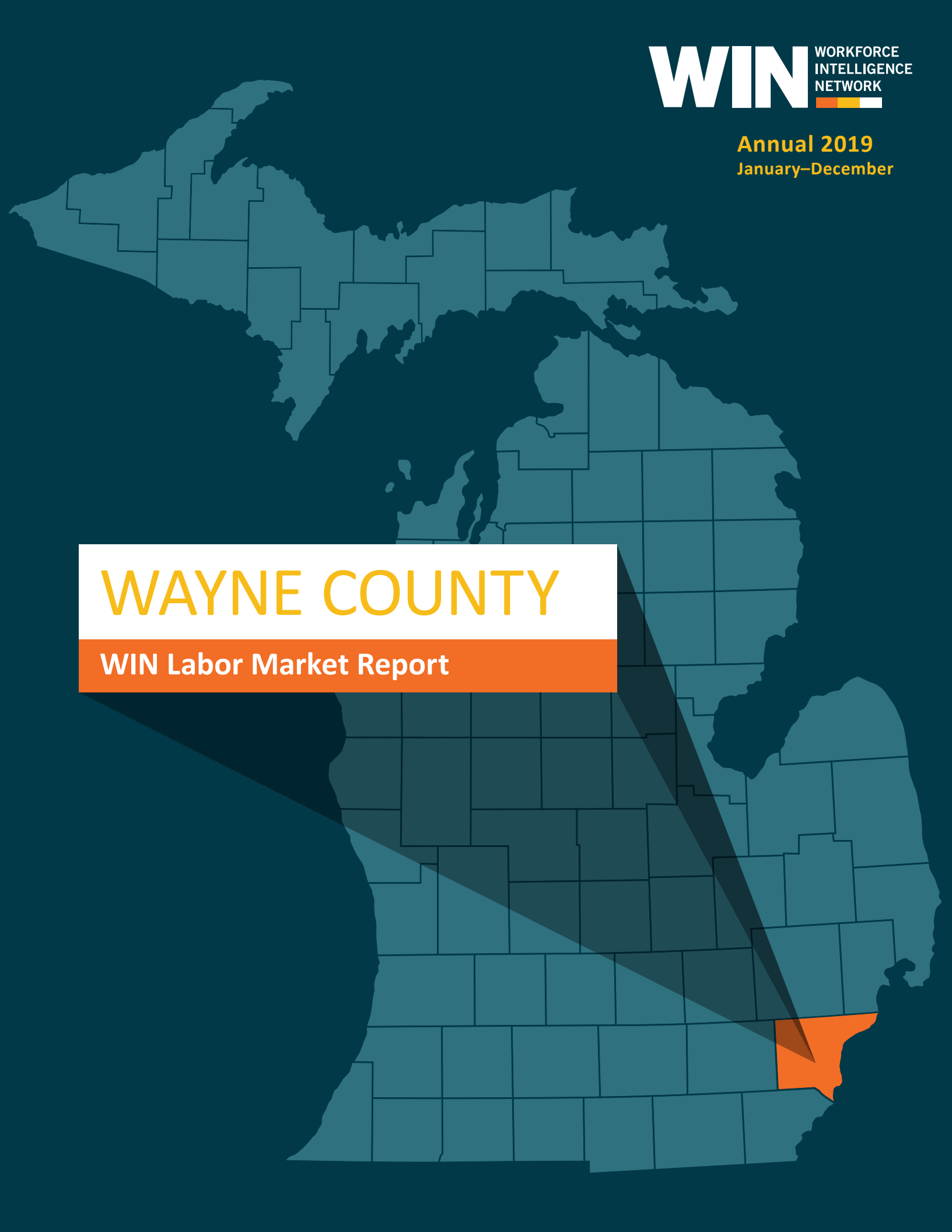


Annual 2019
January–December

WAYNE COUNTY

WIN Labor Market Report





Report Contents

- 2 - State of the Labor Market
- 3 - Key Findings
- 4 - Workforce Overview
- 9 - Real-Time Demand Overview

Occupation Groups

- 12 - Energy
- 16 - Engineers and Designers
- 20 - Health Care
- 24 - Information Technology
- 28 - Skilled Trades and Technicians

About This Report

The Workforce Intelligence Network for Southeast Michigan (WIN) partnership is a collaboration of Michigan Works! Agencies (MWAs) and community colleges across a 16-county region in Michigan. The counties in the WIN partnership include: Genesee, Hillsdale, Huron, Jackson, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, Saint Clair, Sanilac, Shiawassee, Tuscola, Washtenaw, and Wayne, along with the City of Detroit.

This report highlights labor market information and real-time job posting data for Wayne County. A workforce overview is provided within, identifying key components of the area's labor market including labor force status, demographic, and commuting data. WIN's analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market. This data is used to provide a real-time demand overview, detailing posting related findings for both employers and job seekers. WIN's data and research team analyzes job posting data at the occupation level within eleven customized occupation groups built using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. Occupation groups combine data for jobs with similar skillsets, educational attainment, and experience requirements, which provides a more in-depth snapshot of the current labor market when compared to traditional industry data based upon North American Industry Classification System (NAICS) codes. Occupation outlook sections utilize these metrics to identify and display the top in-demand jobs, their entry requirements, and their earning potential.

WIN produces a 16-county region report quarterly using data from all eleven occupation groups. A report focused on the city of Detroit is also produced quarterly, focusing on five occupation groups related to Detroit's labor market. County reports are produced annually and focus on five occupation groups chosen to reflect the labor market specific to the county.

This report analyzes data from the full year of 2019 in Wayne County and includes summative data for January through December of 2019. For Wayne County, the energy, engineers and designers, health care, information technology, and skilled trades and technicians occupation groups are analyzed.

For more information pertaining to the labor market in southeast Michigan, the custom occupation groups within this report, or any other workforce-related data projects, please visit www.WINintelligence.org or contact the data and research team directly at research@WINintelligence.org. For more information about jobseeker resources and our partners, please visit www.micareertraining.org.



State of the Labor Market in Wayne County

During 2019, the annual labor force and employment figures in Wayne County have increased by 1.4 percent and 1.6 percent respectively, up since 2018 annual levels. During Q4 2019 in Wayne County, the labor force decreased by 1.2 percent, a 10,175-worker decrease from Q3 2019. Comparatively, employment in Wayne County increased by 0.1 percent, equaling to a 747 worker increase in employment in Q4. The Q3 2019 unemployment rate of 5.6 percent decreased by 1.3 percentage points, with Q4 2019 reporting an unemployment rate of 4.3 percent. Employer demand for health care workers is still on the rise among the five key groups analyzed for the county, with 60,091 job postings during 2019. Heavy and Tractor-Trailer Truck Drivers is the top demanded occupation this year, accounting for 27,789 postings in 2019.

Annual Labor Market Information

The labor force in Wayne County has grown, increasing by 11,061 individuals between 2018 and 2019 annual levels. Employment increased by 12,264 workers between 2018 and 2019. As the increase in employment accounted for most, but not all, of the sustained increase in labor force, unemployment decreased by 2.9 percent, or 1,204 workers. The 2018 annual unemployment rate of 5.2 percent decreased by 0.2 percentage points to a 2019 annual unemployment rate of 5.0 percent.

Annual Labor Force, Employment, Unemployment Rate
2010–2019

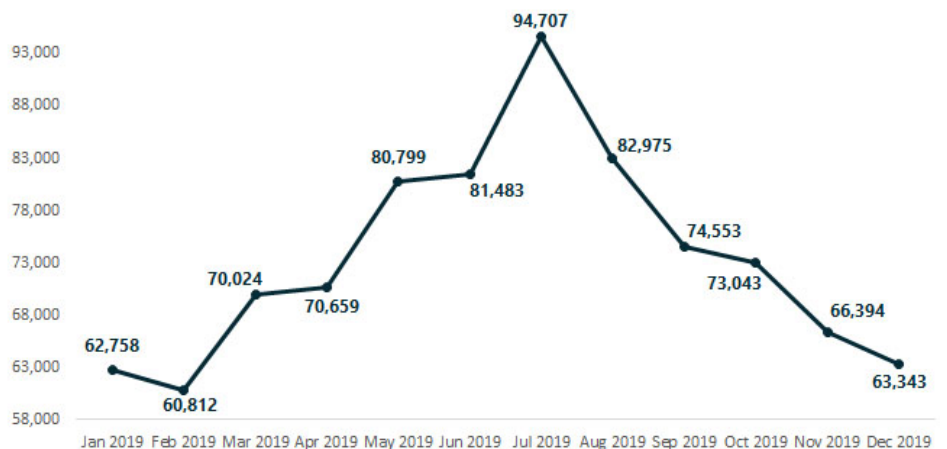


Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data obtained for the fourth quarter of 2019 indicates that employer demand has decreased since the end of Q3 2019. In Q4 2019, there were 118,609 unique postings in Wayne County, a decrease of 37,810 postings since Q3 2019. The decrease in the number of online ads indicate employer demand for jobs has decreased in Q4. Monthly posting data indicate a steady increase in postings during the beginning of 2019, however the second half of the year saw a decline in postings.

Monthly Posting Analysis, Wayne County
Annual 2019



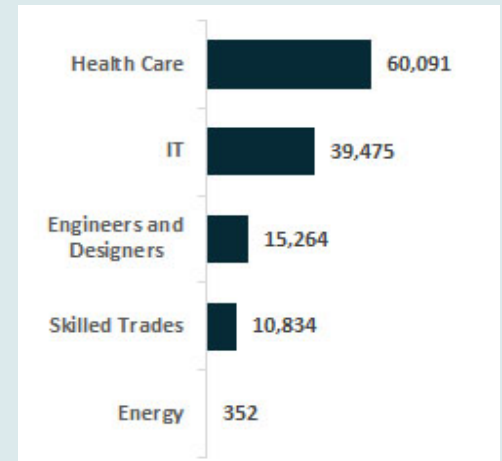
Data: Emsi | Analysis: Workforce Intelligence Network



Employer demand declines by 31.9 percent, a loss of 37,810 job postings since Q3 2019. Health Care remains the top posting occupation group through 2019 with 60,091 postings.

During Q4 2019, there were 118,609 job postings, 37,810 less than the 156,419 postings made during Q3 2019 in Wayne County. The top posted job titles in 2019 include Truck Drivers, Registered Nurses, Commercial Driver's License (CDL) Drivers, Customer Service Representatives (Office and Administrative Support), and Software Engineers. There are 5,276 more postings in Q4 2019 than in Q4 2018. Annually in 2019, there were 367,488 postings in Wayne County, an increase of 69,471 postings since annual 2018, which had 298,017 postings. For more information about in-demand job postings, see page 9.

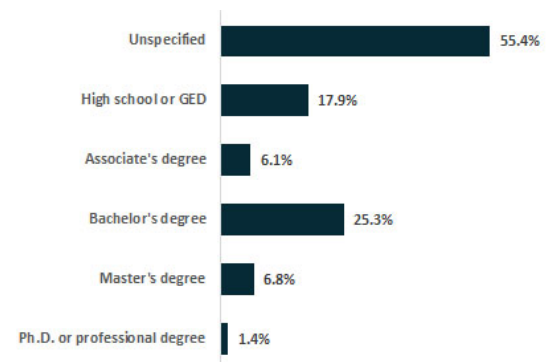
Top 5 Posting Occupation Groups
Annual 2019



Job postings made by employers in Wayne County indicate a bachelor's degree remains the most in-demand minimum education level during 2019.

Of the 367,488 unique postings in Wayne County during 2019, 115,518 (31.4 percent) required a college degree. An additional 30,208 postings (8.2 percent) required an advanced degree. A bachelor's degree is the most in-demand education level of 2019. The high demand for business and finance and information technology roles within the county drives this high demand for college education.

Education Levels In-Demand
Annual 2019



Quarterly Labor Market Data

	4th Quarter 2018	1st Quarter 2019	2nd Quarter 2019	3rd Quarter 2019	4th Quarter 2019	Change from 3rd Quarter 2019	Percent Change from 3rd Quarter 2019	Change from 4th Quarter 2018	Percent Change from 4th Quarter 2018
Labor Force	797,965	803,030	799,072	815,090	804,915	-10,175	-1.2%	6,950	0.9%
Employment	758,032	762,322	758,849	769,421	770,168	747	0.1%	12,136	1.6%
Unemployment	39,933	40,708	40,223	45,668	34,747	-10,922	-23.9%	-5,186	-13.0%
Unemployment Rate	5.0%	5.1%	5.0%	5.6%	4.3%	-1.3%	na	-0.7%	na

Note: Monthly data averaged by quarter Data: Bureau of Labor Statistics

Employment in Wayne County is 765,190, an increase of 12,264 workers since 2018.

Following small growth fluctuations in the labor force through 2019, during the fourth quarter, participation declined slightly. During Q4 2019, the labor force figure was 804,915 individuals, down 10,175 individuals from 815,090 individuals recorded in Q3, a 1.2 percent decrease. Despite the decrease in labor force participation in Q4 2019, employment grew by 747 workers, an increase of 0.1 percent. Due to both declining labor force and growing employment, unemployment for the county decreased by 10,922 workers, a 23.9 percent decrease since Q3 2019. Following the trend, the unemployment rate also fell by 1.3 percentage points, for a Q4 unemployment rate of 4.3 percent. For more information about this year's unemployment rate and other labor market indicators, see page 4.

