



# Leveraging Federal Funds for Medium- and Heavy-Duty Vehicle Decarbonization

NOVEMBER 2022



## ABOUT CLEAN FUELS MICHIGAN

Clean Fuels Michigan is a nonpartisan nonprofit trade association dedicated to advancing the clean transportation industries in Michigan. We take a cross-sector, cross-functional approach including policy advocacy and fostering industry collaboration to move forward, together.

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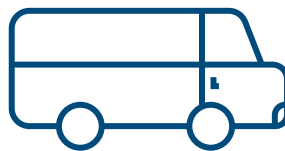
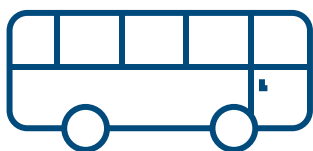
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## OVERVIEW

This report will focus on opportunities to use programs funded by the Infrastructure Investment and Jobs Act (IIJA) of 2021 and the Inflation Reduction Act (IRA) of 2022 to accelerate the decarbonization of medium- and heavy-duty vehicle fleets. These laws create dozens of programs that invest billions of dollars in clean mobility solutions. Much of the initial focus of the industry after IIJA passed has been on the National Electric Vehicle Infrastructure Program (NEVI), which will invest \$5 billion over 5 years nationwide to build a comprehensive network of charging infrastructure for passenger electric cars. Meanwhile, the commercial vehicle sector is quickly pivoting to decarbonized solutions as well. And there are many opportunities in these historic federal policies to further accelerate the transition to support cleaner freight, delivery, transit, and more. This report offers an overview of those opportunities with corresponding policy suggestions for navigating federal opportunities to decarbonize medium- and heavy-duty vehicle fleets.

## FEDERAL FUNDING OPPORTUNITIES

Together, IIJA and IRA provide billions of dollars in incentives, tax credits, and grants for clean mobility projects. These opportunities represent the single largest government investment in clean transportation in history. It is absolutely critical that Michigan and the nation take advantage of these programs to support the swift and effective transition to cleaner mobility.

While we have details about many of the programs created by IIJA and IRA, additional details about timelines, eligible entities, and program details will continue to be announced over the coming months. Programs may also shift over time to continue meeting the needs of the industry.

Importantly, both federal funding bills will be following the Justice40 Initiative, which requires that 40% of the benefits from programs flow to communities that are disadvantaged, marginalized, underserved, or overburdened by pollution. All programs covered by Justice40 are required to engage stakeholders and report on program outcomes.

### Infrastructure Investment And Jobs Act

In November of 2021, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law, was signed into law. This legislation authorizes more than \$1.2 trillion for transportation and infrastructure spending, including funding to fix roads and bridges, replace lead pipes, bolster public transit, and more.

Importantly, IIJA also provides \$128 billion for clean mobility solutions, including:

- **\$7.5 billion** for electric vehicle charging stations nationwide
- **\$39 billion** for modernizing public transit and increasing accessibility
- **\$11 billion** for transportation safety projects with an emphasis on pedestrians and cyclists
- **\$66 billion** for rail projects
- **\$5 billion** for low- and zero-emission buses
- **\$3 billion** for battery manufacturing and recycling
- **\$1.1 billion** for low or no emission programs

There are dozens of different programs funded by IIJA, each with their own timelines, eligible entities, focus areas, and funding levels. These programs offer an opportunity to invest in electric vehicle charging equipment, vehicle-to-grid demonstration projects, electrifying public transportation, and more. In sections below, we get into program details and specific recommendations for how to use these programs to support medium- and heavy-duty vehicle decarbonization.



