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Michigan Public Policy Survey May 2024

Michigan local government leaders report increases in local planning for electric vehicles (EVs)

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This report presents the views of Michigan's local government leaders on electric vehicle (EV) policies in their communities, including the relevance of EV infrastructure planning for their government, whether they currently have or are considering local EV policies, and challenges to local EV infrastructure expansion. These findings are based on statewide surveys of local government leaders in the fall 2023 wave of the Michigan Public Policy Survey (MPPS), with comparisons from the fall 2019 wave.

The Michigan Public Policy Survey (MPPS) is an ongoing census survey of all 1,856 general purpose local governments in Michigan conducted since 2009 by the Center for Local, State, and Urban Policy (CLOSUP). Respondents for the Fall 2023 wave of the MPPS include county administrators, board chairs, and clerks; city mayors, managers, and clerks; village presidents, managers, and clerks; and township supervisors, managers, and clerks from 1,315 jurisdictions across the state.



Key Findings

- Statewide, 39% of Michigan local government leaders say planning for electric vehicles (EVs) is somewhat relevant (24%) or very relevant (15%) for their local governments, up from 23% who said the same in 2019. Meanwhile, just over a quarter (28%) say that planning for EV infrastructure is not relevant at all for their local governments, a substantial decrease from 40% in 2019.
 - » Village (14%) and township (10%) leaders are less likely to say planning for EVs is *very* relevant for their local governments, compared to leaders in cities (32%) or counties (30%).
 - » Similarly, rural officials are less likely to say EV infrastructure planning is relevant for their local governments compared with those from urban areas.
- More than a third (34%) of local officials currently say their community has too few publicly-accessible charging stations (up from 29% who said the same in 2019), while 30% say they have about the right amount, and just 2% believe they have too many. Just over another third (35%) say they are unsure whether they have the right amount of EV stations, but this is down from 48% who were unsure in 2019.
 - » Among local leaders who report there are at least some publiclyaccessible EV charging stations available in their community, 41% say they still have too few; among those that currently do not have any EV charging stations in the jurisdiction, 32% believe they have too few.
- Only 13% of Michigan local governments currently report having considered or adopted any local EV policies to fund or incentivize the use of EVs, however, this is double the percentage who said they had considered or adopted such policies four years earlier.
 - » Officials from mostly urban (45%) and urban (40%) communities are more likely to report in 2023 considering or adopting local EV policies compared to those from rural (16%) and mostly rural (5%) communities.
 - » When asked about six different types of EV policies local governments may be considering or may have adopted, the most commonly reported are incorporating EVs into the jurisdiction's vehicle fleet, including EV policies in planning documents such as a community Master Plan, and disseminating information about EV charging locations around the community.
- Local leaders cite costs associated with adding new EV charging stations (53%) and lack of interest among residents (51%) among the barriers to EV expansion in Michigan communities.

Background

While recent developments have raised concerns about slowing electric vehicle (EV) sales,¹ Michigan is currently projected to see a massive shift in its automotive landscape over the coming years. Although only around 33,000 EVs were registered in Michigan as of 2022, that is an 89% increase year-over-year, and electric and hybrid vehicles are expected to comprise fully 51% of all sales by 2030.²

Michigan has been preparing for the increase in future EV use, with millions in state and federal funds being devoted to bolstering the state's EV infrastructure. In Michigan's 2024 fiscal year budget alone, investments include \$21.3 million for EV and renewable energy charging infrastructure and \$5 million for the "Lake Michigan EV Circuit," which aims to establish an EV tourism route around Lake Michigan.³ The Michigan Department of Environment, Great Lakes, and Energy (EGLE) also has initiated several programs aimed at expanding the EV charging network in the state, such as funding grants to offset the costs of installing both Level 2 chargers and DC Fast Chargers.⁴ In December 2023, Governor Whitmer proposed a \$25 million MI Vehicle Rebate plan to encourage the sale of EVs.⁵ And in the same month, the Governor signed an executive directive to mandate all state fleet vehicles be converted to zero-emission by 2040.⁶

In addition to government investment, private companies have made significant investments regarding EVs in Michigan, while also acknowledging rising uncertainty around consumer demand, foreign competition, and federal emissions standards.⁷ For example, in 2022, General Motors and LG announced a joint venture to commit \$7 billion to manufacture 600,000 electric trucks at a new facility in Orion Township plus EV batteries at a factory in Lansing,⁸ although plans for addition plants from that collaboration have paused.⁹ Similarly, Ford Motor Company has made a significant investment to construct a new LFP battery plant in Marshall, Michigan, however, in late 2023 those plans were scaled back with 32% reduction in workforce from the 2,500 jobs originally announced,¹⁰ with Ford recently signaling a pivot from a fully-electric to more focus on hybrid vehicle production.¹¹

To get a better understanding of how Michigan communities are responding to the changing automotive landscape across the state, the fall 2023 Michigan Public Policy Survey (MPPS) asked local leaders a wide range of questions about EV policies and practices at the local level. This report presents the views of those local leaders, including comparisons to an earlier MPPS survey from 2019 which asked similar questions.

