

Unlocking the Power of Data in Government

November 22, 2024
Scott Powell, Ph.D.



MICHIGAN
**Center for Data
and Analytics**

Role of Chief Data Officer

- Evidence-Based Decision Making
- Strategic Data Leadership
 - Cross-Departmental Guidance
- Michigan Center for Data and Analytics
 - Statewide Priorities

What We Do

- The **research and analytics** team focuses on leveraging state data to drive informed decisions through advanced research and cross-agency collaboration.
- The **demography** team advises on Michigan's population and demographic data and manages the state's relationship with the U.S. Census Bureau.
- The **labor market information** team produces Michigan employment, occupation, and industry data through partnerships with U.S. Department of Labor.

Open Data

- Data from multiple departments across state government
- Promotes transparency, engagement, and accountability
- Resource for everyone

Open Data Portal

data.michigan.gov

This site may be unavailable for routine maintenance from Saturday, November 16, 2024 2:00 PM EST to Saturday, November 16, 2024 3:00 PM EST.

Michigan's Open Data Portal

View and analyze data provided by a variety of Michigan state agencies in one easy-to-view catalog. Create charts and graphs, filter and summarize data, and develop maps with the open data.

Search

- Data Catalog**
View all datasets available on the Michigan Open Data Portal
- Covid-19 Response**
Follow Michigan's response to Coronavirus Disease 2019
- Economy**
View economics and finance related datasets
- Environment**
View environment and energy related datasets
- Health**
View health and human services related datasets

- Michigan Voting Dashboard**
This data dashboard gives the user a snapshot of aggregated Michigan voting data and lets the user explore the details of their community, updated daily during active elections.
- OPE, I VOTED (Mobile Version)**
This data dashboard gives the user a snapshot of aggregated Michigan voting data and lets the user explore the details of their community, updated daily during active elections.
- Spending and Accountability**
Michigan is committed to an open approach to government finance.
- MI School Data**
This site provides access to MI School Data to discover what is working with Michigan education. It is the state of Michigan's official portal for education data.
- DTMB Technology, Management & Budget**
Michigan Labor Market Information
This data search tool allows users to select and export custom data series broken down by year, industry, occupation, geography, and other factors.
- DNR Open Data (Michigan Department of Natural Resources)**
Michigan Department of Natural Resources
The Michigan DNR provides accessible, high-quality information and analysis to drive informed decision-making.
- Michigan Department of Transportation GIS Open Data**
MDOT GIS Open Data
GIS Open Data enables users to browse, search, preview, and download a variety of Michigan Department of Transportation (MDOT) location-based datasets. Data is available in multiple formats including SHP, CSV & KML. Users can also connect to data using the map service and API sources.
- GIS Open Data Portal**
Browse, search, preview and download geospatial data.
- EGLE Open Data**
EGLE Maps & Open Data Portal
Explore the Michigan Department of Environment, Great Lakes, and Energy (EGLE)'s maps and data. This portal provides authoritative information about Michigan's environment for the public to access and download.
- Michigan Transportation Asset Management Council**
Transportation Asset Management Data
Access dashboards and interactive maps for roads and bridges.

Types of Analysis

Three broad categories, from least to most involved:

- 1. Summaries and dashboards:**

Better understanding of state programs

- 2. Program evaluations:**

Identifying what works best in state programs

- 3. Predictive modeling:**

Targeting services to those that need them most



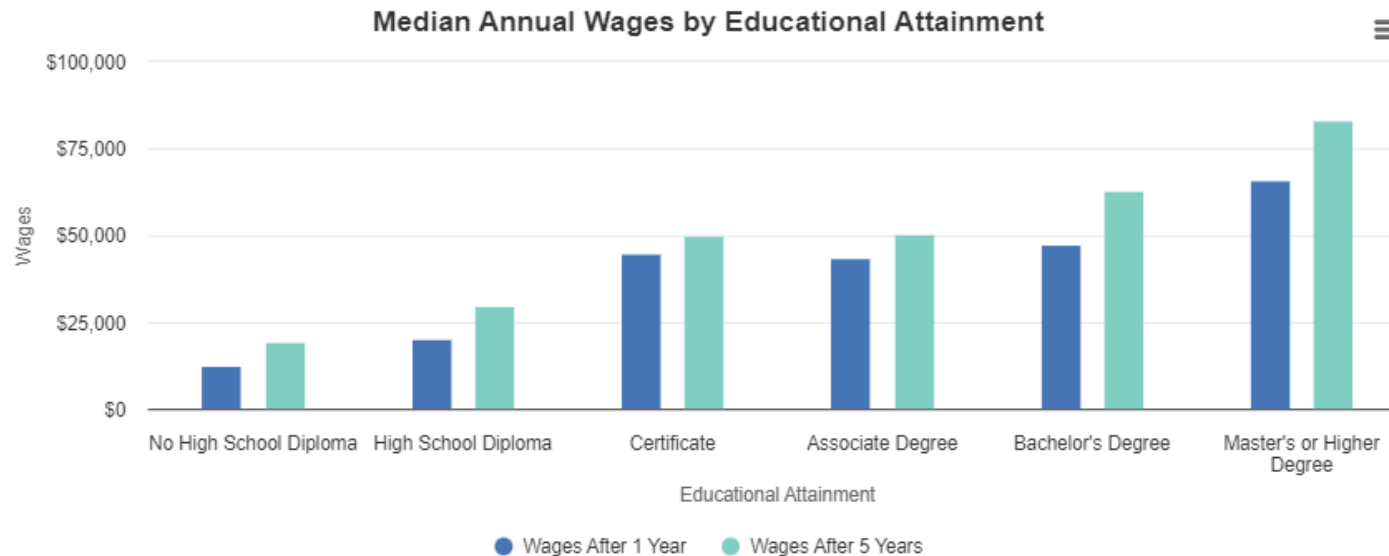
Median Annual Wages by Education Attainment