## Inflation Reduction Act

In August of 2022, the Inflation Reduction Act (IRA) of 2022 was signed into law. This budget reconciliation plan funds \$485 billion of new spending and tax breaks for clean energy and climate related projects, including several clean mobility projects and incentive programs, including the following:

- Extension of the light-duty EV tax credit, with additional modifications to include fuel cell electric vehicles, eliminating the cap on vehicles sold per manufacturer, and requiring certain percentages of American-made and sourced battery materials
- Extension of the Alternative Fuel Refueling Property Tax Credit
- New Used EV Tax Credit
- New Commercial Clean Vehicle Tax Credit
- Long-term extension of the Advanced Manufacturing Production Credit
- \$60 million for the Diesel Emission Reduction Act program
- \$2 billion for the Domestic Manufacturing Conversion Grant program
- \$3 billion for the Advanced Technology Vehicle Manufacturing program
- \$600 million for a Clean Heavy-Duty Vehicle Grant Program

To learn more about the clean mobility opportunities created by the IIJA and IRA, check out Clean Fuels Michigan's Federal Funding Resources, which are regularly updated with the latest information.

## KEY PRINCIPLES FOR MICHIGAN'S USE OF FEDERAL FUNDING

We offer these key principles to guide Michigan's efforts to gain the maximum clean transportation benefits from federal funding opportunities. These principles will ensure that Michiganders, Michigan-based companies, and our air, lakes, and streams will benefit from these opportunities.

### Prepare For The Future By Promoting Flexibility

The clean mobility industry is developing rapidly and so we must plan and adapt in response. Pigeon-holing investments to meet industry needs of today may end up creating stranded assets only a few years from now. We encourage Michigan agencies to create flexible programs that solicit a vast array of solutions and that can be altered to adjust to current industry and consumer demands, especially for multi-year programs. Technology developments are making multiple charging solutions like inductive, bi-directional, and extremely high-power charging safe and available on the market. Depending on the use case at hand, any one (or perhaps multiple) of the many available technologies can work, thus the need for flexibility so that communities and fleets can select the technology that fits their needs. We also recommend incentivizing projects that future-proof infrastructure investments for multiple use cases whenever prudent.

#### EXAMPLE:

**Inductive Charging:** As large electric vehicles move toward full-scale adoption, challenges associated with using manually operated plug-in chargers may scale accordingly. At high power levels, charging cords may become too hot or too heavy to safely handle. Emerging forms of automated charging, such as wireless inductive charging can serve to solve some of these issues. Historically, innovative solutions like inductive charging have been left out of grant programs even when it is a practicable solution. We recommend including inductive charging as an applicable solution for fleet charging.



## Prioritize Projects That Amplify Economic Returns

There are dozens, if not hundreds, of companies in Michigan that stand to gain from the investments in IIJA and IRA. Michigan agencies should direct funding, whenever possible, to projects that utilize Michigan-made content from Michigan-based companies. By funneling these investments into Michigan companies, we can further demonstrate Michigan's leadership in the industry, support job growth in the state, and keep investments in our local communities.

## Focus On Overcoming The Barriers To Entry

To move the industry forward, efforts should be focused on breaking down barriers to entry in the market. In the medium- and heavy-duty vehicle space, this includes upfront price of the vehicles, lack of public charging infrastructure, and lack of knowledge about available makes and models. Focusing efforts to break down the largest barriers will create long-lasting tailwinds after funds have been spent by moving the industry as a whole forward.

## WHY MEDIUM- AND HEAVY-DUTY VEHICLES ARE IMPORTANT

There are vast and mostly untapped benefits of transportation decarbonization, both for the economy and the environment. The programs included in IIJA and IRA present an important step towards harnessing these benefits. This report focuses on harnessing these opportunities specifically for medium- and heavy-duty vehicles for three main reasons: medium- and heavy-duty vehicle decarbonization is critical to reduce harmful air emissions as well as support Michigan's burgeoning electric vehicles industry. And finally, because Michigan needs to begin preparing for these vehicle types if we hope to see adoption rates climb.

