction laborers* represented 3,210 active registered apprentices in the region, or 82.8 percent of the region's total. This also accounted for 90.5 percent of all *Construction laborers* statewide. This was largely due to the presence of a centralized program for the occupation within the region.



The Detroit Metro region had a large presence of *Carpenters* and *Electricians*, which combined accounted for nearly 40 percent of active registered apprentices within the region. West Michigan also had a significant amount of *Electricians* making up 40 percent of active registered apprentices regionally.

Industries

Industries of active registered apprentices varied by region. In 2024, *Construction* had the largest share of active registered apprentices in six of Michigan's Prosperity Regions. East Michigan had the greatest share at 94.8 percent followed by Southeast Michigan at 77.8 percent and East Central Michigan at 76.2 percent. *Construction* accounted for 68.2 percent of active registered apprentices in the Detroit Metro region; however, the region had the highest number of *Construction* active registered apprentices in the state.

Manufacturing had the greatest representation in West Michigan, accounting for 35.4 percent of active registered apprentices in the region. This was followed by Southwest Michigan (26.5 percent)

and Detroit Metro (23.2 percent). The Detroit Metro region had the greatest total number of *Manufacturing* active registered apprentices in the state followed by West Michigan.

Four regions had a majority of their active registered apprentices in nontraditional industries, three of which were among the least populated areas statewide. Nontraditional registered apprentices had the largest share in Northeast Michigan at 89.1 percent with *Transportation and warehousing* accounting for 87.6 percent of the regional total. Northwest Michigan, with strong representation from *Public administration* and *Utilities*, saw nontraditional industries account for 64.3 percent of active registered apprentices.

Nontraditional industries accounted for 51.0 percent of active registered apprentices in the Upper Peninsula. The region had a variety that included *Real estate and rental and leasing*, *Educational services*, and *Public administration*. Southwest Michigan saw nontraditional industries account for 44.8 percent of active registered apprentices with strong representation in *Utilities*.

Demographics

Women represented 26.8 percent of active registered apprentices within the Upper Peninsula, the greatest share among Michigan's Prosperity Regions. This was followed by South Central Michigan (19.4 percent) and Northwest Michigan (15.3 percent). The Detroit Metro region had the largest number of active registered apprentices that were women with 880, representing 11.1 percent of active registered apprentices regionally. Women made up around 7 percent or less in East Central Michigan, East Michigan, and West Michigan.

The Detroit Metro region had the largest share of active registered apprentices who were people of color at 22.2 percent. This is followed by East Michigan (16.5 percent) and South Central Michigan (11.2 percent). West Michigan, Northeast Michigan, and Northwest Michigan saw people of color account for less than 5 percent of active registered apprentices within the region.

Northeast Michigan had the greatest share of veteran registered apprentices at 14.4 percent. This was followed by Northwest Michigan at 8.2 percent. The Detroit Metro region accounted for 41.3 percent of all veteran active registered apprentices across the state.

Youth made up 48.5 percent of active registered apprentices in East Michigan, the greatest share in the state. This was followed by West Michigan (47.2 percent) and East Central Michigan (46.3 percent).

Employment Outcomes

Among Michigan's Prosperity Regions, only Northwest Michigan did not have enough observations for analysis, with less than 20 percent of 2022 completers in the region reporting an SSN.



East Central Michigan had the highest registered apprentice employment rate at 95.2 percent for 2022 completers. This was followed by East Michigan and West Michigan both slightly under 95 percent employment. Detroit Metro, the largest region, tailed at 94.0 percent. The Upper Peninsula, at 91.7 percent, had the lowest employment rate.

The Detroit Metro region, which had a large concentration of registered apprentices in *Utilities*, had the highest median one-year-after wage at \$94,360. *Utilities* had a median one-year-after wage of \$193,860 statewide. This was followed by Southeast Michigan (\$91,450) and East Michigan (\$79,310). The Upper Peninsula had the lowest median one-year-after wage at \$54,560.



Conclusion

Michigan has been at the forefront of Registered Apprenticeship expansion efforts over the last several years. Registered Apprenticeship aids the development of a highly skilled workforce and creates a talent pipeline for many critical occupations. For registered apprentices, these programs offer an alternate path to favorable employment outcomes with high wages and high probability of employment.

In 2024, Michigan had nearly 20,600 active registered apprentices. This was accompanied by a record number of new registered apprentices at 8,430 and more than 2,500 completers.

Registered Apprenticeship in Michigan has also been engaging in initiatives to increase representation from several demographic groups, including women, people of color, veterans, and youth. These initiatives have been reflected in the data, showing increased representation over the last several years. Furthermore, there have been increases in nontraditional Registered Apprenticeships as well. Typically, *Construction* and *Manufacturing*

account for the majority of registered apprentices statewide. While that still held true in 2024, several other industries have had record numbers of new registered apprentices.

Michigan Registered Apprenticeship completers also face favorable employment outcomes. Throughout a Registered Apprenticeship, wages increase as registered apprentices develop their skills. Upon completion, registered apprentices earn significantly higher wages than comparable starting wages in the occupation, often earning above the median wage for the occupation across the state. Completers also have extremely favorable employment opportunities with about 94 percent employed one year after completing their program.

Michigan continues to be a national leader in Registered Apprenticeship, offering pathways to favorable employment outcomes among job seekers while developing a skilled workforce.



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