Envisioning Success for the Future Mobility Workforce

At the beginning of the day, participants were placed into groups and asked to develop a shared vision for success to help identify what challenges or complications need to be considered and overcome as the future mobility industry evolves. The future mobility industry includes all current and potential modes of transportation, such as electric vehicles (EVs), electrified public transportation, and autonomous vehicles. The workforce for this industry includes anyone manufacturing or servicing these modes of transportation.

Across all groups, a few major themes emerged. Participants agreed that high wages, a focus on population growth and retention, and collaboration and alignment among public and private organizations are key to unlocking success for the development of Michigan's future mobility workforce over the next decade.

The conversation culminated in several headlines that would reflect success in the space in ten years:

- **Michigan capitalizes on mobility leadership to create the world's best clean energy ecosystem.**
- **Michigan leads the country in inclusive income growth, driven by the advanced mobility sector.**
- **Workforce training, sector alignment, and high paying jobs make Michigan the number 1 state to live in.**
- **Michigan population booming as diverse clean energy mobility workforce grows.**

Summary of Discussion

**Workforce Development Landscape**

- **Michigan has already had an economic transition over the last 40 years.** The state went from 13th to 39th in per capita income in the United States, with the loss of manufacturing jobs driving much of that transition.
- **Michigan already has successful workforce development organizations and programs in place.** However, the current economic transition—where mobility technology is changing more rapidly than in the state’s history—presents different labor market challenges. The state needs innovative solutions, pilot programs, and collaboration to successfully achieve its workforce development goals.
- **Many strong advanced education programs exist in Michigan, like higher education degrees in science, technology, engineering, and mathematics (STEM).** However, **industry must work with educational institutions to implement approaches to ensure the advanced skills developed in Michigan stay in the state and are applied to the mobility industry.**
• Michigan has an opportunity to benefit from the changing economy spurred by the low-carbon transition, but the state must start planning and strategizing now to take advantage of it.

• As companies make long-term strategic and investment decisions, Michigan has a limited window to demonstrate to employers that the state’s leadership on climate is aligned with its economic growth opportunities, rather than allowing the framing that climate policy is a harmful regulatory burden.

• Although Michigan possesses key competitive advantages that can make it a leader in the EV and future mobility space, there are other major players throughout the United States and abroad that are in direct competition for market share and workforce.

• Michigan’s new Community and Worker Economic Transition Office will bring together flexible resources and technical assistance to help employers and workers navigate existing opportunities. The office will conduct supply chain mapping in collaboration with the Big Three automakers of their EV and internal combustion engine (ICE) supply network; develop a census of the state’s auto suppliers to ascertain levels of vulnerabilities; and conduct research on products and technologies with big future markets and opportunities to diversify.

Workforce Development Needs

• Workforce training providers need to design workforce transformation solutions that allow people to train while they are working. Employers need to be able to upskill and reskill workers without removing them from their jobs.

• Actors across the state need to foster collaboration and create partnerships between industry, economic development organizations, community partners, training organizations, and PK-20+ educational institutions to align around shared objectives and position communities to take advantage of statewide and federal resources.

• Coordinating agencies, educators, and employers need to be intentional about reaching out to the next generation of workers to support their learning and skills for the future mobility industry. This includes establishing experiential learning programs in PK–12 schools to provide students with tangible skills and excitement for potential career opportunities.

• The automotive industry must support organizational transformation by bridging the gap between a traditional business-as-usual mindset and the change that will come in the development of a future mobility industry workforce. Participants pointed to a need to find ways to prepare companies to attract and retain talent during the transition, such as promoting PK-12 experiential learning programs.

• Workforce development programs need to find ways to help translate the existing skills of workers in the ICE industry to the EV industry. There is a great level of sophistication in these future technologies, which will require specialized education and job training.

• Two skills that will be needed in the transition include artificial intelligence competency and sustainability policy and development. Educators and employers need to demystify what these skills actually look like and understand the specificity and level of training needed to acquire them.
• Michigan must focus on equity and wage growth in developing the future mobility workforce. This is crucial to achieving Michigan’s vision of increased talent attraction, retention, and eventually leading the nation in income growth.

• To attract talent, Michigan needs to be an enticing place to live and work. This includes both the existence of high-quality jobs and the existence of other social infrastructure—such as housing, child-care, education, and recreation—that make a place compelling.

• Workforce training programs need coordination, buy-in, and trust among key stakeholders to ensure a successful pathway from outreach, to training, to job placement.

• There need to be standards in place for training certifications to provide a definitive, industry-wide understanding of what skills each certificate represents and how to apply them.

Workforce Development Challenges

• Workers historically valued the automotive industry over other industries due to its pay premium, but the industry is losing workers to industries like retail, warehousing, and others that now offer better pay and benefits but may not have long-term career growth opportunities. Michigan needs to create and communicate the opportunity of entering an industry with a long-term career pathway like mobility.

• Uncertainty about the direction and speed of advancements in mobility technology complicates planning decisions for companies looking to invest in their workforce development.

• Suppliers with fewer than 200 employees producing tier 2 and tier 3 components are at risk of getting left behind during the transition from ICE vehicles to EVs. These businesses have limited capacity to think about the transition and need extra support to build that capacity, including workforce development options.

• Key challenges exist around promoting the opportunities to enter career pathways in the mobility sector. Outreach must begin today about the opportunities in the mobility industry as early as Pre-K–12 and through mid-career workers.

