

NEVI Implementation in Ohio: Case Study



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Introduction and Objective

The National Electric Vehicle Infrastructure (NEVI) Formula Program is a \$5 billion federal program with a primary investment in Direct Current Fast Chargers (DCFCs) along the nation's major highways and interstates. State Departments of Transportation (DOT) and State Energy Offices that administer the NEVI formula funds are implementing the program by soliciting project proposals, issuing contracts, monitoring the reliability and performance of the chargers, and other responsibilities to ensure the success of the program.

As states announce awards and issue contracts for the first round of NEVI funds, there is an opportunity for other states to learn from the successes and challenges of the NEVI program. The National Association of State Energy Officials (NASEO) and the American Association of State Highway and Transportation Officials (AASHTO) partnered with Atlas Public Policy to conduct a series of case studies with the first few states that have announced awards and issued contracts to NEVI recipients. The case studies are intended to delve deeper into the states' solicitation design and stakeholder process; outline the scoring rubric and application evaluation process; discuss the applicant pool variety and quality; highlight state, utility, and site host coordination; and illustrate the successes and challenges of the program. These case studies are part of a larger initiative led by NASEO and AASHTO to enhance coordination and collaboration between State Energy Offices and State DOTs to ensure that NEVI and other EV charger investments are made in a strategic, coordinated, efficient, and equitable manner.

OVERVIEW

On October 31, 2022, the Ohio Department of Transportation (ODOT) released the nation's first Request for Proposal (RFP) for the National Electric Vehicle Infrastructure (NEVI) Program to solicit applications for public fast charging bids along state alternative fuel corridors (AFCs). Initially, the RFP period closed on January 18, 2023. However, in March 2023, changes made to the final NEVI rules and federal guidance affected the original RFP. ODOT decided to request mandatory Proposal Revisions which offered proposers who had already submitted proposals a timeframe of five weeks to amend their proposals in order to comply with the new requirements.

As part of their RFP, ODOT identified 30 possible areas, referred to as corridor groups, across all interstate AFCs with multiple interchanges in each area that would meet NEVI requirements. ODOT developed and released detailed spatial data indicating the eligible zones within each corridor group where the department sought to build charging sites. At the end of the RFP process, the department had received over 300 site proposals for NEVI funding from 30 unique applicants.

On July 13, 2023, ODOT announced it would issue awards for projects across 27 of the 30 corridor groups. Four of the 27 awards are no longer proceeding. The 23 remaining awards totaled approximately \$16,500,000 in NEVI funding for Ohio's first round. In October 2023, ODOT announced that construction had begun on NEVI sites, and on December 13, 2023, they opened their first NEVI site, making Ohio the first state in the nation to have an operational NEVI-funded charging site.

ODOT released their second round NEVI RFP on November 9, 2023, applying lessons learned from Round One to improve the process. The application period for Round Two closed on January 25, 2024.

SOLICITATION DESIGN PROCESS

Prior to the NEVI Program's rollout, ODOT had committed itself to becoming a national leader in electric vehicle (EV) charging infrastructure development. To prepare for this effort, in 2020 the department conducted a gap analysis of Ohio's existing EV charging network and siting study, which they used when the NEVI planning process began. After the NEVI Program was announced, ODOT anticipated hardware-related supply chain issues as states across the country scrambled to get chargers in the ground from a relatively small number of electric vehicle supply equipment (EVSE) vendors. Consequently, they went to great lengths to ensure Ohio would be the first state in the nation at every milestone in the NEVI process in Round One.

