



# Illinois Electric Vehicle Infrastructure Deployment Plan- 2023 Update

Approved by FHWA on September 29, 2023



## Table of Contents

Table of Contents.....	1
Figures .....	1
Introduction .....	2
Plan Vision and Goals.....	4
Vision (Updated).....	4
Goals (Updated).....	4
Stakeholder and Public Engagement (Updated) .....	7
State Agency Coordination .....	7
Community Engagement Outcomes Report .....	7
Contracting (Updated) .....	11
Plan for Compliance with Federal Requirements .....	11
Civil Rights.....	12
Existing and Future Conditions Analysis (Updated) .....	12
State Geography and Terrain .....	12
State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs (Updated) .....	12
Alternative Fuel Corridor Networks and Existing Charging Infrastructure (Updated).....	16
EV Charging Infrastructure Deployment (Updated).....	20
Planned Charging Stations Toward a Fully Built Out Determination (Updated) .....	20
Planning Beyond “Fully Built-Out” (Updated).....	24
Implementation .....	26
Known Risks and Challenges (Updated) .....	26
Equity Considerations (Updated).....	28
Identification and Outreach to Disadvantaged Communities (DACs) in the State (Updated).....	28
Process to Identify, Quantify, and Measure Benefits to DACs (Updated) .....	29
Labor and Workforce Considerations (Updated).....	33
Cybersecurity .....	34
Program Evaluation (Updated) .....	34
Discretionary Exceptions (Updated).....	34

## Figures

Figure 1- Timeline of Illinois Electric Vehicle Infrastructure Plan Development and Implementation (UPDATED).....	3
Figure 2- Illinois Department of Transportation Long Range Transportation Plan Goals .....	5
Figure 3- Stakeholder-Suggested locations for EV Charging Infrastructure .....	9
Figure 4- Illinois Statewide Annual Vehicle Miles of Travel (AVMT) 1950-2022 .....	13
Figure 5- Illinois Projected Population and Employment Growth (2017-2045).....	14

Figure 7- Table of Alternative Fuel Corridors, Ready and Pending ..... 16  
Figure 8- Table of Existing Charging Stations with at least 4 DCFC CCS ports on Designated AFCs ..... 18  
Figure 9- Map of Illinois EV Alternative Fuel Corridors and Existing Charging Stations..... 19  
Figure 10- Table of planned NEVI-funded EV Charging Stations..... 21  
Figure 11- Map of Identified EV Charging Station Locations to Achieve Full Build-Out of Illinois  
Alternative Fuel Corridors ..... 23  
Figure 12- Map of US Routes and Scenic Byways in Illinois ..... 25  
Figure - Selected Potential Risks and Challenges..... 26  
Figure – Map of Transportation Disadvantaged Communities and 2023 Identified Station Locations..... 31

## Introduction

The Bipartisan Infrastructure Law, enacted as the Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58 (Nov. 15, 2021), includes important new programs to address climate change by reducing carbon emissions. Among these programs is the National Electric Vehicle Infrastructure (NEVI) Formula Program that will provide funding to states to strategically deploy electric vehicle (EV) charging infrastructure and establish an interconnected network. These historic investments in EV charging infrastructure will put the United States on a path to a nationwide network of 500,000 EV chargers by 2030 and ensure a convenient, reliable, affordable, and equitable charging experience for all users.

The 2023 State of Illinois Electric Vehicle Infrastructure plan, developed by the Illinois Department of Transportation (IDOT), builds upon the 2022 plan approved by the Federal Highway Administration on September 27, 2022. The plan update details the steps the state has taken over the past year to begin implementing the NEVI program and provide convenient, accessible, reliable, and equitable electric vehicle charging throughout the state. This plan is a critical component of achieving the state’s vision of becoming a leader in manufacturing and deploying electric vehicles, with 1 million electric passenger vehicles on the road in the state by 2030.

In keeping with federal guidance to submit a streamlined plan update, some sections of this plan document have been shortened in order to focus more on areas in which there have been updates over the past year. In particular, the 2023 submission contains substantial updates to the Stakeholder and Public Engagement, EV Charging Infrastructure Deployment, and Equity Consideration sections, as well as more targeted updates to the Plan Vision and Goals, Contracting, Existing and Future Conditions, Implementation, Program Evaluation, and Discretionary Exceptions sections.

As with the 2022 NEVI plan, the 2023 Update captures the work completed and underway by the Department as of 8/1/2023. Stakeholder engagement is ongoing as the department works to implement the NEVI program, and those interested in providing feedback or getting more information can do so on IDOT’s NEVI website at <https://idot.illinois.gov/transportation-system/environment/drive-electric.html>

## Electric Vehicle Infrastructure Plan – State of Illinois

Figure 1- Timeline of Illinois Electric Vehicle Infrastructure Plan Development and Implementation (UPDATED)

Timeline of Illinois Electric Vehicle Infrastructure Plan Development and Implementation	
<b>June 2019</b>	The historic and bipartisan Rebuild Illinois capital plan, investing \$45 billion in statewide infrastructure, is signed and implemented. It provides Illinois its first capital plan in nearly a decade – and the most robust in state history including \$70 million for community electric vehicle charging infrastructure.
<b>March 2021</b>	<p>State of Illinois Electric Vehicle Interagency Working Group holds its first meeting for cross-agency coordination on electric vehicle deployment issues</p> <p>IDOT initiates EV adoption and infrastructure suitability study led by University of Illinois Urbana-Champaign (UIUC)</p>
<b>September 2021</b>	Governor Pritzker signs the Climate and Equitable Jobs Act (CEJA), which sets a goal of 1 million EVs on Illinois roads by 2030, establishes a state EV Coordinator position at the Illinois Environmental Protection Agency (IEPA), and an EV passenger vehicle rebate program
<b>November 2021</b>	President Biden signs the Infrastructure Investment and Jobs Act (IIJA), which includes the NEVI program
<b>March 2022</b>	IDOT and UIUC research team begins stakeholder outreach on EV adoption and infrastructure suitability study
<b>July 2022</b>	<p>FHWA approves IDOT’s designation of 3 additional Alternative Fuel Corridors for inclusion in NEVI plan</p> <p>IDOT holds first NEVI outreach meeting introducing NEVI program and plan, initiating a phase of stakeholder engagement</p>
<b>August 2022</b>	IDOT submits NEVI Plan to the Joint Office
<b>September 2022</b>	<p>IDOT holds second NEVI public meeting, reviews comments received by email, holds additional meetings with stakeholders, and publishes Public Comment Summary</p> <p>FHWA approves Illinois NEVI plan</p>
<b>November 2022</b>	IDOT holds third NEVI public meeting, continues to hold additional meetings with stakeholders
<b>December 2022</b>	IDOT completes study with UIUC on EV adoption and suitability study
<b>February 2023</b>	IDOT publishes solicitation for NEVI program implementation assistance through the Professional Transportation Bulletin

FHWA finalizes regulations setting minimum standards and requirements for projects funded under the NEVI Formula Program

**May 2023**

IDOT releases Request for Information, selects consultant for NEVI program implementation

## Plan Vision and Goals

### Vision (Updated)

The Illinois Department of Transportation envisions an innovative, sustainable, and multimodal transportation system that supports local goals and grows Illinois' economy. Facilitating the deployment of electric vehicles and electric vehicle charging infrastructure is an important component of this vision. The state of Illinois aims to be a leader in manufacturing and deploying electric vehicles, setting a goal of 1 million electric passenger vehicles on the road in the state by 2030. To meet the charging demand to accommodate this level of growth in EVs, the state is in the process of completing its "Roadmap to 1 Million," which will incorporate the latest data specific to Illinois needs and propose targeted DCFC installation goals until 2030 to meet these needs. The "Roadmap" is slated for final release in the fall of 2023 and it is anticipated that federal funding programs like NEVI and CFI, together with the state's own EV and charging infrastructure programs will prove crucial to reaching our DCFC charging goal.

In developing this NEVI plan update and through implementation activities initiated since August 2022, IDOT is working closely with other state agencies and with a wide range of stakeholders, ensuring that the deployment of EV charging infrastructure supports local goals and is responsive to stakeholder needs.

The 2023 NEVI plan update continues to envision a network of EV chargers covering all interstate miles in Illinois. Based on stakeholder engagement and lessons learned through information sharing with peer states over the past year, IDOT is increasingly emphasizing flexibility and a site-sensitive approach to program design in order to deploy needed infrastructure as quickly and effectively as possible, prepare for changing conditions, and ensuring equitable access to low cost, and safe fast charging for all Illinoisans. This is a change from the 2022 plan, which proposed requiring each NEVI site location to meet additional requirements above the minimum established by FHWA.

As described in further detail in the EV Charging Infrastructure Deployment section of the plan, IDOT is beginning to work with partner agencies and other stakeholders to plan for utilizing NEVI funds once all designated Alternative Fuel Corridors are fully built out. Initial plans for use of remaining NEVI funds include installing charging infrastructure in key locations along US Routes and Scenic Byways in the state, supporting additional charging infrastructure in places where demand outpaces supply, in transportation disadvantaged communities, and in other any remaining gaps in the state's DCFC network.

### Goals (Updated)

In addition to the state's 2030 EV adoption and charger installation goals, IDOT's NEVI plan is consistent with the state's Long Range Transportation Plan (LRTP). The LRTP established 5 performance goals for the transportation system related to economy, livability, mobility, resiliency, and stewardship.

These goals provide overarching guidance for the goals for implementing the NEVI program.

Figure 2- Illinois Department of Transportation Long Range Transportation Plan Goals



**Economy-** The State of Illinois and Department of Transportation intend for the buildout of a statewide network of electric vehicle charging infrastructure to have economic benefits for travelers, communities, and workers. In identifying locations for public charging infrastructure, in the contracting process, and in coordinating with other workforce and economic development activities underway in the state, IDOT will work to advance economic opportunity in the state.

**Livability-** The deployment of EVs and EV charging infrastructure in Illinois will improve quality of life across the state by reducing greenhouse gas emissions and air pollution. Furthermore, carefully planned outreach and considerations will be taken to ensure Illinois is investing in the most critical areas of the state. These communities and their ability to adopt EVs will be critical to achieving the state's goal of building a future transportation system that serves all its people. The state of Illinois will ensure this investment targets historically disadvantaged, rural, and underserved communities, including by achieving federal Justice40 requirements that 40% of the benefits of federal investments go to disadvantaged communities.

**Mobility-** The State of Illinois and Department of Transportation are committed to ensuring electric vehicle drivers have a safe and reliable statewide network of chargers no matter where they are traveling along the interstate system. To achieve this goal, IDOT continues to nominate additional interstate corridors for Alternative Fuel Corridor designation and has identified additional locations along these routes beyond the minimum required to achieve fully built out status to ensure access to charging at key nodes in the transportation network. IDOT is actively collaborating with all its border states to ensure seamless travel across state lines.

**Resiliency –** Electric vehicle technology is advancing at a blistering pace. Illinois intends to take full advantage of this historic investment by the federal government, by ensuring infrastructure built today is prepared to adapt to technological innovation and increased electric vehicle adoption. Additionally, the

state has a goal of deploying infrastructure that can withstand and recover from both seasonal weather changes and extreme weather events caused by climate change.

