

Sector Strategies Employer-Led Collaborations

July 10, 2023

Michigan Department of Labor & Economic Opportunity
(LEO)
Employment & Training



DTE

WIN WORKFORCE
INTELLIGENCE
NETWORK



MICHIGAN DEPARTMENT OF
LABOR & ECONOMIC
OPPORTUNITY

EMPLOYMENT
& TRAINING

Agenda

- Welcome
- LEO Overview
- Sector Strategies and Employer-Led Collaboratives
- Michigan Energy Workforce Development Consortium
- Michigan Electric Vehicle Jobs Academy
- Questions and Answers

Presenters:

Deb Lyzenga, Division Administrator
Industry Engagement
Workforce Development
Michigan Department of Labor and Economic Opportunity

Deborah Majeski, Manager Center of Excellence
Workforce Development
DTE Energy

Michelle Ureste, Executive Director
Workforce Intelligence Network for Southeast Michigan (WIN)



Who is LEO Employment & Training?



Bureau of Services for Blind Persons (BSBP) believes in the capacity of people who are blind or visually impaired to achieve employment and independence, providing training and other services that empower people to achieve their individual goals.



Michigan Rehabilitation Services (MRS) provides specialized employment and education-related services and training to assist teens and adults with disabilities in becoming employed, advancing in, or retaining employment.



WORKFORCE DEVELOPMENT

Workforce Development (WD) supports a demand driven workforce system, assists the structurally unemployed with financial independence, advocates for the integration of workforce development into the K-12 school system, and supports the alignment of workforce development with economic development efforts.

Sector Strategies Employer-Led Collaboratives

Purpose

- Michigan Department of Labor and Economic Opportunity, Workforce Development (LEO-WD) supports high-demand industry clusters and the development of ELCs throughout Michigan
- ELCs bring together employers, education and training institutions, workforce development organizations, and other applicable partners such as economic development organizations, labor unions and government to formulate solutions to fill identified talent gaps

Alignment with LEO Operational Plan

The Sector Strategies Employer-Led Collaborative initiative is designed to meet the key objectives of LEO's operational plan:

- Upskilling Michiganders and leveraging resources that lead to postsecondary credentials
- Partnering with Michigan Works! network to grow the middle class by assisting with barrier removal
- Closing equity gaps by intentional and strategic engagement of underrepresented populations
- Providing assistance with tuition and supportive services to ensure successful outcomes
- Increasing employment opportunities for individuals attaining a postsecondary credential that is identified as critical by the ELC

Employer-Led Collaboratives & Sector Strategies (formally known as Michigan Industry Cluster Approach)

- Supporting the needs of industries & regions



Agriculture



Energy



Healthcare



Construction



**Hospitality and Outdoor
Recreation**



Information Technology



Mobility



Manufacturing

Employer-Led Collaboratives

- ELCs are identified as a national best practice.
- Competitive realities of today's economy call for a next level of business engagement and greater program alignment across economic development, workforce development and education
- Call-to-action for private/public partners to work collaboratively determining how to strategically develop, train, and retain a skilled workforce meeting the talent needs of key industries in Michigan
- Neutral organization acting as a facilitator to mobilize employers and partners
 - Demand Planning – Identification of projected high-demand occupations and job openings
 - Identification of competencies, credentials and other hiring requirements
 - Talent Flow Analysis to identify talent sources
 - Implementation of ELC-identified solutions
 - Evaluation and continuous improvement of ELC metrics and sustainability plans

Going PRO Talent Fund

- Awards to employers to assist in training, developing and retaining current and newly hired employees
- Flexible & responsive training that results in a credential, certificate or degree
- **Over \$217M Awarded**

Talent Fund Outcomes (2014-2022)

6,016

awards granted
to date

\$36,149

average award
amount

170,000

workers trained

\$1,198

average training
cost per person

9%

average hourly wage
increase for workers



Benefits to Employers

- Immediately fills job openings with motivated workers
- Starts a rapid transfer of knowledge from current to future high-value workers
- Provides flexible, customized training to ensure workers develop the right skills
- Reduces turnover: 94% of apprentices stay with the employer after graduation
- Improves access to state and federal resources for talent development
- Fosters a diverse and inclusive workplace

Registered Apprenticeship Resources

- Registered Apprenticeship – benefits job seekers and businesses
- Expanding and supporting youth apprenticeship
- Registered Apprenticeship supports Sixty by 30
- Reimbursement funding can be braided with Going Pro Talent Funds
- Streamlined process to launch a program
- Michigan Apprenticeship Advisory Board
- Contact a Michigan Works! Apprenticeship Success Coordinator to get started

Michigan.gov/Apprenticeship

Virtual Job Fairs

- Save time & money
 - Less money on in-person event items
 - Less time out of office
 - Less money on travel costs
- See job seekers at-a-glance
- Access available job seekers, including UIA claimants & Pure Michigan Talent Connect users
- Platform now supports in-person hiring events