▶ About this Report

Please select a report year: 2023 ▾

Please select a location type: Statewide ▾

Please select a demographic category: All ages, ethnicities, and genders ▾



Michigan Employment Information

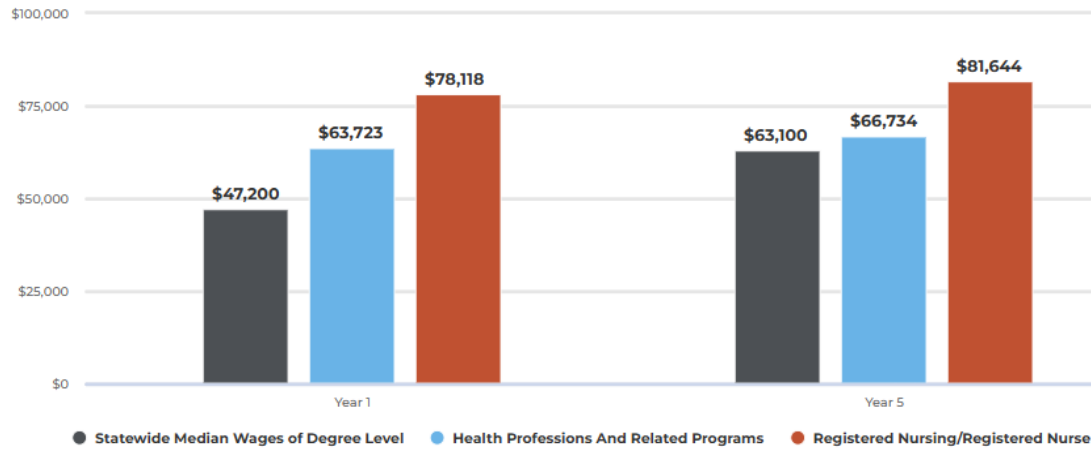
Selected School: **Grand Valley State University**

Selected Field of Study:
Health Professions And Related Programs

Selected Field:
Registered Nursing/Registered Nurse

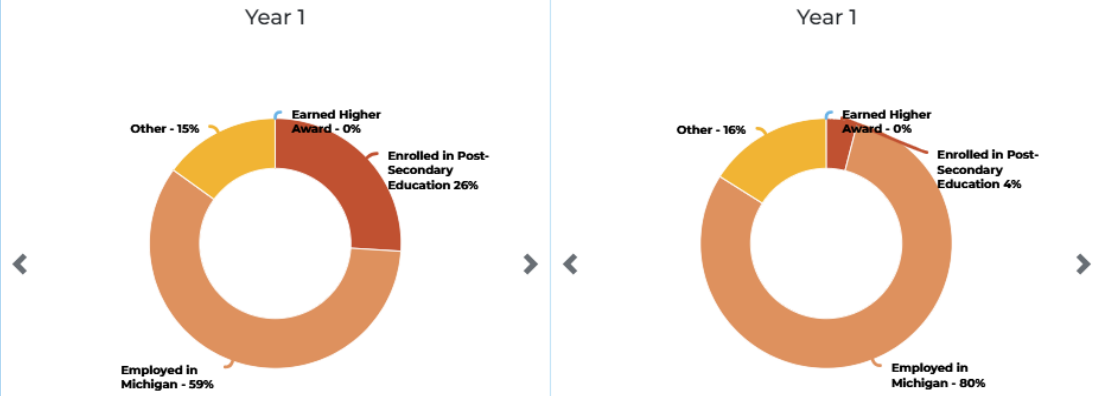
Bachelor's Degree Master's Degree Professional Degree Doctoral Degree No Award