**Stewardship-** The state of Illinois intends to be a wise steward of federal funds, both in establishing procurement policies that ensure efficient and effective use of resources, and by tracking progress towards the goals described above while providing stewardship of public funds and public goods.

IDOT continues to work with stakeholders to identify appropriate metrics to track progress toward these goals. Establishing these performance measures is a key area that the department will be working on with consultant and stakeholder support over the coming year as part of issuing the state’s first notice of funding opportunity for NEVI funds. Initial progress metrics identified include the number of chargers built, progress toward “fully built out” determination, charger usage, and uptime statistics. Priorities for establishing performance measures include data availability through existing NEVI requirements or other existing data sources as well as ease of communicating performance measures to the general public, decisionmakers, and recipients of NEVI funding.

## Stakeholder and Public Engagement (Updated)

Stakeholder and public engagement is an ongoing and intensive process when planning a major investment like the NEVI program. Illinois is committed to involving a wide range of stakeholders to produce a charging network that will serve the current and future needs of EV drivers. IDOT has been working closely with governmental agencies in Illinois and neighboring states on implementation of the NEVI program over the past year. IDOT also completed complementary work with academic partners and a diverse steering group of stakeholders, and conducted a series of broader public outreach through a website, survey tool, public meetings, and smaller meetings and correspondence with a range of stakeholders interested in NEVI implementation. These activities are described in more detail in the following sections.

### State Agency Coordination

The state's Electric Vehicle Officer coordinates across agencies to ensure they are working in concert to achieve the state's goals related to electric vehicle adoption, charging installation, workforce development, and encouraging the development of the EV supply chain in Illinois. One venue in which this coordination takes place is through the Illinois Electric Vehicle Interagency Working Group. The group meets biweekly and includes the following agencies.

- Central Management Services (CMS)
- Department of Commerce and Economic Opportunity (DCEO)
- Illinois Commerce Commission (ICC)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Finance Authority (IFA)
- Illinois Department of Natural Resources (IDNR)
- Illinois Department of Transportation (IDOT)
- Illinois Power Agency (IPA)

Each of these agencies plays an important role in facilitating EV adoption in the state and are important partners on ensuring the success of the NEVI program. For example, IEPA is responsible for several state and federal programs related to both electric vehicles and charging infrastructure for light, medium, and heavy-duty vehicles, including the state's Volkswagen Settlement, and the Illinois Electric Vehicle Rebate Program. ICC is responsible for regulatory issues related to electric utilities, including the Beneficial Electrification Plans developed by ComEd and Ameren Illinois. DCEO is the implementing agency for the 2021 [Reimagining Electric Vehicles in Illinois](#) (REV Illinois Act) designed to bolster Illinois electric vehicle manufacturing and grow the ecosystem to create new capacity for electric vehicles, batteries, and other component part production. DCEO also has a role in helping Illinois residents prepare for and train to capitalize on jobs in the clean energy industry, and providing support to workers and communities that have historically faced economic and environmental barriers, bolstering a diverse workforce in the clean energy industry.

### Community Engagement Outcomes Report

IDOT established the following objectives for initial community engagement around NEVI implementation:

- Inform Illinois communities, municipal leaders, legislators, private sector EV charging station owners and operators, utilities, advocacy groups, and the public of key steps towards



implementation of the NEVI program in Illinois and the opportunity the NEVI program represents

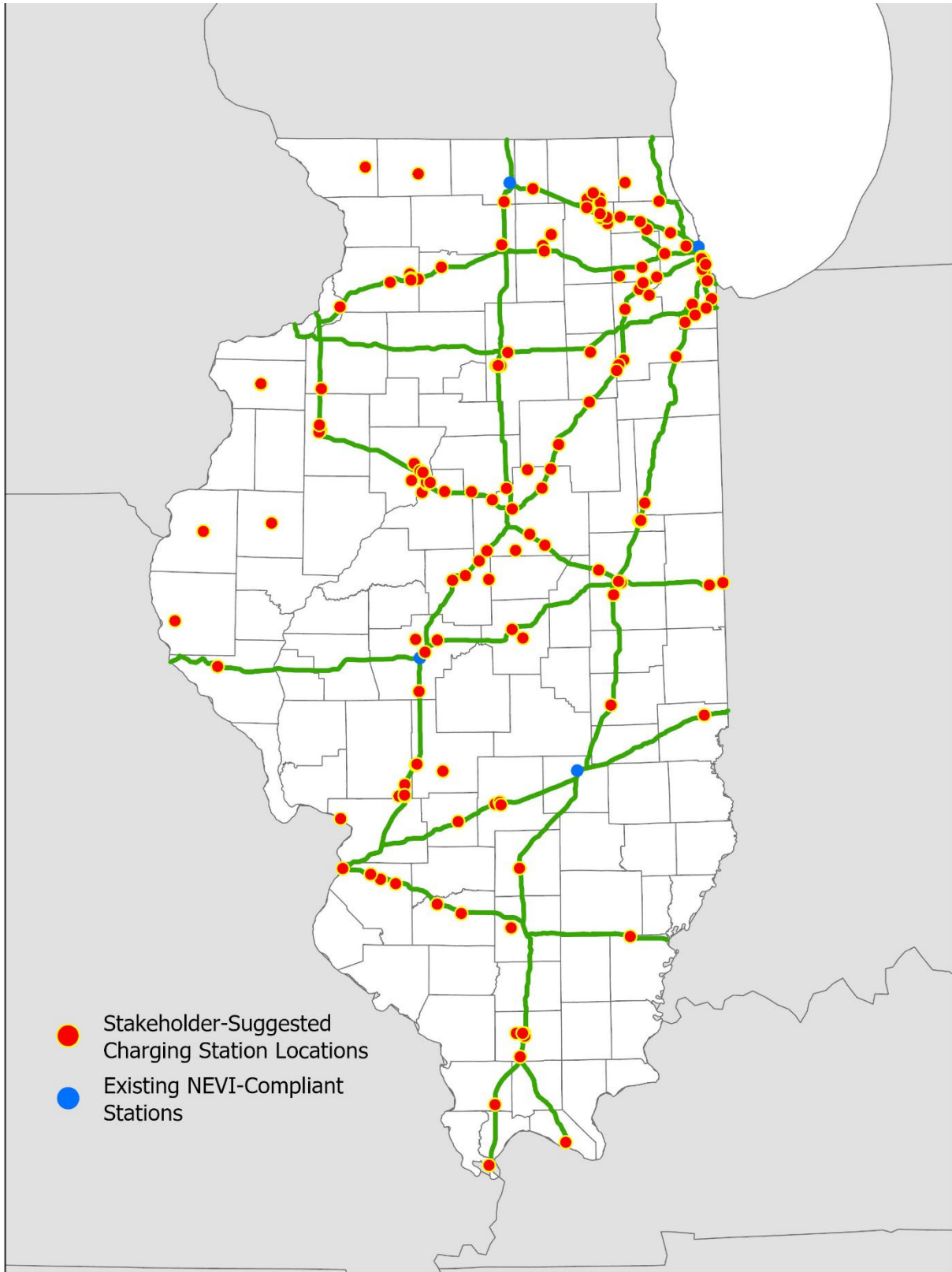
- Collect feedback from stakeholders that improves Illinois’ approach to NEVI implementation
- Identify potential risks and roadblocks of NEVI implementation and solutions to address these issues
- Ensure engagement from a diverse group of stakeholders, including those representing marginalized communities

### Activities and Outcomes

Between July and November 2022 IDOT held a series of three public meetings on the NEVI program. The first of these meetings on July 28<sup>th</sup> provided an overview of the NEVI program and the considerations going into the development of the plan. The second meeting on September 27<sup>th</sup> walked through the detail of the submitted NEVI plan and solicited feedback on the topics of most interest to stakeholders for future discussion. The third meeting, on November 29 was focused on two of the topics that received the most interest in meeting #2, prioritizing locations for charging infrastructure. Recordings of the three meetings are available on IDOT’s NEVI website: <https://idot.illinois.gov/transportation-system/environment/drive-electric.html> In each of the meetings, IDOT surveyed attendees for feedback on elements of the NEVI program. These survey results helped to inform implementation steps and will continue to inform the Department as the procedure for the first round of NEVI funding is finalized in the coming months.

IDOT’s NEVI website is the home base for information on the NEVI plan and provides several avenues for stakeholder engagement. In addition to links of the recordings of workshops, the website contains a link to share feedback on the plan. Anyone who fills out the feedback link has the option to sign up to receive email updates on the NEVI program. IDOT staff email this list when there are significant developments, such as stakeholder meetings, open requests for information, solicitations for consultant assistance, and major announcements from the Federal government such as the Charging and Fueling Infrastructure Notice of Funding Opportunity. IDOT’s NEVI website also contains a link to an interactive ArcGIS map that allows stakeholders to submit suggestions of EV charging locations. A total of 204 suggested locations were submitted. These location suggestions helped to inform the 2023 plan update’s identification of additional station locations.

Figure 3- Stakeholder-Suggested locations for EV Charging Infrastructure



In addition to IDOT-hosted stakeholder engagement events, IDOT staff presented at a large number of stakeholder meetings since submission of the 2022 NEVI plan. These audiences included Chambers of Commerce, local elected officials and policymakers, Metropolitan Planning organizations, Professional Societies, and advocacy organizations. These types of meetings are an essential way to increase IDOT's reach to audiences that are not already connected to IDOT.

Comments from the public meetings as well as emails, letters, and additional smaller stakeholder meetings conducted between July 15 and August 30 were summarized in a Public Comment Summary document, also posted on the IDOT NEVI website. This document contains a summary of the type of feedback received as well as responses from IDOT. Key areas of feedback included text in the 2022 NEVI plan that proposed requiring each station to support medium and heavy duty electrification through higher power levels and pull-through designs. Based on concerns expressed by stakeholders that these requirements could significantly limit the number of viable sites for public charging and/or increase costs to an extent that would make charging installation infeasible in some areas of the state, IDOT revised its approach to take a more site/corridor specific approach to these issues. These edits are reflected in several areas of the 2023 Plan Update. (See Appendix A)

In addition to the three public meetings, stakeholder engagement on the EV adoption and suitability study in partnership University of Illinois Urbana-Champaign, begun in March 2022, continued throughout the fall and winter of 2022. This project, which had a goal of modeling future EV adoption and evaluating the number and location of chargers needed to reach the state's EV goals, including meeting federal Justice40 requirements, included a steering committee with representatives from public agencies, advocacy groups, industry, and academia. In particular, the steering committee provided feedback into the technical process of measuring and weighting criteria for evaluating EV charging station location suitability. The final report was completed in December 2022 and includes more detailed descriptions of the outcomes of this stakeholder process. The report is available on the UIUC website at <https://apps.ict.illinois.edu/projects/getfile.asp?id=10398>.

IDOT conducted initial outreach on the topic of NEVI, Justice40, and disadvantaged communities. In particular, IDOT staff reached out directly to organizations working on transportation issues in marginalized communities. This outreach resulted in a meeting in fall 2022 with the members of the Illinois cohort of the Towards Equitable Electric Mobility (TEEM) program. In addition, IDOT staff worked to reach disadvantaged communities outside the Chicagoland area by engaging with a state effort to reinvest in communities with recent or planned coal plant retirements.