Adult Education



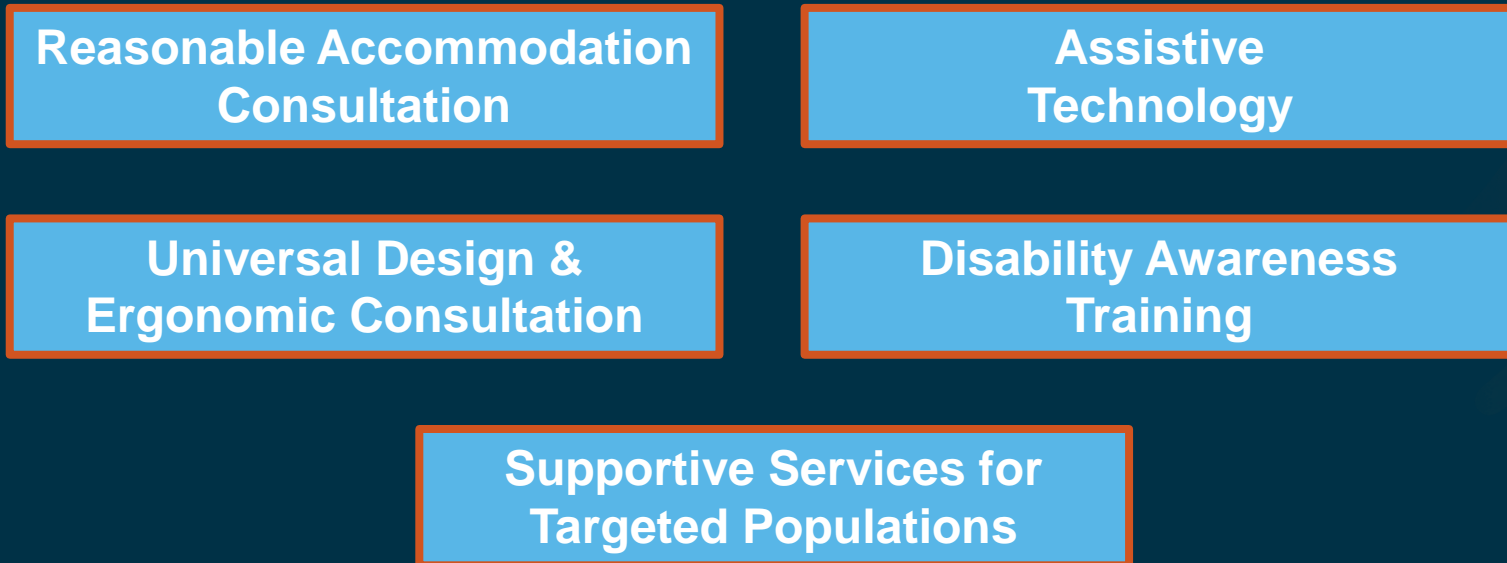
Learn More, Earn More!

Michigan.gov/LearnMoreEarnMore

- Assist adults to become literate and obtain the knowledge and skills for postsecondary education, employment and economic self-sufficiency
- Assist immigrants and English language learners in improving their English proficiency
- Support employers by providing workplace literacy and remediation services on-site to upskill current workers

Vocational Rehabilitation

- Office of Federal Contract Compliance Programs (OFCCP) requirements for federal contractors
 - Documentation
 - Data collection & analysis



MI Tri-Share Child Care



MI Tri-Share
CHILD CARE

- Cost of employee's childcare is shared equally
 - Employee
 - Employer
 - State of Michigan
- Remove barriers
- Provide financial relief
- Attract & retain talent

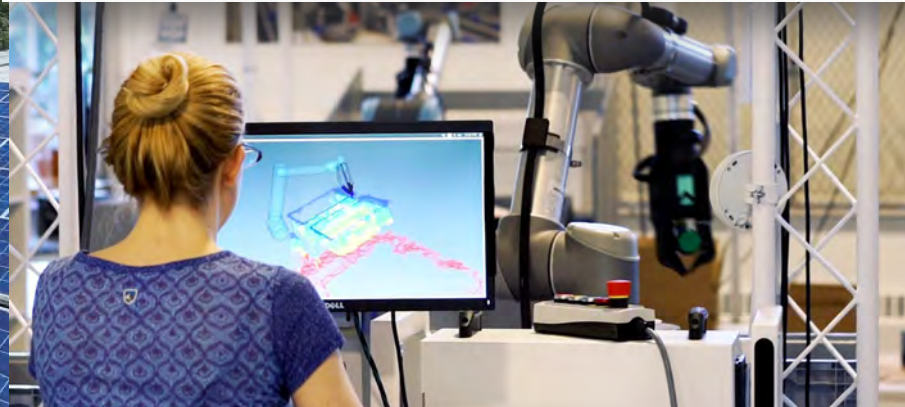
Workforce Development 2022 At-a-Glance



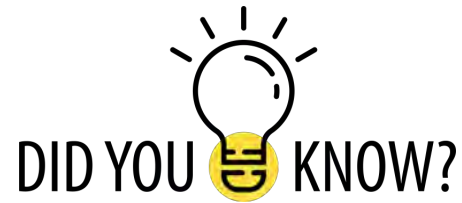


get into energy

MICHIGAN ENERGY WORKFORCE DEVELOPMENT CONSORTIUM



Energy Careers Statistics



- More than 7 million people work in energy
- Michigan's energy industry accounts for more than 116,000 energy-related careers with total demand projected to increase by 7.5 percent between 2020 and 2030
- As of today, energy companies across the US have 11,724 job openings
- Energy jobs pay 34 percent higher, on average, than the national median hourly wage
- Energy accounts for 4.8 of the Gross Domestic Product of the United States