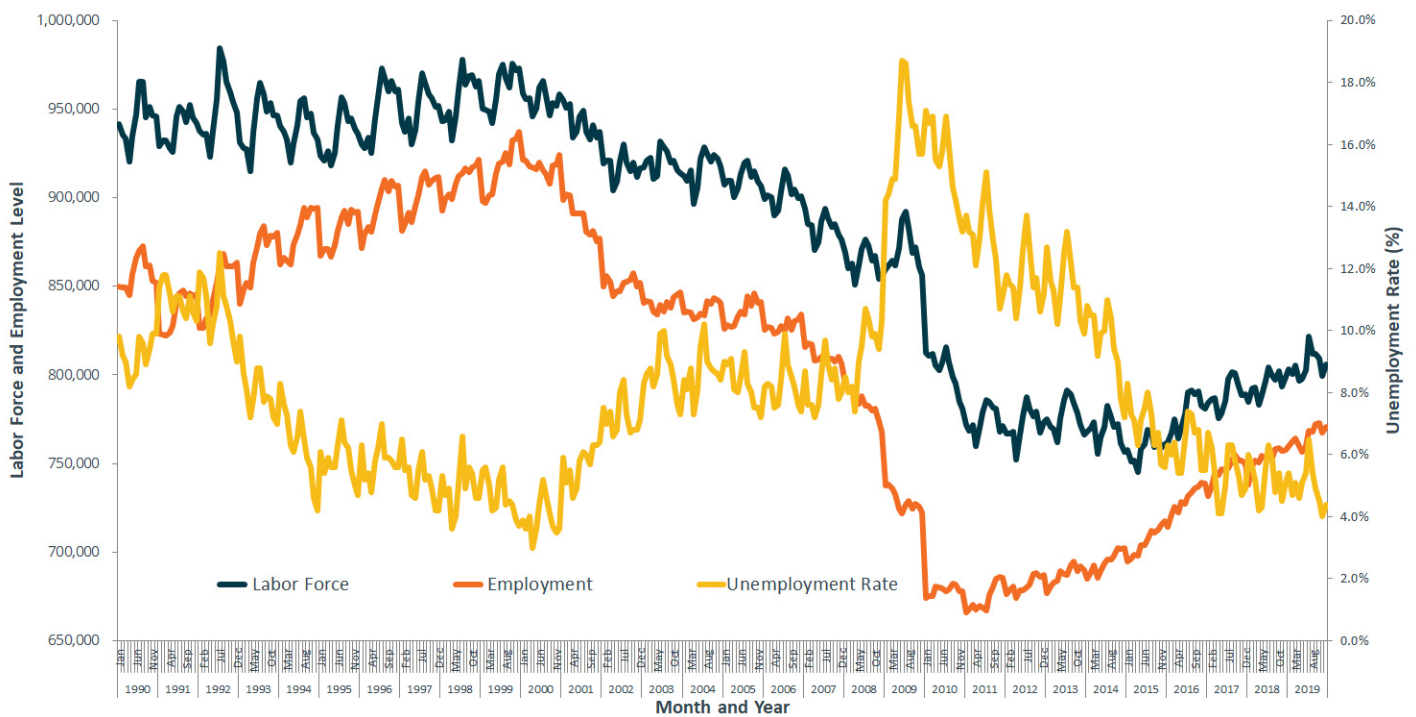
Data: Emsi | Analysis: Workforce Intelligence Network



Labor Force, Employment, and Unemployment

The annual labor force in the Wayne County has been growing steadily year over year since 2015, though there is still fluctuation between quarters. The labor force change from 2018 to 2019 is an increase of 11,061 individuals, or 1.4 percent. Employment in the county has been on the rise since 2011, with an increase of 12,264 workers since 2018. Unemployment for the county, recorded as 41,540 unemployed jobseekers in 2018, fell 2.9 percent. This decrease of 1,204 workers brought 2019 annual unemployment down to 40,337 workers. The unemployment rate also decreased by 0.2 percentage points, leading to an annual 2019 unemployment rate of 5.0 percent.

Labor Force, Employment, Unemployment Rate
1990-2019



Data: BLS | Analysis: Workforce Intelligence Network

Annual Labor Market Data
2010 - 2019

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	Change from 2018	Percent Change from 2018
Labor Force	802,754	774,443	771,845	776,560	768,439	758,684	778,434	789,089	794,466	805,527	11,061	1.4%
Employment	678,426	674,177	681,453	687,300	694,244	706,075	729,654	746,415	752,926	765,190	12,264	1.6%
Unemployment	124,328	100,266	90,392	89,260	74,195	52,609	48,780	42,673	41,540	40,337	-1,204	-2.9%
Unemployment Rate	15.5%	12.9%	11.7%	11.5%	9.7%	6.9%	6.3%	5.4%	5.2%	5.0%	-0.2%	na

Data: Bureau of Labor Statistics

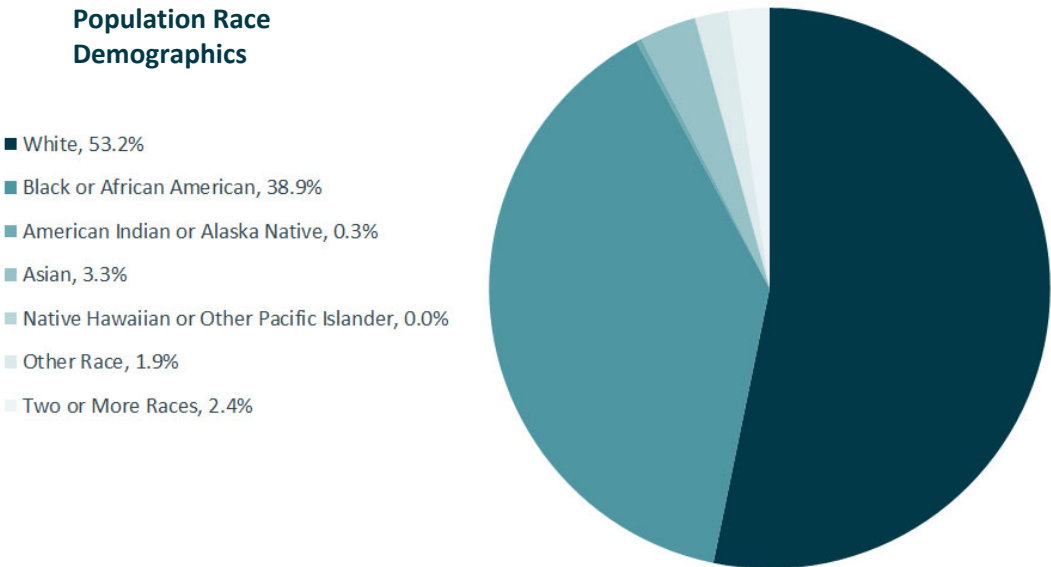


Population Demographics

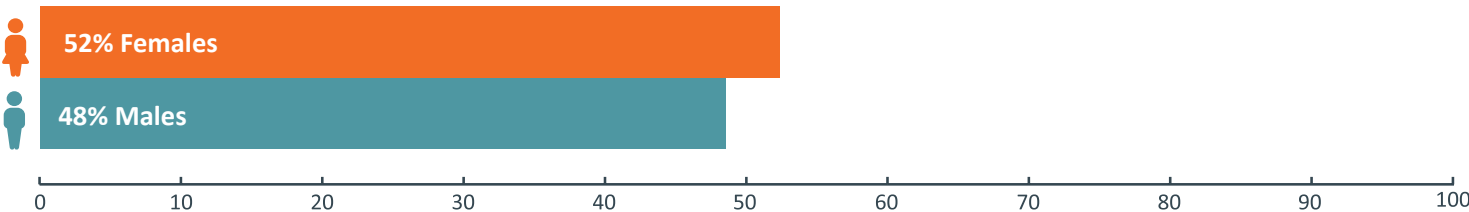
According to the data from the Census Bureaus' most recent 2018 ACS Five Year estimates, during 2018, 1,761,382 people were living in Wayne County. The sex of the populace was split almost evenly, with 51.9 percent of the population identifying as female, and the other 48.1 percent identifying as male. Much of the population identified as white (53.2 percent) with the second largest number of individuals identifying as black or African American (38.9 percent). The county skews younger than the surrounding region; 28.0 percent of population was over the age of 55, compared to 33.1 percent under the age of 25. Wayne County also has a strong middle-aged population between the ages of 25-54, accounting for 38.9 percent of the total population.



Population Race
Demographics



Population Gender Demographics



Population Age Demographics



Data: American Community Survey 5-Year Estimates | Analysis: Workforce Intelligence Network



Labor Market Demographics

During 2018, the most recent census year, there were about 817,808 people in the labor force, either working or looking for work in Wayne County. Resident employment totals 734,480 workers or just under half, 41.7 percent, of the total population in Wayne County. The highest unemployment rates in 2018 were seen in those aged 24 years old or younger, accounting for an unemployment rate of 47.6 percent for males and 43.7 percent for females. Overall, males in the county have a higher unemployment rate than females, with 10.7 percent and 9.7 percent respectively, for 2018. Black or African American job seekers have a difficult time finding employment, facing an unemployment rate of 17.2 percent, while Native American job seekers also face difficulty, with an unemployment rate of 9.7 percent.

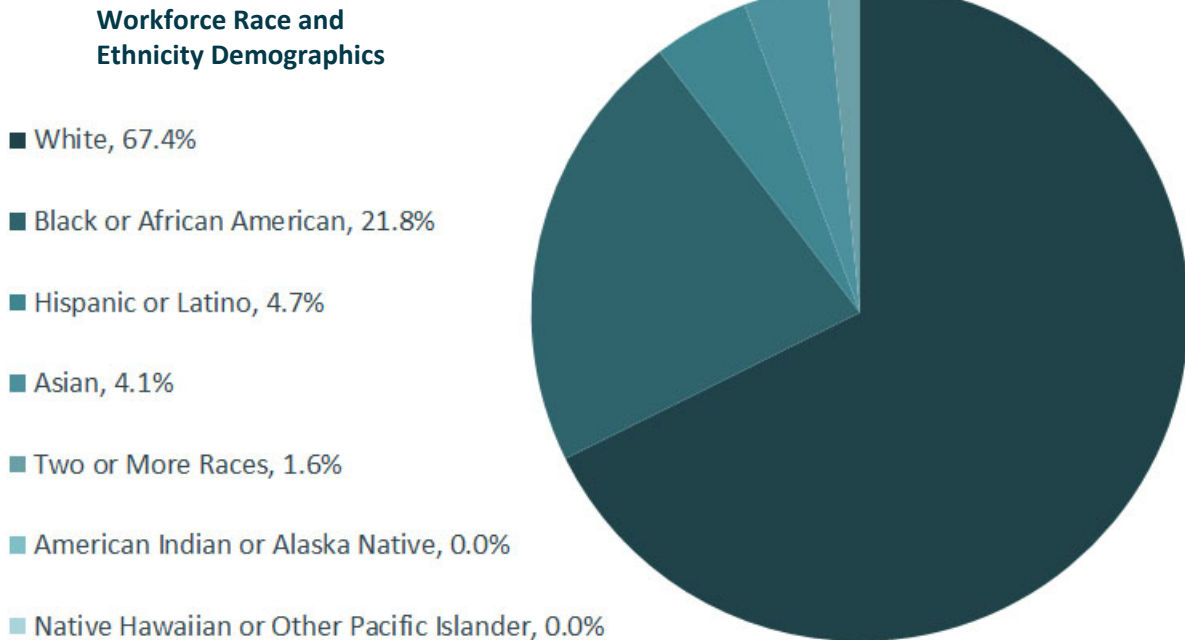
Civilian Labor Force by Demographic Group				
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate
Total Population 16 +	817,808	734,480	83,328	10.2%
Sex				
Male 16+	416,568	372,179	44,389	10.7%
16-19	16,922	12,100	4,822	28.5%
20-24	45,004	36,415	8,589	19.1%
25-54	272,034	246,163	25,871	9.5%
55-64	65,330	61,095	4,235	6.5%
65 Plus	17,278	16,406	872	5.0%
Female 16+	401,240	362,301	38,939	9.7%
16-19	16,737	12,166	4,571	27.3%
20-24	45,386	37,945	7,441	16.4%
25-54	258,471	235,677	22,794	8.8%
55-64	64,391	61,125	3,266	5.1%
65 Plus	16,255	15,388	867	5.3%
Race				
White	461,131	434,498	27,207	5.9%
Black / African	297,092	245,723	51,100	17.2%
Native American	2,767	2,497	268	9.7%
Asian	28,120	26,127	2,025	7.2%
Native Hawaiian /	215	191	0	0.0%
Some Other Race	14,244	13,023	1,225	8.6%
Two or More Races	14,224	12,487	1,735	12.2%
Ethnicity				
Hispanic	43,798	39,860	3,898	8.9%



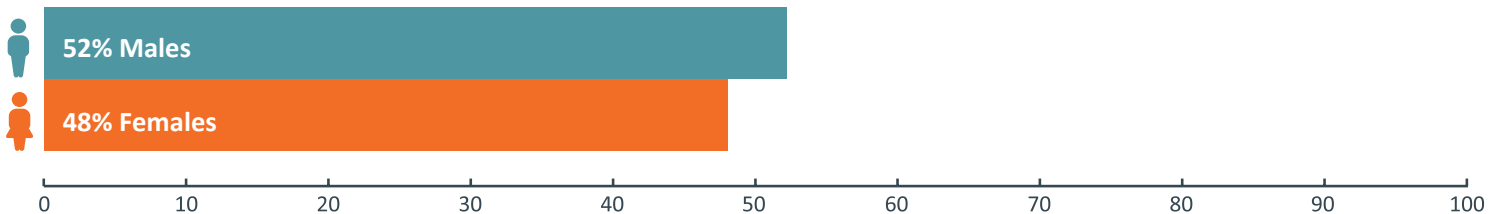
Current Workforce Demographics

In 2019, the workforce had a total of 788,928 individuals working in Wayne County. A slight majority (52.2 percent or 411,677 workers) were male, while 47.8 percent (377,251 workers) of the workforce was female. Most workers in the county identified as white, accounting for 67.4 percent of the workforce, while black or African American workers accounted for 21.8 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.7 percent. Much of the workforce in Wayne County (64.4 percent) are between the ages of 25 through 54, while 23.4 percent of workers are 55 and older.