IDOT continued to engage with both major investor-owned utilities (Commonwealth Edison and Ameren Illinois) and the Illinois Municipal Utilities Association throughout the past year. Both [ComEd](#) and [Ameren](#) have provided maps that show where along designated Alternative Fuel Corridors their utility could provide the necessary power to support charging infrastructure that meets NEVI requirements and where significant additional grid investments would be required. IDOT has continued to engage with the utilities as the Department looks to refine its process for reviewing applications for NEVI funding. The priority is to ensure an efficient process for applicants, utilities, and the department that provides sufficient site-specific information to understand how electric capacity needs would affect the cost and timeline of a potential NEVI project.

Finally, in May 2023 IDOT released a Request for Information (See Appendix B) intended to collect information from EVSEs about industry best practices. Responses to the RFI were due by the end of May, and will inform grant program development.

## Contracting (Updated)

IDOT has taken its first steps toward contracting in the NEVI program based on the risk analysis and project delivery options study completed by IDOT in the fall of 2022. In February 2023, IDOT advertised in the Department’s Professional Transportation Bulletin for consultant assistance for NEVI implementation (Advertisement attached as Appendix C) This consultant will assist IDOT in setting up and administering a grant program to fund the installation and maintenance of electric vehicle charging infrastructure in compliance with all federal requirements developed by the US Department of Transportation and Joint Office of Energy and Transportation. Tasks included in this project include development of the grant program and selection processes, grant agreement development and administration, grantee support related to environmental review, utility coordination, and permitting issues, and data reporting. To ensure that a wide range of firms with specialized expertise in EV charging infrastructure were able to submit statements of interest, IDOT waived vendor prequalification requirements and communicated about the solicitation with everyone who requested email updates on the NEVI program in addition to the department’s standard procurement communications. A firm was selected by the department in May, and IDOT and the consultant are working through scope negotiations and finalizing contract terms.

While working to finalize the contract for EV implementation assistance, IDOT has moved forward in refining a framework for a grant program to competitively select sites and EVSE providers to install, operate and maintain EV charging infrastructure. IDOT aims to create a process that will encourage innovation and participation from communities, small businesses, and others as potential site hosts and ensure efficient use of federal funding under NEVI. This framework will be further developed with the assistance of the EV implementation consultant and in coordination with stakeholder and community engagement for potential site identification and selection. Possible scoring metrics include:

- Location characteristics, including distance between stations, distance away from the interstate, and other factors as identified through public outreach
- Power requirements and ability of potential site hosts to meet the NEVI program guidance requirements and minimum standards
- Benefits for rural areas and disadvantaged communities
- Operation and maintenance planning, including plans to achieve minimum reliability measures
- Utilization of disadvantaged and small businesses
- Workforce development and local economic development benefits
- Plans to meet data sharing and reporting requirements
- Warranty requirements and handover clause or plan for operation and maintenance

## Plan for Compliance with Federal Requirements

IDOT is working to ensure that the planned competitive grant process will comply with 23 U.S.C., 23 CFR 680 and all applicable requirements under 2 CFR 200, as well as relevant state procurement laws. At present, IDOT anticipates that existing contracting authority will allow IDOT to award grants for the construction/upgrade, operation, and maintenance of EV charging stations. The Department has substantial experience in managing grant programs, such as the Illinois Transportation Enhancement Program. However, IDOT has not historically made grants to private sector recipients, and as a result the NEVI program presents unique issues. IDOT staff are working with FHWA Division staff to identify these issues and ensure a successful roll out of the NEVI program. While IDOT does not currently anticipate that this will be necessary, the department is exploring the option of submission of a SEP-14 request in order to utilize policies and procedures developed by IDOT and modeled off the state’s existing

EV charging infrastructure grant program administered by the Illinois EPA.

IDOT will ensure that proposals include a scope of work, project timeline and schedule, and budget details. Proposals could involve specific site locations or specific segments with multiple sites. Selected contractors will be required to communicate progress and any project delays or issues to the oversight consultant (if established) and IDOT, as well as a plan to mitigate project delays. Proposals will also be required to include methods for ensuring program communications and maintaining daily customer services for the EVSE. Contracts will comply with all relevant Illinois laws and regulations including the Illinois Procurement Code and the Illinois Works Jobs Program Act

## Civil Rights

IDOT, through the procurement process, will require all qualified vendors comply with the following federal legislation to ensure full compliance.

- The American with Disabilities Act of 1990 (ADA)
- Title VI of the Civil Rights Act of 1964
- Title VIII of the Civil Rights Act of 1968

As part of ensuring stations are accessible for people with disabilities and meet the standards of the ADA, Illinois will follow the guidance of the Access Board, once that guidance is available. The Office of Civil Rights at IDOT will ensure all prime contractors, sub-contractors, and workers understand all the provisions of The American with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, Title VII of the Civil Rights Act of 1964 by conducting workshops and trainings across the state to ensure compliance with NEVI Projects that are federally funded.

## Existing and Future Conditions Analysis (Updated)

In keeping with FHWA guidance encouraging states to submit a more streamlined plan update focused on areas where changes have been made, much of the detailed discussion of the state’s geography, terrain, and climate patterns has been removed. Stakeholders interested in this discussion should review Illinois’ approved Year 1 NEVI plan.

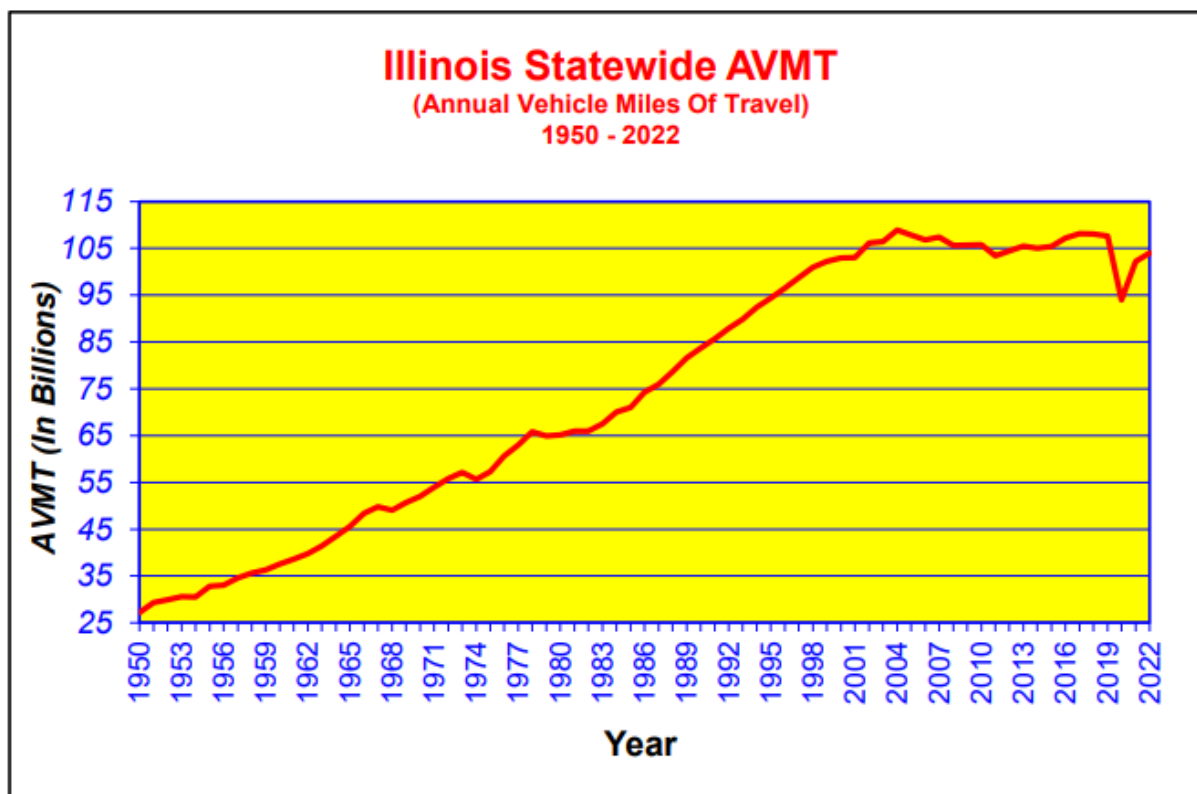
### State Geography and Terrain

The State of Illinois is in the Midwest region of the United States bordered by Wisconsin to the north, Iowa and Missouri to the west, Kentucky to the east and south, and Indiana to the east. The state borders Lake Michigan in the northeast, the Mississippi River to the west, Wabash River to the east and the Ohio River to the east and south. Illinois lies midway between the Continental Divide and the Atlantic Ocean, and the state’s southern tip is 500 miles north of the Gulf of Mexico. Illinois’ total population is 12.67 million.

### State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs (Updated)

Illinois’ connection to two major watersheds (the Mississippi River and the Great Lakes), 13 primary interstate highways, and the convergence of all Class I railroads situates the state at the center of the nation’s transportation network, particularly when it comes to intermodal freight and logistics. In 2022, annual vehicle travel in Illinois amounted to more than 104 billion miles, and the vehicles on Illinois roads consumed 4 billion gallons of gasoline.

Figure 4- Illinois Statewide Annual Vehicle Miles of Travel (AVMT) 1950-2022



While electric vehicles still represent a small share of the overall passenger vehicle fleet of more than 7 million vehicles, EV adoption in the state is rapidly picking up pace. Between July 2022 and July 2023 the number of electric vehicles registered in the state increased by over 60 percent, from 46,645 to 76,071. Projections indicate that the state could reach 100,000 registered EVs by the end of 2023, and is on track to meet statewide goals of 1 million EVs on the road by 2030. Construction of public EV charging infrastructure is also picking up speed but has a long way to go to meet the state’s goals. Currently, Illinois has 164 publicly accessible Direct Current Fast Chargers (DCFC) stations, for a total of 842 ports. Implementing the NEVI program will provide critical infrastructure to the state’s growing EV fleet and provide prospective EV buyers the confidence that public charging will be available on longer distance journeys.

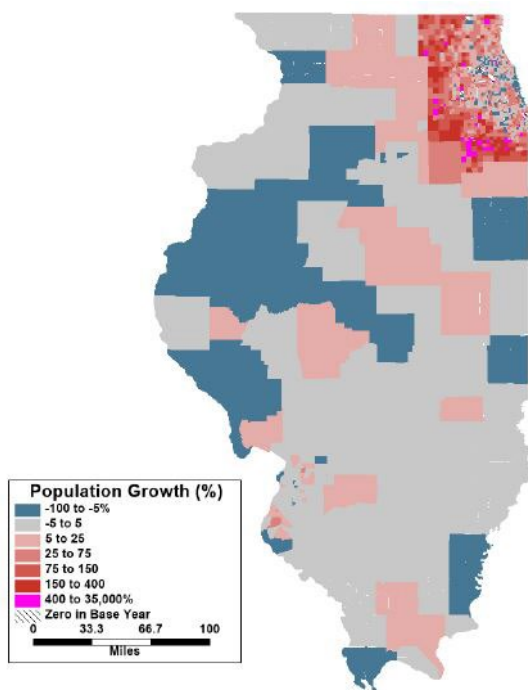
Illinois faces long-term challenges in ensuring that transportation funding keeps up with needs for system investment. While Rebuild Illinois and the Infrastructure Investment and Jobs Act are providing critical opportunities to invest in the maintenance and enhancement of the state’s transportation system, construction costs are increasing faster than inflation, vehicle miles of travel are exhibiting flat growth, and vehicles are becoming more fuel efficient. As the number of electric vehicles in the state increase,

IDOT will continue to need to maintain nearly 16,000 centerline miles of roadway and more than 7,800 bridges under state jurisdiction. As part of CEJA implementation, IDOT has been conducting a study to better understand the impacts of electric vehicle adoption on transportation revenue in the state and identify strategies to ensure sufficient funding to maintain and enhance the state’s transportation network. This study, which included engagement with a wide range of stakeholders in the state, is expected to be complete later in 2023.