MEWDC Partnership Development



Association that represents U.S. investor-owned electric companies



National consortium supporting state and regional partnerships



Industry-led partnership of more than 50 representatives

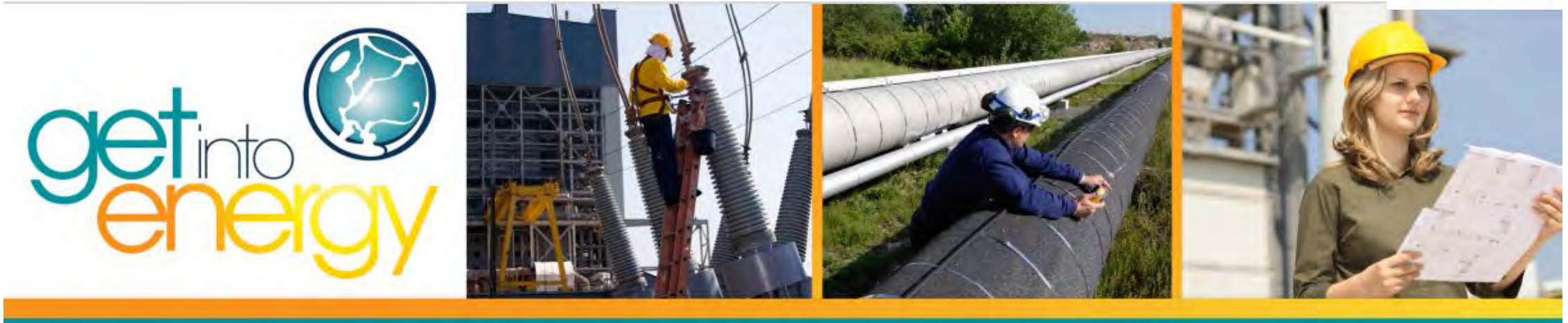


National Partners



State Partners

Why An Energy Cluster?



- In 2016 MEWDC obtained Michigan's Board of Education adoption of a 17th career cluster in Energy
- Energy jobs tend to get hidden in other clusters, such as Architecture and Construction
- By integrating an Energy career cluster, there is an increased awareness among secondary and post-secondary students of the knowledge and skill sets required for energy jobs
- With the importance of our country's clean energy future, it's important to have a cluster that focuses on the job growth expansion and impending retirements
- Supports statewide goal to raise the percentage of Michigan adults with a post-secondary credential to 60% by 2030

State of Michigan Key Occupations in Energy Cluster and Projected Annual Openings

Key Occupation	Cluster Employment	Michigan Employment	Cluster Wage Range	Annual Openings
Construction Laborers	2,640	21,850	\$14-\$22	3,340
Control & Valve Installers and Repairers	1,100	1,760	\$22-\$39	120
Cost Estimators	1,040	6,640	\$22-\$39	710
Electrical & Electronics Repairers, Powerhouse, Substation, Relay	1,460	1,550	\$35-\$48	100
Electrical Engineers	1,640	10,280	\$33-\$50	780
Electrical Powerline Installers & Repairers	3,980	4,260	\$29-\$45	420
Electricians	14,750	22,780	\$20-\$35	2,580
1st-Line Supv. of Construction Trades/Extraction work	2,390	11,550	\$24-\$38	1,410
1st-Line Supv. of Mechanics, Installers, Repairers	1,710	14,680	\$24-\$41	1,380
Heating, AC, Refrigeration Mechanics/Installers	6,540	8,970	\$17-\$29	1,020
Logisticians	1,530	8,000	\$27-\$48	820
Plumbers, Pipefitters, Steamfitters	7,520	12,250	\$22-\$36	1,620
Power Plant Operators	1,470	1,720	\$32-\$46	160
Refuse and Recyclable Material Collectors	1,790	4,400	\$16-\$22	550
Sheet Metal Workers	1,510	3,210	\$19-\$32	420