Workforce Race and Ethnicity Demographics



Workforce Gender Demographics



Workforce Age Demographics

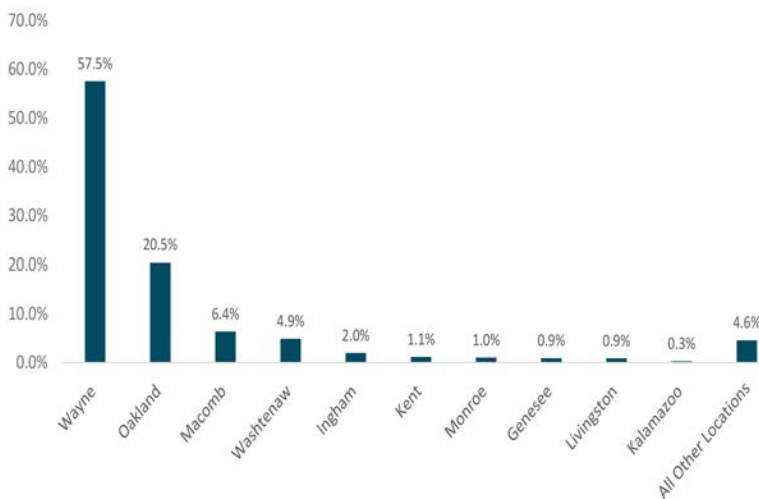




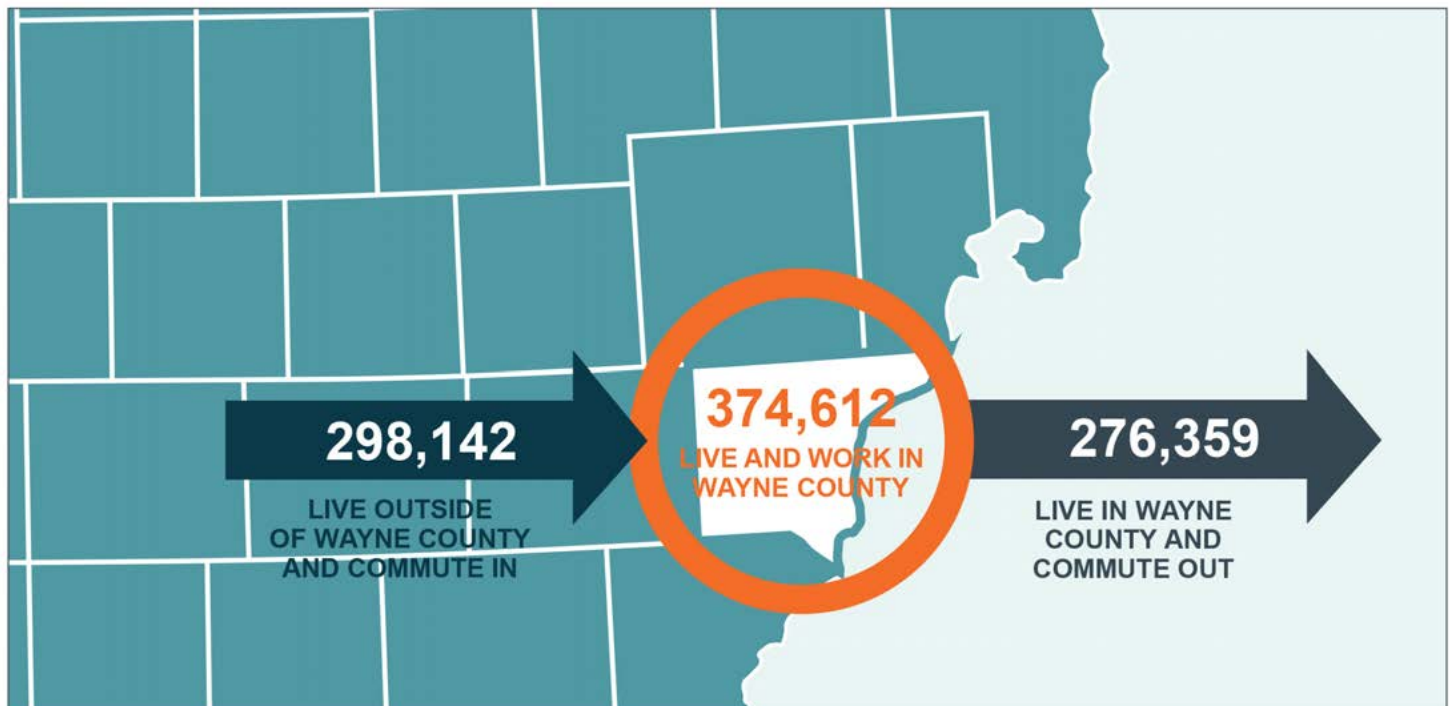
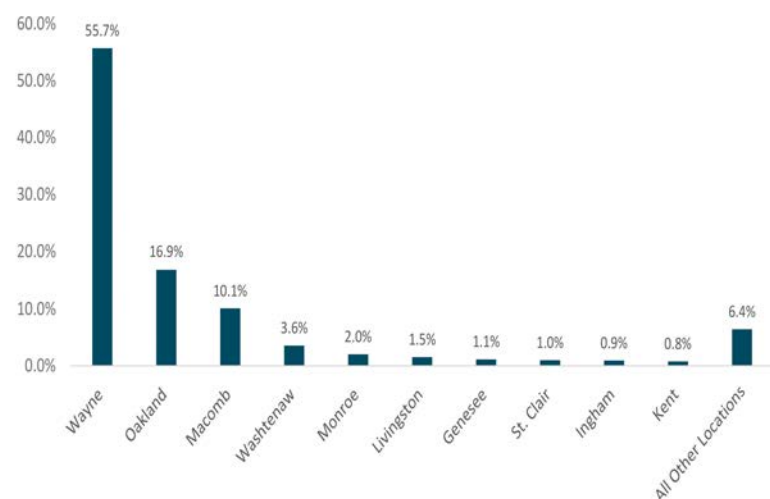
Regional Commuting Patterns

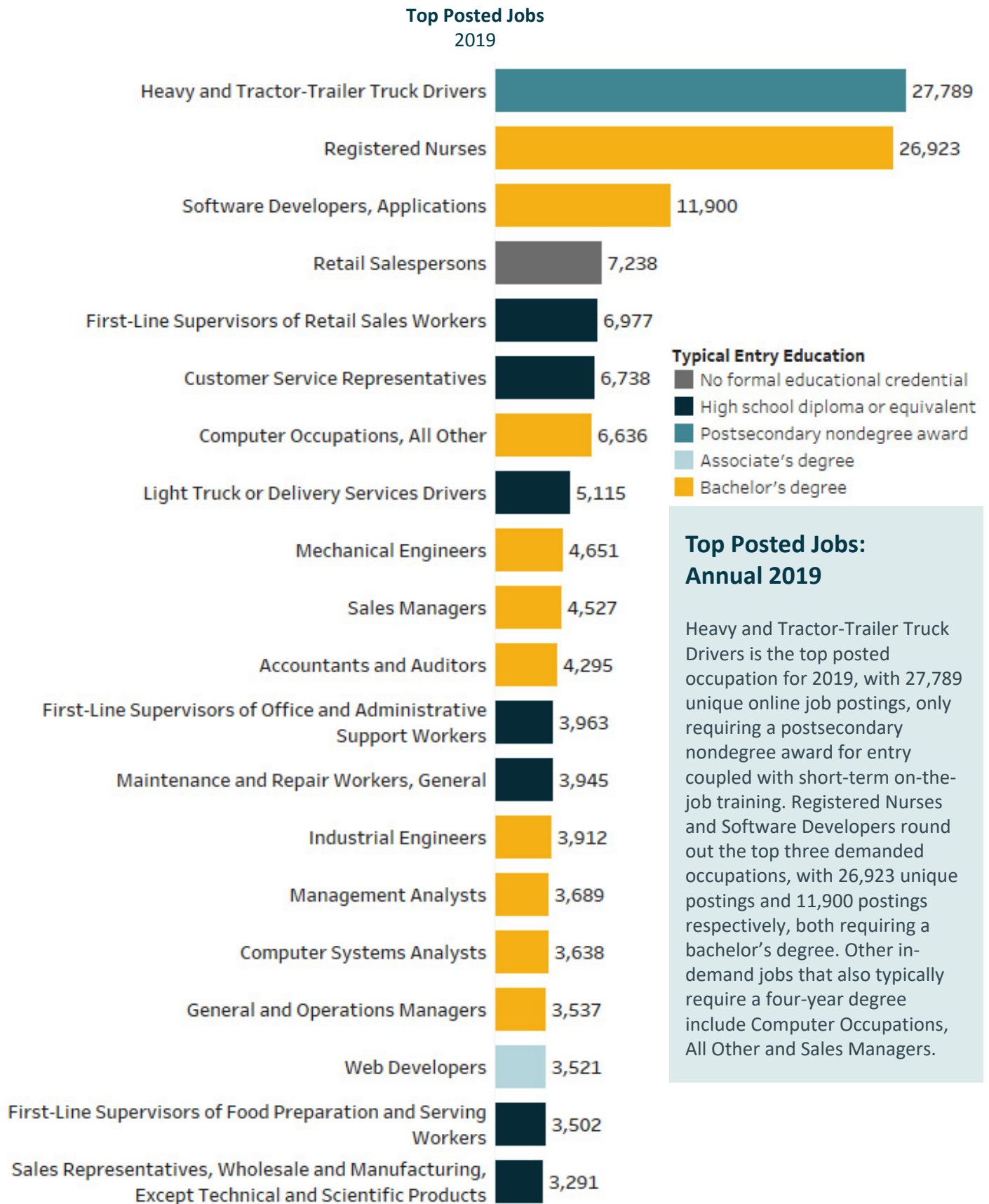
According to the most recent OnTheMap data set available from the Census Bureau, during 2015, the county's workforce consisted of 650,971 residents. 374,612 (57.5 percent) of the residents lived and worked within the county, while the remaining 276,359 residents (42.5 percent) traveled outside of the region for work. There were 672,754 workers employed in the county during 2015. Of those, 298,142 workers (44.3 percent) lived outside of the region's borders and commuted in. We can see that Wayne County is, by a small margin, a net importer of jobs with more workers commuting into the area for employment than leaving.