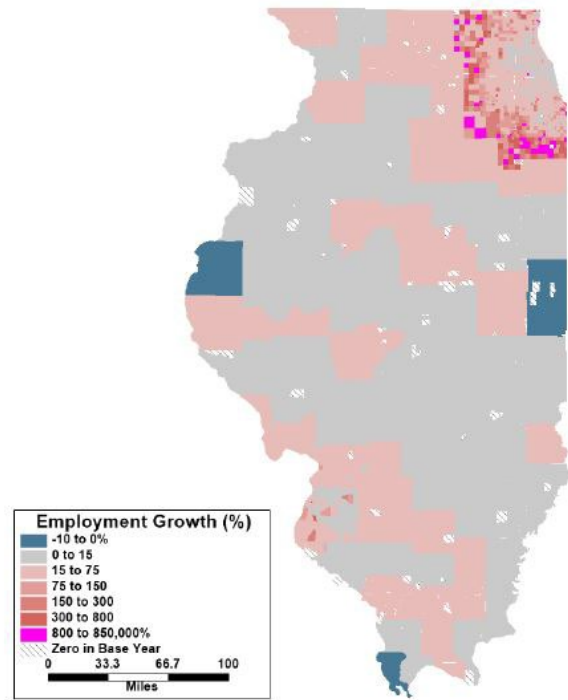
IDOT anticipates that population and employment growth in the state through mid-century will be largely concentrated in suburban and exurban portions of the Chicago metropolitan region (see figures 6 and 7). Current land use patterns in these areas are auto-oriented, with limited access to high frequency public transit. With Rebuild Illinois including an additional \$50m/year for bike/pedestrian facilities, transit’s first ever pay-go revenue source, and funding to improve the State’s public ports to encourage freight movement via waterways the intent is to invest in a range of strategies to reduce greenhouse gas emissions from transportation, including rapid adoption of electric vehicles and land use and transportation policies that reduce travel demand and shift travel to biking, walking, and transit, Illinois will be on track to meet the state’s climate goals.

Figure 5- Illinois Projected Population Growth (2017-2045)

Figure 6- Illinois Projected Employment Growth (2017-2045)



Source: RSG



Source: RSG

## Freight Needs

Freight transportation is integral to the Illinois economy. Originally, because of its waterways and central location, and then because industry and other modal transportation networks developed on similar

patterns, Illinois is a national freight crossroads, transporting goods from all directions. Illinois is the third largest state in terms of freight movement by tonnage and value. Today, over 1.2 billion tons of freight, valued at nearly \$3 trillion, are moved to, from or within Illinois.<sup>1</sup>

Illinois is also a burgeoning hub for medium- and heavy-duty EV manufacturing, with a Lion Electric manufacturing facility in Joliet and Rivian’s manufacturing facility in Normal, Illinois. The 2021 Reimagining Electric Vehicles in Illinois is designed to bolster Illinois EV manufacturing and to grow the ecosystem to create new capacity for EV vehicle and component parts production. These existing conditions point to the importance of heavy-duty charging infrastructure in the state. While the NEVI program is focused on passenger vehicle charging, the state will look for opportunities for synergies, such as coordination, for example: coordinated utility planning in areas that are likely to see both NEVI investments and medium and heavy duty electrification. As a part of evaluation of potential NEVI sites, IDOT will consider applications that include design elements or other features intended to accommodate medium duty vehicles, and may encourage those design elements on freight corridors and where freight electrification provides benefits for disadvantaged communities.

### **Public Transportation Needs**

Illinois has the fourth-highest public transit commute mode share of U.S. states. Transit systems operate in 96 of the 102 counties in Illinois, with 452 million transit trips taken annually. Public transit systems nationwide saw significant ridership decline due to the COVID-19 pandemic, with these declines unevenly distributed by mode and rider demographics. In Illinois, as in the rest of the United States, bus transit systems saw smaller ridership declines than rail systems, and lower-income riders were more likely to continue to rely on public transit for commuting and to access other needed destinations.

Large and small transit agencies throughout the state are making commitments to electrifying their fleets, and the recent award of a Federal Transit Administration (FTA) Low-No competitive grant will increase these commitments among rural transit agencies. IDOT has committed more than \$32 million in Rebuild Illinois funding, \$12.3 million Low-No, and nearly \$5 million in FTA formula funding for electric and hybrid-electric buses to help spur this effort. In addition, many transit agencies are installing chargers at their bus storage facilities and along key high frequency routes in preparation for the transition.

As with medium- and heavy-duty vehicles used in goods movement, Illinois will look for opportunities to coordinate NEVI investments with other programs to support future transit electrification. There may be instances where NEVI sites can increase transit system resilience by providing backup charging capacity for paratransit vehicles.

---

<sup>1</sup> [Illinois State Freight Plan.](#)

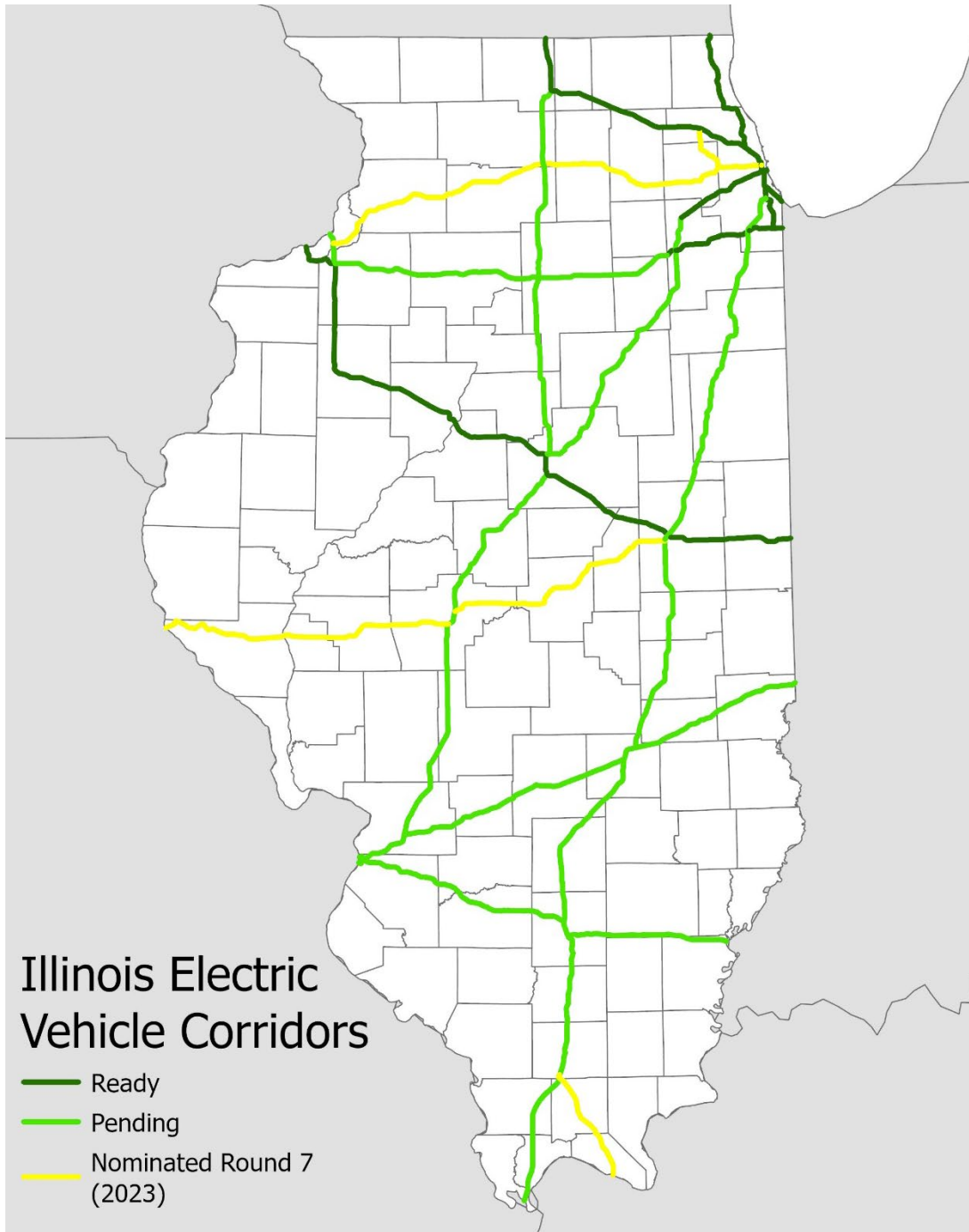


## Alternative Fuel Corridor Networks and Existing Charging Infrastructure (Updated)

Starting in 2016, IDOT began designating Alternative Fuel Corridors per Federal Highway Administration guidance. Over the past six years, Illinois has designated almost all its interstates for either propane, compressed natural gas, liquid natural gas, or hydrogen. The largest of these corridor networks in Illinois is electric. Electric Vehicle Ready Corridors are designated by the Federal Highway Administration based on the density of EV charging stations. These corridors may have signage on them directing drivers to nearby charging infrastructure. Illinois has 558 EV corridor-ready miles and 1,963 EV corridor-pending miles, including 386 miles nominated in the recent Round 7 call for Alternative Fuel Corridor nominations which closed on June 21, 2023. These corridors include:

Figure 7- Table of Alternative Fuel Corridors, Ready and Pending

Electric Vehicle Ready Corridors	Electric Vehicle Pending Corridors
<ul style="list-style-type: none"> <li>– <b>I-39</b> From Rockford IL to Sun Prairie WI</li> <li>– <b>I-55</b> From Chicago IL to Bolingbrook, IL</li> <li>– <b>I-74</b> From IL/IA border to IL/IN border</li> <li>– <b>I-80</b> From IL/IN border to Joliet IL</li> <li>– <b>I-90</b> From IL/IN border to Sun Prairie WI; and, from La Crosse WI to Sparta WI</li> <li>– <b>I-94</b> From Sun Prairie WI to IL/IN border</li> </ul>	<ul style="list-style-type: none"> <li>– <b>I-39</b> From Normal IL to Rockford IL</li> <li>– <b>I-55</b> From Normal IL St. Louis</li> <li>– <b>I-80</b> From Joliet IL to IL/IA border</li> <li>– <b>I-70</b> From St. Louis to Indiana border</li> <li>– <b>I-55</b> From Joliet IL to Normal IL</li> <li>– <b>I-57</b> From Chicago to Missouri border</li> <li>– <b>I-64</b> From St. Louis to Indiana border</li> <li>– <b>I-88</b> From East Moline to Hillside (Nominated Round 7)</li> <li>– <b>I-72</b> From IL/IA border to Champaign (Nominated Round 7)</li> <li>– <b>I-290</b> From Rolling Meadows to the Chicago Loop (Nominated Round 7)</li> <li>– <b>I-24</b> From I-57 to the IL/KY border (Nominated Round 7)</li> </ul>