Top 15 key occupations in the energy cluster in this table



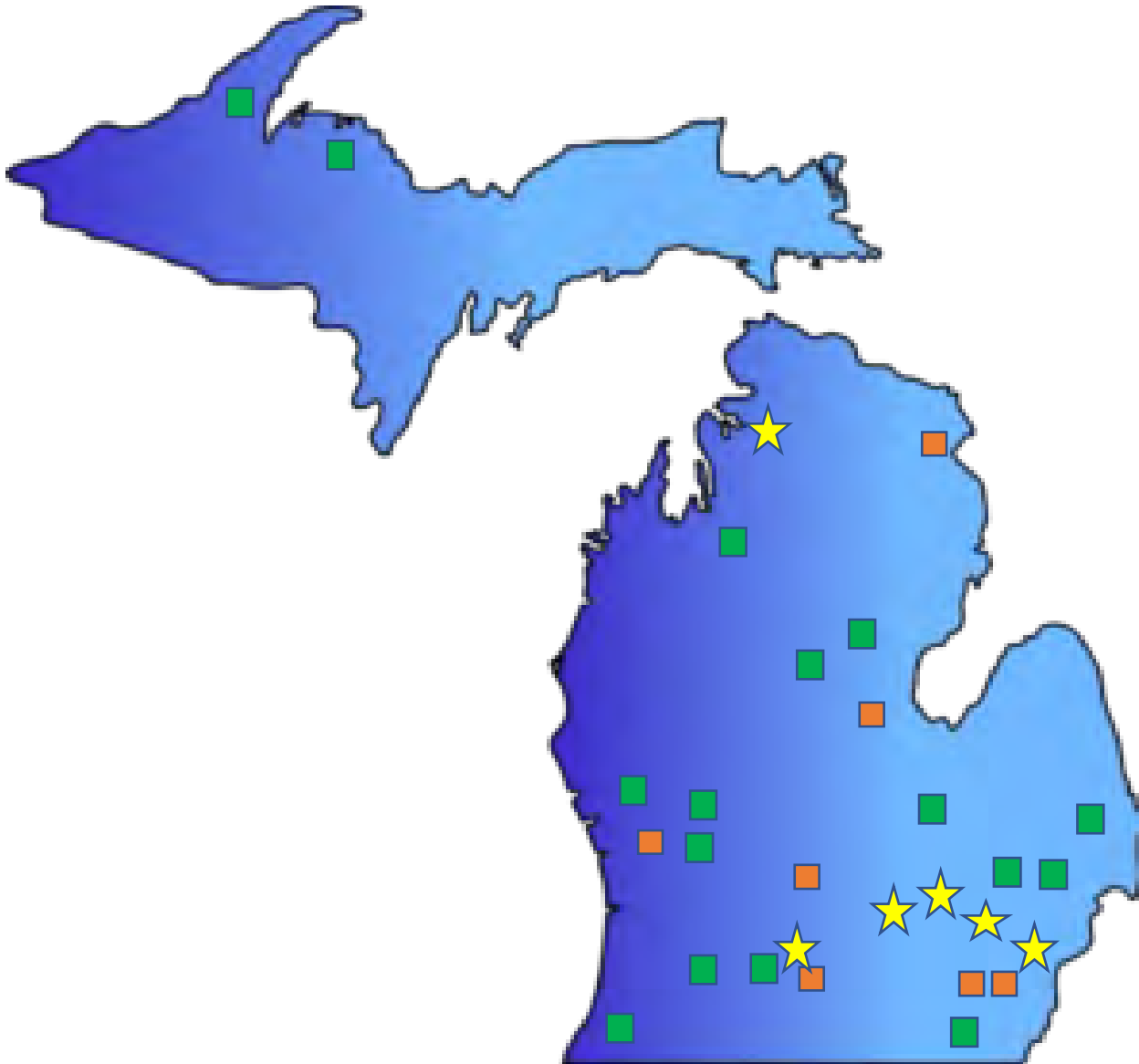
Determined by two criteria: share of the cluster's total employment and share of the state's employment for that occupation



Volume of these jobs in the cluster is large, representative of the average wage and demand for the cluster

Sources: 2019 Energy Cluster Publication: Cluster employment, Michigan employment, and Wage range: Occupational Employment Statistics, Michigan Bureau of Labor Market Information and Strategic Initiatives (2017); Annual Openings: Long-term Occupational Projections (2016–2026), Michigan Bureau of Labor Market Information and Strategic Initiatives; Typical Education and Training: Bureau of Labor Statistics; Michigan's Occupational Supply and Demand and the Talent Gap: Linskey, Evan. 2018. "An Analysis of Occupational Supply and Demand in the Michigan Labor Market." Michigan's Labor Market News, Vol. 74, Issue 10.

Energy Education Programs in Michigan



★ Active High School/Career and Technical Education Energy Programs with Energy Industry Fundamentals (EIF):

- Boyne City High School
- Hartland High School
- Oakland Schools Technical Campus (OSTC) Northwest (Clarkston)
- Oakland Schools Technical Campus (OSTC) Southeast (Royal Oak)
- Parma Western High School
- Randolph Career & Technical Center (launching in fall of 2023)

■ Post-Secondary Energy Programs with EIF:

- Alpena Community College
- Grand Rapids Community College
- Henry Ford College
- Jackson Community College
- Lansing Community College
- MIAT College of Technology
- Mott Community College

■ Post-Secondary Energy Programs without EIF

Energy Education Long-Term Strategy: Henry Ford College, Power and Trades Pathways Program



- Provides certificate and associate degree training graduates for in-demand occupations in electric operations, gas operations, construction, and engineering
- Average Enrollments per year in both programs: 180
- Completions since 2018: 352 graduates
- 2022 surveyed graduates on employments status, based on respondents 88% are employed
- Program includes test taking preparation for apprenticeship opportunities and hands on learning lab activities involving industry experts

Available Tuition Support to Eligible Students

- More information: hfcc.edu/power-trades-pathways
- Articulation agreements established with Oakland Technical Campus and Hartland High School Career and Technical Education Energy programs
- 2022 Finalist 23rd Annual Citizens Award through the U.S. Chamber of Commerce Foundation for the Best Commitment to Education Program

