

Targeting Non-Traditional Apprenticeship Using Labor Market Information

Brandon Betz

Economic Analyst

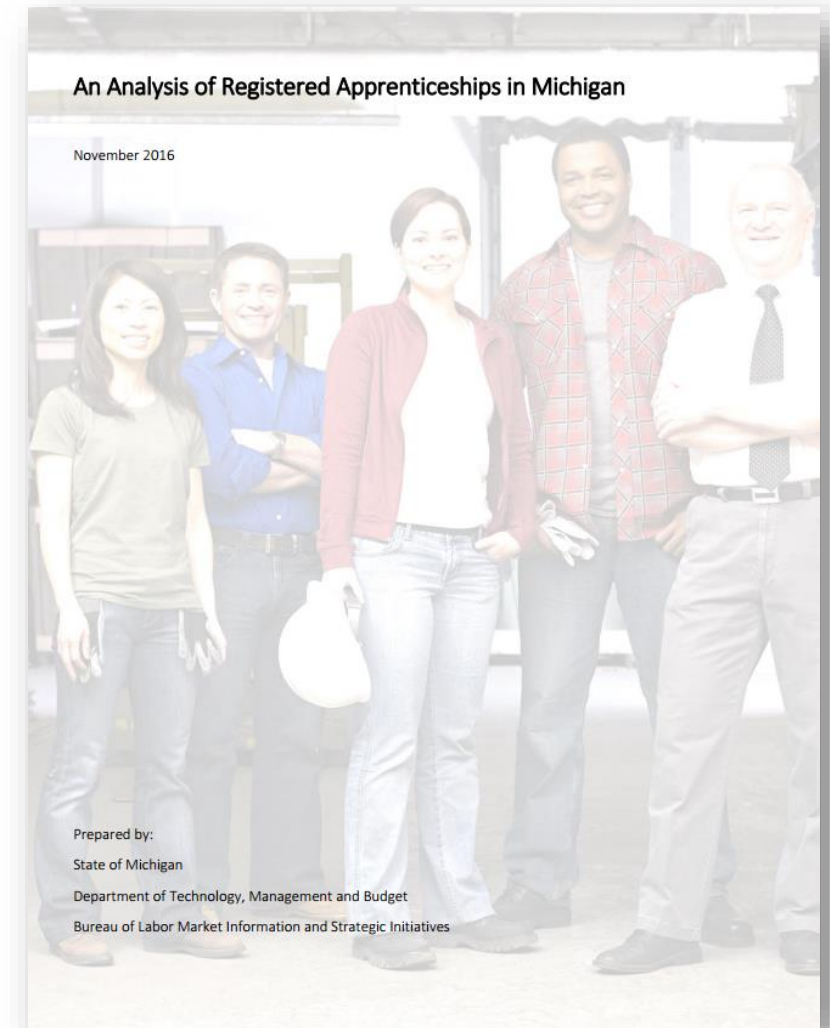
Bureau of Labor Market Information and Strategic Initiatives

The Bureau of Labor Market Information and Strategic Initiatives

- We are the official source for high-quality demographic and labor market information for the state of Michigan and its regions.
- We administer the state's federal-state cooperative programs with the Bureau of Labor Statistics (BLS) and the Census Bureau and produce high-quality information and analysis through grants from the U.S. Department of Labor and from partner agencies in the state of Michigan.
- We provide our national, state, and local partners and customers with accurate, objective, reliable, timely, accessible, and transparent information and insights.

Apprenticeship Data

- All registered apprenticeship data resides in Registered Apprenticeship Partners Information Management Data System (RAPIDS)
- Data available for fiscal years 2008 – 2015
- New data available in 2018
- Apprenticeship data is not linked to any longitudinal system (currently)



Traditional vs. Non-Traditional Apprenticeship

Traditional:

Building and Construction

Electricians
Carpenters
Tool and Die Makers
Heavy and Tractor-Trailer Truck Drivers
Construction Laborers
Machinists

Non-Traditional:

Healthcare, IT, Agriculture, Energy, Advanced Manufacturing, etc.