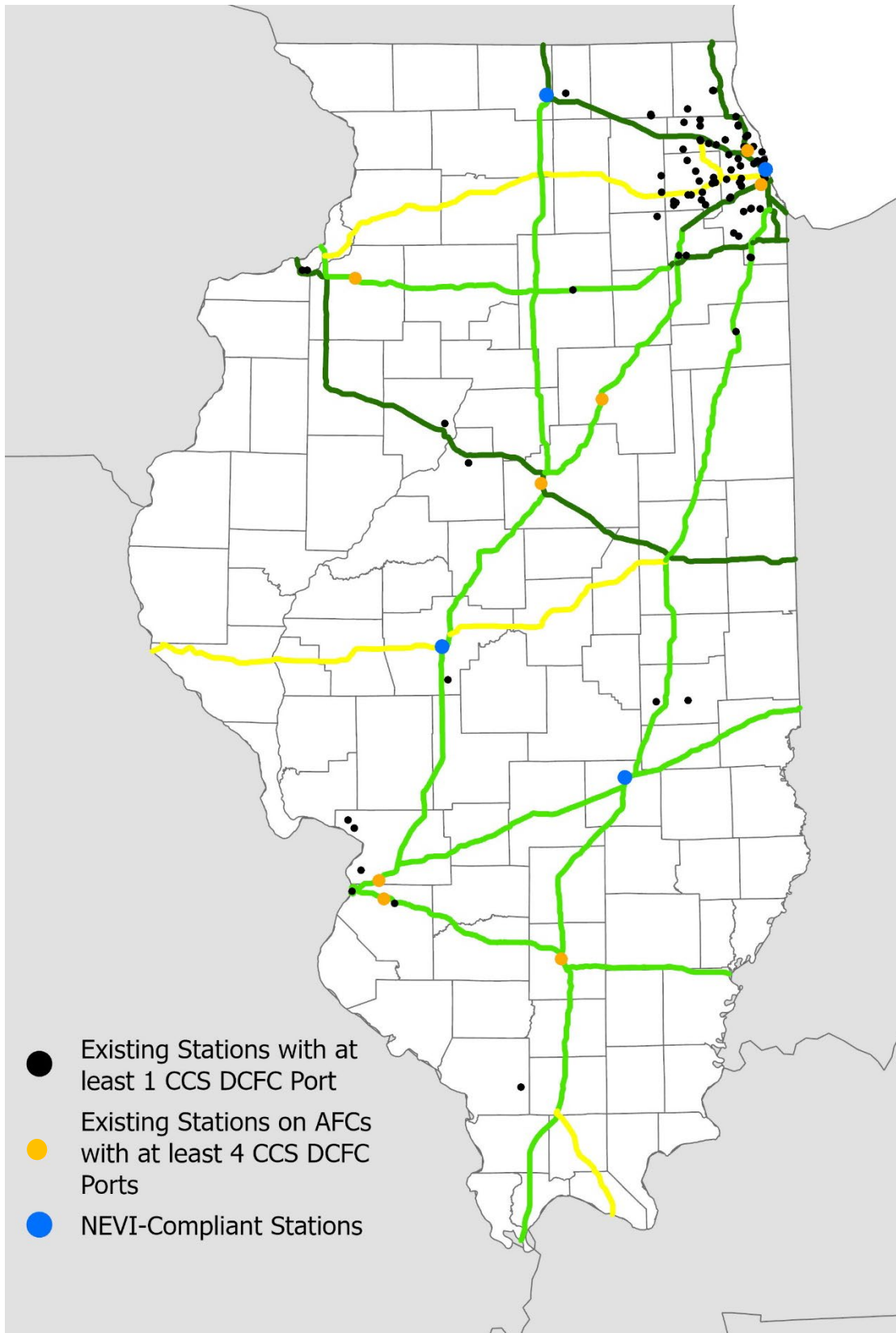


According to the Department of Energy’s Alternative Fuel Data Center, as of August 1, 2023, Illinois had 859 DCFC ports at 168 station locations. 238 of these ports have a combined charging system (CCS) connector type, the type that can be counted toward “fully-built out” for the purposes of NEVI implementation. Further narrowing based on proximity to Alternative Fuel Corridors and number of 150 kW DCFC ports with CCS connectors, 4 existing stations meet the minimum requirements to count toward fully building out the Illinois AFCs, and an additional 8 existing stations could qualify with upgrades to the power levels of existing ports. IDOT’s assessment of compliance with 23 CFR 680 for existing stations is based on information available on the Department of Energy’s Alternative Fuel Data Center and information available on station operator websites.

Figure 8- Table of Existing Charging Stations with at least 4 DCFC CCS ports on Designated AFCs

ID	Route	Location	Address	Number of DCFC Ports	Network	Count toward fully built out?
121725	39	Sam's Club 8297	7151 Walton St, Rockford	4	Electrify America	Y
121736	80	Gasey's Geneseo	100 E Bestor Dr, Geneseo	4	Electrify America	Potentially, with upgrades
121753	55, 74	Walmart 3459-Bloomington IL	2225 W Market St, Bloomington	4	Electrify America	Potentially, with upgrades
121761	55, 72	Walmart 3602 Springfield	1100 Lejune Dr, Springfield	4	Electrify America	Y
121778	55, 70	Walmart 361-Collinsville	1040 Collinsville Crossing Blvd, Collinsville	4	Electrify America	Potentially, with upgrades
149766	90, 94	Target T2613	1200 N Larrabee St, Chicago	6	Electrify America	Y
164397	64	Walmart 224 Mount Vernon	110 Davidson Ave, Mount Vernon	4	Electrify America	Potentially, with upgrades
167840	55	Wally's	1 Holiday Rd, Pontiac	8	Non-Networked	Potentially, with upgrades
170363	57, 70	Firefly Grill	1810 Avenue of Mid-America, Effingham	4	Electrify America	Y
201004	55	Target T2078	1940 W 33rd Street, Chicago	4	Electrify America	Potentially, with upgrades
228615	94	Whole Foods Sauganash	6020 N Cicero Ave, Chicago	6	eVgo Network	Potentially, with upgrades
228704	57, 64	Crossroads Centre	10850 Lincoln Trl, Fairview Heights	6	eVgo Network	Potentially, with upgrades

Figure 9- Map of Illinois EV Alternative Fuel Corridors and Existing Charging Stations



## EV Charging Infrastructure Deployment (Updated)

### Planned Charging Stations Toward a Fully Built Out Determination (Updated)

IDOT intends to utilize NEVI funds to fully build out public EV charging, at minimum, every 50 miles along designated EV corridors in the state per program guidance. The 2023 Update to the NEVI plan includes the identification of 46 locations needed to achieve full build out of the state’s Alternative Fuel Corridors. These identified locations include locations that do not currently have existing DCFC charging ports as well as locations with existing charging ports that could be upgraded to compliance with NEVI standards. This is an expansion of the number of locations identified in the 2022 NEVI plan to include station locations on recently-nominated AFCs as well as locations identified to meet FHWA guidance requiring stations within 25 miles of a corridor terminus. The locations identified on the map are approximate, and represent a group of interchanges that would be appropriate for meeting the NEVI program requirements for at most 50 miles between station locations. Interchange numbers are provided in Figure 10. These locations are subject to revision and refinement through the development of Notices of Funding Availability.

Illinois does not currently have any NEVI-funded stations under construction. However, IDOT is working to establish the selection process for the first round of NEVI awards, targeting a release by the end of 2023. IDOT envisions that this first round will result in selection of approximately 46 stations for either initial construction or upgrades to meet the requirements of 23 CFR 680. The goal with this first round of funding is to achieve a fully-built out designation of the state’s AFCs.

The table and map below provide additional detail on identified locations, estimated costs, and estimated year operational. In total, IDOT anticipates that full build out of the AFCs will cost approximately \$40 million. It should be emphasized that these details are planning-level estimates. In particular, costs were conservatively estimated based on expert analyses (such as Atlas Public Policy and ICCT) in order to understand funding needs for achieving full build out of the state’s Alternative Fuel Corridors and begin to plan for the scale of charging that may be funded by the NEVI program after that build out is complete. Illinois expects costs per port to be lower than estimated, as a key component of competitive selection will be price. In addition, while some sites are specifically noted as potential new or upgraded based on presence of existing infrastructure, IDOT plans to consider proposals to upgrade existing stations at all identified locations. These reductions in costs may be balanced by sites that have higher costs due to additional ports, higher power levels, freight accommodations, or other factors as proposed by applicants.

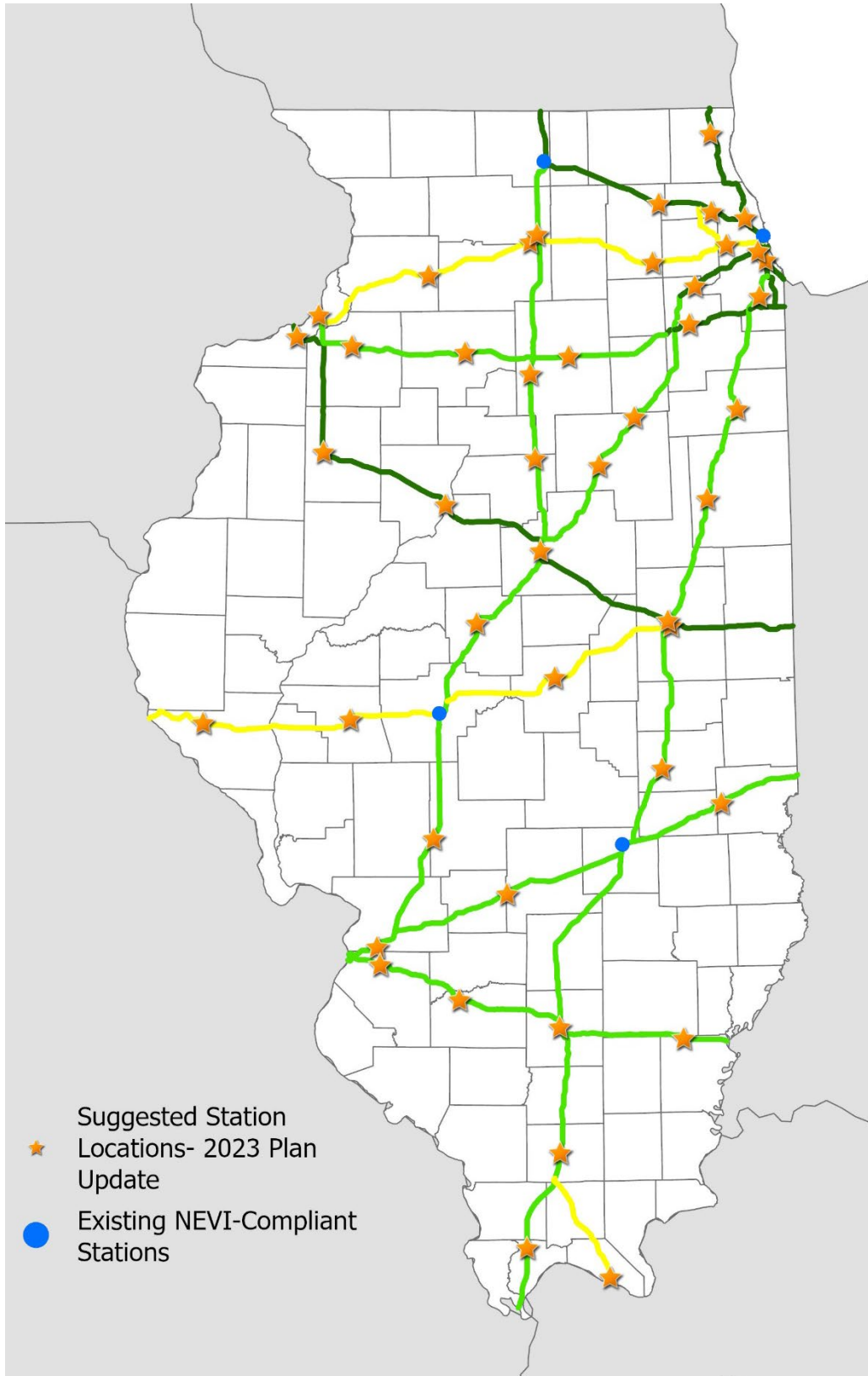
Figure 10- Table of planned NEVI-funded EV Charging Stations