Federal Student Aid
An OFFICE of the U.S. DEPARTMENT of EDUCATION

PROUD SPONSOR of
the AMERICAN MIND®



Grand Rapids Community College Energy Trades Pathway Program

Project Purpose

- Increase diversity
- Build a recognized standard foundational training program that benefits multiple industries
- Increase qualified talent to successfully find employment in the energy sector
- Develop a stackable credential certificate program that focuses on common core curricula within in-demand skilled trade job disciplines in West Michigan
- In West Michigan there is a projection of over 1500 job opportunities in the next five years
- The in-demand jobs opportunities are in gas operations, heavy equipment operation, electric operations, and line clearance tree trim
- Target to start Fall 2023

Collaborative Partners

Consumers Energy
DTE Energy
Energy Sciences
Grand Rapids Community College
Holland Board of Public Works (HBPW)
Infrasource
Kent ISD / Kent Career Tech Center
Lewis Tree Service
Muskegon Community College
West MI Works

Available Tuition Support to Eligible Students

Federal Student Aid
An OFFICE of the U.S. DEPARTMENT of EDUCATION

PROUD SPONSOR of
the AMERICAN MIND®



Energy Education Programs in Michigan Long-Term Strategy: Career and Technical Education (CTE) Energy Program

- The CTE Energy Program provides a broad understanding of the electric and natural gas utility industry and the energy generation, transmission, and distribution infrastructure which forms the backbone of the industry
- Program benefits:
 - Articulation agreement with HFC for students who want to pursue the Power & Trades Pathways program
 - Energy career exploration
 - Internship opportunities
 - Line Clearance Tree Trimming Exposure
- DTE endorses the following CTE Energy programs:
 - Hartland High School
 - Oakland Schools Technical Campus (OSTC) Southeast in Royal Oak
 - OSTC Northwest Campus in Clarkston
 - Randolph Career & Technical High School (Launching Fall 2023)



Pole yard donation at OSTC-SE, Spring 2021

Short-Term Strategy: Readiness Workshop Components, Benefits

Benefits of Readiness Workshops

- Help candidates successfully navigate through the application process
- Prepare candidates for the Edison Electric Institute test, targeted selection interview and physical assessments
- Directed outreach efforts positively impacted the increase in diversity candidates for many job roles

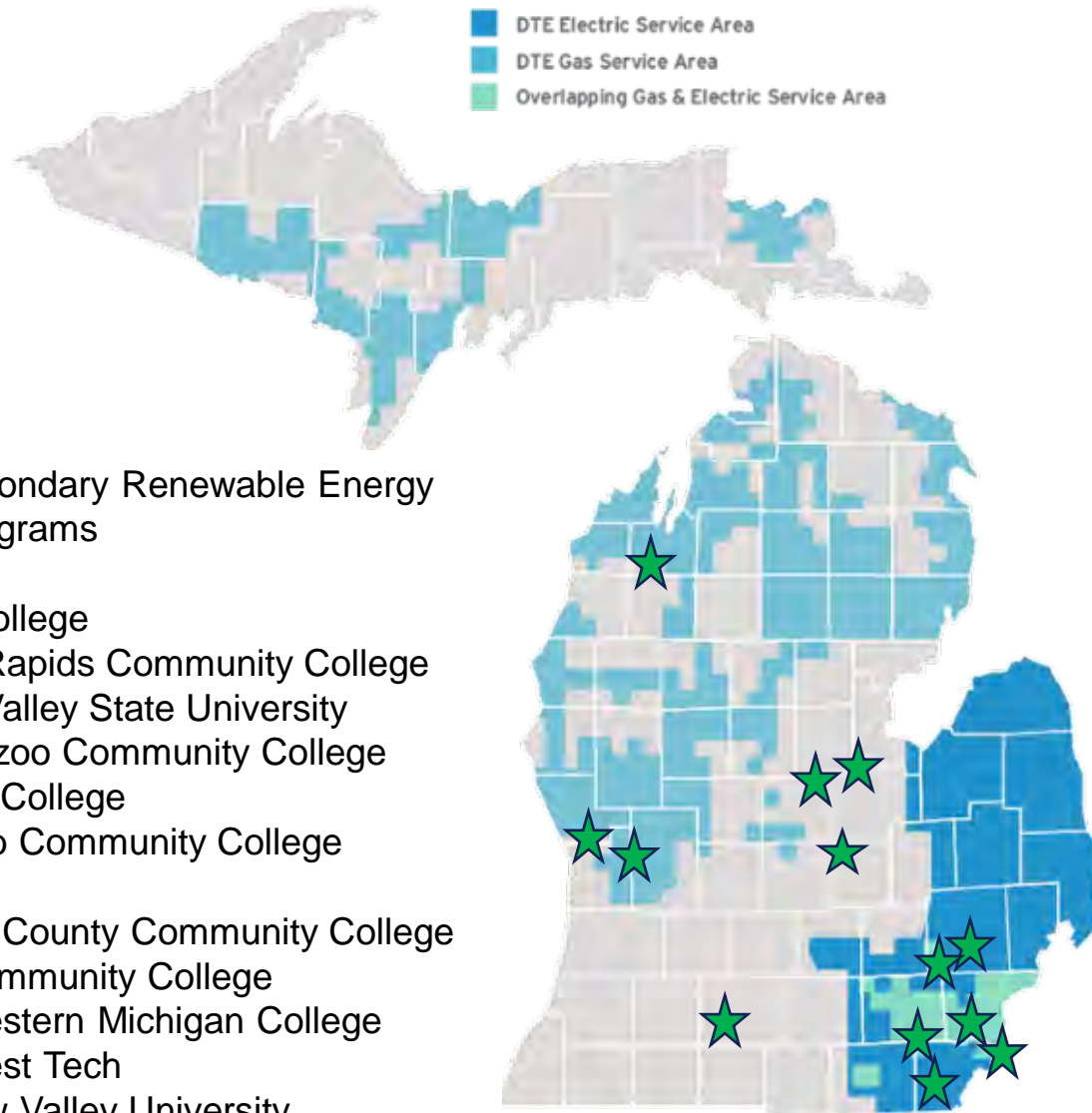
Creating Diversity Through Workforce Readiness Workshops