## There Are Many Types Of Medium- And Heavy-Duty Vehicles

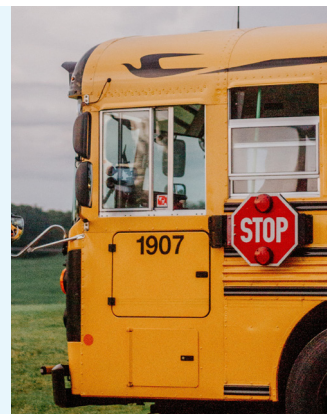
Medium- and heavy-duty vehicles are defined as a vehicles with a "gross vehicle weight rating over 8,500 pounds." Examples of these vehicles include school and transit buses, fire trucks, garbage trucks, delivery vans, and freight transportation.

Depending on the vehicle type and what the route(s) of that vehicle are like, it will need different charging solutions. There are three main types of medium- and heavy-duty fleets: short distance, regional haul, and long haul. The majority (67%) of freight travels a maximum of 250 miles, making it extremely realistic to transition to electric vehicles. Take these two examples:

### EXAMPLES:

**School Buses:** School buses operate a fixed route and return to the central depot each night. An electric school bus fleet needs charging infrastructure that can reliably re-charge the vehicles overnight while they are in the bus barn to the level that is needed to do their route in the morning. School buses offer an opportunity for resiliency because they are idle much more than other fleet vehicles. School buses can be used for emergency power, as demonstrated by vehicle-to-grid demonstration projects around the country. Consider too that school buses take many non-route trips, such as field trips or to sports teams' away games. In these instances, public charging infrastructure may make a trip possible that otherwise would not be possible in an electric bus.

**Delivery Trucks:** A medium-duty box truck that is used to make deliveries such as furniture or appliances to a customer's home might operate on more of a territory-basis, rather than a fixed route. The number of miles per day may vary in this scenario. While depot-charging should be used to support the vehicle's needs most of the time, having public infrastructure to re-charge as needed throughout the day's deliveries is an extremely valuable safety net.





## Reducing Harmful Emissions

While medium- and heavy-duty vehicles make up only 10% of the vehicles on the road, they are responsible for 28% of the greenhouse emissions from the transportation sector<sup>1</sup>. The volume of freight is expected to grow over the next decades, necessitating diversification of supply chains, transportation routes, and transportation fuels.

On April 21, 2022, Michigan's MI Healthy Climate Plan was introduced, offering a "roadmap" to a zero-emissions statewide economy by 2050 with an interim goal of 52% emissions reductions by 2030<sup>2</sup>. The plan outlines several goals related to medium- and heavy-duty vehicle electrification including the electrification of state fleet vehicles, implementing a Clean Fuels Standard, and building out the necessary infrastructure for the deployment of electric and alternative fuel vehicles.

## Supporting Michigan's Economy

Not only are trucks, buses, and other large vehicles responsible for a large percentage of greenhouse gas emissions, they are crucial to the economic engine in Michigan and across the nation. The Michigan NEVI Plan<sup>3</sup> states that, "Funding to preserve and expand the freight system after years of under-investment is essential to Michigan's ability to recapture and grow the manufacturing industry... The state's importance as a gateway to Canada will likely rise as more freight volumes flow across the continent."

Michigan is already showing leadership on this front. The REV Midwest partnership, an MOU with Illinois, Minnesota, Wisconsin, and Indiana, provides the foundation for cooperation on fleet electrification with the goal of safeguarding interstate commerce<sup>4</sup>.

Also, with global tensions increasing, the transition to a domestically produced transportation fuels is more important than ever. Electric vehicles are re-powered with electrons produced by the local utility company, which keeps energy dollars close to home.

## Preparing Our Infrastructure Is Critical

According to a Michigan Department of Transportation analysis, 74% of the total 538 million tons of freight moved throughout Michigan was moved by truck in 2019. As we look toward meeting climate goals with greater adoption of zero-emission trucks, we desperately need to prepare the infrastructure to power and repower these vehicles. Without public and on-route infrastructure, many fleets will be limited in their options to electrify. Plus, if Michigan begins to prepare now, we can leapfrog other states and become a leader in medium- and heavy-duty vehicle electrification.

Freight electrification presents a unique challenge for electrification because larger vehicles require charging stations to look and operate slightly differently than passenger electric vehicle charging stations. While the basic technologies are the same, like the power cords, software, and interface, the special and power requirements may be very different.