The relevance of planning for electric vehicles has increased since 2019 for local officials across Michigan, particularly in urban communities

When asked on the Fall 2023 MPPS whether planning for EV infrastructure is relevant for their local government, as shown in *Figure 1a*, a majority (58%) of local leaders statewide say that planning for EV infrastructure is not very relevant (30%) or not relevant at all (28%). However, this is a significant decrease from the nearly three-quarters (73%) in 2019 who said the same. Meanwhile, 39% statewide currently say planning for electric vehicles is somewhat relevant (24%) or very relevant (15%) for their local governments, up significantly compared with 2019 (23%).

Local officials from cities (32%) and counties (30%) are the most likely leaders to say planning for EVs is *very* relevant for their governments (see *Figure 1b*). This is an increase from 2019, when 21% of cities and 11% of counties said it was *very* relevant. Meanwhile, around a third of township (34%) and village (29%) officials currently believe EV infrastructure planning is *not at all* relevant for their local governments. This is down significantly from the nearly half (46% of townships and 43% of villages) that said the same in 2019.

Figure 1a

Local officials' assessments that planning for EV infrastructure is relevant for their local government, 2019 vs. 2023



Figure 1b

Local officials' assessments that planning for EV infrastructure is relevant for their local government, 2023, by jurisdiction type



Relatedly, leaders from mostly urban (78%) and urban (71%) jurisdictions are more likely than their counterparts from mostly rural (45%) or rural (27%) places to say planning for EVs is relevant for their governments (see *Figure 1c*). Only 5% of local leaders in mostly urban jurisdictions believe EV planning is not at all relevant for their government.

Meanwhile, among local leaders from fully rural jurisdictions, currently 69% report that planning for EVs is either not very relevant (34%) or not relevant at all (35%) for their community, and a majority (52%) of officials from mostly rural jurisdictions currently say the same.

Figure 1c

Local officials' assessments that planning for EV infrastructure is relevant for their local government, 2023, by urban-rural self-identification



Over a third of local leaders statewide say their community currently has too few charging stations

As of fall 2023, over a third (34%) of local officials say their community has too few publicly-accessible charging stations available, compared with 29% who said the same in 2019 (see *Figure 2a*). Meanwhile, in 2023, 30% say they have about the right amount, and only 2% believe they have too many. And while uncertainty is very high, with 35% saying they are unsure whether their jurisdiction has enough EV stations in 2023, that percentage is down from 48% who were unsure four years earlier.

Local officials from mostly urban communities (64%) are significantly more likely to say their jurisdiction has too few EV publicly-accessible charging stations, compared with officials from urban (55%), mostly rural (38%), or fully rural (26%) communities (see *Figure 2b*). Officials from mostly urban communities (14%) are also by far the least likely to be unsure about their community's demand for EV charging stations.

Among local leaders who report there are at least some publicly-accessible EV charging stations available in the community, 41% say they still have too few. And among those that currently do not have any EV charging stations, 32% believe they have too few.

Figure 2a

Local officials' assessments of whether their jurisdiction has the right amount of publicly-accessible EV charging stations, 2019 vs. 2023



Figure 2b

Local officials' assessments of whether their jurisdiction has the right amount of publicly-accessible EV charging stations, 2023, by urban-rural self-identification



Local governments in mostly urban and urban communities are the most likely to have considered or enacted EV policies

Although 39% of local leaders in 2023 say planning for EV infrastructure is relevant for their local governments, and 34% believe they have too few EV charging stations in their communities, substantially fewer report that their own local government is considering or enacting any local EV policies. For example, just 13% statewide report considering or adopting any policies to fund or incentivize the use of EVs, either for their jurisdiction's own vehicles or for the public (see *Figure 3a*). Although that number is small, it is double the percentage who said they had considered or adopted such policies four years earlier.

There are significant differences in EV policy considerations between rural and urban communities. Local officials who identify their community as mostly urban (45%) or urban (40%) are more likely to report having considered or adopted EV policies compared with mostly rural (16%) and rural (5%) places (see *Figure 3b*). Figure 3a

Percent of jurisdictions considering or enacting policies on EVs, 2019 vs. 2023 $\,$



Figure 3b Percent of jurisdictions considering or enacting policies on EVs, 2023, by urban-rural self-identification



More than a quarter of urban communities report incorporating EVs into their local government's vehicle fleet

When asked about six different types of EV policies local governments may be considering or may have adopted, the most commonly reported are incorporating EVs into the jurisdiction's vehicle fleet (7% statewide), including EV policies in planning documents (7% statewide), and providing information about EV charging locations around the community (6% statewide).