State EV Charging Location Unique ID	Route	Location	Nearby Municipality	Number of Ports	Estimated Year Operational	Estimated Cost	NEVI Funding Sources (Choose No NEVI, FY22/FY23, FY24, FY25, FY26, or FY27+)	New Location or Upgrade?
ILNEVI1001	24	Exit 16 or 37	Metropolis, Vienna	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1002	39	Exit 14, 27, or 35	El Paso, Minonk, Wenona	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1003	39	Exit 54 or 57	Oglesby	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1004	39	Exit 99	Rochelle	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1005	55	Exit 263 or 267	Bolingbrook, Romeoville	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1006	55	Exit 217, 220, 227	Dwight	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1007	55	Exit 115, 119, 123, 126, 133	Lincoln, Broadwell, Elkhart	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1008	55	Exit 44, 52, 60	Litchfield	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1009	57	Exit 18 or 24	Ulin, Dongola	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1010	57	Exit 53, 54, 59, or 65	Marion, Johnston City, West Frankfort	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1011	57	Exit 190 or 203	Mattoon, Arcola	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1012	57	Exit 232, 235, 237, or 238	Champaign	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1013	57	Exit 280 or 283	Onarga, Gilman	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1014	57	Exit 312, 308, 315, 318, or 322	Kankakee, Bourbonnais, Manteno	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1015	57	Exit 339, 340, 342, 346, 348, 350, 353, 354, 355, or 357	South Suburban Chicago	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1016	64	Exit 117	Burnt Prairie	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1017	64	Exit 27, 41 or 50	New Baden, Okawville, Nashville	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1018	70	Exit 129 or 136	Casey, Martinsville	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1019	70	Exit 52 or 45	Greenville, Mulberry Grove	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1020	72	Exit 138, 141, 144	Decatur	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1021	72	Exit 64 or 68	Jacksonville	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1022	72	Exit 20	Barry	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1023	74	Exit 181	Champaign	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1024	74	Exit 88, 89, 92, 93, 94, 95 or 96	Peoria	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1025	74	Exit 51 or 48	Galesburg	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1026	74	Exit 5, 4, 3 or 2	Moline	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1027	80	Exit 137, 134, 133, 132, or 130	Joliet	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1028	80	Exit 81, 90, or 93	Ottawa, Utica	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1029	80	Exit 56	Princeton	5	Late 2024	1000000	FY 22/FY23	New Location

Electric Vehicle Infrastructure Plan – State of Illinois

ILNEVI1030	88	Exit 117 or 119	North Aurora	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1031	88	Exit 76	Rochelle	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1032	88	Exit 36, 41, 44 or 54	Sterling	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1033	80	Exit 1	East Moline	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1034	90/94	Exit 52, 53 56, 57	Chicago	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1035	90	Exit 47, 52, 54, 56, 59	Elgin	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1036	94	Exit 8	Gurnee	5	Late 2024	1000000	FY 22/FY23	New Location
ILNEVI1037	290	Any exit	Chicago, West Suburbs Arlington Heights, Mount Prospect	5	Late 2024	1000000	FY 22/FY23	New Location Upgrade or New Location
ILNEVI1038	90	Exit 70,73		5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1039	57/64	Exit 95, 94	Mt Vernon	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1040	80	Exit 19	Geneseo	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1041	55/74	Exit 160	Bloomington	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1042	70	Exit 11	Collinsville	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1043	55	Exit 197	Pontiac	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1044	55	Exit 286, 289, 290	Chicago	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1045	94	Exit 35, 37, 39, 41	Chicago	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location
ILNEVI1046	64	Exit 12,14	Fairview Heights	5	Late 2024	300000	FY 22/FY23	Upgrade or New Location

Figure 11- Map of Identified EV Charging Station Locations to Achieve Full Build-Out of Illinois Alternative Fuel Corridors





IDOT anticipates that funding recipients will own and receive revenue from charging infrastructure. As such, we expect that proposals will include a cost-share that will cover the 20% non-federal match requirements. In evaluating potential proposals, IDOT will prioritize projects that provide greater non-federal match shares in order to further leverage scarce dollars for EV infrastructure. This higher cost share may include private funding and/or incentives from utilities or local government programs; however, all project elements counted toward non-federal match must comply with federal requirements, such as Buy America. IDOT understands there may be limited circumstances where there is a need to incentivize the submission of proposals that are likely to be initially underutilized. IDOT is considering options to address this situation, which could involve requiring proposals for stations with high expected early utilization to also include stations with less initial use.

### Planning Beyond “Fully Built-Out” (Updated)

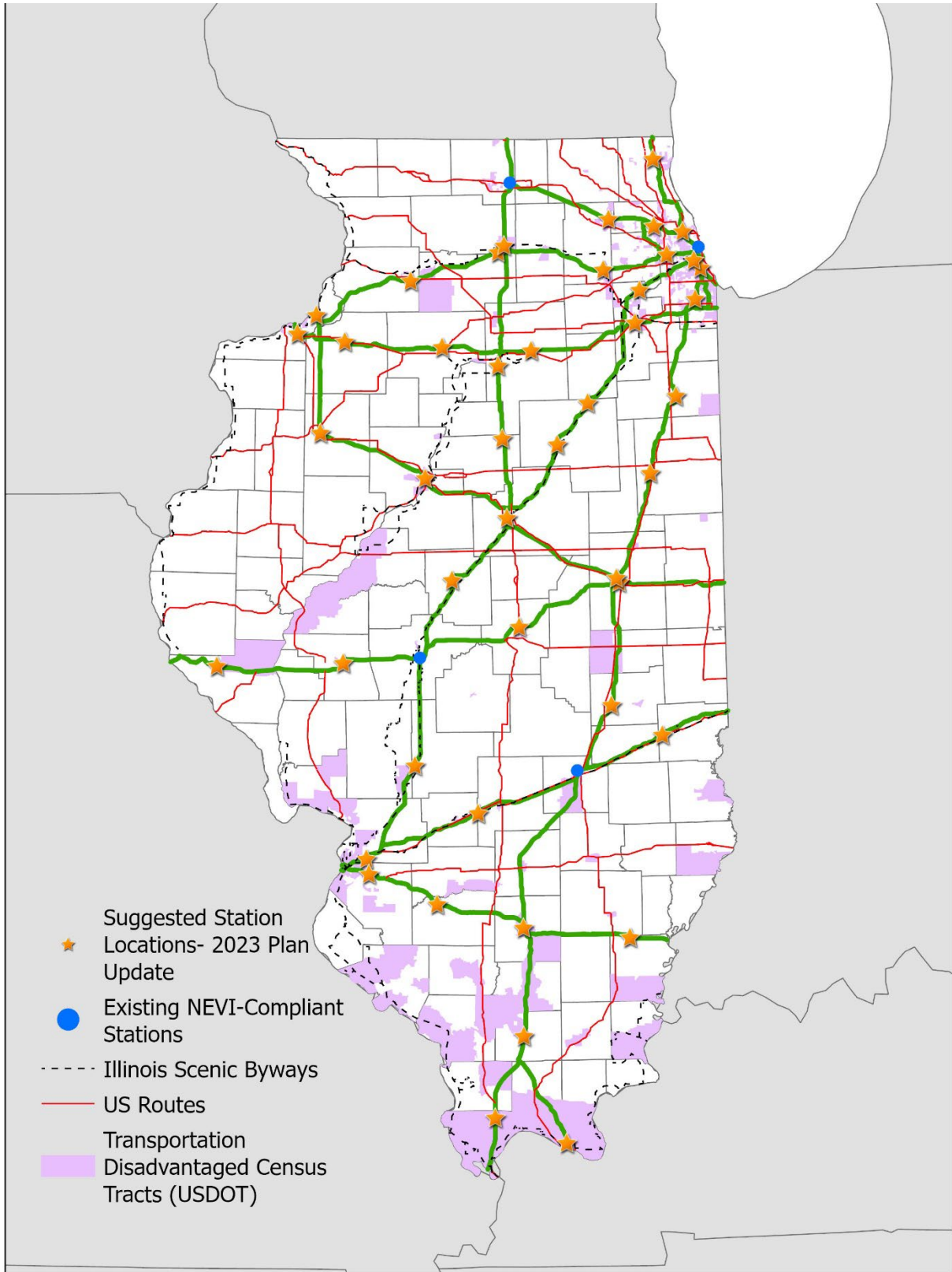
IDOT intends to complete full build out of the state’s AFCs by late 2024 or early 2025. At that point, IDOT expects to have approximately \$100 million in remaining funds to install EV charging infrastructure in the state. While IDOT is primarily focused on implementation of the first round of funding availability, staff are beginning to plan for future phases of NEVI funding. The following priorities have been preliminarily identified once full build-out of the AFCs is complete:

#### **Phase 2: US Routes and Scenic Byways**

Illinois has over 3,000 miles of non-Interstate US Routes. While some of these US Routes run parallel to routes identified as Alternative Fuel Corridors, many others run through parts of the state without Interstate routes, including areas in western and southern Illinois that have been identified by USDOT as Transportation Disadvantaged Communities. Adding charging stations along these routes is a priority for Illinois. Additional detail on density of charging locations and site considerations will be developed over the coming year with stakeholder input.

In addition to US Routes, Illinois has 7 Scenic Byways. These roads are federally designated due to their intrinsic archeological, cultural, historic, natural, recreational, and scenic qualities. As with US Routes, many of these Scenic Byways travel through parts of the state that are not along designated Alternative Fuel Corridors, including through Transportation Disadvantaged Communities south of St. Louis along the Mississippi and Ohio Rivers. The scenic byways are also a priority for Illinois NEVI implementation once the AFCs are fully built out due to their role in local economic development. A key target for additional stakeholder engagement as the state moves forward in planning future phases of NEVI implementation are the businesses and sites already identified as Points of Interest along the Scenic Byways.