Medium- and heavy-duty electric vehicles can use up to 10 times more power than passenger vehicles. This higher power level comes with cost and feasibility considerations. Some fleets may require depot charging as well as high-power charging systems along corridors, potentially with a megawatt or more power at each location.<sup>5</sup>

Limiting idle time is critical to the economics of freight haulers, so fast charging will be necessary to make the economics for electric vehicles work for fleets. Deployment of high-capacity fast charging infrastructure that reduces charging dwell times and meets fleets' unique charging needs will be critical for adoption. "Right-sizing" infrastructure to the vehicles it will service will create maximum impact for that location, as well as spread dollars among more projects. Customized solutions based on fleet analysis and market dynamics can help balance charging speed with costs.

Equally as important in preparing the infrastructure is considering the different unique needs of different vehicle types. For example, a box truck will need the turn radius to easily move through the parking lot, into the charging spot, and back out to the road. Pull-through design is often easiest for larger vehicles to handle because they do not often travel in reverse. It is important to note, too, that passenger vehicles may also need larger charging spots, especially as more EVs having towing capacity. Without the ability to pull through to the charger, a Ford F-150 Lightning towing their camper won't be able to use the charger (unless they take up all the other parking spots long-wise!).

### EXAMPLE

**West Michigan International Truck Dealership in Kalamazoo:** Currently, Michigan has only one public station for commercial vehicle charging. The West Michigan International Truck Dealership in Kalamazoo debuted their charging station in August 2022. With a location on I-94, the station is set up to service class 8 freight vehicles travelling across Michigan. The station can charge vehicles at speeds up to 350 kW and offers four ports.

To facilitate adoption of medium- and heavy-duty electric vehicles, Michigan needs accessible, high-power charging infrastructure. We have a long way to go to provide the infrastructure necessary for large vehicle fleets, however, the federal funding opportunities listed on the following pages can (and should) be harnessed to make significant progress.



## FUNDING DETAILS AND RECOMMENDATIONS TO SUPPORT MEDIUM AND HEAVY-DUTY VEHICLE ELECTRIFICATION

There are several funding opportunities for electric medium and heavy-duty vehicle charging programs included in Infrastructure Investment and Jobs Act.

### National Electric Vehicle Formula Program

Abbreviated as NEVI, this program will strategically deploy electric vehicle charging infrastructure to establish a public interconnected network of charging stations. Funds must first be spent to build out stations every 50 miles along the Alternative Fuel Corridors.

**FUNDING:** \$5 billion nationwide, \$110 million for Michigan over 5 years

**TIMING:** All 50 states Electric Vehicle Infrastructure Deployment Plans were approved as of September 7, 2022. The approval of the statewide plans gives states the access to FY22 and FY23 NEVI formula funds. FY24-26 funds will be approved at a later date.

**RECOMMENDATION:** Michigan should future-proof the assets that are funded by this program by prioritizing projects that can accommodate many vehicle types including vehicles towing trailers, delivery vans, school buses, and more. Higher than required by NEVI power output, space availability, and proximity to fleets should be considered for all projects as applicable.



## Community And Corridor Charging And Fueling Infrastructure

These are competitive programs that will provide funding to deploy electric vehicle charging along with hydrogen, propane, and natural gas fueling infrastructure along designated Alternative Fuel Corridors and in communities. Applications must include an explanation of the consideration of “height and fueling capacity requirements for facilities that charge or refuel large vehicles, such as semi-trailer trucks” with consideration for “medium- and heavy-duty vehicles (including along the National Highway Freight Network established under section 167(c)) and in proximity to intermodal transfer stations<sup>6</sup>.”