Stakeholder Engagement

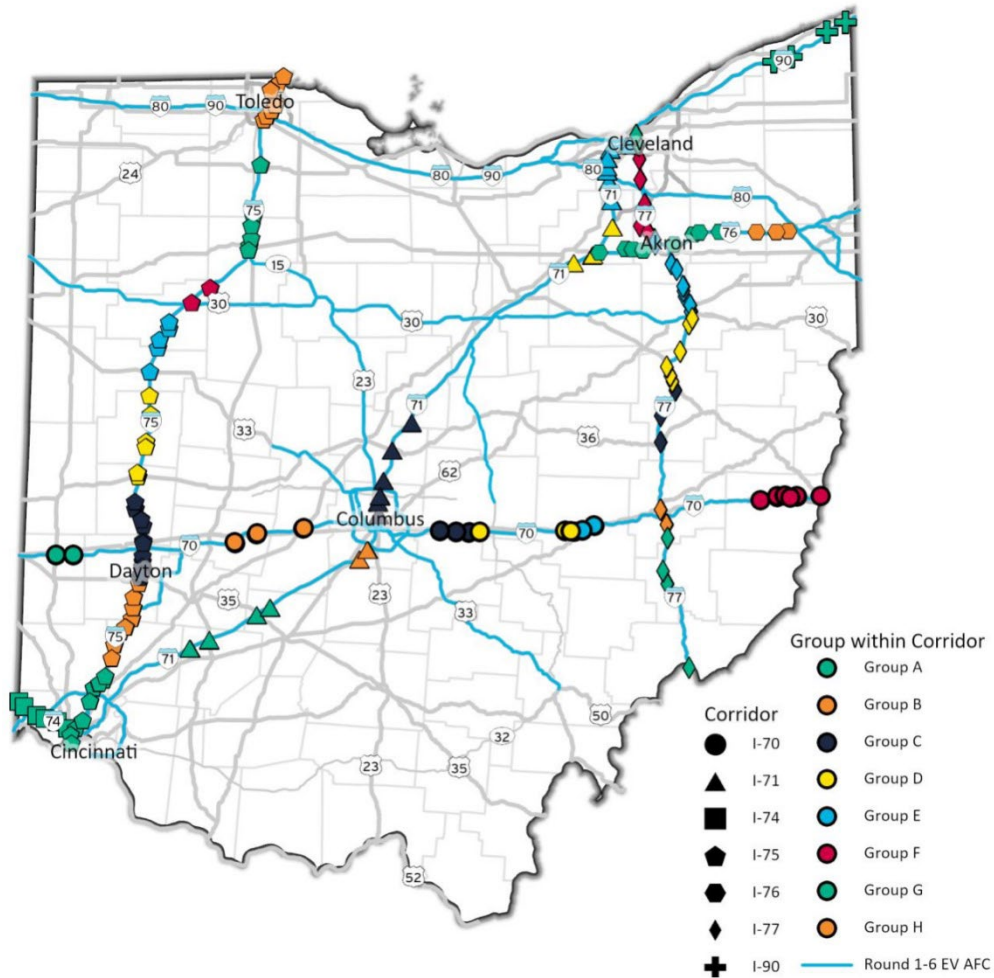
In September 2022, ODOT issued a Request for Information (RFI) to EVSE vendors seeking feedback on the department's NEVI plans. ODOT staff held a series of meetings to discuss the RFI and generate interest from prospective applicants and site hosts in the state's first round of NEVI solicitation. The department also conducted local outreach to encourage Ohio-based companies to apply directly or participate as site hosts. ODOT engaged with utilities to identify locations with available three-phase power to ensure they could realistically serve these sites without costly and lengthy electrical grid upgrades.

Site Identification and Prioritization

Before the NEVI Program launched, the 2020 siting study provided insights to the coverage gaps in the state EV charging network. This study, in addition to utility power site assessments, helped the department streamline where to request site proposals and ensured the selection committee only received proposals for sites with available grid capacity.

The NEVI Program requires a charging station within one mile of an interchange every 50 miles along designated AFCs. ODOT identified 30 areas with eligible locations and sufficient power across all of Ohio's Interstate AFCs (see Figure 1), which they designated as corridor groups. Most of the corridor groups included three eligible interchanges, allowing applicants greater diversity and flexibility in the site selection and proposal development process. In Round One, the department allowed applicants to apply to any corridor group across the state.

Figure 1: Ohio Round One Corridor Groups



This map depicts Ohio’s Round One NEVI corridor group locations. Each corridor has a unique shape and each group within a corridor has an associated color. For instance, Group A on Corridor 1-70 is demarcated by a green circle. Group F on Corridor I-77 is a red diamond.

Source: ODOT Round One NEVI RFP

ODOT developed a detailed and interactive GIS mapping tool to create one mile driving distance polygons that explicitly outlined the specific areas of eligibility within each corridor group (see Figure 2: Example of Ohio Corridor Group Polygons). The department made this tool publicly available so prospective applicants could assess whether a location would meet the NEVI Program’s geographic requirements, have available three-phase power, and meet the department’s priorities based on their gap analysis.

Figure 2: Example of Ohio Corridor Group Polygons



This figure depicts an example of three polygons at interchanges within a single corridor group. The polygons demonstrate the exact locations where an applicant could build charging sites.

Source: [Ohio EV Charger Coverage Gap Planning Map \(Round I, Round II\)](#)

RFP Design

ODOT provided prospective applicants with specific format, page limit, and submission method requirements in the RFP. For instance, ODOT instructed prospective applicants to submit proposals via email and gave detailed file naming conventions to which the proposal files had to adhere. As part of the RFP, department staff structured proposal requirements in three main sections: (1) Administrative, (2) Technical, and (3) Pricing.