Where Wayne County Residents Work



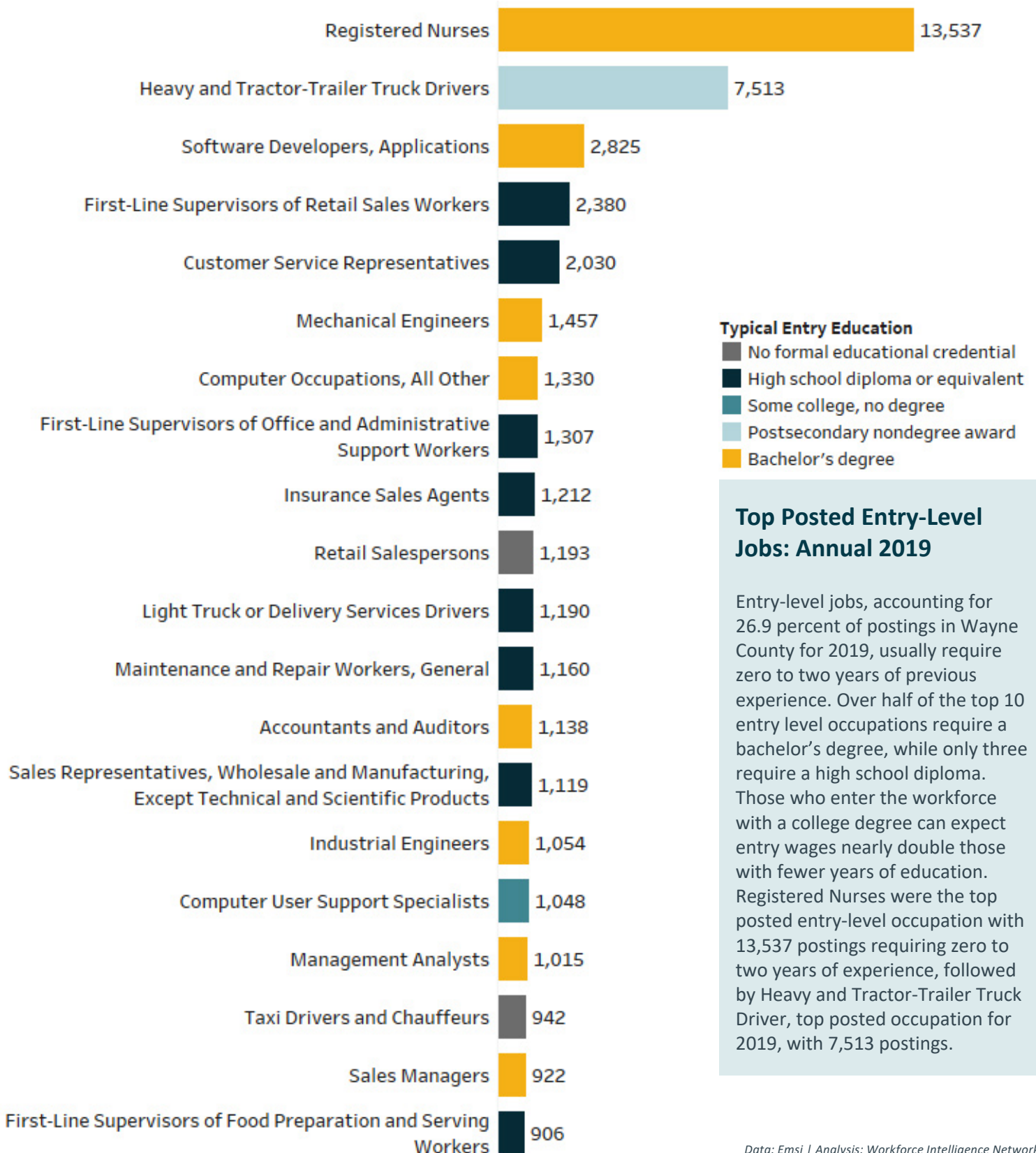
Where Wayne County Workers Live



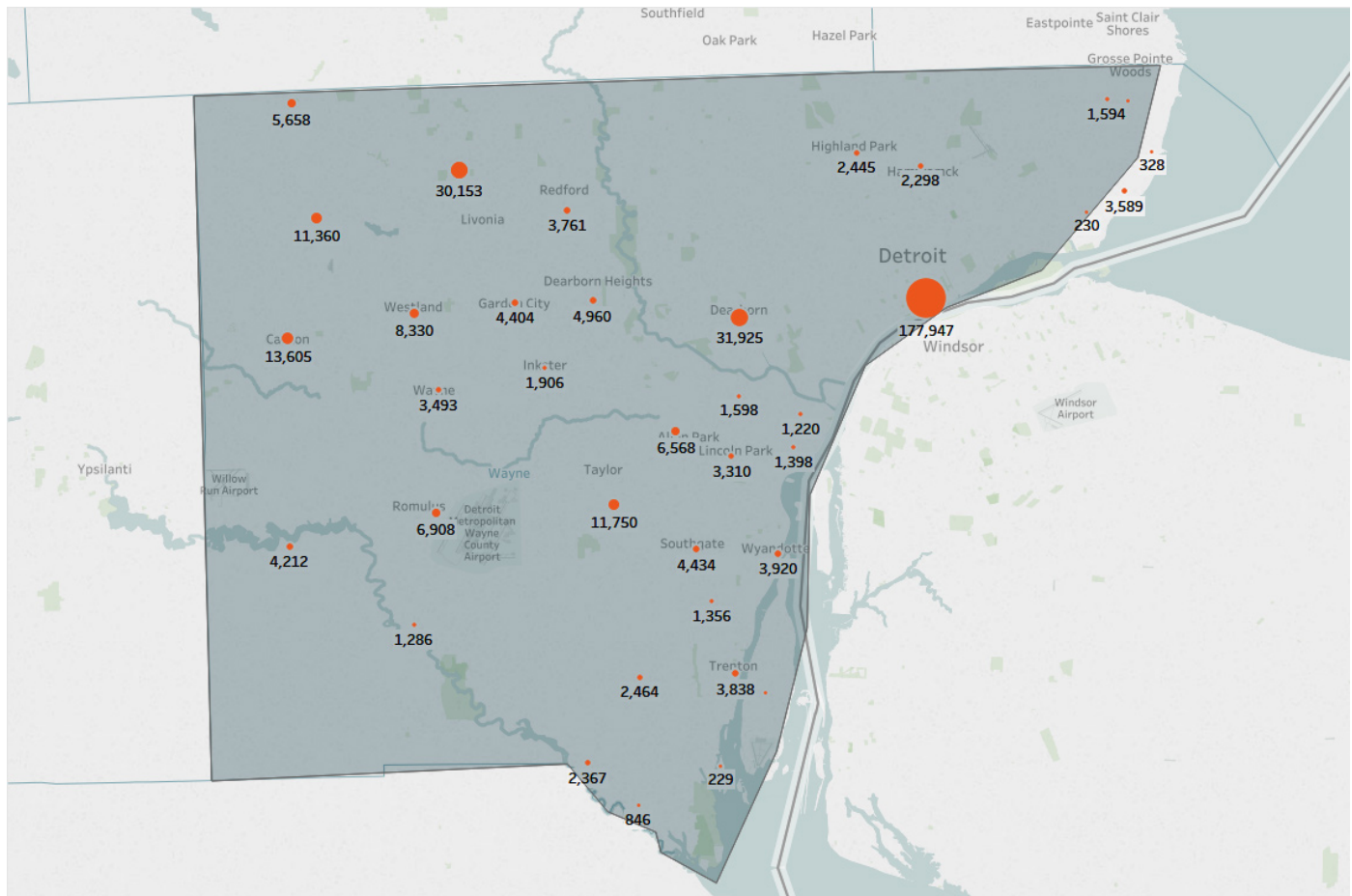




Top Posted Entry-Level Jobs 2019



Employer Demand by City



Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Certified Nursing Assistant
- Licensed Practical Nurse
- Nurse Practitioner
- Certified Public Accountant
- Automotive Service Excellence (ASE) Certification
- Associates Degree in Nursing
- Project Management Professional Certification
- Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP)
- Transportation Worker Identification Credential (TWIC) Card

Top In-Demand Skills

- Nursing
- Restaurant Operation
- Selling Techniques
- Merchandising
- Auditing
- Management
- Customer Service
- Sales
- Communications
- Leadership

Top Posting Employers*

- General Healthcare Resources, Inc.
- Henry Ford Health System
- Mercy Medical Center, Inc.
- Ford Motor Company
- Deloitte LLP
- Shipt LLC
- Beaumont Health System
- Soliant Health, Inc
- Anthem, Inc.
- Ascension Health

**Employer names are listed as they appear in online job postings.*



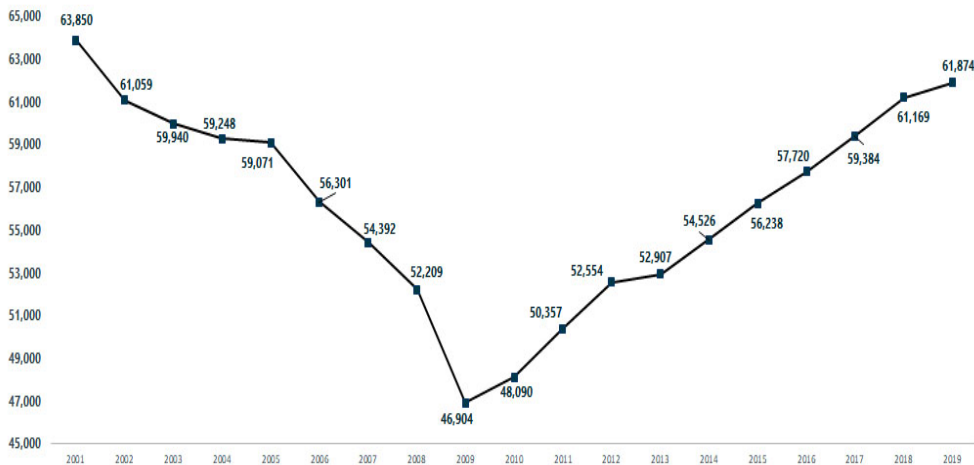
Introduction

Energy-related occupations encompass jobs in engineering, science, mining, and extraction. Workers in this field have a range of skills all related to keeping businesses and homes powered. Energy companies employ workers in a variety of occupations, many of which are also included in other WIN occupation groups. Posting data referenced in this section pertain only to job postings from energy-related businesses, while employment and wage data apply for these workers in every industry.

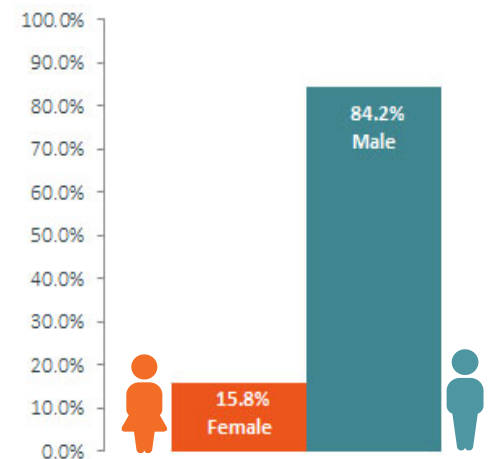


61,874
Energy Workers
1.1% Increase from
2018

Employment Over Time
2001–2019



Worker Gender Demographics



Energy Worker Demographics

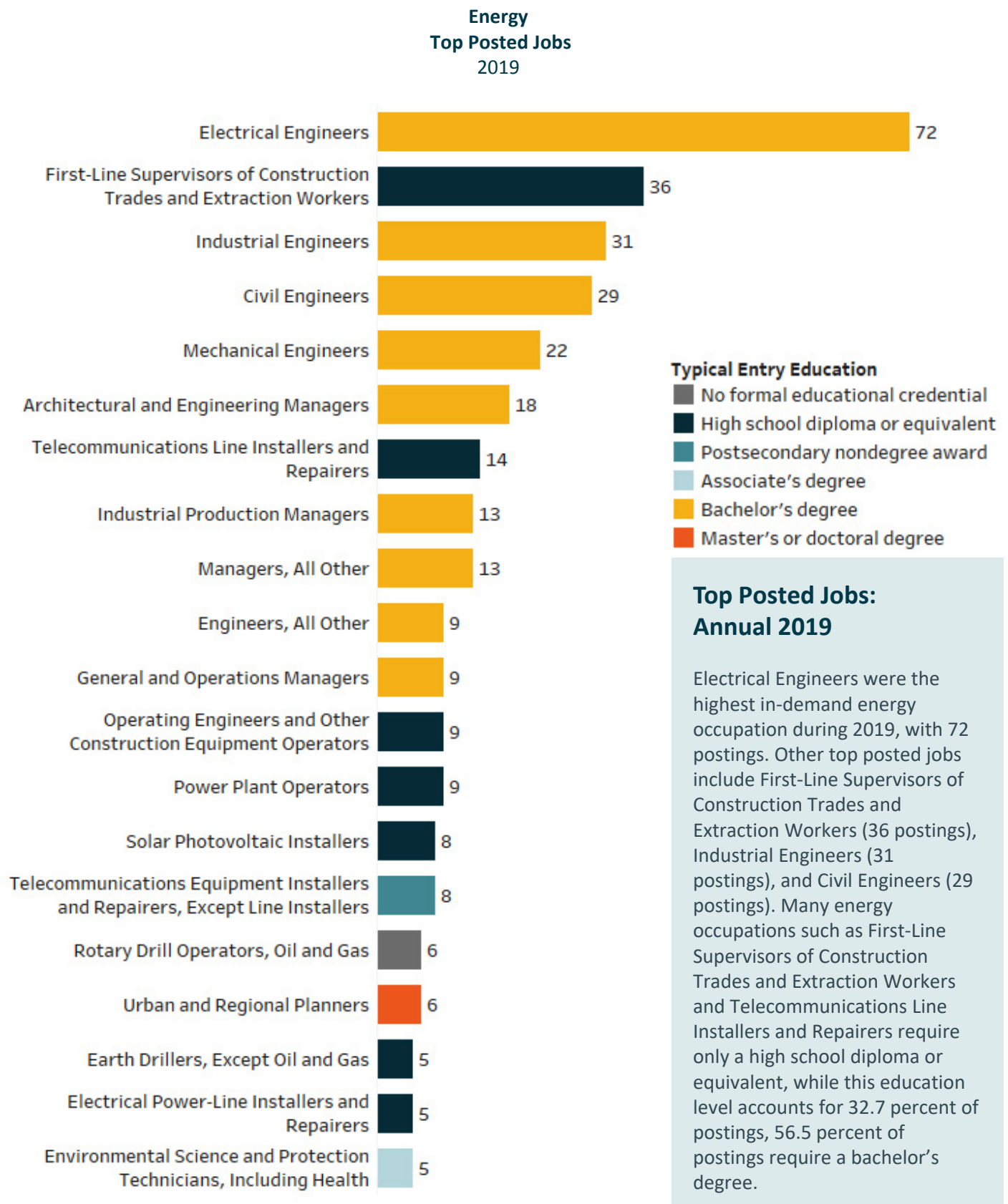
According to the most recent Emsi data set available (2019), the energy occupation group has increased since 2018 by 705 workers, for a total of 61,874 workers in 2019. During 2019, 15.8 percent of workers identified as female, while 84.2 percent identified as male. In the region, 75.2 percent of workers in the energy occupation group identified as white, while 13.1 percent and 3.6 percent identified as black or African American and Hispanic or Latino respectively. The 25-54 age group has the most energy workers, with 70.8 percent.

Race and Ethnicity Demographics

75.2% White | **13.1% Black or African American** | **3.6% Hispanic or Latino**

Worker Age Demographics







Energy Wage Overview

Almost all the top ten occupations offer median wages over \$30.00. However, seven of the top posted occupations report median wages over \$40.00 per hour, many of which are engineering and management roles requiring a bachelor's degree and varying years of experience. Entry-level occupations such as First-Line Supervisors of Construction Trades and Extraction Workers offers a median wage of \$33.09, or a salary of \$68,827, to workers with five or more years of experience.