**FUNDING:** \$2.5 billion in competitive funding nationwide, \$1.25B for Corridor and \$1.25 for Community Charging

**APPLICANTS:** State or political subdivision of a State, Metropolitan Planning Organizations (MPOs), local governments, special purpose district or public authority with a transportation function, and Indian Tribes

**TIMING:** Federal Highway Administration will publish a Notice of Funding Opportunity in 2022.

**RECOMMENDATION:** Relevant Michigan State agencies should encourage applications from Michigan entities that emphasize charging for medium- and heavy-duty fleets, especially for the corridor charging programs. This opportunity converges with the REV Midwest efforts to plan regional electric trucking corridors.

## Surface Transportation Block Grant Program

This is a formula program with funding doled out to states. Surface Transportation Block Grants promote flexibility in state and local transportation decisions and provides flexible funding to best address state and local transportation needs. Projects should improve the conditions and performance on a Federal-aid highway, including bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects. New additions to the eligible project list include the installation of electric vehicle charging infrastructure and vehicle to grid infrastructure. FHWA Guidance released in May 2022 highlights “climate change and sustainability” as a priority for investments<sup>7</sup>.

**FUNDING:** \$72 billion nationwide, Michigan to receive \$1.89 billion over 5 years and \$363 million in 2022

**TIMING:** States are automatically apportioned funds each year.

**RECOMMENDATION:** Set aside up to a quarter of Michigan’s Surface Transportation Block Grant funding to fund commercial charging and vehicle to grid deployments. Just a small portion of these funds would go a long way towards building the infrastructure needed to facilitate fleet electrification in Michigan.

## Congestion Mitigation And Air Quality Improvement Program

CMAQ provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). The IIJA amends program to include “the purchase of medium- or heavy-duty zero emission vehicles and related charging equipment.”

**FUNDING:** \$13.2 billion nationwide, \$32.7 million annually in Michigan through 2026

**TIMING:** Local agencies are encouraged to submit their Fiscal Year 2024 – 2026 projects to Michigan Department of Transportation now.

**RECOMMENDATION:** MDOT, with the support of relevant state agencies and MPOs, should prioritize non-diesel projects that prepare communities for clean fuels and fleet electrification.

## Carbon Reduction Program

The Carbon Reduction Program will provide formula grants to states to reduce transportation emissions or the development of carbon reduction strategies. States may use Carbon Reduction Program funds for projects that support the reduction of transportation emissions, including: the construction, planning, and design of trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation; public transportation projects; and congestion management technologies. Transportation electrification, electric vehicle charging, and diesel engine retrofit projects are also eligible.

**FUNDING:** Michigan to receive \$168 million over 5 years and \$32 million in 2022

**TIMING:** States are required to develop a Carbon Reduction Strategy by November 15, 2023

**RECOMMENDATION:** Michigan should use this funding to meet the goals of the Council on Future Mobility and Electrification and MI Healthy Climate Plan. These funds can be used to fill gaps in existing grant programs, such as to supplement the EPA Clean School Bus Program.

## Department Of Transportation Vehicle Funding Opportunities: Low-No And More

There are several Department of Transportation-housed programs that fund electric vehicle purchases, including: Federal Transit Administration Low and No Emission Bus Program and Bus + Facilities Competitive Program, Electric or Low Emitting Ferry Program, and more. The eligible projects vary by program, but all programs target low- and zero-emission vehicle applications.

**FUNDING:** More than \$8 billion nationwide

**RECIPIENTS:** State and local governments

**TIMELINE:** Timelines vary by program.

**RECOMMENDATION:** Continue to pursue these opportunities to support clean mobility across Michigan. In 2022, Michigan was awarded funding for electric buses in 3 communities as well as an award to MDOT to support addition transit projects.

## Clean School Bus Program

This program provides funding for replacing diesel school buses with propane and electric buses. Funds are prioritized for rural and low-income communities. There are 297 school districts in Michigan that are "priority districts" for funding. Applications for the first round of funding were due on August 12, 2022 and Michigan had more applicants than there was funding available.

**FUNDING** \$5 billion nationwide, split between zero-emission buses and low- emission buses. \$500 million will be offered in 2022.