- DTE Energy leveraged Talent Pipeline Management® strategies to identify and address talent gaps in their company and industry



Workshop Components	Provider
Edison Electric Institute (EEI) Test Preparation	Education Partner
STAR Interview Method	Education Partner
Physical Assessment Preparation	DTE
Learning Labs	DTE

Solar and Renewable Energy Programs and Pathways



★ Post-Secondary Renewable Energy Training Programs

1. Delta College
2. Grand Rapids Community College
3. Grand Valley State University
4. Kalamazoo Community College
5. Kellogg College
6. Macomb Community College
7. MIAT
8. Monroe County Community College
9. Mott Community College
10. Northwestern Michigan College
11. Northwest Tech
12. Saginaw Valley University
13. Wayne County Community College

Interested in a career as a Solar Technician or Wind Technician?

The Roadmap to an Exciting Career



For more information visit
getintoenergy.org/careers-in-renewable
 or scan this code

TRAITS THAT WILL HELP YOU BE SUCCESSFUL:

- Interpersonal Skills
- Physical Stamina
- Problem Solver
- Enjoys the Outdoors
- Dependable/Reliable
- Mechanical Acumen

SOLAR TECH OR WIND TECH

- Competitive Wages and Benefits Package
- Stable Employment in a Growing Industry
- Continuous Learning and Exposure to Innovative Technology
- Diverse Work Environment

START HERE

COMMUNITY COLLEGE/ TRADE SCHOOL

- Associate Degree or Higher
- Sustainability Theory
- Energy Policy
- Learn about Energy Science

START HERE

CAREER & TECHNICAL EDUCATION (CTE)

- Diploma/GED or Equivalent
- Introduction to Energy Industry Fundamentals (EIF)
- Gain an Understanding of Renewable Energy

OR

HIGH SCHOOL

- Diploma/GED or Equivalent

You can begin your career journey from any starting point

Research Wind and Solar Tech Training Programs in Michigan

DTE Virtual Field Trip to Learn about Renewable Energy and Educator Companion Guide



[DTE Virtual Field Trip to Learn about Renewable Energy - YouTube](#)

Educator Companion Guide Key Learning Objectives:

Students will be able to:

- Explain how we generate energy from the wind and sun
- Describe how this energy travels along the power grid
- Imagine new ways to generate more energy from the wind and sun
- Understand the importance of addressing climate change
- Identify ways they can use energy more efficiently and reduce their carbon footprint
- Explore how individuals, businesses, nonprofit organizations and government can work together to create a more sustainable future
- Learn about different careers in the clean energy sector

[FINAL Teachers Guide for Virtual Renewable Field Trip.pdf
\(dteempowermi.wpenginepowered.com\)](#)

The Power of Partnerships for Renewable Energy Career Pathways

Career Awareness

Career Exploration

Career Preparation

Pre-Employment Training

Employment

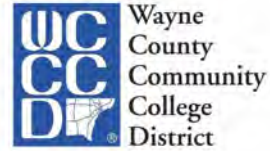
High School Career and Technical Education

Career Training

Employment Opportunities



RANDOLPH CAREER AND TECHNICAL CENTER
Students Rise. We All Rise.





MICHIGAN ELECTRIC VEHICLE JOBS ACADEMY (EV Jobs Academy)

Michigan Electric Vehicle Jobs Academy (EV Jobs Academy)

Summary

EV Jobs Academy is an employer-led collaborative **comprised of over 100 stakeholder partners to identify EV and mobility-related occupational skill** needs, to **develop and scale postsecondary credentialing programs** utilizing a turn-key **online shared learning** platform to Michigan Occupational Dean's Administrative Council (MODAC) 32 colleges and universities statewide.

