



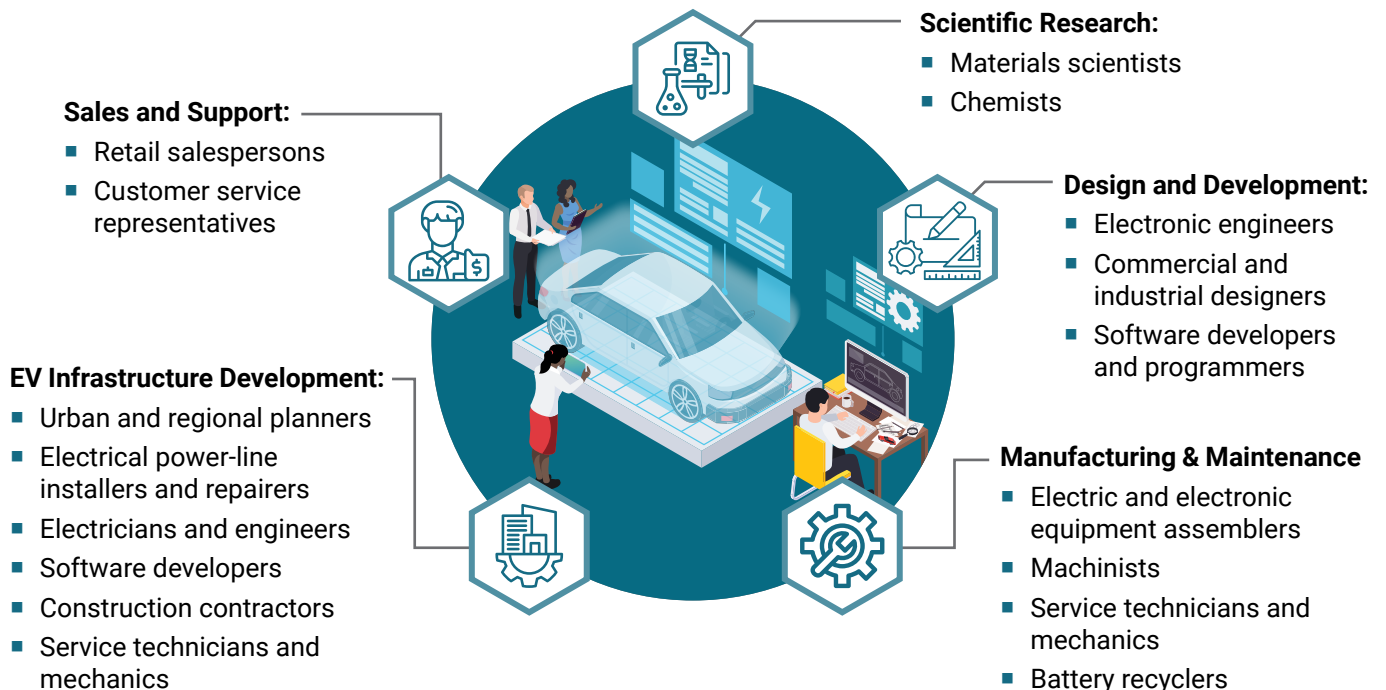
WORKFORCE DEVELOPMENT IN THE ELECTRIC VEHICLE (EV) SPACE: AN EQUITY LENS

Generating New Opportunities

The Baltimore region has an economic opportunity to fill new jobs created by the transition from the internal combustion engine to electric vehicles. Public agencies and private companies have crucial roles in building a strong, local, and diverse workforce to ensure these job opportunities benefit all communities. This fact sheet explores strategies to promote equitable EV workforce development.

EV Related Jobs

The region's workforce should be prepared and be trained ahead of Maryland's EV transition, which requires all new light-duty vehicle sales be electric or zero-emission by 2035. The growing market for EVs and EV charging equipment creates a wide variety of new job and training opportunities for the region, including ([Bureau of Labor Statistics](#)):



Current Landscape of EV Workforce Development

The energy efficiency sector workforce is made up of predominately white men. Women comprise only 25% of the sector's workforce despite representing 48% of the overall U.S. workforce. Black American workers comprise 8% of the energy efficiency workforce compared to 12% of the U.S. workforce (ACEE, 2023). The Baltimore region must build a diverse local workforce to maximize economic opportunities.

Strategies for Equitable Workforce Development:

To promote equitable workforce development in the EV sector, public agencies and private companies can implement several strategies:

- **Workforce Development in the Procurement Process:** Set disadvantaged business enterprise (DBE) goals in your requests for proposals to create opportunities for local business development.
- **Targeted Outreach:** Inform underrepresented communities about contracting and career opportunities in the EV sector through targeted outreach programs.
- **Training Programs:** Collaborate with local colleges and technical schools to provide subsidized training in EV technologies.
 - Baltimore City Public Schools' [Career and Technical Education \(CTE\)](#) program offers Automotive Technician training in some area high schools.
 - Montgomery College's [Automotive Electrical Systems Specialist Certificate](#) prepares students for the Automotive Service Excellence (ASE) L3 Light Duty Hybrid/Electric Vehicle technician certification exam, as well as other automotive, electrical, and wiring skills.
 - Carroll Community College's [90-hour Hybrid/Electric Vehicle Technician Program](#) prepares students for the ASE L3 and the ASE Engine Performance (A8) exams. Prior coursework in automotive electrical systems is required.
 - [VETWorkS](#) offers automotive training courses and certifications in Baltimore, including training on EV charger maintenance.
- **Mentorship and Apprenticeship Programs:** Establish internal mentorship and hands-on apprenticeship programs for underrepresented groups, focusing on minority and low-income individuals in the EV industry.
- **Workforce Diversity:** Implement inclusive hiring practices and ensure job postings reach a diverse pool of applicants.
- **State and Federal Support:** Advocate for policies that fund equitable training programs and workforce development in the EV sector. See the GUMBO Initiative for a federally supported example.

Clean Cities Partnership: The GUMBO Initiative

The GUMBO (Guaranteeing Access to Underserved and Marginalized Populations by Building Employment Opportunities) initiative provides EV educational curriculum to regional and national training partners. Initially developed by Louisiana Clean Fuels and Baton Rouge Community College, it received Department of Energy funding. Now, multiple partners, including Greater Washington Region Clean Cities Coalition and Virginia Clean Cities, are involved. Maryland Clean Cities and Communities Coalition may also benefit from exploring this partnership.



Key points of workforce development from the GUMBO initiative include:

- **Practical Training:** Hands-on training in installing, maintaining, and servicing electric vehicle supply equipment (EVSE), directly addressing the growing need for skilled technicians in the EV sector.
- **Career Opportunities:** New career pathways in the EV infrastructure, with technicians specializing in EVSE installation and maintenance potentially earning between \$40,000 and \$65,000 annually.
- **Supporting Underserved Populations:** Access to training and employment opportunities explicitly targeting underserved and marginalized populations.
- **Curriculum Development:** Curriculum for EVSE installation and operations will be made publicly available, enabling broader access to education and skill-building.