Wage Overview for Top Posted Energy Jobs in 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$29.64	\$35.52	\$43.87	\$53.50	\$61.68
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$19.13	\$26.61	\$33.09	\$44.35	\$52.22
17-2112	Industrial Engineers	\$30.45	\$36.02	\$44.09	\$53.07	\$60.28
17-2051	Civil Engineers	\$24.25	\$28.40	\$34.31	\$42.85	\$54.04
17-2141	Mechanical Engineers	\$29.77	\$35.18	\$43.70	\$54.00	\$62.46
11-9041	Architectural and Engineering Managers	\$45.46	\$53.65	\$63.36	\$75.23	\$89.89
49-9052	Telecommunications Line Installers and Repairers	\$12.52	\$14.43	\$17.95	\$26.08	\$40.91
11-3051	Industrial Production Managers	\$35.48	\$44.62	\$56.00	\$69.87	\$86.51
11-9199	Managers, All Other	\$31.50	\$39.58	\$51.03	\$61.58	\$76.44
11-1021	General and Operations Managers	\$22.86	\$36.39	\$55.95	\$85.26	\$120.39

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Electrical Engineering
- Requirements Management
- Project Management
- Quality Control
- Construction Management

In-Demand Foundational Skills

- Management
- Operations
- Problem Solving
- Construction
- Presentations

In-Demand Education Level*

- High School Diploma: 32.7%
- Associate Degree: 12.8%
- Bachelor's Degree: 56.5%
- Master's Degree: 16.2%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

- Professional Engineer
- Operator Certification
- Licensed Professional Engineer
- NABCEP Certified Energy Practitioner
- Project Management Professional Certification



Employer Demand by City

DETROIT
Top Posting City
for 2019



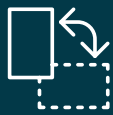
Top Posting Employers*

- DTE Energy Company
- Henkels & McCoy, Inc.
- CMS Energy Corporation
- Service Electric Company
- Communications Construction Group, LLC
- McDermott International, Inc.
- Exelon Corporation
- Black Hills Corporation
- Aegion Corporation
- Schlumberger Limited

Job Postings by City

1. Detroit, MI: 193 Postings
2. Canton, MI: 76 Postings
3. Dearborn, MI: 13 Postings
4. Plymouth, MI: 11 Postings
5. River Rouge, MI: 9 Postings
6. Belleville, MI: 8 Postings
7. Melvindale, MI: 8 Postings
8. Romulus, MI: 6 Postings
9. Livonia, MI: 4 Postings
10. Dearborn Heights, MI: 3 Postings

**Employer names are listed as they appear in online job postings.*



Introduction

Jobs in the manufacturing industry can range from assembly and production, to skilled trades and technicians, designers and engineers, and even computer-related occupations such as software development. Demand for engineers in the region has been consistent, and employment has been growing quickly. There are about 8,500 openings annually for engineers in southeast Michigan.

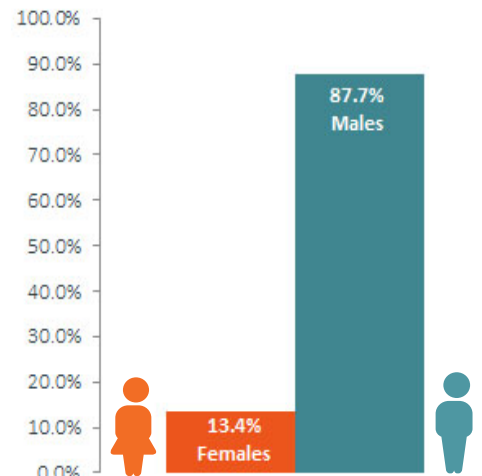


27,903
Engineering Workers
0.7% Increase from 2018

Employment Over Time
2001–2019



Worker Gender Demographics



Engineering and Design Worker Demographics

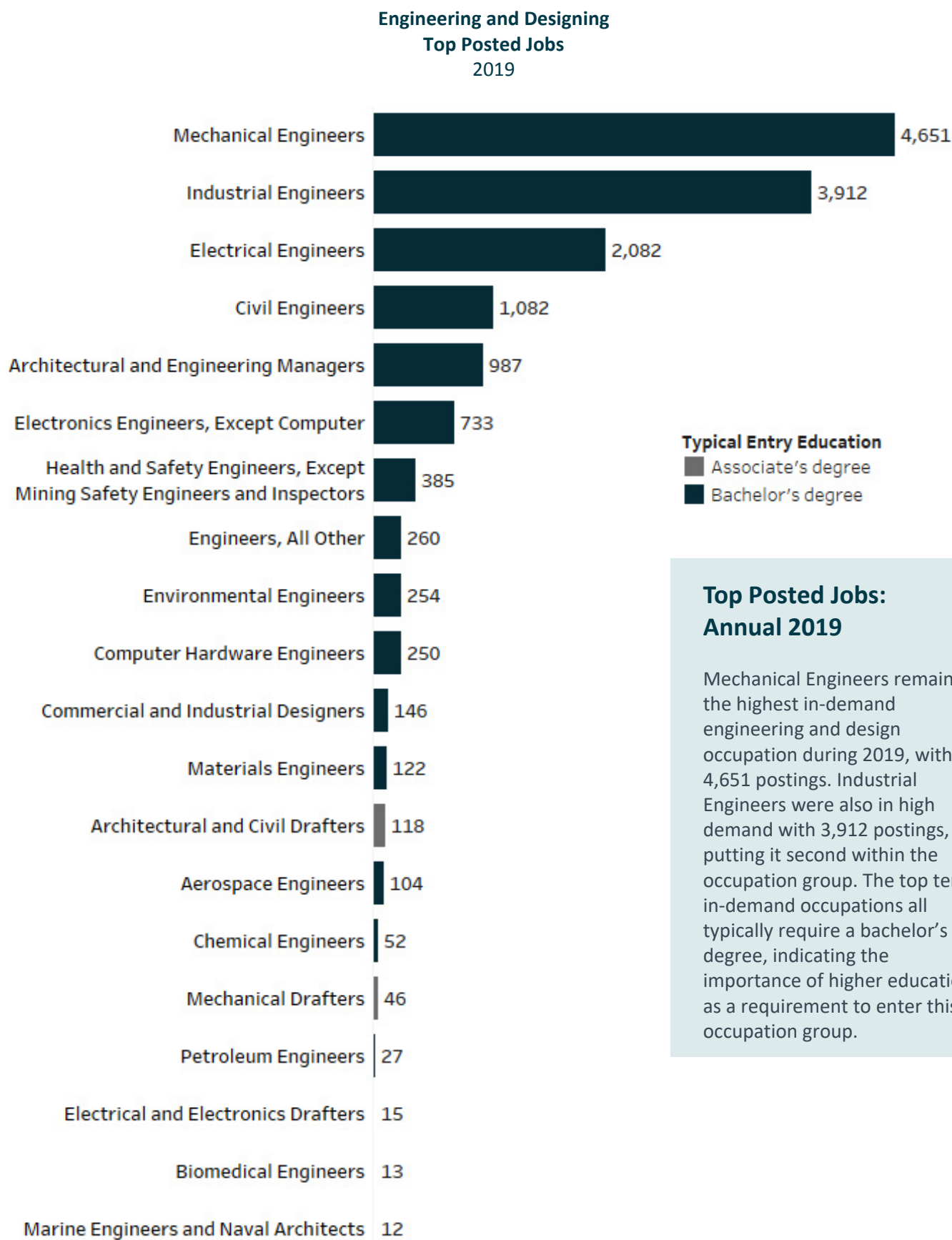
According to the most recent Emsi data set available (2019), the nearly 28,000 workers in the engineering and design group are not particularly diverse. Just 5.1 percent of the related workforce is under 25, likely due to the consistently high educational requirements. 13.4 percent of current workers are female, and only 23.4 percent identify as a race other than white; as the labor force overall continues to change, this is one field that could benefit from seeking more diverse talent.

Race and Ethnicity Demographics

76.6% White | 10.2% Asian | 8.6% Black or African-American

Worker Age Demographics







Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Median wages average about \$36 per hour across the group, and the top posted engineering and design job, Mechanical Engineers, offers a median hourly wage of \$43.69. This reflects an annual salary of approximately \$91,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Engineering and Design Jobs in 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2141	Mechanical Engineers	\$29.75	\$35.17	\$43.69	\$54.01	\$62.49
17-2112	Industrial Engineers	\$30.44	\$36.01	\$44.09	\$53.07	\$60.29
17-2071	Electrical Engineers	\$29.56	\$35.46	\$43.84	\$53.50	\$61.70
17-2051	Civil Engineers	\$24.06	\$28.33	\$34.40	\$43.29	\$55.12
11-9041	Architectural and Engineering Managers	\$45.43	\$53.63	\$63.35	\$75.24	\$89.92
17-2072	Electronics Engineers, Except Computer	\$31.95	\$37.92	\$45.07	\$54.58	\$63.88
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$27.58	\$31.23	\$41.15	\$54.21	\$64.37
17-2199	Engineers, All Other	\$23.35	\$33.39	\$43.57	\$55.36	\$63.50
17-2081	Environmental Engineers	\$28.68	\$35.54	\$44.86	\$56.16	\$65.30
17-2061	Computer Hardware Engineers	\$19.97	\$27.91	\$42.86	\$55.67	\$63.91

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Electrical Engineering
- Mechanical Engineering
- New Product Development
- Computer-Aided Design
- Systems Engineering

In-Demand Foundational Skills

- Management
- Problem Solving
- Communications
- Leadership
- Presentations

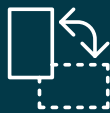
In-Demand Education Level*

- High School Diploma: 3.3%
- Associate Degree: 4.7%
- Bachelor's Degree: 64.5%
- Master's Degree: 16.3%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

- Professional Engineer
- Six Sigma Green Belt Certification
- Licensed Professional Engineer
- LEED Accredited Professional (AP)
- Project Management Professional Certification



Employer Demand by City



Top Posting Employers*

- Ford Motor Company
- Gtech Services, Inc
- Advantage Resourcing
- ALTAIR ENGINEERING, INC.
- Roush Industries, Inc.
- American Axle & Manufacturing, Inc.
- Advantage Technical Resourcing, Inc.
- Robert Bosch LLC
- CyberCoders, Inc.
- Aerotek, Inc.

Job Postings by City

1. Detroit: 6,669 Postings
2. Dearborn: 3,233 Postings
3. Plymouth: 1,597 Postings
4. Livonia: 1,196 Postings
5. Allen Park: 587 Postings
6. Northville: 418 Postings
7. Canton: 308 Postings
8. Taylor: 163 Postings
9. Redford: 150 Postings
10. Romulus: 119 Postings

*Employer names are listed as they appear in online job postings.

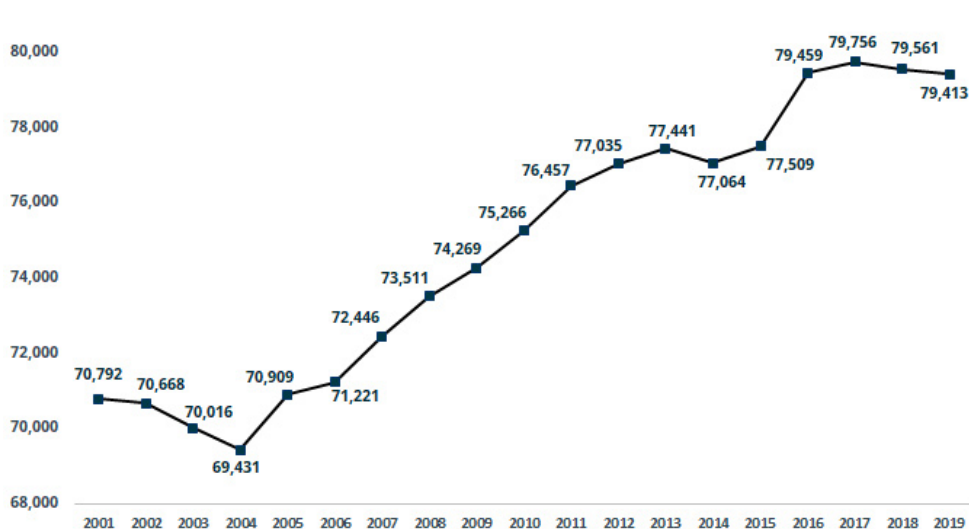


Introduction

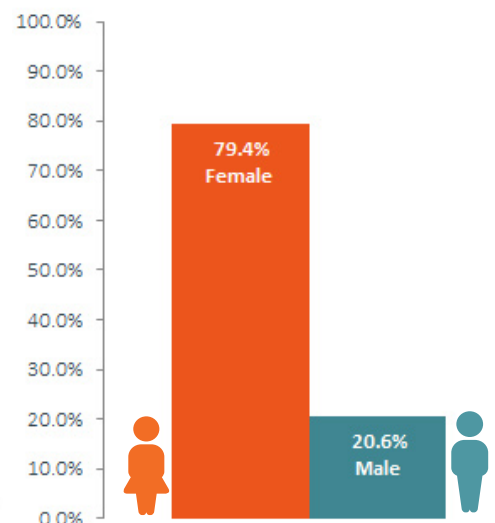
WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, more health care workers needed to care for Michigan's aging population and in response to regulatory and other changes. Registered nurses are routinely the most in-demand job in this group. Annually, there are about 23,600 job openings for these positions across southeast Michigan, and this is projected to continue increasing.