Nursing Assistants
First-Line Supervisors of Retail Sales Workers
Pharmacy Technicians
Cooks, Restaurant
Power Distributors and Dispatchers
Computer Programmers

Breakdown of Registered Apprenticeship by Type

	Traditional	Non-Traditional
Number of Programs	1,203	130
Number of Apprentices	23,500	2,314
Number of Completers	2,331	577
Mean Completion Rate	31%	66%
Median Starting Wage	\$14.26	\$12.50
Median Exit Wage	\$24.76	\$19.12

Traditional
Apprenticeships

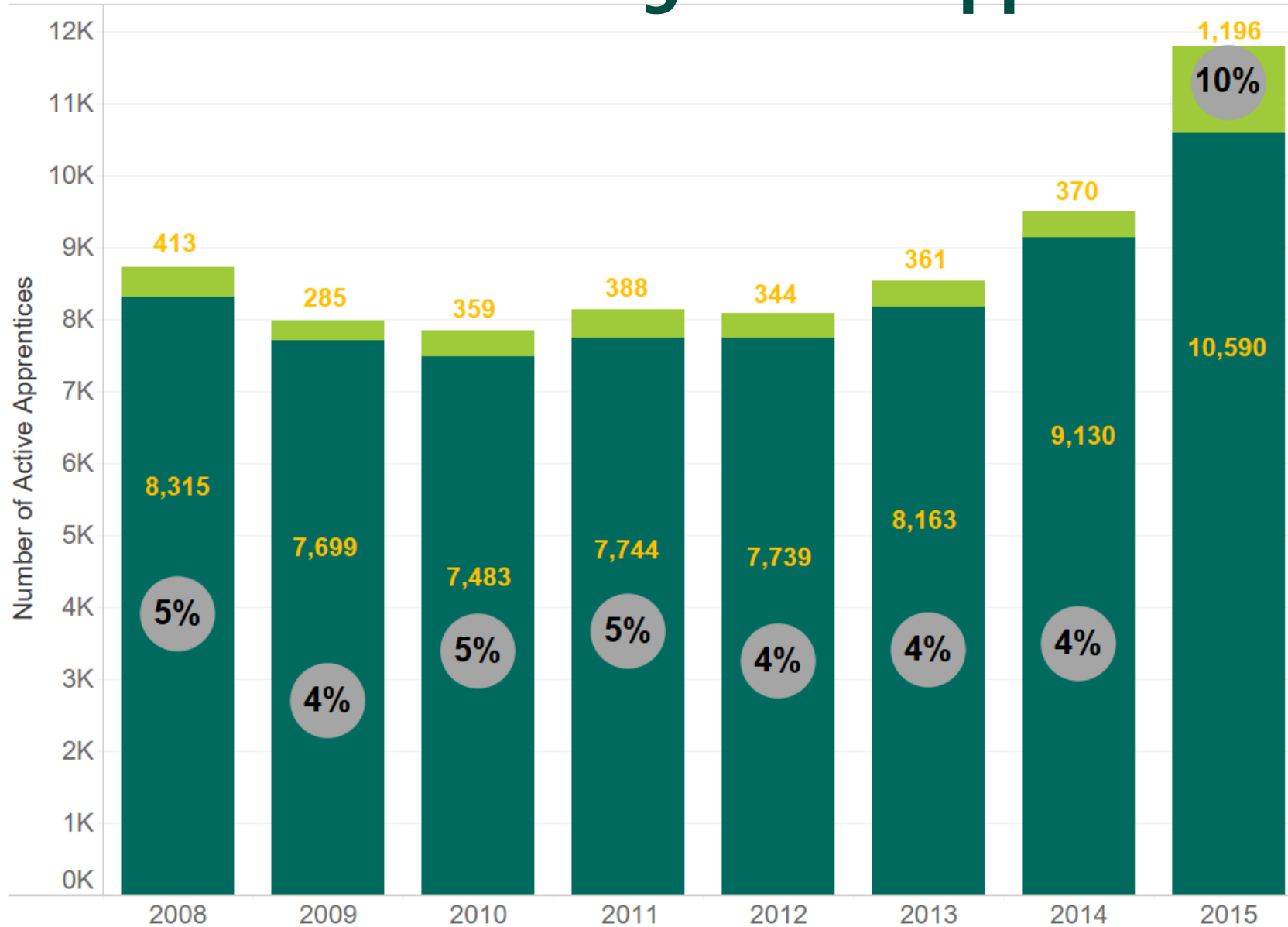
89%

Non-Traditional
Apprenticeships

11%

Growth in Active Registered Apprentices

- Traditional Apprenticeships
- Non-traditional Apprenticeships
- Proportion
- Non-traditional Apprenticeships