Building a Workforce to Navigate The EV Future

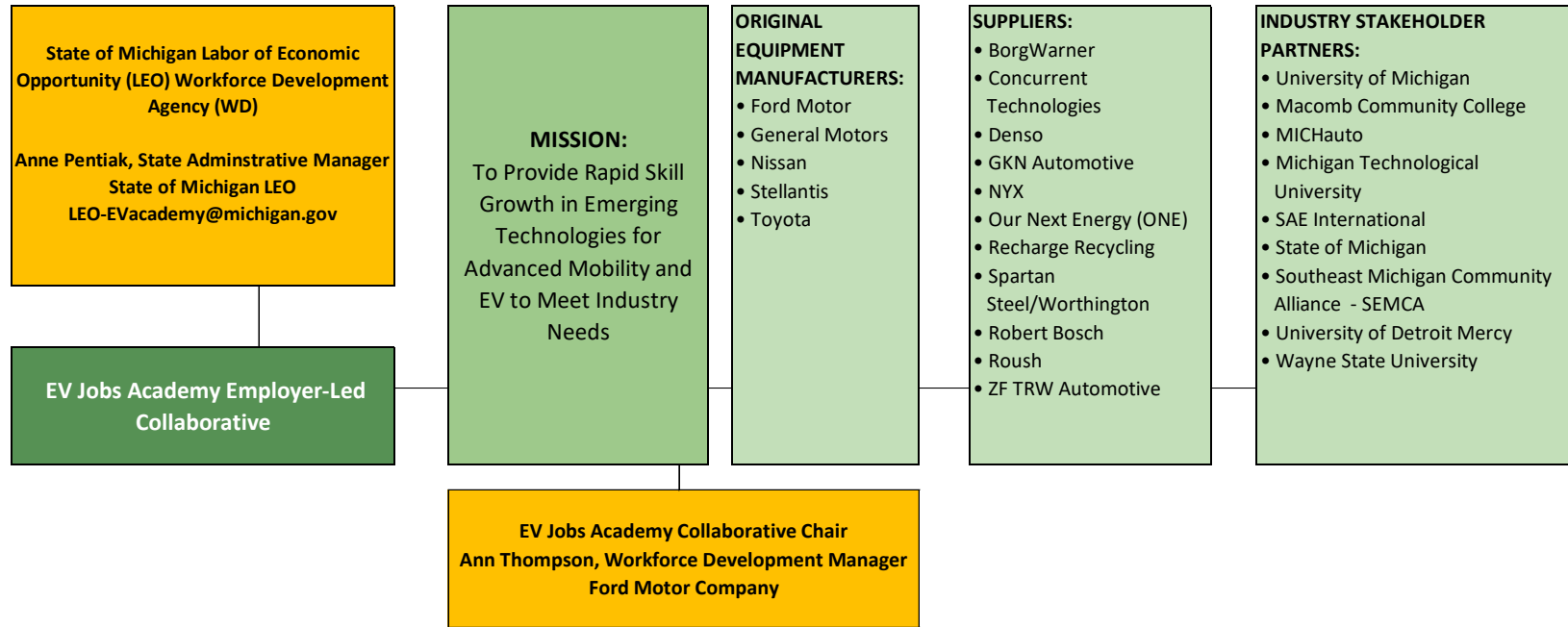
Mission

- To catalog and respond to advanced occupational skills needs of the automotive mobility and electrification industry
- To align education and training programs with the most critical workforce needs
- To facilitate recruiting, placement and retention solutions to fill talent gaps for in-demand and emerging occupations within the mobility and electrification industry.

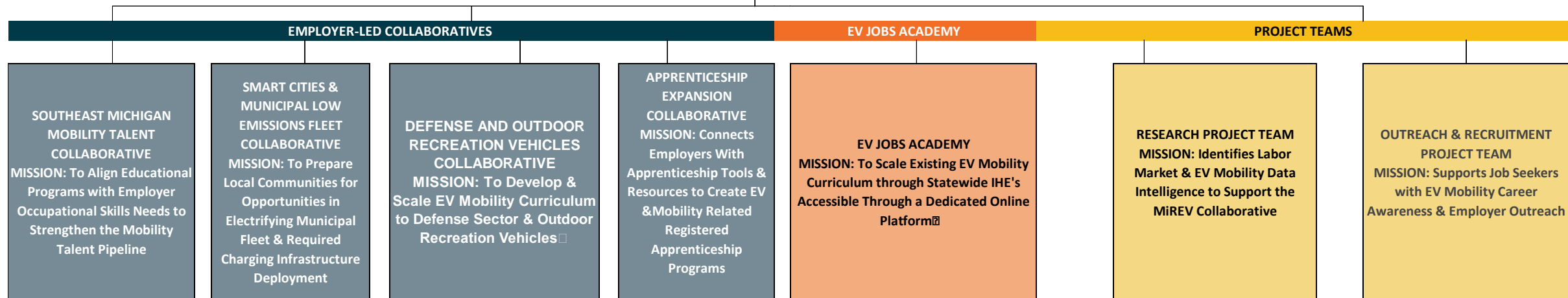
Electric Vehicle Jobs Academy Operational Chart