79,413
Health Care Workers
148-Worker Decrease
from 2018

Employment Over Time
2001–2019



Worker Gender Demographics



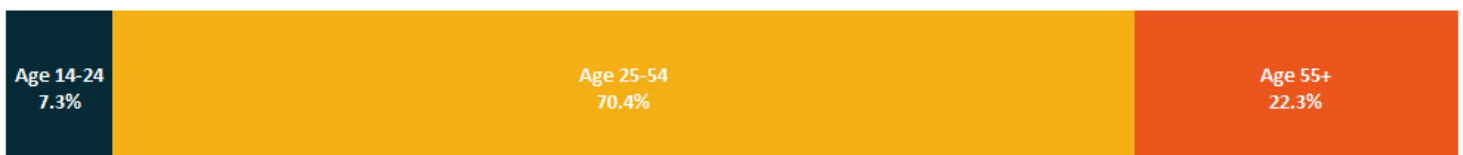
Health Care Worker Demographics

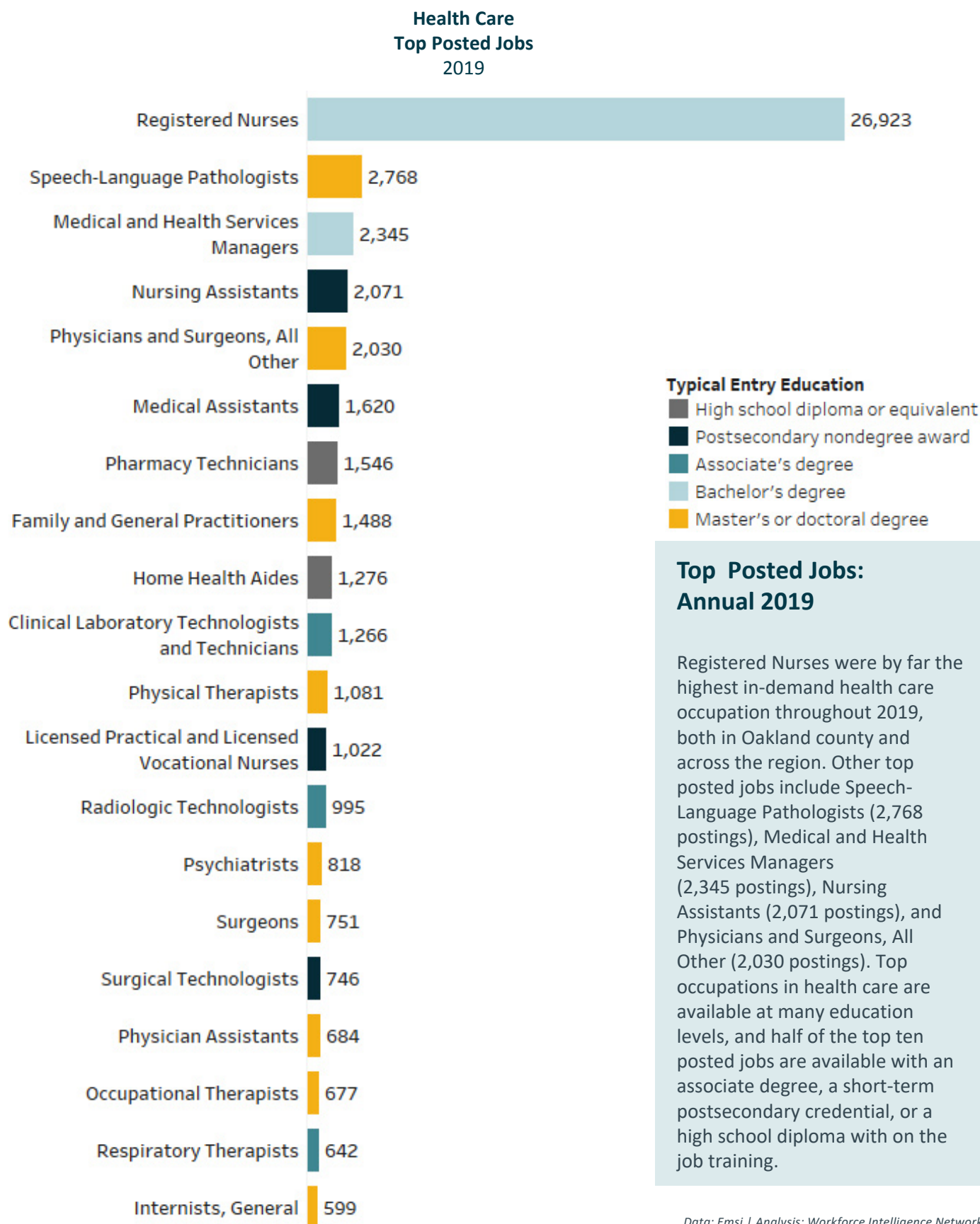
According to the most recent Emsi data set available (2019), the health care occupation group employs around 79,400 workers in Wayne County, who are overwhelmingly female (79.4 percent) and between the ages of 25 and 54 (70.4 percent), although 22.3 percent of workers are over 55. For registered nurses in particular, 26.4 percent of workers are over 55, so recruiting young workers for this high demand occupation is even more important.

Race and Ethnicity Demographics

60.4% White | **28.6% Black or African American** | **6.4% Asian**

Worker Age Demographics







Health Care Wage Overview

Wages in the high-demand health care field tend to scale with both education and experience. The health care occupation group offers a relatively broad array of entry requirements and a high volume of jobs are open to candidates with less than a bachelor's degree. However, most of the top-posted jobs that require less than a bachelor's degree pay under than the state's median wage of \$18.08 per hour. Registered Nurses, the top posted health care job, offers a median hourly wage of \$36.27 per hour or annual salary of about \$75,400 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$27.40	\$31.54	\$36.27	\$40.82	\$47.96
29-1127	Speech-Language Pathologists	\$27.40	\$32.47	\$37.96	\$47.01	\$67.49
11-9111	Medical and Health Services Managers	\$28.35	\$36.06	\$47.71	\$65.00	\$103.02
31-1014	Nursing Assistants	\$11.48	\$13.00	\$14.53	\$16.58	\$18.64
29-1069	Physicians and Surgeons, All Other	\$22.67	\$27.07	\$63.42	\$101.96	\$131.86
31-9092	Medical Assistants	\$12.59	\$13.74	\$15.55	\$18.28	\$20.44
29-2052	Pharmacy Technicians	\$10.64	\$12.76	\$15.92	\$19.26	\$23.76
29-1062	Family and General Practitioners	\$42.93	\$57.58	\$89.11	\$101.09	\$161.52
31-1011	Home Health Aides	\$9.80	\$10.19	\$11.64	\$13.66	\$15.59
29-2018	Clinical Laboratory Technologists and Technicians	\$14.77	\$17.92	\$25.78	\$32.74	\$37.93

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Nursing
- Basic Life Support
- Advanced Cardiovascular Life Support (ACLS)
- Intensive Care Unit
- Nursing Care

In-Demand Foundational Skills

- Management
- Leadership
- Customer Service
- Communications
- Teaching

In-Demand Education Level*

- High School Diploma: 13.3%
- Associate Degree: 12.6%
- Bachelor's Degree: 16.6%
- Master's Degree: 7.8%

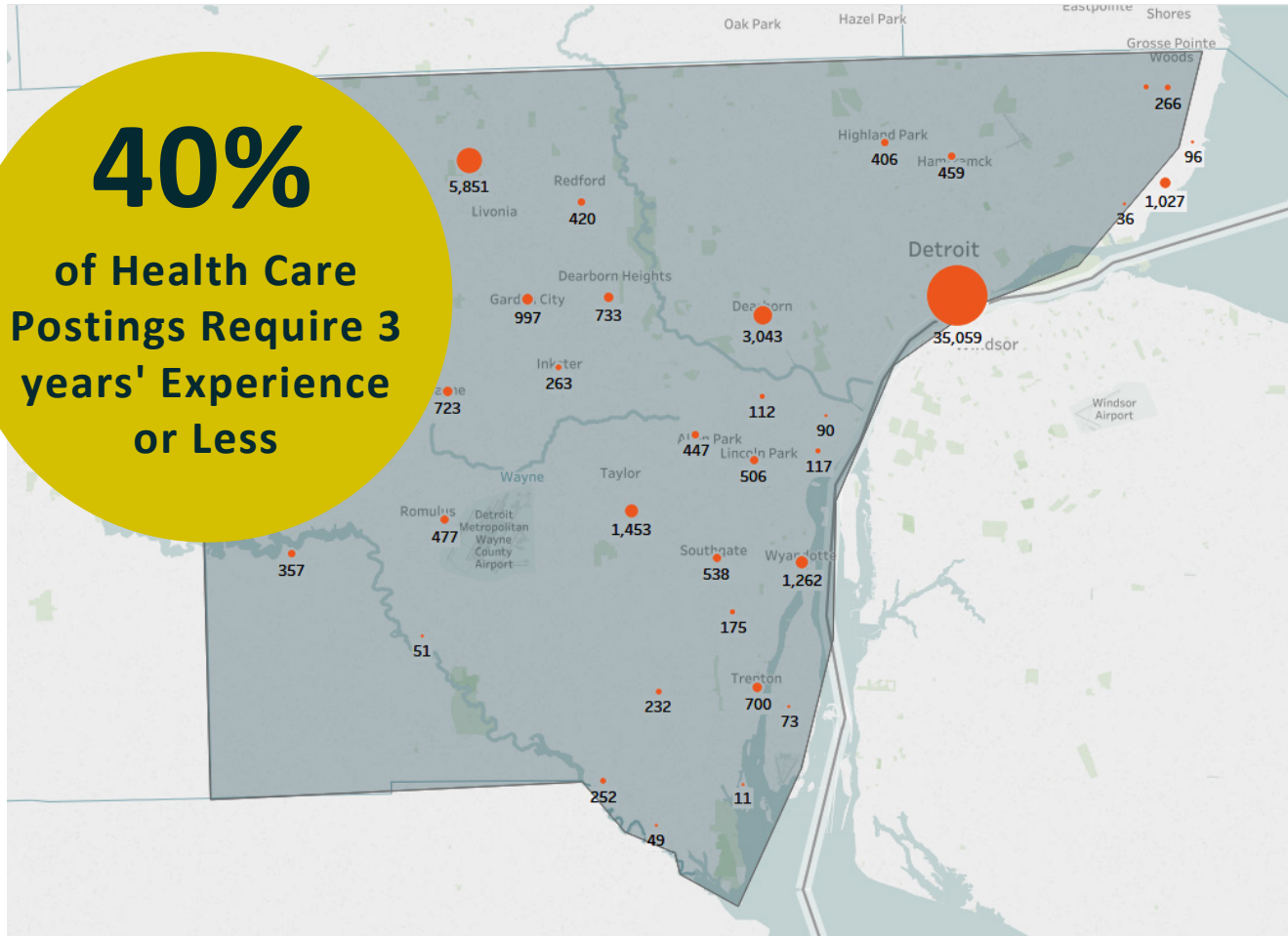
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

- Licensed Practical Nurse
- Certified Nursing Assistant
- Nurse Practitioner
- Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP)
- Critical Care Registered Nurse (CCRN)



Employer Demand by City



Top Posting Employers*

- General Healthcare Resources, Inc.
- Mercy Medical Center, Inc.
- Henry Ford Health System
- HealthCare Employment Network
- Beaumont Health System
- Ascension Health
- Tenet Healthcare Corporation
- Soliant Health, Inc
- William Beaumont Hospital
- Trinity Health Corporation

Job Postings by City

1. Detroit: 35,059 Postings
2. Livonia: 5,851 Postings
3. Dearborn: 3,043 Postings
4. Canton: 1,612 Postings
5. Taylor: 1,453 Postings
6. Wyandotte: 1,262 Postings
7. Grosse Pointe: 1,027 Postings
8. Garden City: 997 Postings
9. Westland: 934 Postings
10. Dearborn Heights: 733 Postings

*Employer names are listed as they appear in online job postings.



Introduction

Information technology (IT) jobs include occupations that are associated with entry-level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services. While the information technology group does not currently employ as many individuals as the other groups here, it is quickly growing, and about 7,000 job openings are reported in the region annually.

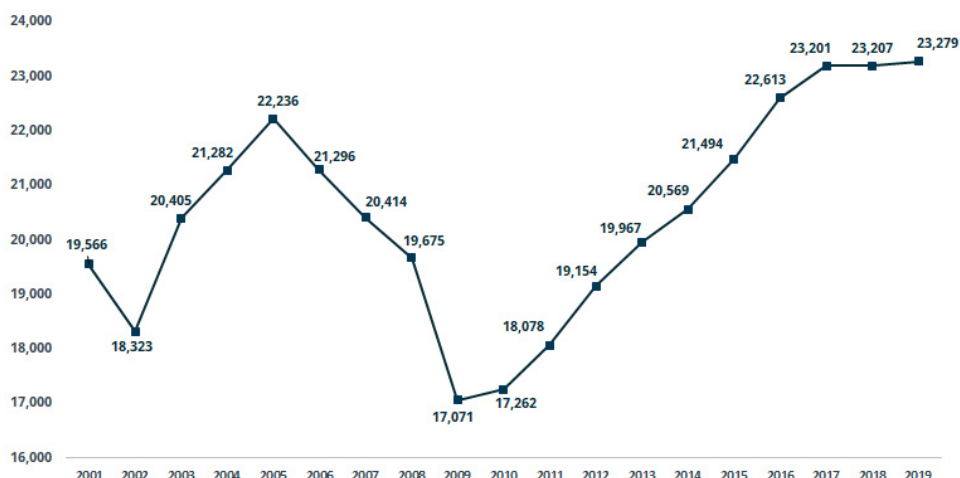


23,279

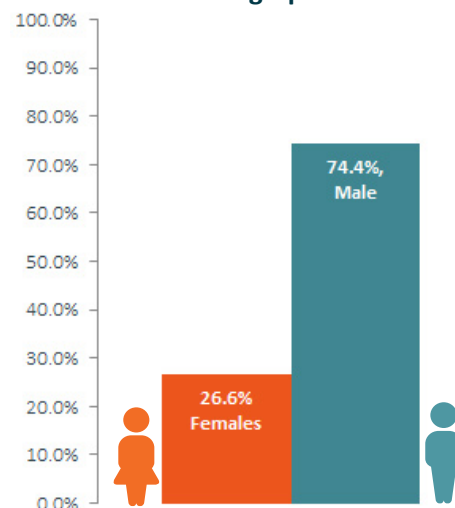
IT Workers

0.3% Decrease
from 2018

Employment Over Time
2001–2019



Worker Gender Demographics



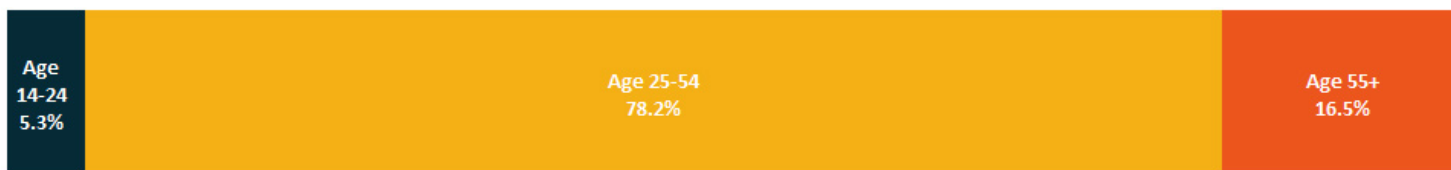
IT Worker Demographics

According to the most recent Emsi data set available (2019), although Wayne county has over 23,279 workers, the IT occupation group has yet to overcome some pronounced demographic differences. Most workers are white males between the ages of 25 and 54. Although demographic disparities are slightly less significant than in other counties, 74 percent of the workers in IT in Wayne County identify as male, and 67 percent identify as white. More than 78 percent are between the ages of 25 and 54. More than 16 percent are above the age of 55 and only 5 percent under 24 years old are employed in IT occupations.