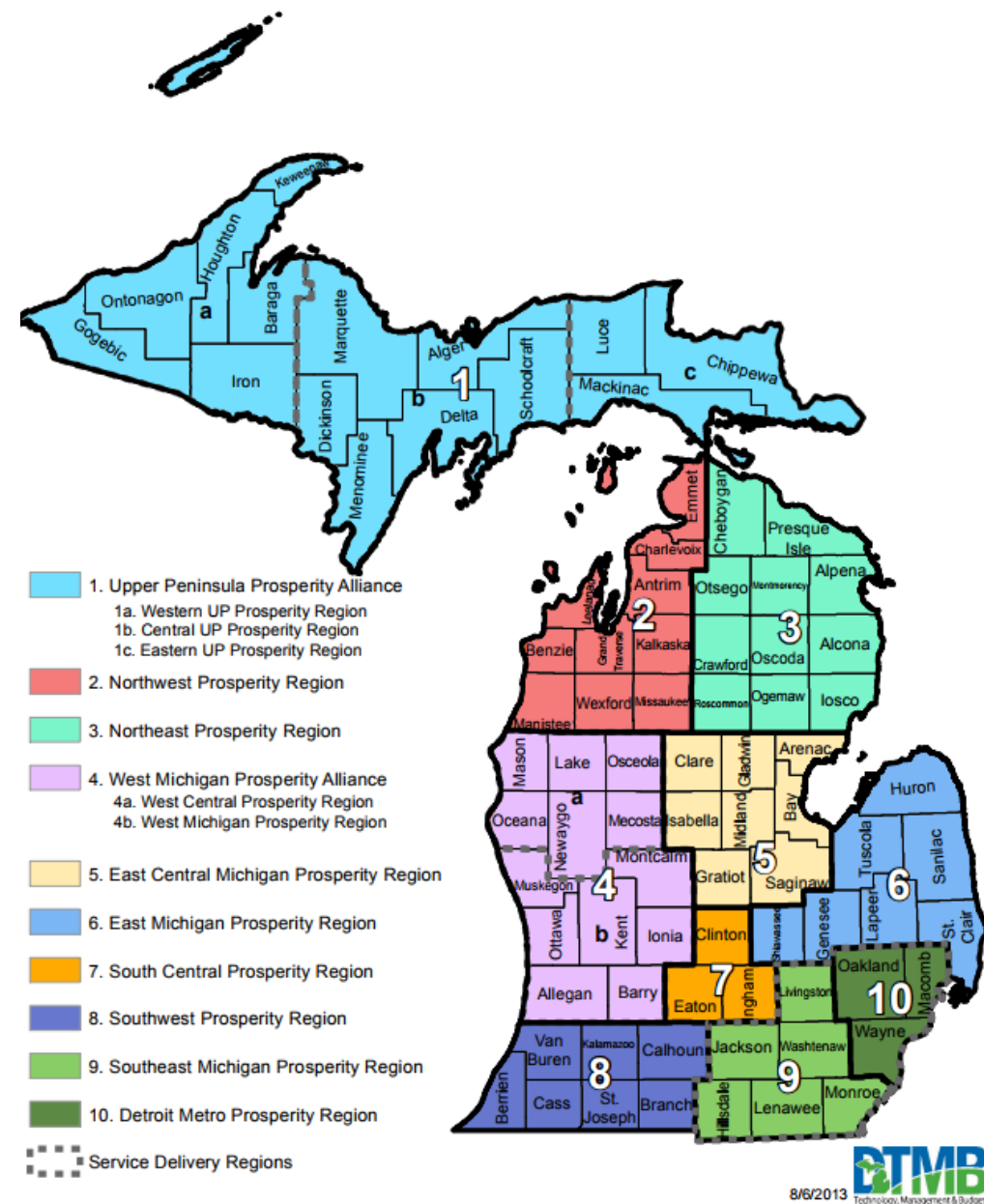


Data to Better Inform Decision-making

- Projections
 - Growth Rates
 - Annual Openings
- Wages and Employment
- Education and Training Requirements
- Skills, Knowledge, and Abilities
- Real-time Demand