**RECIPIENTS:** State and local government entities that provide school busing services as well as eligible contractors, tribes, and nonprofit school associations

**TIMELINE:** Additional rounds will be announced.

**RECOMMENDATION:** Continue to support Michigan entities as they apply for this limited funding. In the first round, Michigan fleets submitted applications for over 150 electric school buses, far more than the program can fund. Especially considering the resiliency benefits of electric school buses, we recommend finding alternative pathways for funding school bus electrification, including making a budget appropriation to fund a \$45 million pilot project as recommended by the Council on Future Mobility and Electrification in 2021<sup>8</sup>.

### Grants For Energy Projects At Public School Facilities

Consortiums of education agencies, schools, nonprofits, and for-profits can apply for funding to make energy efficiency improvements at public schools, including alternative fuel vehicles and infrastructure improvements to support them.

**FUNDING:** Amount: \$500 million nationwide

**RECIPIENTS:** Education agencies, schools, nonprofits

**TIMELINE:** Likely applications will open for the first time in 2022 Q4

**RECOMMENDATION:** Michigan agencies should support school districts in applying for this funding, particularly for clean school buses.

### Energy Efficiency And Conservation Block Grant Program

This program is to help states and local governments reduce energy use and fossil fuel emissions. Development and implementation of an energy efficiency and conservation strategy, including programs for zero-emission transportation (and associated infrastructure). Programs may include capital investments, loan programs, rebates, grants, and/or other incentives for the purchase and installation of energy efficiency, renewable energy, and zero-emission transportation (and associated infrastructure) measures.

**FUNDING AMOUNT:** \$550 million nationwide. Eligible local governments will receive a minimum of \$75,000.

**TIMELINE:** Estimated application opening Q4 2022

**RECIPIENTS:** States, local governments, tribes

**RECOMMENDATION:** Michigan should apply for a Conservation Block Grant to fund an extensive survey and analysis of the different types of electric vehicles that will be deployed throughout the state and the corresponding charging and workforce needs. This study can (and should) build on existing efforts like the MSU-EGLE passenger vehicle charging studies and other state planning efforts. The outcome of the study should include what types of charging will be necessary, where, and on what timeline. Additionally, the study should include analysis of workforce and skills needed to develop, install, and maintain clean mobility technologies. This will help to guide State, local, and private investments in vehicle electrification.

### Reduction Of Truck Emissions At Port Facilities

The Department of Transportation (DOT) in consultation with the Department of Energy and the Environmental Protection Agency will establish a program to reduce idling at port facilities. DOT will first study opportunities, then provide grant funding to test, evaluate, and deploy projects to reduce idling truck emissions, particularly from heavy-duty vehicles. Vehicle and infrastructure projects that reduce emissions at ports, such as electric freight vehicles and corresponding charging infrastructure are expected to be eligible projects.

**RECIPIENTS:** Likely states and local governments

**TIMELINE:** To be announced

**RECOMMENDATION:** Michigan should apply to pilot freight electrification at the Detroit-Canada border. The importance of the port for national and international commerce, along with the poor air quality in surrounding communities, make this a prime location for freight decarbonization. We would like to work with the State to identify fleets and land to pilot freight decarbonization with electric, hydrogen, and other clean propulsion technologies.

## THERE ARE ALSO SEVERAL FUNDING OPPORTUNITIES FOR ELECTRIC MEDIUM AND HEAVY-DUTY VEHICLE CHARGING INCLUDED IN THE INFLATION REDUCTION ACT:

### QUALIFIED COMMERCIAL CLEAN VEHICLES

This creates a new credit for qualified commercial clean vehicles that will be equal to 30 percent of the cost of an electric vehicle, or the incremental cost for such vehicle as compared to one that relies solely on gasoline or diesel. The maximum credit will be \$7,500 for vehicles with a gross weight rating of 14,000 pounds and \$40,000 for all others. There are no battery or mineral sourcing requirements. The vehicle must be used for business purposes.