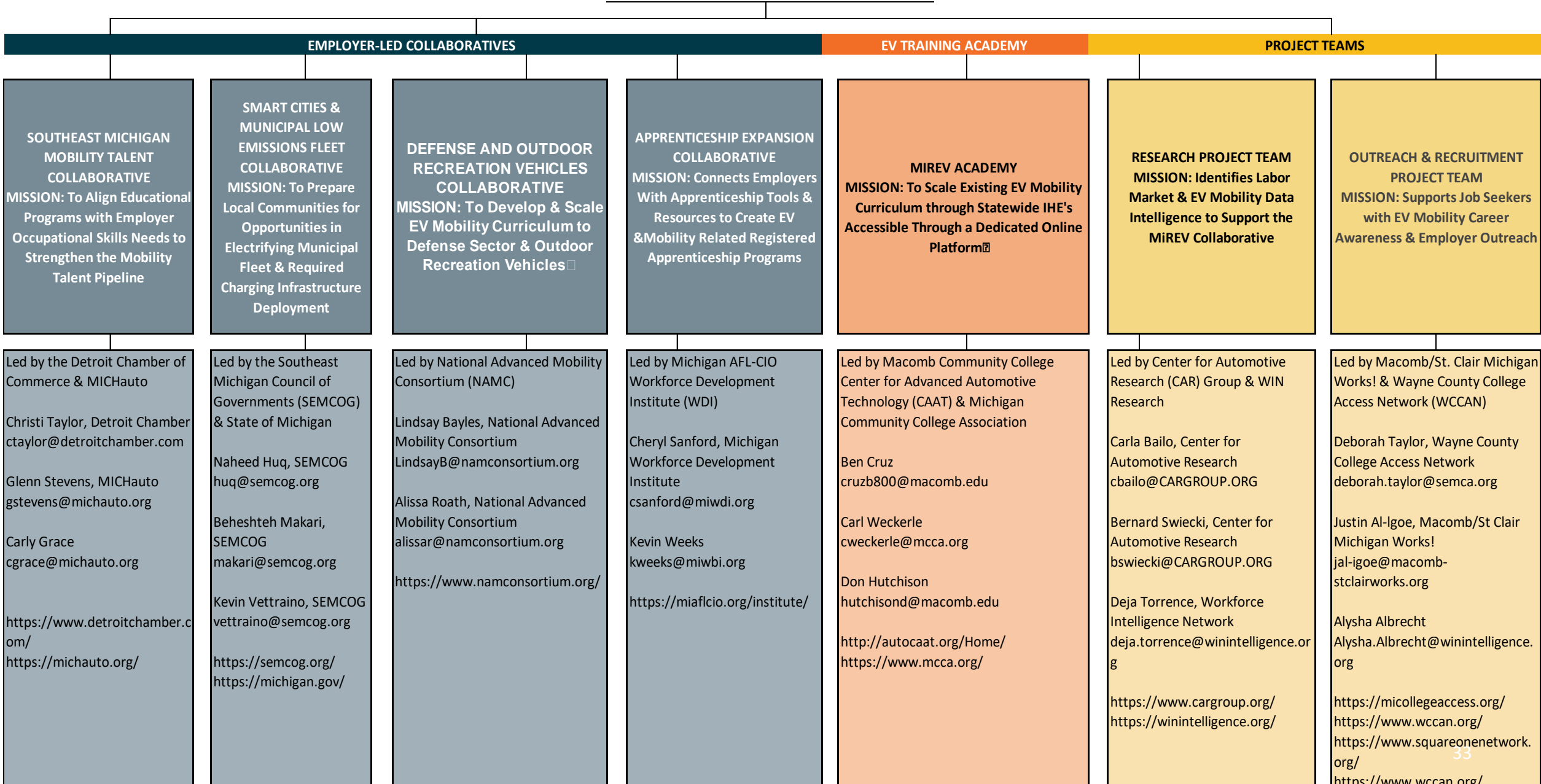
EV Jobs Academy Flowchart
LEO-EVacademy@michigan.gov



revised 6.26.2023



Electric Vehicle Jobs Academy Operational Chart (cont.)



First Year Accomplishments

Engaging & Organizing
130+ Employer /
Stakeholder Partners

Conducting Surveys to
Determine Critical Job
Needs

Gap Analysis of Existing
Training

EV Jobs Academy
Recognized Curriculum
Posted on Michigan.gov/
evjobsacademy

Procured Battery
Technology Curriculum to
Train 3,000

New EV Technology
Curriculum

Established OSMIS EV
Jobs Academy Portal to
Track Outcomes

EV Jobs Academy & Educational Programs in Collaboration (EPiC) Shared Learning Platform



7 MILLION IN
TRAINING FUNDS



COMPREHENSIVE
NETWORK



ACCESS TO
TRAINING



INFORM TRAINING
DEVELOPMENT



Deb Lyzenga

Division Administrator
Industry Engagement
Workforce Development
Michigan Department of Labor and
Economic Opportunity
lyzengad@michigan.gov
[Website: https://michigan.gov/LEO](https://michigan.gov/LEO)

Deborah Majeski

DTE Energy | Manager, Workforce Development
MEWDC | Vice-Chair Education, Standards,
Data Management
deborah.majeski@dteenergy.com

Michele Economou Ureste

Executive Director
Workforce Intelligence Network for Southeast
Michigan (WIN)
michele.ureste@winintelligence.org