ODOT explained in the RFP that their review would include an administrative pass/fail assessment to dictate whether proposals were responsive or non-responsive. Responsive proposals were followed by an evaluation of Technical and Pricing proposals. The evaluation process consisted of scoring the technical and pricing scoring elements based on the evaluation criteria provided (see Figure 3: Ohio Scoring Rubric).

Figure 3: Ohio Scoring Rubric

Technical Proposal Scoring

Scoring Element	Max Points
General Technical Elements	
Program Understanding and General Approach	100
Team Qualifications and Management	200
Draft Data Interface Plan	50
Site Safety	50
Candidate Site Specific Elements	
Site Selection and Site Access	100
Infrastructure Needs Assessment and Plan	150
Enhancements/Exceeding Minimums – Equity and DBE	50
Enhancements/Exceeding Minimums – Amenities	150
Maximum Technical Proposal Score	850

Pricing Proposal Scoring

Scoring Element	Max Points
Candidate Site Pricing Proposal Fixed Subsidy	75
Candidate Site Pricing Proposal Narrative	75
Maximum Candidate Site Pricing Proposal Score	150

This scoring rubric outlines the sections of a proposal that ODOT would evaluate. A proposal could receive a maximum of 1,000 points. The department issued awards to proposals that received the highest score in each corridor group. Alongside this high-level rubric, ODOT also included explanatory information in the RFP regarding each scoring element to help applicants develop responsive and relevant proposals.

Source: ODOT Round One NEVI RFP

As part of the proposal development process, ODOT required all applicants to coordinate with local utilities to fill out a project cost estimate form on a standardized template provided by the department. After Round One proposals were submitted, ODOT de-briefed with utility companies and learned that utilities became overloaded from the high volume of prospective applicants requesting estimates. Due to this high volume, utilities began providing more general cost estimates.

While the general cost estimates were not as useful as an exact cost estimate, proposers got credit if they could show they had reached out to attempt utility coordination. ODOT also provided the draft public-private partnership agreement terms and conditions as an appendix to the RFP, providing applicants the opportunity to review the draft language before submitting proposals.

ODOT required all applicants to submit proposals via email to a designated address provided in the RFP. To ensure uniformity across applications and for ease of review, department staff included in the RFP instructions detailed naming conventions for required proposal sections.

APPLICATION EVALUATION

ODOT's RFP period initially closed on January 18, 2023. However, in March 2023, changes made to the final NEVI rules and federal guidance affected the original RFP. ODOT decided to request mandatory Proposal Revisions which offered proposers who had already submitted proposals a timeframe of five weeks to amend their proposals in order to comply with the new requirements. The department underwent a two-stage review process composed of a pass/fail assessment followed by a scored evaluation of each individual proposal that was responsive following the evaluation criteria detailed in the RFP.

The Applicant Pool

When the RFP window closed, ODOT had received 300 proposals from 30 unique applicants across all 30 corridor groups. Overall, department staff reported that they received a wide variety of applicants, including both major EV Service Providers (EVSPs) and direct site hosts, such as gas stations and convenience stores, grocery stores, and large travel and truck stop companies.

ODOT faced some issues with the applicant pool and the proposals. They did not anticipate receiving 300 applications, which extended the timeline for review. Notably, a single applicant submitted 145 proposals, roughly half of the total pool. ODOT staff reported that they deemed almost all proposals submitted by that applicant as non-responsive based on the pass/fail evaluation. ODOT had to review each one of these proposals manually, which required an extensive amount of time to complete. The department affirmed that smaller, less established applicants overall struggled to develop robust proposals—either due to a lack of preparation, experience, or effort.

STATE PRIORITIES

ODOT scored the maximum number of points related to cost for the proposal with the lowest cost within a corridor group, demonstrating that cost was a top priority for the department. Proposals with higher subsidy requests were indexed to that with the lowest request, such that higher cost proposals received a proportionally lower score for cost than the lowest cost proposal. The department required proposals to include a detailed cost breakdown, from which department staff could review a year-by-year explanation of the total costs and requested subsidy (see Figure 4: ODOT Proposal Cost Breakdown).