Figure 12- Map of US Routes and Scenic Byways in Illinois



**Phase 3: Filling in Gaps (State Routes, additional support for Disadvantaged Communities, and system resilience/added capacity)**

Preliminary planning level estimates suggest that the cost of Phase 2 infrastructure may be approximately \$50 to \$60 million, which leaves additional NEVI funding available for a third phase focused on filling gaps not already addressed by Phases 1 and 2. By the time more detailed planning for this phase begins, Illinois will have learned a number of lessons from the installation of the first round of NEVI projects and will have data from performance measures indicating where gaps exist. IDOT envisions this phase identifying locations on State Routes in areas not already served by Interstates, US routes, or Scenic Byways, in addition to potentially adding infrastructure in places where capacity is not meeting demand or to provide system resilience. In addition, while the state’s Transportation Disadvantaged Communities have been a priority in identifying locations along AFCs in Phase 1 and US Routes and State Byways in Phase 2, a priority for Phase 3 will be ensuring that the state has met Justice40 requirements and that the state’s charging network equitably serves disadvantaged communities.

**Implementation**

IDOT is continuing to work through implementation details, many of which will be finalized with consultant support. This section contains minor updates, particularly in the area of known risks and challenges.

**Known Risks and Challenges (Updated)**

The past year has provided substantial additional clarity on the greatest implementation risks and challenges of the NEVI program. IDOT is working to address these risks to the extent possible through the state’s approach to contracting and program administration. Below are some risks that have been identified.

*Figure 13- Selected Potential Risks and Challenges*

Risk Name	Risk Description
Procurement challenges and associated legal issues	EV charging installation is a new activity for IDOT. While the department is confident in its legal authority to implement the NEVI program, working through procurement processes designed for highway construction causes a number of unforeseen issues to arise, and addressing them may cause implementation delays.
Insufficient IDOT Managerial resources	Insufficient IDOT resources to implement and manage contractors could cause project delays and jeopardize future funding rounds.
Delay in Environmental Permits	If Environmental permits and/or categorical exclusions are not obtained on time, the risk of costly delays increases
Change in charging standards	Changes in the EV charging industry (such as the increasing adoption of the NACS standard) may shorten the useful lifespan of early investments
Inability to negotiate host site agreements	Inability to negotiate host site agreements could affect EV station spacing/network connectivity and impact program goals

Poor site design leads to operational issues (e.g., puddling)	Poor site design could delay the project and delivery costs may increase.
Unanticipated escalation of construction materials	If cost of construction materials is higher than budgeted, the economic feasibility of the site host is affected
Increase in Utility Cost or Schedule	If utility upgrades or relocation is more costly or time consuming than expected, there could be an increase in project cost.
Material scarcity	Materials price increase due to scarcity caused by supply chain issues.
Low EV charging utilization	If EV charging utilization is low, the risk of operating at a loss increases
Bankruptcy or Financial Deterioration of Developer/Contractor/EVSE provider	If Developer/Contractor experiences financial difficulties during the construction and operation of site hosts, future funding will be jeopardized and EV network connectivity affected
Underutilized EVSE is viewed as "waste" of financial resources	If EVSE is underutilized, there could be a negative impact on IDOT's reputation as a responsible steward of transportation funds
Expected revenues not materialized	If EVSE provider/developer does not generate expected revenues, operating performance and site economics may deteriorate
"Reasonable profit" is not met	If the EVSE operator fails to achieve the target rate of return on charging stations (individually or collectively), they may seek to abandon the underperforming stations.
High demand for charging station installation	Competition for charging equipment with other states could increase costs and reduce the number of stations the state can install with NEVI program funding.
Data collection & reporting responsibilities are not met	If data gathering and EV reporting fails, future federal funding is at risk for lack of compliance with FHWA requirements.
Buy America requirements not achievable	If Buy America goal of 100% cannot be met, goods and products cannot be purchased with NEVI funds
"Unattractive" EV charging locations	If demand and EVSE utilization is projected to be low, it will be difficult to attract EVSE providers/operators
Workforce	The federal NEVI program has set targets for apprenticeship and workforce development and state policy also sets apprenticeship participation goals on certain public works projects. Given the current low unemployment rate, shortage of skilled workers in many engineering fields and the unique type of work in and emerging field (EV charging), there is a possibility that it may be difficult achieve the targets set at the federal and state levels.

Providing (or protecting) data sharing with 3rd parties	The desire of researchers and, potentially, private firms to acquire data from the operation of EVSE could conflict with consumer expectations and state/federal privacy protection provisions if the data is shared.
Labor unions	In addition to any workforce requirements set in Illinois law or the federal NEVI program, specific labor unions/bargaining units may have terms in their agreements that may affect procurement or deployment strategies.

Illinois may run into challenges related to sufficient electric grid capacity, particularly in rural areas of the state. Acceptable locations for charging stations may be limited or may require additional make-ready investments either by site hosts or utilities. This could increase the cost of these stations or delay the timeline for implementation.

## Equity Considerations (Updated)

To address racial equity and the climate crisis, the Justice40 Initiative sets the goal of delivering 40 percent of overall federal investment benefits in climate and clean energy, including sustainable transportation, to disadvantaged communities. Illinois is committed to realizing equity benefits as part of the NEVI program through technical analysis and targeted stakeholder engagement.

### Identification and Outreach to Disadvantaged Communities (DACs) in the State (Updated)

In addition to the transportation disadvantaged communities identified by the US Departments of Transportation and Energy and the draft Climate and Economic Justice Screening Tool developed by the Council on Environmental Quality, the state of Illinois is implementing several programs that define disadvantaged communities.

IDOT is coordinating with its partner agencies while the state updates its maps for identifying environmental justice communities per the Climate and Equitable Jobs Act provisions. Currently there are two State of Illinois programs that prioritize funding for specifically-identified disadvantaged communities. The Restore, Reinvest, and Renew program, managed by the Illinois Criminal Justice Information Authority, provides funding to support community organizations that serve neighborhoods most impacted by economic disinvestment, violence, and the war on drugs. The neighborhoods eligible for R3 funding can be found in a [web map](#) on the program website. The Illinois Power Agency administers the Solar for All Project, which helps make solar installations more affordable for income-eligible households and organizations through state incentives. Twenty-five percent of the funding from the Solar for All program is allocated to environmental justice communities, as identified in a [web map](#) on the program website. The Department of Commerce and Economic Opportunity is creating a new map based on the communities identified by these two programs for the purposes of prioritizing state investments in clean energy.

Geospatial analyses are critical for identifying disadvantaged communities, but meaningful outreach to and engagement is essential for ensuring the NEVI program achieves equitable outcomes. The

“Community Engagement Outcomes” section above details IDOT’s outreach specifically focused on reaching populations representing disadvantaged communities over the past year, but the department has more work to do in this area, particularly in the process of defining the program evaluation metrics for the NEVI program.

### Process to Identify, Quantify, and Measure Benefits to DACs (Updated)

Based on preliminary stakeholder engagement and building upon equity work taking place in other parts of the department, IDOT has identified the following categories of benefits and outlined an initial strategy for tracking them.

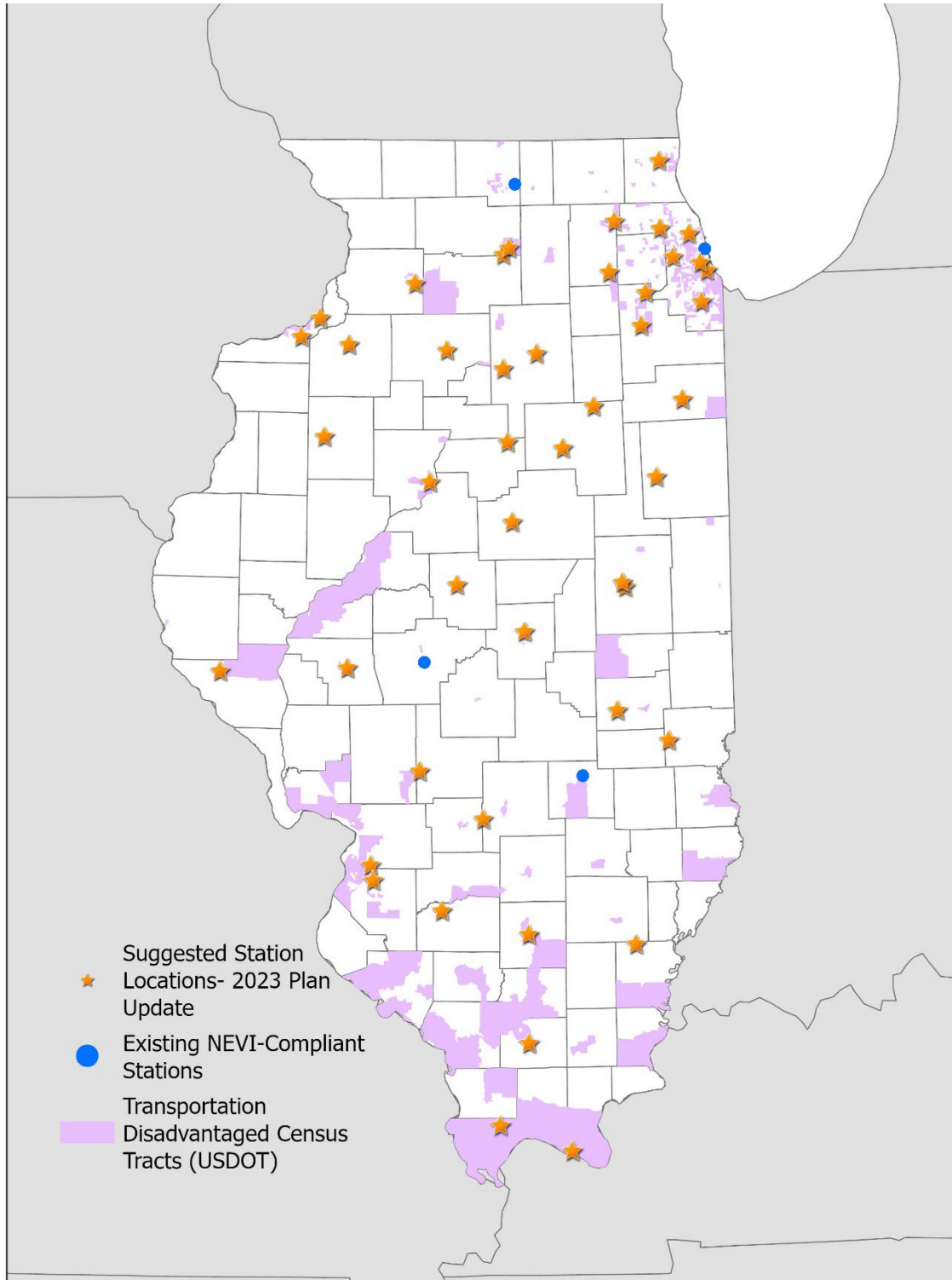
Benefits Category (examples)	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Improve clean transportation access through the location of chargers;	<p><b>Metrics:</b> Number of new EV charging stations everywhere and in DACs, proximity to public transit, and charging station usage rates.</p> <p><b>Baseline:</b> Existing charging infrastructure and public transportation accessibility everywhere and in DACs.</p> <p><b>Goals:</b> Significant increase in the number of charging stations and improved proximity to public transit.</p> <p><b>Data Collection &amp; Analysis Approach:</b> Gathering data from charging station operators and community surveys. Analyzing geographic data to assess distribution and accessibility.</p> <p><b>Community Validation:</b> Engaging with stakeholders to ensure charging stations are strategically located based on their needs.</p>
Decrease the transportation energy cost burden by enabling reliable access to affordable charging;	<p><b>Metrics:</b> Reduction in transportation costs everywhere and for DAC residents, percentage of low-income households using EVs.</p> <p><b>Baseline:</b> EV adoption rates among all population and low-income individuals.</p> <p><b>Goals:</b> Lowering transportation costs and increasing EV adoption everywhere and in DACs.</p> <p><b>Data Collection &amp; Analysis Approach:</b> tracking EV registrations</p> <p><b>Community Validation:</b> Consulting with stakeholders to verify the impact of charging on EV registrations in DAC.</p>
Reduce environmental exposures to transportation emissions;	<p><b>Metrics:</b> Air quality improvements (e.g., reduced particulate matter, nitrogen oxides) everywhere and in DACs.</p> <p><b>Baseline:</b> Existing air quality data everywhere and in DACs.</p> <p><b>Goals:</b> Significant reduction in air pollutants linked to transportation emissions.</p> <p><b>Data Collection &amp; Analysis Approach:</b> Monitoring air quality through environmental agencies.</p> <p><b>Community Validation:</b> Involving stakeholders in air quality monitoring efforts and seeking their feedback on changes observed.</p>
Increase parity in clean energy technology access and adoption;	<p><b>Metrics:</b> Clean energy technology adoption rates in DACs compared to other areas.</p> <p><b>Baseline:</b> Current adoption rates of clean energy technologies in DACs.</p> <p><b>Goals:</b> Achieving similar adoption rates as non-DAC areas.</p> <p><b>Data Collection &amp; Analysis Approach:</b> Collecting data from Illinois Commerce Commission and tracking clean energy installations.</p> <p><b>Community Validation:</b> Engaging stakeholders to ensure access to clean energy technologies is equitable.</p>