As shown in *Figure 4*, jurisdictions characterized as mostly urban are generally the most likely to report considering or adopting EV policies, including 29% that have added EVs to their vehicle fleet and 20% that have included EVs policies in planning documents.

Figure 4

Types of policies local governments are considering or adopting on EVs, by urban-rural self-identification



Costs and lack of interest among residents are top challenges to adding new EV charging stations

The MPPS asked local leaders in jurisdictions that are currently working on energy policies (71% of jurisdictions statewide) if there were any factors that would pose challenges to adding new publicly-accessible EV charging stations in their communities. Among these jurisdictions, costs associated with adding new EV charging stations (53%), lack of interest among residents (51%), and lack of interest among local officials (32%) are the most common challenges local officials identify to adding new EV charging stations (see *Figure 5a*). Meanwhile, 15% believe there are no significant challenges to adding new charging stations in their jurisdictions, while another 8% are unsure.

Figure 5a

Percent of jurisdictions reporting challenges to adding new publicly-accessible EV charging stations in their jurisdiction (among jurisdictions statewide that have at least considered energy issues)



Figure 5b

Percent of jurisdictions reporting challenges to adding new publicly-accessible EV charging stations in their jurisdiction (among jurisdictions statewide that have at least considered energy issues), by urban-rural self-identification



When looking at differences along the rural-urban spectrum, as shown in *Figure 5b*, local leaders in mostly urban (22%) and urban (24%) jurisdictions are more likely to say that there are no significant challenges to adding new EV charging stations compared to those in rural (13%) and mostly rural communities (15%). Among jurisdictions that are currently working on energy policies, costs associated with adding charging stations (51%) is the most frequently cited challenge among those in urban areas. By contrast, lack of interest among residents (58%) is the most common challenge for those in rural areas, followed by costs (50%), and a lack of interest among local officials (36%).

The MPPS also gives local leaders the opportunity to answer open-ended questions, where they can provide additional information in their own words. Below are some examples of these more detailed survey responses regarding their concerns with EVs and EV infrastructure in their communities.

Voices Across Michigan

Quotes from local leaders about challenges to adding EV charging stations in their jurisdictions

"We have the interest and started the process but the overall cost for installation is not affordable to us."

"We're a small town and 97% residential. The use case/need for public chargers is not really there for us. Most EVs in our City are charged at home."

"This may be better served thru the private sector, similar to gas stations."

"The City has installed electrical boxes for future charging stations as the downtown parking lots are rebuilt. The stations are not free to install, very expensive even with a small rebate, and a piece of equipment to monitor and maintain."

"Complications for who pays for costs of the energy."

"Trying to find locations that are accessible in the long snowy winter months in this remote area....always need to think about how a parking area will be plowed and where the snow banks will accumulate."

"EV technology is nascent and EV fires present a significant risk and are costly and overly time-consuming to put out."

"Virtually all commercial and most parks traffic is tourist traffic. Our residents are mostly residential and do not benefit directly from tourism, so investing in tourist facing infrastructure causes controversy."

"The electric grid needs to be upgraded. We also need capacity for DC fast chargers WHICH WE DESPERATELY WANT."

"More information is needed for our Board to make any decisions on need, site locations, etc. within our township."

"No need, EVs are not popular in our Township. Locals that might have one have their own charging system at their residence."

"This is completely irrelevant to our residents due to cost of EVs."

"Taxes paid to the village would not be used for adding charging stations around town as that is not a proper use of those funds."

Conclusion

Electric vehicle (EV) use in Michigan had been increasing, reflecting broader national and global trends towards EV adoption. Local officials across the state, particularly those in mostly urban and urban communities, increasingly view EV infrastructure planning as relevant for their local governments, and many mostly urban (45%) and urban (40%) jurisdictions report having considered or adopted EV policies to fund or incentivize the use of electric vehicles (EVs), either for their jurisdiction's own vehicle fleet or for others in the community. Currently, over a third (34%) of local leaders statewide say their community has too few publicly-accessible charging stations available, compared with 29% who said the same in 2019. However, only 15% believe there are no significant challenges to adding new charging stations in their jurisdictions, while a majority point to costs associated with adding new EV charging stations (53%) and a lack of interest among residents (51%) as barriers to local EV infrastructure expansion.