Short-term and long-term projections offer insight into occupation growth

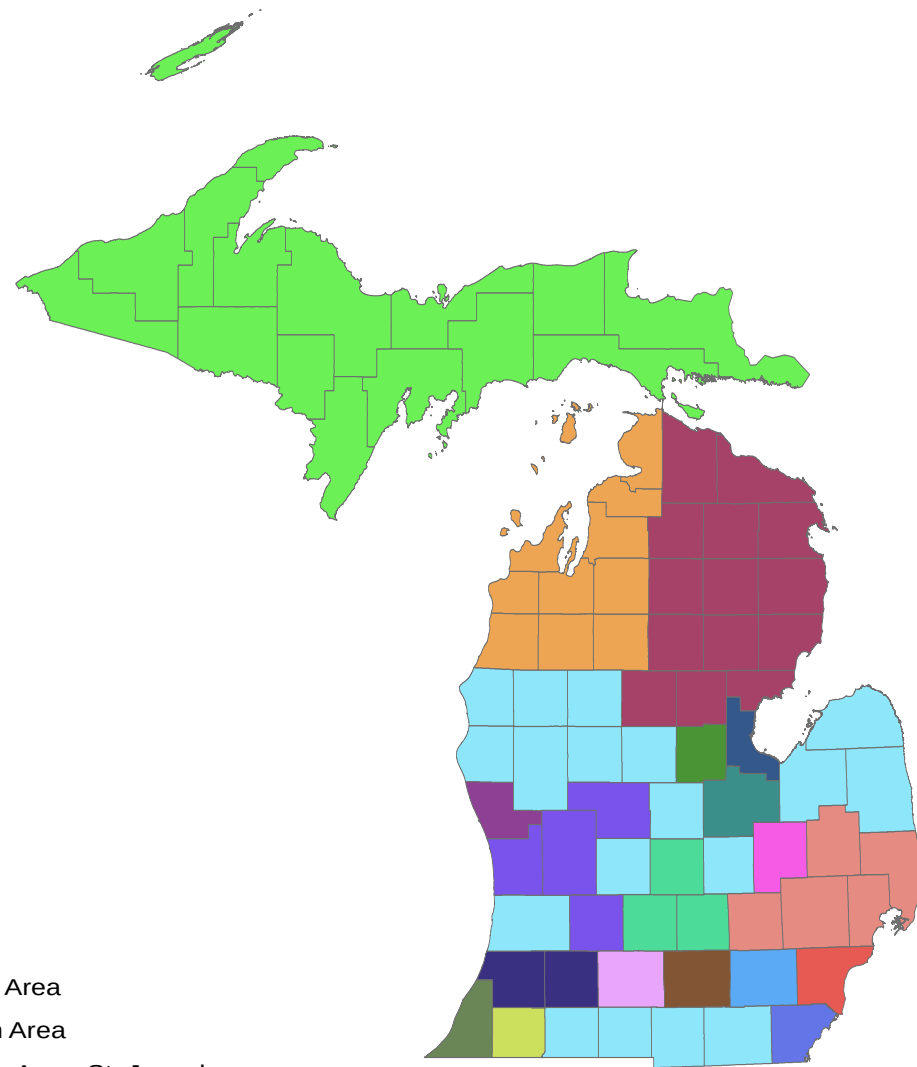
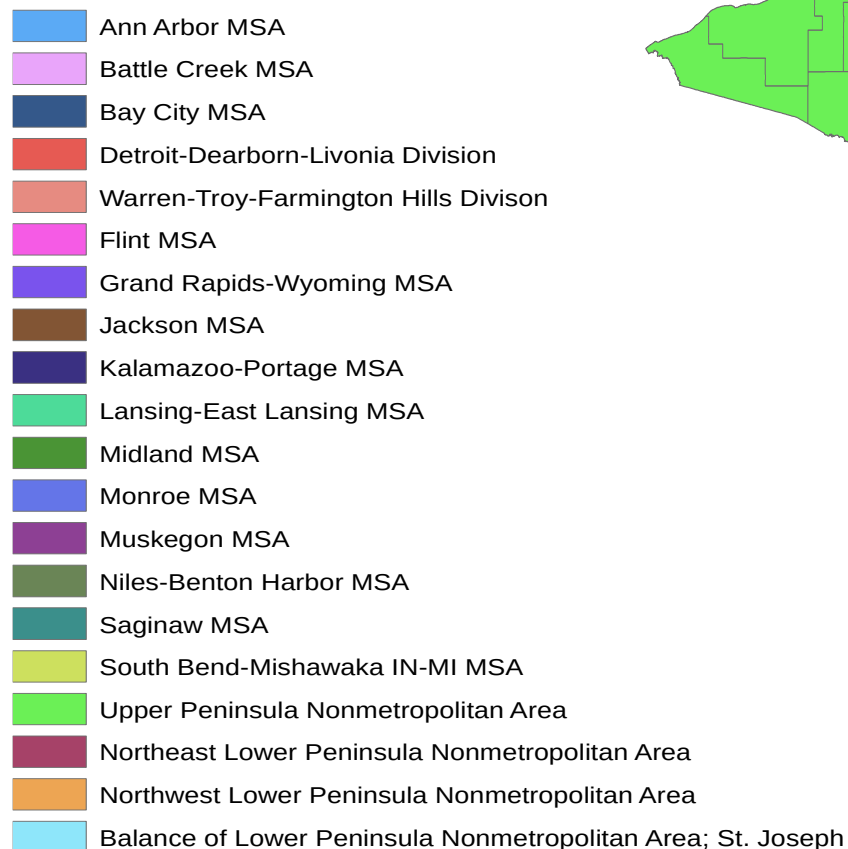
- 2-Year and 10-Year Projections
- Base Year and Projection Year Employment Levels
- Employment Growth
- Average Annual Openings Due to Growth and Replacement
- Long-term projections available at the regional level