Figure 4: ODOT Proposal Cost Breakdown

1. COSTS

	Pre-construction and Construction Costs	O&M – Year 1 Costs	O&M – Year 2 Costs	O&M – Year 3 Costs	O&M – Year 4 Costs	O&M – Year 5 Costs
Property Acquisition						
Design and Permitting						
Utility Infrastructure Improvements						
Site Preparation and Construction						
EVSE Hardware and Software						
Operations						
Maintenance						

2. REQUIRED SUBSIDY

	Subsidy required for Pre-construction/ Construction	Year 1 – Subsidy required	Year 2 – Subsidy required	Year 3 – Subsidy required	Year 4 – Subsidy required	Year 5 – Subsidy required
Required ODOT/FHWA Subsidy Amount						

The cost breakdown has two main sections: (1) the total cost of the proposed project, with costs delineated across seven categories; and (2) the amount in NEVI funding that ODOT would pay the applicant as a subsidy. Both sections include the costs to bring the site online and the costs to maintain the site for five years, per NEVI requirements.

Source: ODOT Round One NEVI RFP

Site proposals that emphasized a positive driver experience and exceeds NEVI minimum standards by including amenities like restaurants, 24/7 access to bathrooms, canopies, and pull-through parking scored higher based on evaluation criteria established in the RFP. They also provided higher scores for proposals with more than four ports at a site and those with a total power capacity above 600 kilowatts. However, the department acknowledged that proposals that exceeded port and power minimums are likely to cost more, which could reduce their cost score in the rubric.

Applicant experience and qualifications served as a key evaluation metric in the selection process. The Department requested all EVSE installations by the applicant or a member of the applicant’s team going back five years. ODOT staff used this information to assess the applicants’ experience with deploying, operating, and maintaining publicly accessible fast charging stations.

The Awardees

After reviewing all 300 applications, ODOT issued awards for sites at 27 of the 30 corridor groups. All 30 corridor groups received proposals, but ODOT noted that one group only received a single proposal, while others that received multiple proposals did not include any responsive submissions. Of the 27 awards, four fell through due to challenges related to the site host agreement or infeasibility to conform to NEVI standards, leaving 23 final round one awards (see Table 1: Ohio NEVI Round One Awards). ODOT awarded a total of \$16,591,676 in NEVI funding, averaging \$721,377 per site. The lowest awarded site received \$639,646 and the highest awarded received \$839,712.

Two companies received an outsized proportion of total awards: EVgo (an EVSP) and Pilot Travel Centers (a site host). While EVgo was only a direct applicant for two of the awards, they were part of applicant teams for 19 of the 23 awards (82.6 percent). On the other hand, Pilot Travel Centers received 14 awards (60.8 percent) and was the direct applicant for each award they received. Notably, Pilot Travel Centers and EVgo partnered with one another for all Pilot Travel Centers sites that received awards—EVgo partnered with other site hosts for the remaining five site awards.

Only two EVSPs won awards in Ohio, EVgo and Francis Energy. However, seven site hosts aside from Pilot Travel Centers won awards (see Table 1: Ohio NEVI Round One Awards).

Table 1: Ohio NEVI Round One Awards

Award	Direct Applicant	EVSP	Site Host	Hardware Provider	NEVI Award
1	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$655,903
2	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$737,636
3	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$752,410
4	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$719,514
5	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$725,880
6	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$670,334
7	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$839,712
8	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$669,536
9	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$738,896
10	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$731,382
11	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$805,600
12	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$676,540
13	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$676,778
14	Pilot Travel Center	EVgo	Pilot Travel Center	Delta Electronics	\$718,961
15	EVgo	EVgo	Brunswick Strip Mall	Delta Electronics	\$639,646
16	EVgo	EVgo	Balden Park Strip Mall	Delta Electronics	\$662,898
17	Meijer	EVgo	Meijer	Delta Electronics	\$751,493
18	Meijer	EVgo	Meijer	Delta Electronics	\$737,883
19	Meijer	EVgo	Meijer	Delta Electronics	\$744,366
20	Francis Energy	Francis Energy	Best Western	SK Signet America	\$733,044
21	Francis Energy	Francis Energy	Casey's Gas & Convenience	SK Signet America	\$730,194
22	Francis Energy	Francis Energy	Dollar General	SK Signet America	\$742,907
23	Francis Energy	Francis Energy	Shoppes on Bluebell	SK Signet America	\$730,165
Total					\$16,591,676

ODOT reported the entire applicant team when announcing awards, including the direct applicant, the EVSP, the site host, and the hardware provider where applicable. As direct applicants, Pilot Travel Centers won 14 awards, Francis Energy won four, EVgo won two, and Meijer won three.