<p>Increase access to low-cost capital to increase equitable adoption of more costly, clean energy technologies like EVs and EV chargers;</p>	<p><b>Metrics:</b> Number of low-income individuals receiving the EV rebates or charging grants.  <b>Baseline:</b> Number of low-income individuals receiving the EV rebates or charging grants  <b>Goals:</b> Increasing the number of low-income individuals receiving the EV rebates or charging grants  <b>Data Collection &amp; Analysis Approach:</b> Comparing funding disbursements.  <b>Community Validation:</b> Collaborating with stakeholders to assess the effectiveness of financial support programs.</p>
<p>Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities;                  Increase energy resilience;</p>	<p><b>Metrics:</b> Number of residents trained and employed in clean energy sectors.  <b>Baseline:</b> Current clean energy job opportunities and training programs.  <b>Goals:</b> Boosting clean energy job opportunities and workforce training overall and in DACs.  <b>Data Collection &amp; Analysis Approach:</b> Tracking job training programs, employment statistics, and workforce development initiatives.  <b>Community Validation:</b> Working with stakeholders to ensure training programs meet their needs and provide meaningful employment opportunities.</p>
<p>Provide charging infrastructure for transit and shared-ride vehicles;</p>	<p><b>Metrics:</b> Increase in the availability and usage of EV charging infrastructure for shared mobility services.  <b>Baseline:</b> Existing charging infrastructure for shared-ride vehicles everywhere and in DACs.  <b>Goals:</b> Expanding charging infrastructure to support shared mobility options everywhere and in DACs.  <b>Data Collection &amp; Analysis Approach:</b> Usage of DCFC by transit agencies and shared-ride providers.  <b>Community Validation:</b> Involving stakeholders to identify suitable locations for charging infrastructure and ensuring equitable access.</p>
<p>Increase equitable access to the electric grid; and</p>	<p><b>Metrics:</b> Percentage of DAC households connected to the electric grid and reliability of grid services.  <b>Baseline:</b> Current grid connectivity and service reliability in DACs.  <b>Goals:</b> Achieving universal grid access and improving service reliability.  <b>Data Collection &amp; Analysis Approach:</b> Working with Illinois Commerce Commission to gather data from utility companies and conducting surveys on grid service satisfaction.  <b>Community Validation:</b> Seeking community input on grid services and addressing any issues identified.</p>
<p>Minimize gentrification-induced displacement result from new EV charging infrastructure.</p>	<p><b>Metrics:</b> Monitor demographic changes, housing costs, and community feedback on the impact of EV charging infrastructure.  <b>Baseline:</b> Existing demographics and housing affordability in areas where EV charging infrastructure is planned.  <b>Goals:</b> Preventing displacement and ensuring that the introduction of charging infrastructure benefits existing residents.  <b>Data Collection &amp; Analysis Approach:</b> Analyzing housing data, tracking community feedback, and monitoring housing affordability.  <b>Community Validation:</b> Engaging with communities to understand potential gentrification impacts and adapting plans accordingly.</p>

## Electric Vehicle Infrastructure Plan – State of Illinois

While no specific sites have been selected to receive NEVI funding, 22 of the 46 initial station locations (approximately 48%) identified in the 2023 are within one mile of a Transportation Disadvantaged census tract.

Figure 14- Transportation Disadvantaged Communities and 2023 Identified NEVI Station Locations





Additional potential benefits are likely to emerge through stakeholder engagement. It remains a challenge of the NEVI program that different communities are likely to identify different benefits as priorities. It will be difficult to add up disparate benefits, particularly ones that are less easy to quantify, such as minimizing gentrification. In addition, residents of disadvantaged communities and the organizations that support them are dealing with a wide range of issues and fielding requests from government agencies on a number of topics. Many of these groups do not have the resources to engage in detail on every specific program, particularly without state DOTs having easy processes in place to compensate organizations and individuals for their expertise. As a result, the department is currently scoping a broader public engagement planning project for the Office of Planning and Programming to make it easier to provide meaningful input on a range of ongoing planning efforts at the department. Illinois expects the process of evaluating equity benefits to be iterative, involving engagement with stakeholders, guidance from the US Department of Transportation, and learning from best practices of other states.

One often-overlooked component of equity analysis is that calculating the distribution of benefits to disadvantaged communities involves more than just understanding the impact of the NEVI program on marginalized communities. To ensure that 40% of the benefits accrue to disadvantaged communities, IDOT will need to assess total benefits in those same categories for the state as a whole as part of broader program evaluation.

## Labor and Workforce Considerations (Updated)

For Illinois to be a leader in clean energy, the State needs a workforce that is ready to support the growth of Illinois' clean energy economy. To achieve this vision, CEJA directed DCEO to develop multiple clean energy workforce training programs throughout the State, all of which take an equity-centric approach and prioritize participation for individuals and businesses from areas that have known economic and environmental barriers.

Illinois is currently developing these programs. One of the more expansive programs, the Clean Jobs Workforce Program, will create 13 workforce hubs around the State that will train individuals for clean energy jobs. The training curriculum will be developed with broad community and industry input, and will consider the required skills, certifications and core competency areas required to fulfill the job needs of Illinois' growing clean energy economy, which can include programs to train for electric vehicles and EVSE. Individuals participating in the Clean Jobs Workforce Program and other CEJA workforce programs will be supported by two programs that will focus on recruiting participants and connecting them with jobs and will provide wrap-around support services such as childcare, financial services, and transportation assistance to ensure these individuals can successfully complete the training programs.

Specific to EV workforce development, IDOT and DCEO staff have been meeting regularly over the past year to understand the size of the existing workforce, project future workforce demand, and identify key areas where additional state support could overcome barriers to EV workforce development. One of the activities undertaken this year was a survey of existing EV charging installers to understand their workforce needs and existing training and staffing plans.

Looking ahead, the Illinois Department of Transportation's Office of Business and Workforce Diversity in collaboration with the Illinois Department of Commerce's Offices for Minority Economic Empowerment, Regional Economic Development, and Entrepreneurship Innovation and Technology teams will work collaboratively to ensure access, equity, and inclusion in the NEVI Program. These diverse state agency teams will achieve this through marketing, outreach, and technical assistance across the State of Illinois' 10 economic development regions and IDOT's 9 Districts.

IDOT's annual "Today's Challenge, Tomorrow's Reward" (TCTR) conference provides opportunities for networking, skill-building, and knowledge sharing among our vendor networks. All firms doing business with the department, including primes and subcontractors, consultants, suppliers, and our various partners are welcome. IDOT will have workshops tailored to EV Infrastructure and workforce initiatives to ensure industry is aware of this new emerging industry and opportunity.

IDOT will leverage its resource centers in Districts 1-9 as well to ensure that across all parts of the state NEVI partners, minority and women-owned businesses, and workers can host events, trainings, and workshops for networking and supportive services. Specifically, IDOT will leverage its Supportive Services Consultants to provide the following services for minority and women-owned businesses that will work on EV Infrastructure projects below:

- Estimation and Bidding Assistance
- Website Development and Membership Fee Reimbursement
- Business Plans
- Access to Capital Support

As part of the procurement process IDOT will require vendors to prove full compliance with the NEVI program requirements as defined in the final rulemaking. This includes that all electricians installing,

operating, or maintaining NEVI compliant stations has appropriate licenses, certification and training to ensure that the installation and maintenance of NEVI complaint stations are performed safely by a qualified and increasingly diverse workforce of licensed technicians and other laborers.

This means these electricians must meet one or both of the following requirements:

- Certification from the Electric Vehicle Infrastructure Training Program (EVITP).
- Graduation from a Registered Apprenticeship Program for electricians that includes EVSE-specific training and is developed as a part of a national guideline standard approved by the Department of Labor in consultation with the Department of Transportation.

For projects requiring more than one electrician, at least one electrician must meet the requirements above, and at least one electrician must be enrolled in an electrical registered apprenticeship program.

All other onsite, non-electrical workers directly involved in the installation, operation, and maintenance of NEVI compliant stations must have graduated from a registered apprenticeship program or have appropriate licenses, certifications, and training as required by IDOT and the finalized NEVI program minimum standards and requirements.

## Cybersecurity

To be a successful candidate for the Illinois NEVI program a vendor must demonstrate at a minimum how they will address user identity and access management, selection of appropriate encryption systems, intrusion and malware detection, event logging and reporting, management of software updates, and secure operation during communication outages.

## Program Evaluation (Updated)

IDOT is still working to establish program evaluation requirements, which will be finalized through the contracting process with NEVI grantees. Because the state does not currently have NEVI-funded stations under construction, we are unable at this time to summarize or assess performance of EV chargers based on data submitted to the Joint Office. IDOT is continuing to monitor development of the federal reporting database, and will be working to comply with federal requirements.

## Discretionary Exceptions (Updated)

IDOT is not requesting any discretionary exceptions at this time. However, once the Department receives the first round of response to the NEVI NOFO, areas may emerge where the best sites in two identified areas are slightly farther apart than the required 50 miles. If that occurs, IDOT may request an exception as part of the 2024 NEVI plan update.