Occupational Employment Statistics

- Provides breakdown of wages (hourly or annual) for detailed occupations
- Breakdown by various geographies

Metropolitan Statistical Areas



Other Labor Market Information Sources

- Education and Training Assignments by Detailed Occupation
- Real-time demand data can be used to identify hard-to-fill occupations
- O*NET (Skills, Knowledge, Abilities)

Data should be complemented by local knowledge and information

HOT JOBS

WEST MICHIGAN



Allegan • Barry • Ionia • Kent • Lake • Mason • Mecosta • Montcalm • Muskegon • Newaygo • Oceana • Osceola • Ottawa

Demand Occupations	Wage Range	Projected Growth 2014-2024	Projected Annual Job Openings	Education and Training Beyond High School
Accountants and Auditors	\$25- 37	14.8%	180	Bachelor's degree, license
Computer Systems Analysts	\$26- 42	22.8%	47	Bachelor's degree
Computer-Controlled Machine Tool Operators	\$13- 22	33.7%	187	Moderate-term OJT
Cost Estimators	\$20- 34	16.8%	58	Bachelor's degree
Electrical Power-Line Installers and Repairers	\$28- 38	26.3%	55	Long-term OJT
Electricians	\$20- 29	21.9%	114	Apprenticeship, license
Financial Managers	\$37- 63	10.6%	74	Bachelor's degree
Healthcare Social Workers	\$21- 30	22.2%	48	Master's degree, license
Industrial Engineers	\$29- 44	12.6%	176	Bachelor's degree, license
Industrial Machinery Mechanics	\$18- 26	31.9%	166	Long-term OJT
Machinists	\$14- 23	21.4%	244	Long-term OJT
Management Analysts	\$25- 43	19.4%	45	Bachelor's degree
Market Research Analysts & Marketing Specialists	\$20- 35	22.8%	67	Bachelor's degree
Mechanical Engineers	\$33- 51*	13.0%	117	Bachelor's degree, license
Medical and Clinical Laboratory Technologists	\$23- 32	20.3%	46	Bachelor's degree
Medical and Health Services Managers	\$36- 59	19.3%	85	Bachelor's degree
Occupational Therapists	\$29- 38	26.5%	43	Master's degree, license
Personal Financial Advisors	\$17- 39	18.7%	45	Bachelor's degree, license
Physical Therapist Assistants	\$19- 26	37.2%	54	Associate's degree, license
Physical Therapists	\$34- 47	31.7%	94	Doctoral or prof. degree, license
Physician Assistants	\$43- 63	27.0%	31	Master's degree, license
Physicians and Surgeons	\$85- 100+	16.3%	41	Doctoral or prof. degree, license
Plumbers, Pipefitters, and Steamfitters	\$18- 30	20.2%	62	Apprenticeship, license
Registered Nurses	\$26- 33	23.9%	650	Bachelor's degree, license
Software Developers, Applications	\$27- 43	24.4%	65	Bachelor's degree