Notes

1. Korn, M. (2024, January 1). Electric vehicle sales are slowing. No need for panic yet, insiders say. ABC News. Retrieved from https://abcnews.go.com/Business/electric-vehicle-sales-slowing-panic-insiders/ story?id=105842727

2. MICHAuto (2024). Michigan EV Landscape. Retrieved from https://michauto.org/michigan-ev-landscape/

3. Executive Office of the Governor. (2023, July 24). What's in the Budget to Upgrade Michigan's Infrastructure? Retrieved from https://www.michigan.gov/whitmer/news/press-releases/2023/07/24/whats-in-the-budget-to-upgrade-michigans-infrastructure

4. Michigan Department of Environment, Great Lakes, and Energy (EGLE). (2024). Charge Up Michigan Program. Retrieved from https://www.michigan.gov/egle/about/organization/materials-management/energy/rfps-loans/ charge-up-michigan-program

5. James, J. (2023, December 13). Whitmer plan would give rebates to Michiganders who buy new EV, other cars. Bridge Magazine. Retrieved from https://www.bridgemi.com/michigan-government/whitmer-plan-would-giverebates-michiganders-who-buy-new-ev-other-cars

6. Mauger, C. (2023, December 5). Michigan Gov. Gretchen Whitmer directs state government vehicle fleet to go electric. The Detroit News. Retrieved from https://www.detroitnews.com/story/news/local/michigan/2023/12/05/ gov-whitmer-directs-state-govt-vehicle-fleet-to-go-electric/71813588007/

7. Gardner, P. (2024, March 22). Michigan's auto industry awaits an EV revolution in flux. Bridge Magazine. Retrieved from https://www.bridgemi.com/business-watch/michigans-auto-industry-awaits-ev-revolution-flux

8. Center for American Progress. (2023, July 13). GM EV and Battery Investment in Michigan. Retrieved from https:// www.americanprogress.org/article/gm-ev-and-battery-investment-in-michigan/

9. Colias, M. (2023, January 20). GM, LG Scrap Plans to Partner on Fourth U.S. Battery Factory. The Wall Street Journal. Retrieved from https://www.wsj.com/articles/gm-lg-scrap-plans-to-partner-on-fourth-u-s-batteryfactory-11674241152

10. Mihalascu, D. (2023, November 22). Ford's Michigan LFP Battery Plant Will Be Much Smaller Than Planned. InsideEVs. Retrieved from https://insideevs.com/news/697527/ford-michigan-lfp-battery-plant-will-be-muchsmaller-than-planned/

11. Howard, P.W. (2024, April 4). Ford to expand hybrid vehicles, push back launch of 3-row EVs to stay competitive. Detroit Free Press. Retrieved from https://www.freep.com/story/money/cars/ford/2024/04/04/ford-hybrid-ev-models-sales/73201156007/

Survey Background and Methodology

The MPPS is an ongoing survey program, interviewing the leaders of Michigan's 1,856 units of general purpose local government, conducted by the Center for Local, State, and Urban Policy (CLOSUP) at the University of Michigan in partnership with the Michigan Municipal League, Michigan Townships Association, and Michigan Association of Counties. Surveys are conducted each spring (and prior to 2018, were also conducted each fall). The program has covered a wide range of policy topics and includes longitudinal tracking data on "core" fiscal, budgetary and operational policy questions and designed to build-up a multi-year time-series.

In the Fall 2023 iteration, surveys were sent by the Center for Local, State, and Urban Policy (CLOSUP) via the internet and hardcopy to top elected and appointed officials (including county administrators and board chairs; city mayors and managers; village presidents, clerks, and managers; and township supervisors, clerks, and managers) from all 83 counties, 280 cities, 253 villages, and 1,240 townships in the state of Michigan.

The Fall 2023 wave was conducted from October 2 – December 7, 2023. A total of 1,315 jurisdictions in the Fall 2023 wave returned valid surveys (65 counties, 216 cities, 174 villages, and 860 townships), resulting in a 71% response rate by unit. The margin of error for the survey as a whole is +/- 1.46%. Missing responses are not included in the tabulations, unless otherwise specified. Some report figures may not add to 100% due to rounding within response categories.

Detailed tables of the data analyzed in this report broken down several ways—by jurisdiction type (county, city, township, or village); by population size of the respondent's community, by the region of the respondent's jurisdiction; and by self-identified rural, mostly rural, mostly urban, or urban categories—will be available online at the MPPS homepage: closup.umich.edu/michigan-public-policy-survey.

The survey responses presented here are those of local Michigan officials, while further analysis represents the views of the authors. Neither necessarily reflects the views of the University of Michigan, or of other partners in the MPPS.

Acknowledgement and Disclaimer

This material is based upon work supported by the Department of Environment, Great Lakes, and Energy (EGLE) under Award Number EE0008653.

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