Median Wages



Selected Field of Study:
Health Professions And Related Programs

Selected Program:
Registered Nursing/Registered Nurse [Change](#)



Median Salary (Year 1): \$63,723	Median Salary (Year 5): \$66,734	Median Salary (Year 1): \$78,118	Median Salary (Year 5): \$81,644
Employment for those Not Continuing in Education (Year 1): 79%	Employment for those Not Continuing in Education (Year 5): 64%	Employment for those Not Continuing in Education (Year 1): 84%	Employment for those Not Continuing in Education (Year 5): 65%
Licensed Employment (Year 1): 42%	Licensed Median Wage (Year 1): \$78,592	Licensed Employment (Year 1): 97%	Licensed Median Wage (Year 1): \$78,634
Typical Time from Completion to Employment: 90 days or less		Typical Time from Completion to Employment: 90 days or less	

Please note: Military, railroad, and certain self-employment earnings are not available in state wage records.



PATH Training in Michigan Found to be Cost-Effective and Increases Wages

February 29, 2024

Key Findings

This PATH evaluation found that completing certain training activities increases a participant's wage premiums by nearly \$3,500, in the first two years after exiting their program. Furthermore, these training programs are found to be cost effective, with the cost of training being recovered within a year's time. Keep reading for more information about MCDA's analysis on PATH training programs.

What is the PATH Program and PATH Training?

PATH (Partnership, Accountability, Training, Hope) is a program designed to identify barriers to employment (such as childcare needs, transportation, and literacy) and help connect clients to the resources they need to gain employment. The PATH program was implemented on January 1, 2013, by the (now) Michigan Department of Health and Human Services, the Michigan Workforce Development Agency (now part of the Department of Labor and Economic Opportunity), and the Michigan Works! Agencies.

The PATH program begins with an assessment that identifies barriers to employment. During the assessment period, clients are also provided services that help them find employment, particularly clients who have difficulties sustaining employment or who have been unemployed for some time. After the evaluation period, caseworkers help connect clients to resources that help remove identified barriers. The PATH program helps connect clients to resources ranging

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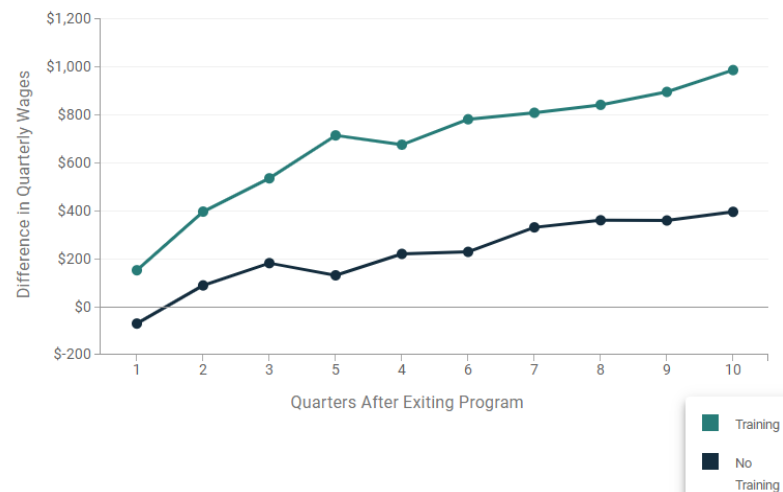
Data Scientist

PATH Training Increases Wages and Employment for Participants

The evaluation found that PATH training did lead to higher earnings for trainees compared to those who did not receive training. On average, individuals receiving training experienced a significantly larger increase in wages than those who did not receive training. The wage gap continued to grow over the period examined. Two and a half years (10 quarters) after exiting the program, trainees experienced a quarterly wage increase of \$988, on average. Over the course of a year, PATH trainees earn an average of \$2,366 more than non-trainees.

Six months (two quarters) after exiting the program, trainees have a higher probability of being employed than non-trainees. This higher probability is maintained throughout the period examined -- two and a half years after exiting the program.

Change in Earnings from Prior to PATH Entry to Program Exit

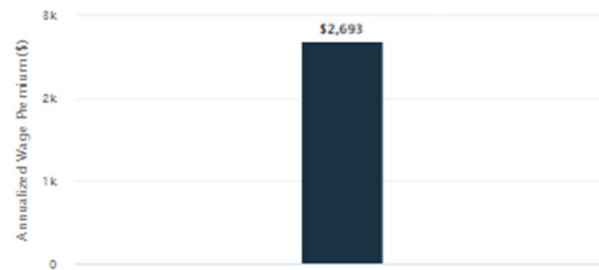


Benefits Of Training



Employment Outcomes for Similar Individuals

Two quarters after exit, employment rates are 8 percentage point(s) higher for similar individuals who receive training compared to those who do not.