Middle-Skill Jobs

Job title
Electrical Power-Line Installers and Repairers
Electricians
Industrial Machinery Mechanics
Machinists
Physical Therapist Assistants



Careers

	Percent Growth through 2024	Total Annual Openings	Median Wage (Hourly)	Median Wage (Annual)	Typical Education Needed for Entry
Automotive Body and Related Repairers	10.0%	185	\$21.55	\$44,824	High school diploma or equivalent and long-term OJT
Bus and Truck Mechanics and Diesel Engine Specialists	13.9%	219	\$20.38	\$42,390	High school diploma or equivalent and long-term OJT
Cardiovascular Technologists and Technicians	19.0%	80	\$25.56	\$53,165	Associate degree
Carpenters	7.2%	393	\$20.41	\$42,453	High school diploma or equivalent and apprenticeship
Computer Network Support Specialists	11.4%	134	\$26.50	\$55,120	Associate degree
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	28.7%	93	\$23.69	\$49,275	High school diploma or equivalent and long-term OJT
Computer User Support Specialists	14.3%	601	\$22.04	\$45,843	Some college, no degree
Diagnostic Medical Sonographers	19.7%	96	\$28.70	\$59,696	Associate degree
Electrical Power-Line Installers and Repairers	10.0%	195	\$35.17	\$73,154	High school diploma or equivalent and long-term OJT
Electricians	14.1%	562	\$28.38	\$59,030	High school diploma or equivalent and apprenticeship
Engine and Other Machine Assemblers	11.2%	86	\$25.36	\$52,749	High school diploma or equivalent and moderate-term OJT
Engineering Technicians, Except Drafters, All Other	11.3%	95	\$30.10	\$62,608	Associate degree
Heating, Air Conditioning and Refrigeration Mechanics and Installers	15.6%	231	\$21.88	\$45,510	Postsecondary non-degree award and long-term OJT
Industrial Engineering Technicians	8.9%	164	\$24.07	\$50,066	Associate degree
Industrial Machinery Mechanics	27.1%	752	\$24.40	\$50,752	High school diploma or equivalent and long-term OJT
Machinists	19.0%	1279	\$19.04	\$39,603	High school diploma or equivalent and long-term OJT
Massage Therapists	20.6%	87	\$22.47	\$46,738	Postsecondary non-degree award
Mechanical Engineering Technicians	13.1%	178	\$27.90	\$58,032	Associate degree
Millwrights	20.1%	118	\$31.83	\$66,206	High school diploma or equivalent and apprenticeship
Physical Therapist Assistants	28.6%	213	\$22.18	\$46,134	Associate degree
Plumbers, Pipefitters and Steamfitters	11.4%	279	\$27.02	\$56,202	High school diploma or equivalent and apprenticeship
Respiratory Therapists	10.9%	142	\$26.15	\$54,392	Associate degree
Sheet Metal Workers	11.7%	128	\$24.30	\$50,544	High school diploma or equivalent and apprenticeship
Web Developers	24.7%	108	\$28.61	\$59,509	Associate degree
Welders, Cutters, Solderers and Brazers	9.3%	489	\$17.15	\$35,672	High school diploma or equivalent and moderate-term OJT