Race and Ethnicity Demographics

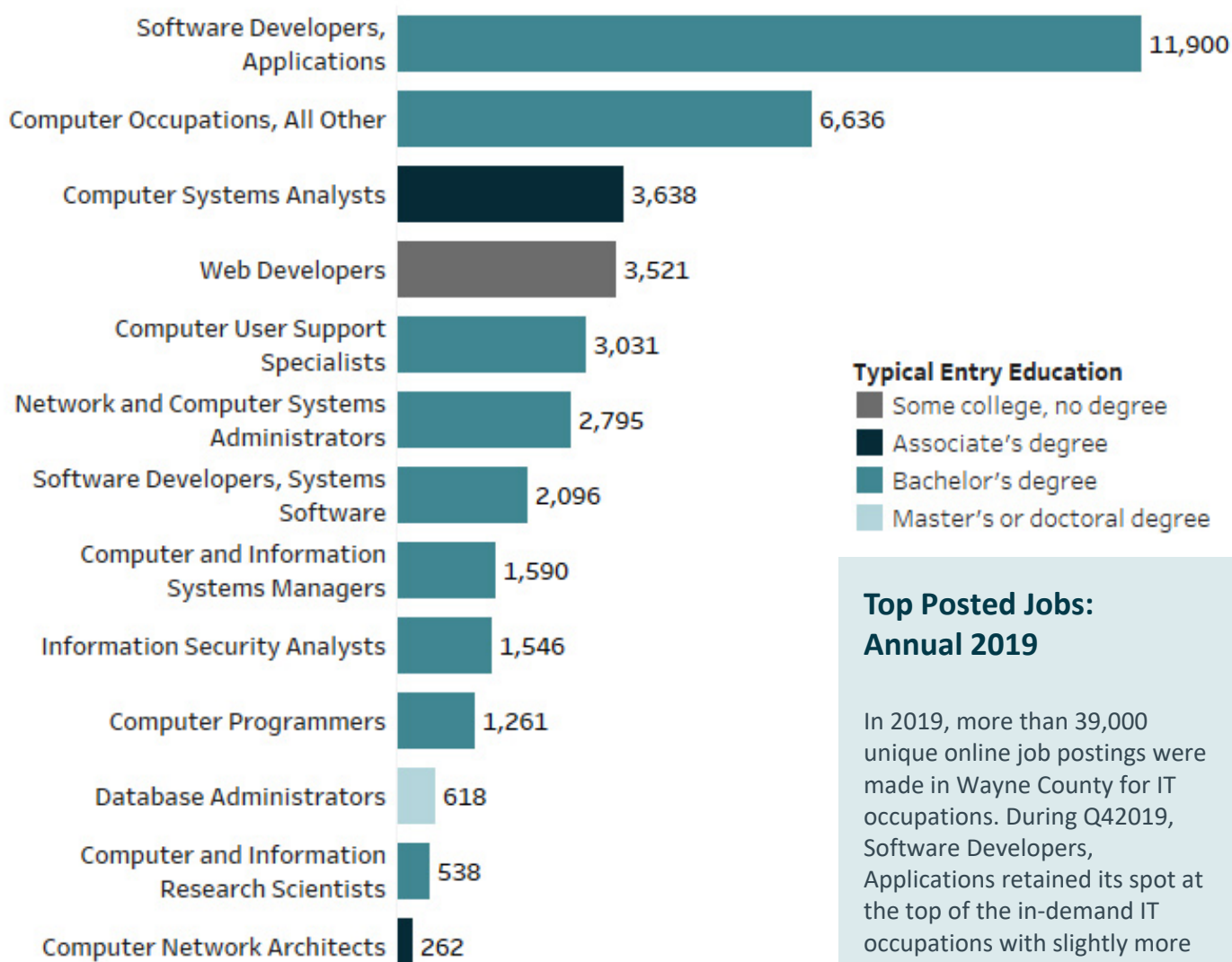
66.5% White | **13.0% Black or African American** | **2.5% Hispanic or Latino**

Worker Age Demographics





Information Technology Top Posted Jobs 2019



Typical Entry Education

- Some college, no degree
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Annual 2019

In 2019, more than 39,000 unique online job postings were made in Wayne County for IT occupations. During Q4 2019, Software Developers, Applications retained its spot at the top of the in-demand IT occupations with slightly more than 1,944 job postings, which is 1,712 fewer job postings than in Q3 2019. While most of the top IT jobs typically posted the requirement for a bachelor's degree, one of the top five, Computer User Support Specialists, typically require only an associate degree. Computer Occupations, All Other, Computer Systems Analysts, and Web Developers were also in demand in the region.



IT Wage Overview

High-wage offerings are available to job seekers that are willing to meet the minimum education requirements for IT occupations. Software Developers, Applications, the top posted IT job in Q4 2019, offers a median hourly wage of \$44.06 per hour or roughly \$93,000 per year according to the Bureau of Labor Statistics (BLS). Computer and Information Systems Managers earn the highest median wage among the top ten posted IT occupations at \$65.66 per hour or more than \$137,000 annually. Several occupations that have fewer qualifications, such as Computer User Support Specialists and Web Developers, make over \$31 per hour at the median.

Wage Overview for Top Posted IT Jobs in 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$29.20	\$35.78	\$45.06	\$56.11	\$64.78
15-1199	Computer Occupations, All Other	\$20.11	\$27.87	\$38.45	\$50.08	\$61.45
15-1121	Computer Systems Analysts	\$26.17	\$32.65	\$40.66	\$51.15	\$63.02
15-1134	Web Developers	\$10.98	\$20.98	\$32.18	\$43.36	\$51.39
15-1151	Computer User Support Specialists	\$13.93	\$17.45	\$23.39	\$30.47	\$39.18
15-1142	Network and Computer Systems Administrators	\$25.76	\$32.32	\$39.83	\$50.15	\$60.29
15-1133	Software Developers, Systems Software	\$23.45	\$34.22	\$44.47	\$54.05	\$63.87
11-3021	Computer and Information Systems Managers	\$41.64	\$52.92	\$65.66	\$80.55	\$100.78
15-1122	Information Security Analysts	\$30.35	\$35.61	\$45.36	\$57.92	\$66.66
15-1131	Computer Programmers	\$22.40	\$30.34	\$38.05	\$46.49	\$54.13

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Java
- SQL
- Agile Software Development
- Software Development
- JavaScript

In-Demand Foundational Skills

- Management
- Communications
- Problem Solving
- Leadership
- Integration

In-Demand Education Level*

- High School Diploma: 3.3%
- Associate Degree: 3.5%
- Bachelor's Degree: 47.7%
- Master's Degree: 11.3%

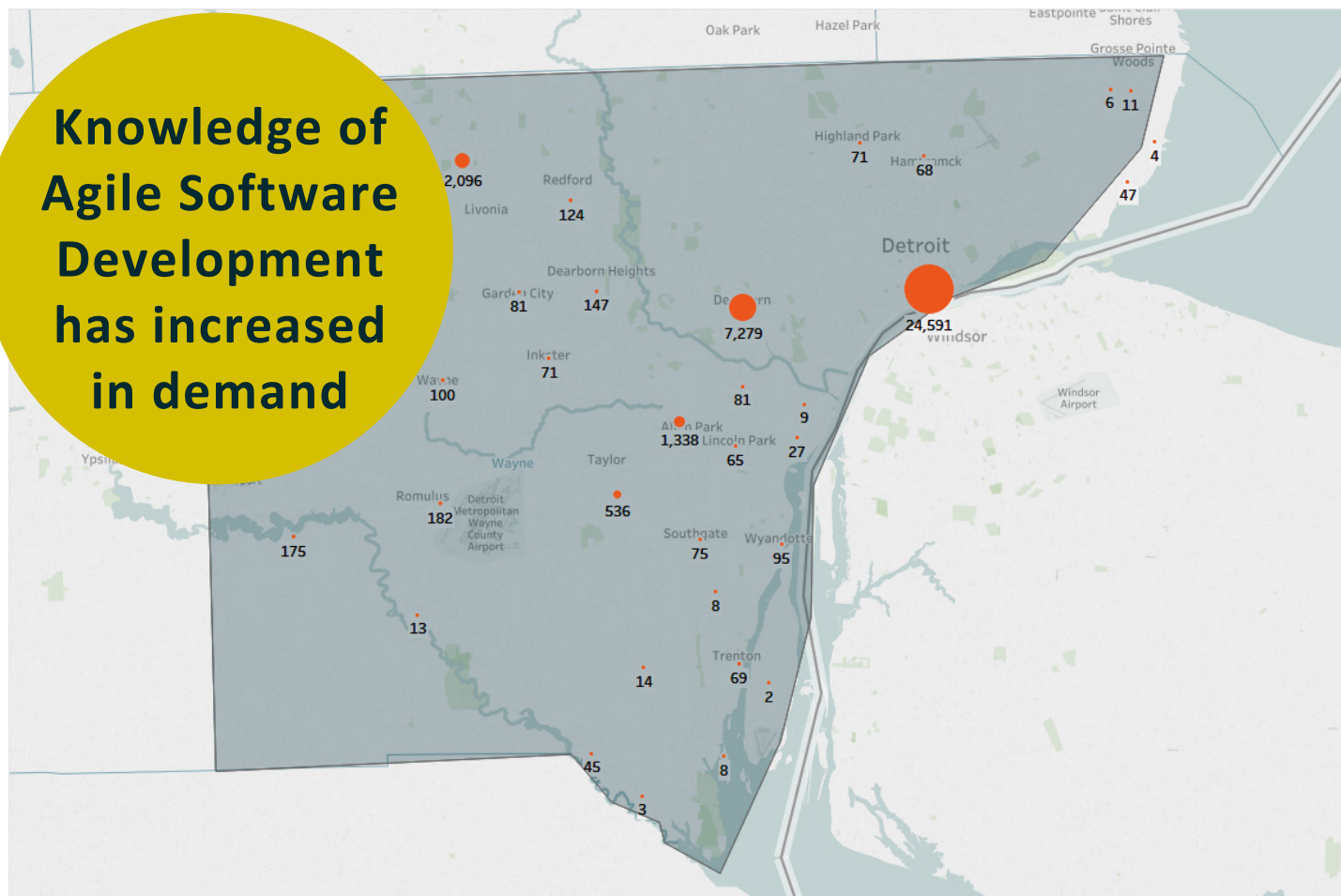
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

- Certified Information Systems Security Professional (CISSP)
- Project Management Professional Certification (PMP)
- Certified Information System Auditor (CISA)
- Microsoft Certified Systems Engineer (MCSE)
- Certified Information Security Manager (CISM)



Employer Demand by City



Top Posting Employers*

- Ford Motor Company
- Deloitte LLP
- Teksystems, Inc.
- Fast Switch, Ltd.
- Revature
- Quicken Loans Inc.
- Anthem, Inc.
- Accenture PLC
- Efinancialcareers, Inc.,
- Ciber, Inc.