Wage Premiums for Similar Individuals

Four quarters after exit, similar individuals who receive training are making \$2,693 more per year than those who do not receive training.



Training Completion for Similar Individuals

Using data from similar individuals, this section displays the likelihood of completing a training program. This information is designed to help case managers identify which participants may need additional assistance to successfully complete training.

[Explore Education and Training Opportunities](#)

Current Priorities

- Silo-Busting
- Data Strategy
- Priority Projects

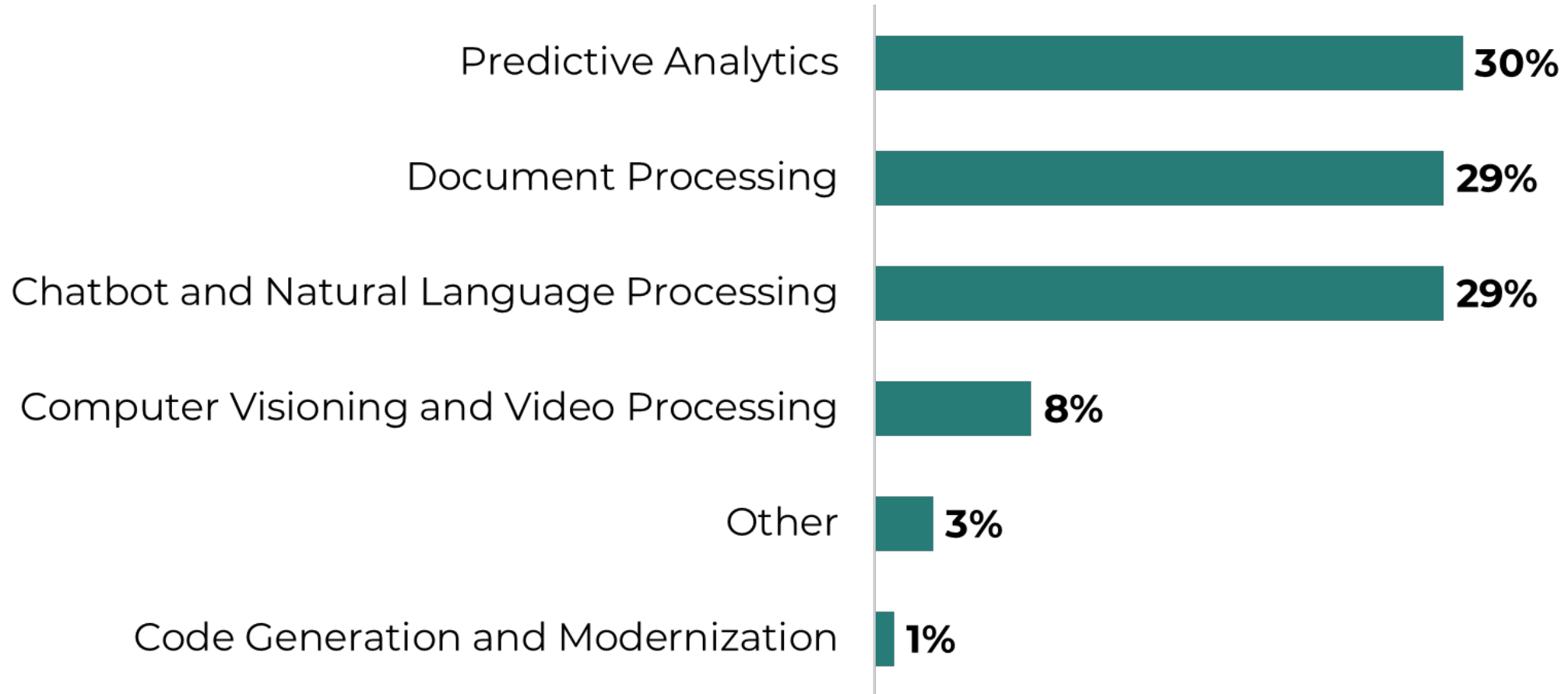
DTMB and AI

- Policies and Procedures
- AI Core Team
- Strategy in 2025

Core AI Use Cases

- Predictive Analytics
- Chatbot and Natural Language Processing
- Code Generation and Modernization
- Computer Visioning and Video Processing
- Document Processing

Demand for AI Use Cases



Role of MCDA in AI

- Predictive Analytics
- Data Quality
- Equity

Resources

[Michigan.gov/MCDA](https://michigan.gov/MCDA)

Subscribe to email updates

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Thank you!



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