• There is a disconnect between generational values and desire to work in the manufacturing and mobility sectors. Younger generations may have different priorities informed by their perception of what success looks like and what is considered a good career pathway.

• The optics around EVs are more negative than companies and policymakers would like, due in part to political challenges (e.g., polarization and infrastructure) and technological challenges (e.g., charging times, power, and transmission).

• Success will be driven by implementation at the local level, but there is a lag between existing data and the time-sensitive nature of what is going on in local communities. Investments at the local level need to be strategic to fill gaps. Program implementers need to be both a trusted advocate for employers and a neutral trusted party to advocate at the local level for investment.

• Communities need technical support and additional capacity to effectively plan for the coming investments in clean energy and advanced manufacturing projects.
Solutions to Workforce Development Challenges

- **Roundtable participants were all interested in community partnerships to create a shared vision for Michigan.** This includes partnerships between formal institutions like corporations and economic development organizations, as well as non-traditional partners like community colleges, PK-12 schools, and museums who work on the topic.

- **Equitable access to training opportunities is paramount to building a robust and resilient workforce.** Michigan must remove structural barriers that prevent people from participating in labor training and taking advantage of long-term career opportunities.

- **Workforce development professionals should create a technology workforce roadmap** to understand what skill sets need to be developed as the industry continues to evolve.

- Often, regional programs succeed because of strong leadership and communication with their communities. **Planners need to find a way to replicate successful programs and tailor these solutions to fit the local contexts in other parts of the state.** For example, planners could leverage the MiSTEM network infrastructure for communities to learn about PK-12 best practices for attraction, development, and retention.

- **The industry needs a talent pipeline and connective infrastructure in place where individuals can see the process of how they can be skilled up to ultimately receive a certification or a higher education degree.** More innovative and accessible programs are needed to reach pockets of talented non-traditional workers that are often overlooked (e.g., single parents, immigrants, and formerly incarcerated people).

- **Michigan needs transparency around workforce and employer information to connect its existing infrastructure across companies, agencies, and educational institutions.** Having data about information sources, gaps, efforts, and needs is crucial for visibility. This will allow for workforce programs to address the real needs and issues.

- **Increased access to data could also help address the uncertainty around market direction and workforce needs that many suppliers are facing in the transition.** The government has a role to coordinate the data needed to provide more clarity on the skills that suppliers need for the EV transition and on the resources available that could help.

- **The mobility industry needs a flexible, fast, and customizable training system that can adapt to a changing landscape as technology advances rapidly.** This flexibility is crucial to provide life-long learning opportunities for workers who will need to be trained in new technologies and industries that do not yet exist.

- **Non-traditional learning pathways, such as accelerated, competency-based, 4-8 week non-credit training bootcamps, are innovative tools to provide a career on-ramp for people who are unable to fit a traditional academic schedule into their lives.**
**Big Ideas and Experiments**

Participants brainstormed big picture goals for Michigan over the coming decade. These were large strategic goals to help meet the vision of success that they agreed upon at the beginning of the day. In this session, participants agreed on one big idea to aim for and then developed “experiments”—tangible, near-term actions that can be taken to reach that goal.

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<th>Big Idea</th>
<th>Experiment</th>
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<td>State-led investment in placemaking to build a community of support for a person’s full day, including wrap-around services (e.g., housing, public transit/alternative modes of transport, and child-care).</td>
<td>Take the baseline data from the <a href="#">Growing Michigan Together Council Report</a> to map out neighborhoods with lower labor force participation and their barriers to working (e.g., transportation and childcare). This mapping could be used as the basis for exploring investments in employment hubs to provide the necessary support to pursue employment opportunities. Provide technical assistance to communities to plan and seek resources for solutions to the barriers to entry into the workforce. Take lessons learned from other examples of technical assistance being offered to communities.</td>
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<td>Create a national EV Workforce Moonshot with clear roles for each level of government. This includes less restricted federal investment and technical support, state convening and supporting programs, and locally driven implementation.</td>
<td>The federal government should invest in capacity building for states to support local governments applying for federal funding related to workforce development programs.</td>
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<td>Create an anchor organization that coordinates and is supported by employers to create an inclusive workforce. Create a neutral organization that brings all stakeholders together and understands the needs and helps create an organized path forward for the EV workforce.</td>
<td>Stakeholders identify who would act as the leader of the anchor organization. Define the anchor organization’s mission and goal.</td>
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<td>Make Detroit an American example of the future of transportation to attract people to live there. Clean, fully electric public mobility with projects designed to promote the city (EVs power the city grid, fully electric public transportation, reliable and safe transportation linking residents to their jobs).</td>
<td>Extend Q line to link the airport and downtown. Engage the auto industry on supporting the work by demonstrating financial and labor opportunities of making Detroit a place people want to live. Engage non-Michigan automakers to put pressure on local companies to support the transition and the desired public transit projects. Approve legislation for a regional transportation system, which is needed to access federal dollars.</td>
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<td>Marketing for EV jobs and careers (including branding and promotion) to make the EV career paths and hiring and training opportunities real. (i.e., “Got milk”-style campaign for EVs and jobs.</td>
<td>Tap into state of Michigan communications assets and programs (like Pure Michigan campaign, but for EV careers/jobs)</td>
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