Job Postings by City

1. Detroit: 24,591 Postings
2. Dearborn: 7,279 Postings
3. Livonia: 2,096 Postings
4. Allen Park: 1,338 Postings
5. Plymouth: 1,095 Postings
6. Taylor: 536 Postings
7. Northville: 464 Postings
8. Canton: 359 Postings
9. Romulus: 182 Postings
10. Belleville: 175 Postings

**Employer names are listed as they appear in online job postings.*



Introduction

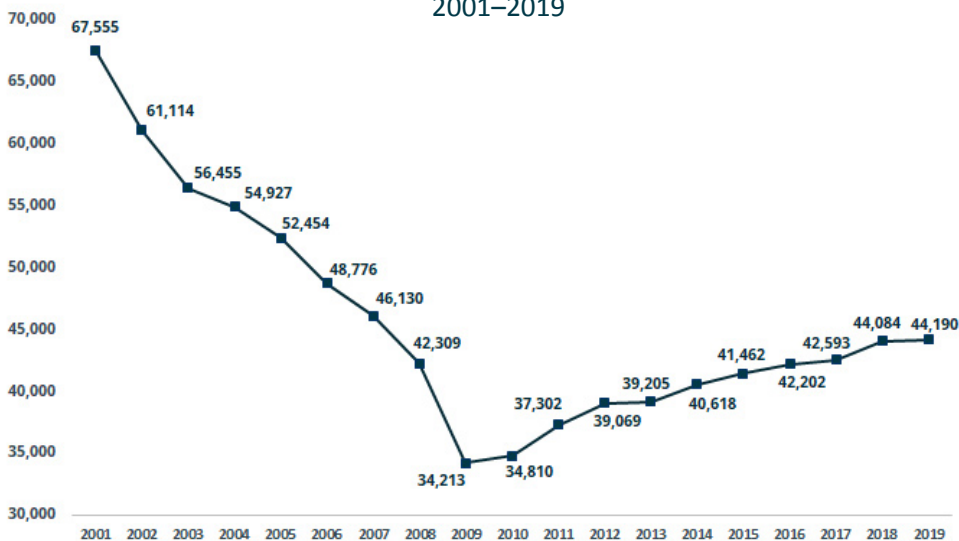
WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled- trades labor, such as CNC machinists and welders, than almost anywhere else in the country. There are about 21,000 openings for these workers annually.

NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.

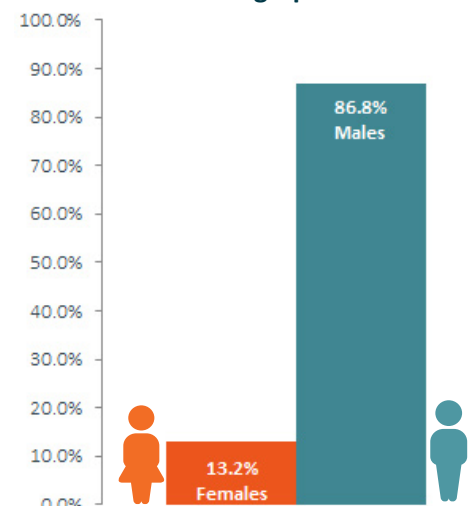


44,190
Skilled Trades Workers
0.2% Increase from 2018

Employment Over Time
2001–2019



Worker Gender Demographics



Skilled Trades Worker Demographics

According to the most recent Emsi data set available (2019), the skilled trades occupation group employs about 44,100 workers in Wayne County. A majority of skilled trades workers are white males between the ages of 25 and 54. Additional outreach may be necessary in the near future, as at 26.3 percent, the group has a somewhat higher proportion than average of workers over age 55.

Race and Ethnicity Demographics

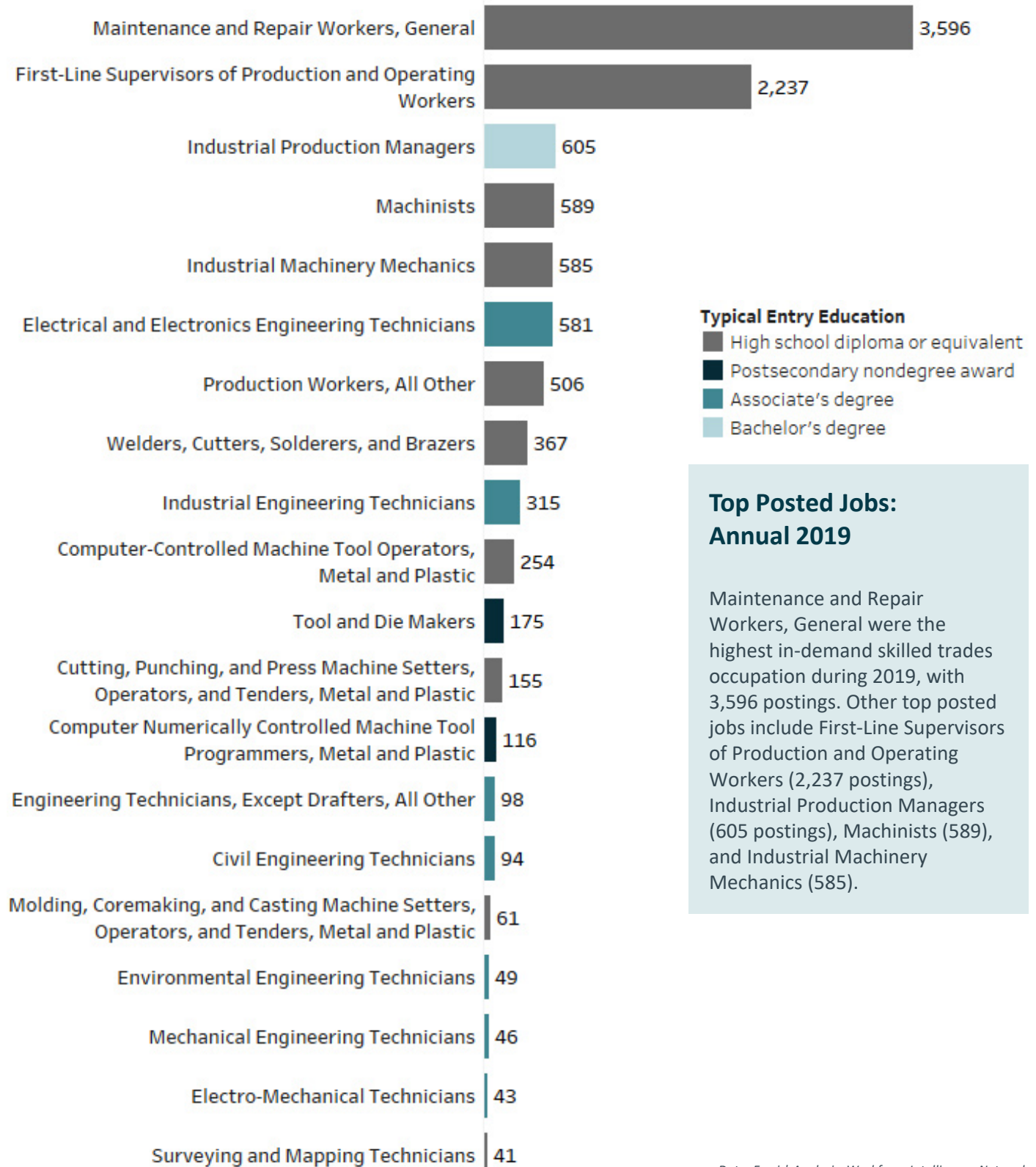
70.7% White | **19.1% Black or African American** | **5.3% Hispanic or Latino**

Worker Age Demographics





Skilled Trades Top Posted Jobs 2019





Skilled Trades Wage Overview

Half of the top ten in-demand skilled trades occupations have median wages above \$20 per hour according to the Bureau of Labor Statistics (BLS), and three more above the state's median wage of \$18.08. Maintenance and Repair Workers, General, the top posted skilled trades job in Q4 2019, offers a median hourly wage of \$17.36. This translates to an annual salary of about \$36,000.

Wage Overview for Top Posted Skilled Trades Jobs in 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
49-9071	Maintenance and Repair Workers, General	\$10.99	\$13.52	\$17.36	\$23.10	\$29.01
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.69	\$24.23	\$32.16	\$41.32	\$51.11
11-3051	Industrial Production Managers	\$35.10	\$44.36	\$55.84	\$69.76	\$86.41
51-4041	Machinists	\$11.29	\$15.27	\$19.99	\$25.99	\$30.20
49-9041	Industrial Machinery Mechanics	\$15.42	\$19.75	\$25.27	\$31.44	\$37.43
17-3023	Electrical and Electronics Engineering Technicians	\$16.70	\$22.21	\$30.14	\$35.05	\$39.11
51-9199	Production Workers, All Other	\$9.25	\$10.29	\$14.52	\$20.50	\$31.91
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.23	\$15.88	\$19.06	\$23.85	\$29.68
17-3026	Industrial Engineering Technicians	\$16.75	\$20.86	\$26.38	\$33.34	\$38.89
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$12.14	\$14.45	\$19.16	\$23.57	\$29.24

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Plumbing
- HVAC
- Machining
- Preventive Maintenance
- Mechanics

In-Demand Foundational Skills

- Operations
- Troubleshooting
- Management
- Communications
- Valid Driver's License

In-Demand Education Level*

- High School Diploma: 38.5%
- Associate Degree: 9.2%
- Bachelor's Degree: 14.6%
- Master's Degree: 1.6%

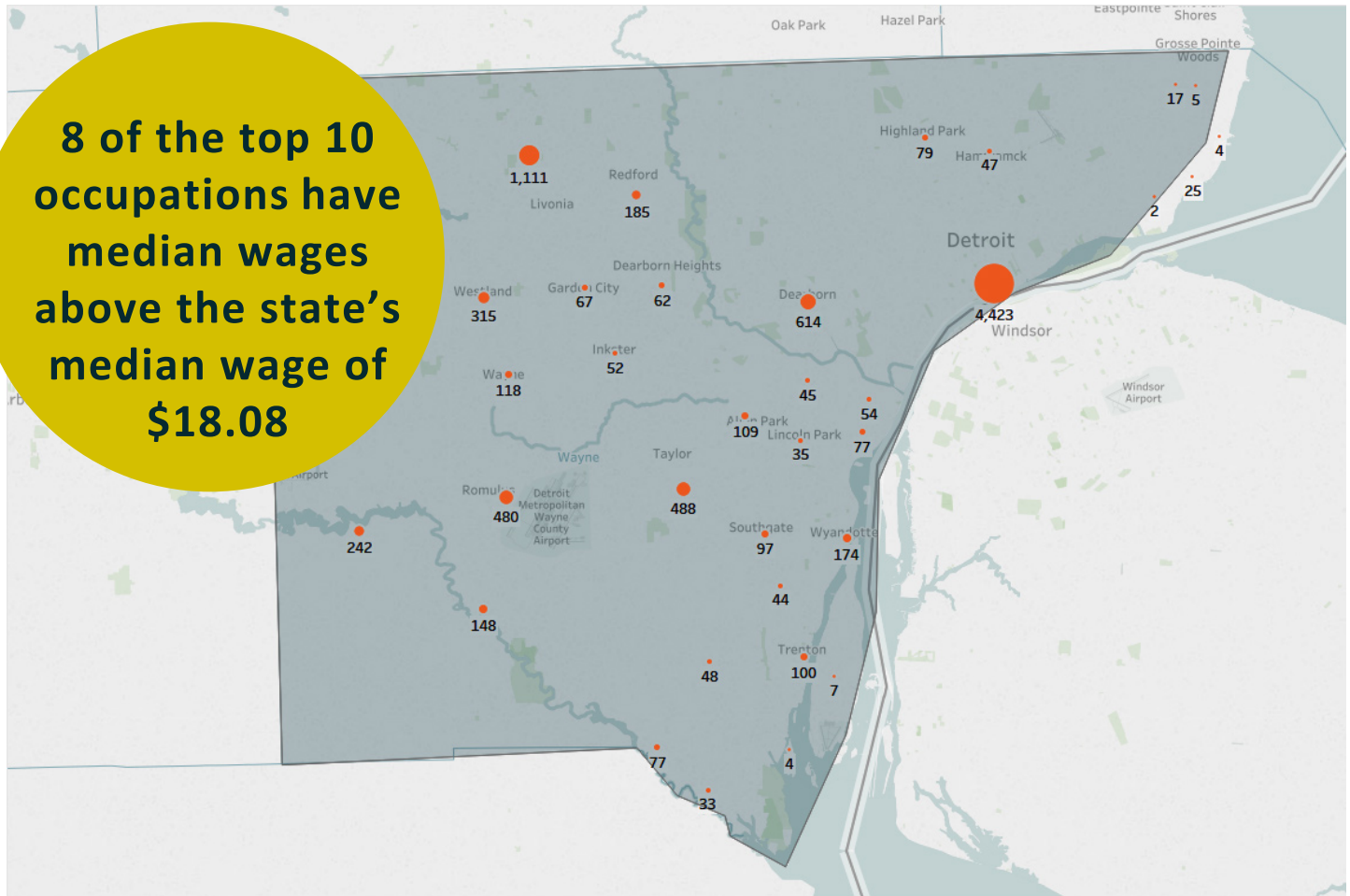
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

- Commercial Driver's License (CDL)
- HVAC Certification
- EPA 608 Technician Certification
- CFC Refrigeration Certification
- Automotive Service Excellence (ASE) Certification



Employer Demand by City



Top Posting Employers*

- Kelly Services, Inc.
- Aerotek, Inc.
- A.J.M. Packaging Corporation
- The Home Depot
- DTE Energy Company
- Express Employment Professionals
- Ford Motor Company
- Flex-N-Gate Corporation
- Roush Industries, Inc.
- Loc Performance Products, Inc.

Job Postings by City

1. Detroit: 4,423 Postings
2. Livonia: 1,111 Postings
3. Plymouth: 859 Postings
4. Dearborn: 614 Postings
5. Taylor: 488 Postings
6. Romulus: 480 Postings
7. Canton: 473 Postings
8. Westland: 315 Postings
9. Belleville: 242 Postings
10. Redford: 185 Postings

*Employer names are listed as they appear in online job postings.

Website

www.WINintelligence.org

Email

info@WINintelligence.org

Phone

313.744.2946

Address

25363 Eureka Rd.
Taylor, MI 48180

Facebook

[@workforceintelligencenetwork](https://www.facebook.com/workforceintelligencenetwork)

Twitter

[@WIN-semich](https://twitter.com/WIN-semich)