**RECIPIENTS:** Business entities with a federal tax liability that operate a fleet

**TIMELINE:** The credit will apply to any vehicles placed in service after Dec. 31, 2022, through 2032.

**RECOMMENDATION:** While these tax incentives will help to bring down the upfront cost of clean vehicles, it is not going to be enough of an incentive on its own to bring the upfront cost of clean vehicles to parity with diesel and gasoline. We recommend the State utilize additional methods to incentivize commercial clean vehicle adoption by creating a grant program that can be funded by General Funds or by other federal funding programs like the Carbon Reduction Program as outlined in recommendations throughout this report.

### Alternative Refueling Property Tax Credit

This extends and modifies the tax credit available for alternative refueling property (i.e., electric vehicle charging), increasing the maximum credit available from \$30,000 to \$100,000 and allowing the credit to be calculated per single charging unit rather than per location. Under the Inflation Reduction Act, additional requirements and stipulations were added to the credit eligibility calculation, whether the property is in a qualified census tract, wage and apprenticeship requirements, and whether the property is depreciable. To qualify for the credit, the project must be in a census tract defined as a low-income community under section 45D(e) as having a poverty rate of at least 20%, or outside of a metropolitan area having a median family income that does not exceed 80% of statewide median family income.

If the property is depreciable, the base credit will be 6 percent. That can increase up to 30% if the prevailing wage and apprenticeship requirements are met. The wage requirements will be met so long as laborers, mechanics, and contractors are paid prevailing wages for the location of the project. In addition, projects must employ qualified apprentices. Starting on January 1, 2023, apprenticeship hours must equal 12.5% of the total labor hours, which is increased to 15% for construction that begins after December 31, 2023.

**RECIPIENTS:** Businesses and individuals with federal tax liability

**TIMELINE:** The credit availability extends to 2032.

**RECOMMENDATION:** The complicated and restrictive requirements to qualify for this tax credit amplify the need for grant funding for commercial charging projects that do not qualify. Grant funds to supplement NEVI and the Alternative Refueling Property Tax Credit would go a long way toward preparing Michigan's infrastructure for full scale electric vehicle adoption. We recommend creating a \$55 million fund to provide rebates for commercial and community charging projects.



### Clean Heavy-Duty Vehicles Program

Grants will be awarded to replace Class 6 and Class 7 heavy-duty vehicles with zero-emission vehicles. Funding could also be used to purchase, install, operate, and maintain the infrastructure needed to charge, fuel, or maintain zero-emission vehicles; for workforce development and training to support the maintenance, charging, fueling, and operation of the zero-emission vehicles; or to plan and provide technical assistance to support zero-emission vehicle adoption and deployment. The program requires that 40 percent of funding (\$400 million) be directed to recipients proposing to replace eligible heavy-duty vehicles serving communities located in nonattainment areas.

**FUNDING AMOUNT:** \$1 billion nationwide

**RECIPIENTS:** States, local governments, and nonprofit school transportation associations

**RECOMMENDATION:** Michigan should apply for funding to replace State Fleet vehicles, as well as support municipalities and school districts to apply for funding. Additionally, since class 8 vehicles are not eligible under this project, we recommend that should the State have additional funds to create grant or rebate programs for medium- and heavy-duty vehicles, that they be focused on class 8 vehicles to supplement that market.

### FINAL RECOMMENDATIONS

To meet this critical moment and ensure a swift and lasting transition to electric transportation, we must equitably and efficiently spend federal funding. We recommend Michigan state agencies work together to take advantage of these opportunities to invest in medium- and heavy-duty vehicle decarbonization to benefit the economy and air quality across the state, as well as support our burgeoning electric and alternative fuel medium- and heavy-duty vehicle industries.

Clean Fuels Michigan is pleased to support eligible entities, project partners, state agencies, and interested parties as they navigate the IIJA and IRA. If you have any questions, or would like to get involved, please reach out to us at [info@cleanfuelsmi.org](mailto:info@cleanfuelsmi.org).

## Sources

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Michigan Department of Transportation Fast Facts 2022
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- 4 State of Michigan REV Midwest Announcement
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- 6 Infrastructure Investment and Jobs Act
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- 8 Council on Future Mobility and Electrification Report



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