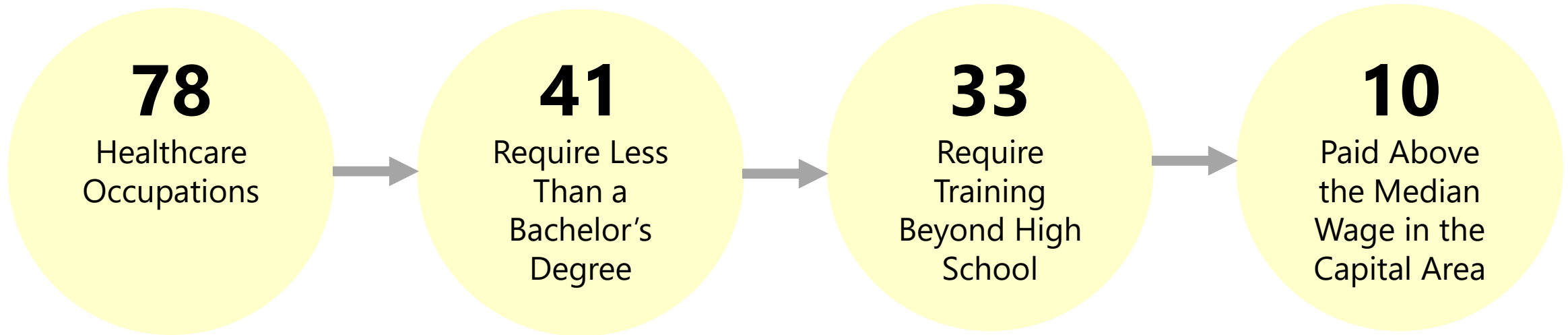
Pathfinder

- Uses data from...
 - Labor Market Information
 - Education Records
 - Wage Records
 - And others
- To provide traditional LMI data on a student's or jobseeker's path as well as brand new information on school and education program outcomes.

Non-Traditional Occupation Selection: An Example

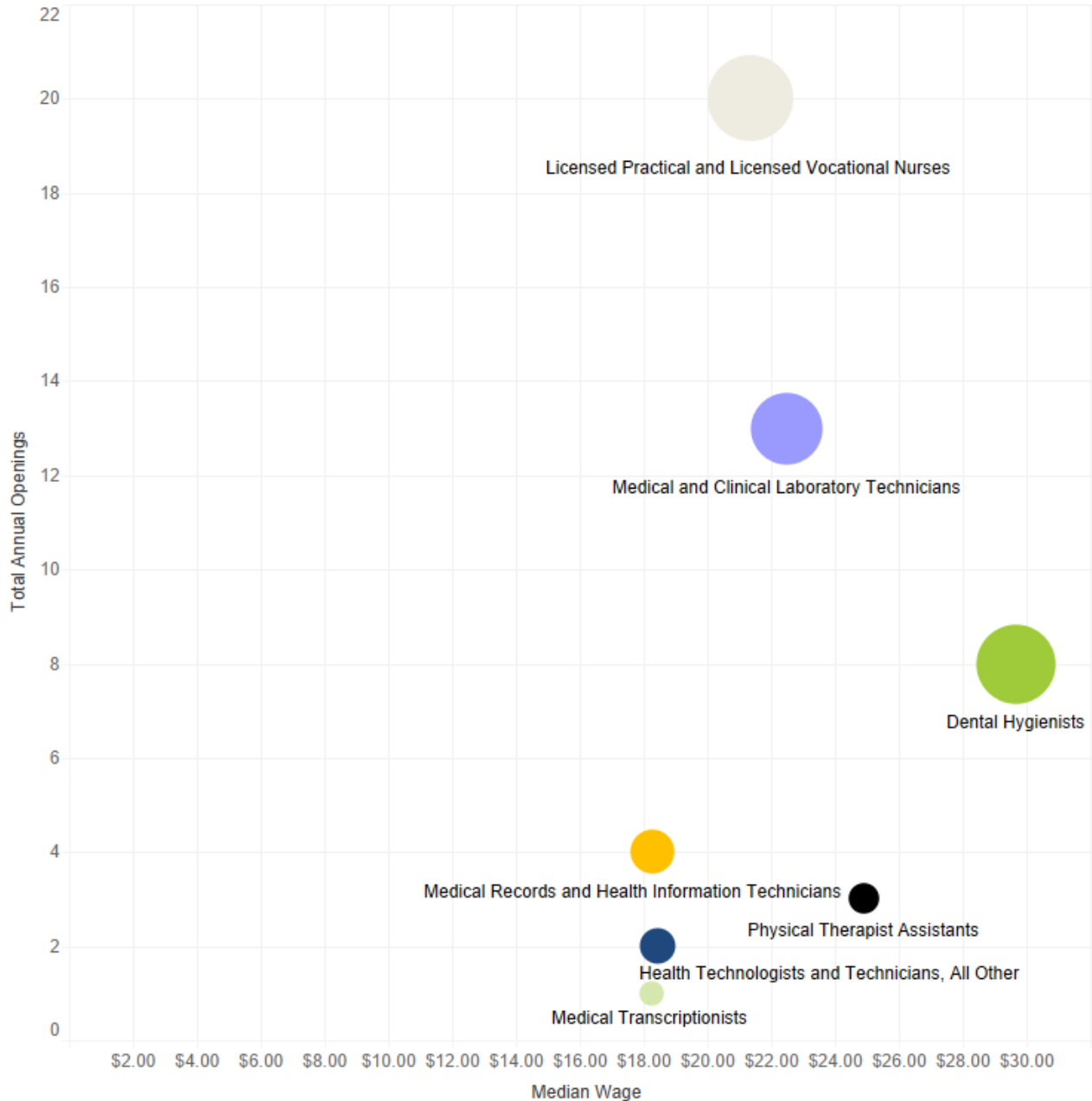
Healthcare Occupations in the Capital Area