Source: ODOT

POST-AWARDS PROCESS

After finalizing the award recipients, ODOT and the awardees entered contract negotiations. ODOT reported that some awardees voiced concern about the agreements' step-in clause, through which ODOT could assume control over sites that were in repeated breach of the contract (e.g. failure to meet reliability requirements). Some awardees reported that they were not comfortable with the department commandeering part of their business. Department staff also acknowledged that they were not in a position to become an EVSE manager. As a result of negotiations, ODOT also included clawback provisions (e.g. unavailability deductions) in the final template of the P3 Agreement.

Before ODOT would finalize the contracts with awardees, the department also required that awardees provide an executed site host agreement indicating that the site host will commit to installing and operating the chargers for five years (only applicable for awards where the prime proposer was not the site owner). Once ODOT and an awardee finalized their contract, the Ohio Controlling Board then needed to approve all funding awards related to the NEVI program in Ohio, which took about one month. To support the awardees and streamline the process, ODOT took on the responsibility of conducting the National Environmental Policy Act (NEPA) process for all sites, which takes about two to three months, because they have experience handling the NEPA process for other federally funded projects. Had ODOT not taken this responsibility on for the awardees, the NEPA process would have likely taken significantly longer to clear, further delaying deployment.

On October 18, 2023, ODOT announced that the first charging site in the nation from NEVI Round One had begun construction in Ohio. On December 13, 2023, the NEVI site went live, becoming the first NEVI site in the country to be open to the public. ODOT has projected that all 23 NEVI Round One sites will become operational by the end of 2024.

KEY FINDINGS AND LESSONS LEARNED

Key Findings:

- ODOT released the first RFP in the nation for the NEVI Program, receiving 300 applications across all corridor groups in Round One.
- Ohio led the nation in NEVI implementation, with their first site entering construction in October 2023 and becoming operational in December 2023.
- ODOT's move to take on the NEPA process on behalf of awardees further accelerated the deployment of NEVI sites.

Lessons Learned:

- ODOT will use Bid Express to better structure proposals for both the applicant and the review team due to disorganized email proposals from applicants and lack of standardization.
- ODOT will consider bundling low utilization sites in rural areas with high utilization sites in urban areas to encourage applicants to submit proposals for both site locations in order to accelerate efforts to fill gaps across Ohio.
- ODOT will continue requiring a letter of intent between the site host and the direct applicant. Because some awardees backed out due to site host agreements falling through, ODOT will also require that awardees provide a signed Site Host Commitment letter within 5 business days of receiving the awards unless the site host is the direct applicant themselves.
- ODOT will only require a utility cost estimate developed by the applicant directly due to the strain placed on utilities during Round One. ODOT will only require those who receive awards to solicit cost estimates from utilities, which awardees will do while the department goes through the NEPA process for the sites.
- ODOT will add additional questions, changing their overall structure to elicit yes/no responses in order to have more clarity and reduce the likelihood of misinterpretation. Taking inspiration from the Pennsylvania Department of Transportation, ODOT will also create a more detailed and transparent scoring rubric with element-level scoring, so applicants better understand how much the department values individual elements within larger sections of proposals.

ACHIEVING NEVI GOALS

Overall, Ohio made great strides toward achieving NEVI and led the nation at nearly every critical milestone of the program thus far.

Table 2: Ohio’s Actions to Meet NEVI Goals

NEVI Goal	State Action
Engage with relevant stakeholders in program design	<ul style="list-style-type: none"> • Conducted outreach presentations, workshops, and webinars across the state. • Worked with utilities to assess power availability before solicitation.
Ensure Positive Driver Experience	<ul style="list-style-type: none"> • Scored amenities in site proposal rubric and provided examples of relevant amenities. • Provided points for sites that exceed NEVI minimum power and port requirements. • Provided points for sites with incident mitigation plans and site safety considerations.
Establish a Reliable Charging Network	<ul style="list-style-type: none"> • Included clawback mechanisms and “step-in rights” clauses to enforce compliance. • Included evaluation criteria to assess prior experience with EVSE installations, operations and maintenance, and uptime data. • Selected established EVSPs with a proven track record maintaining EV charging sites.
Fill Gaps across all Geographies, including Rural Areas	<ul style="list-style-type: none"> • Received applications in all corridor groups. • Issued awards to sites in rural areas.
Prioritize Equity and Engage Disadvantaged Communities	<ul style="list-style-type: none"> • Provided points to sites that exceed minimums for accessibility and equity principles. • Provided points for utilizing and committing efforts to diverse business enterprises in site construction.

Note, these actions come from direct interviews with ODOT and its applicants, as well as publicly available information. ODOT may have taken more actions to meet NEVI goals than listed in this table.