1. Narrow Down Occupations by Typical Education and Training Requirements, Wages



Radiation Therapists
Medical and Clinical Laboratory Technicians
Dental Hygienists
Diagnostic Medical Sonographers
Licensed Practical and Licensed Vocational Nurses

Medical Records and Health Information Technicians
Health Technologists and Technicians, All Other
Occupation Therapy Assistants
Physical Therapist Assistants
Medical Transcriptionists



2. Use Projections Data to Determine Good Candidates for an Apprenticeship Program

3. Compile Data and Explore Your Options

Medical Records And Health Information Technicians

2016 Occupational Employment Statistics		2014-2024 Long-Term Projections	
Average Employment:	180	Projected Growth Rate:	10.3%
10 th Percentile Wage:	\$14.42	Annual Replacement Openings:	3
Median Wage:	\$18.28	Annual Growth Openings:	1
75 th Percentile Wage:	\$22.85		
O*NET Information			
Selected Skills, Knowledge, and Abilities		Technology Skills: Accounting Software, Database Software, Medical Software	
		Knowledge: Biology, Chemistry, Customer Service	
		Abilities: Active Listening, Critical Thinking, Science	



CHOOSE AN OCCUPATION



Medical records and health information technicians

Medical Records and Health Information Technicians

Reset

Showing 1 of 1 Occupations



Michigan Occupation Details

Medical Records and Health Information Technicians

Overall Rank ★★★★★

Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards in a manner consistent with the healthcare industry's numerical coding system. Excludes "File Clerks" (43-4071).

Wage Rank

36

Openings Rank

72

Growth Rank

70

Wage Range

\$35,780

\$24,090

\$57,950

About Medical Records and Health Information Technicians in Michigan

Projected Annual Openings:

133

Projected Ten-Year Growth:

10%

Typical Education Required:

Certificate

Typical Training Required:

None

4. Summarize Data

Your Regional Contacts

Southwest Lower Michigan and the Upper Peninsula:

Leonidas Murembya
Lansing office
(517) 241-6574
murembya@michigan.gov

South Central Michigan:

Marcus Reason
Lansing office
(517) 335-8341
reasonm@michigan.gov

Saginaw, Bay, Midland, and Northeast Michigan:

Evan Linskey
Lansing office
(517) 241-8272
linskeye@michigan.gov

West and Northwest Michigan:

Brandon Betz
Lansing office
(517) 335-3875
betzb2@michigan.gov

Flint and Thumb Area:

Dylan Schafer
Detroit office
(313) 456-3064
schaferd9@michigan.gov

Detroit Area:

Dalia Salloum
Detroit office
(313) 456-3075
salloumd@michigan.gov

Evan Cunningham
Detroit office
(313) 456-1764
cunninghame1@michigan.gov