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EVHYBRIDNOIRE

Charging Toward Justice

How States Can Lead on Racial and Economic Equity through the National Electric Vehicle Infrastructure (NEVI) Program

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Executive Summary

The transportation sector emits [more climate pollution](#) than any other sector of the U.S. economy. Today, most of the country's light duty passenger vehicles and heavy duty trucks run on fossil fuels, which, in addition to warming the planet, [release](#) pollutants that worsen air quality and threaten public health. To enable widespread adoption of clean, electric vehicles (EVs), the Biden Administration [committed](#) to build out a national, public EV charging network. The cornerstone of this effort is the National Electric Vehicle Infrastructure program ([NEVI](#)), which provides \$5 billion to states to build charging stations within their borders. To ensure that the benefits of this program flow to disadvantaged communities (DACs), the NEVI program is covered by the President's [Justice40 Initiative](#), established by [Executive Order 14008](#).

Each state submitted a NEVI plan to the Federal Highway Administration (FHWA) to unlock this federal funding and all plans were approved for the 2022 funding cycle. To help broaden the field of view as this critical network further develops in coming years, this report examines the development of NEVI plans, in relation to equity, across 27 states through two lenses:

1. An analysis of states' NEVI plan development processes, specifically as it relates to public engagement, through interviews with stakeholders involved in state NEVI planning; and
2. An analysis of the approved state plans across 20 diverse states using equity indicators.

Although equity ultimately requires consideration along many axes, including gender and disability, our focus (and that of many states) was on race and class given the way the U.S. transportation system has historically perpetuated oppression

of low-income communities and people of color. Throughout this report the term disadvantaged communities is used to refer to pollution burdened and historically underserved communities (namely low income populations and communities of color) to maintain consistency with the language used by the federal government through the Justice40 Initiative. However, this term is not the language preferred by many people from pollution burdened and historically underserved communities, in addition to the authors.

We find that states varied widely in the depth of their consultations with community members, their approaches to engagement, and their identified benefits (and disbenefits) to communities. This report identifies best practices for planning and engagement strategies that center equity and benefit DACs, which can be applied both to future NEVI planning and other Justice40-covered federal programs.

Deeper community engagement is especially important as states complete build-out of the initial charger deployment along highways designated as Alternative Fuel Corridors ([AFCs](#)) and begin building chargers in communities. States will need to submit updated NEVI plans to the federal government annually through 2026, which provides the opportunity to improve upon community engagement processes and better tailor program benefits to DACs. The next round of state NEVI plans are due to FHWA by August 1, 2023. In these updated plans, states will now be [required](#) to include a "community engagement outcomes report" that describes how the state consulted communities (including DACs) throughout plan development. This will require robust engagement strategies that states should prepare for now.

Summary of Recommendations for States

To improve equitable public engagement and maximize benefits to DACs in future planning, states should:

Outreach

- Employ a wide range of outreach strategies to DACs, including social media, email lists, local media, and campaigns targeted specifically to communities of color (Black, Brown and Indigenous communities).
- Hold a mix of virtual and in-person meetings, including within DACs, to achieve broad geographic and demographic representation.
- Consult with community-based organizations, especially those that represent DACs, throughout the NEVI planning process.
- Actively solicit feedback from DACs through virtual and in-person meetings, listening sessions, public surveys, and recommendations from community-based organizations.
- Engage tribal nations, who were often entirely omitted from state NEVI planning but should directly benefit from the program.

Accessibility and education

- Provide education to people from DACs, including the basics of EV ownership, clean vehicle incentives, and how the NEVI program will directly impact their lives.
- Make all engagement materials simple and accessible to people of all levels of education and experience.
- Offer written materials and verbal translation in the primary non-English languages spoken in the state, especially those commonly spoken in DACs. This should include design, marketing and communications materials that are culturally appropriate and reflect the targeted communities.

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- Offer written materials and verbal translation in the primary non-English languages spoken in the state, especially those commonly spoken in DACs. This should include design, marketing and communications materials that are culturally appropriate and reflect the targeted communities.

Benefits to DACs

- Consider developing a state-specific equity mapping tool to identify DACs that better targets benefits while aligning with Justice40 goals.
- Co-determine Justice40 benefits with community members, allowing DACs to define which benefits are most important to them. States should also identify the metrics with which they will measure these benefits.
- Engage people from DACs to identify potential disbenefits and continue to engage directly with DACs to develop mitigation plans for perceived disbenefits.
- Prioritize applicants that commit to safety measures including site lighting and visibility so that drivers feel safe accessing chargers.

Planning

- Build agency capacity for subsequent rounds of NEVI planning, including training staff, leveraging federal funds, and involving community-based organizations early on in the planning process.
- Have a detailed plan to continue to conduct and improve upon engagement throughout the NEVI program, including after and in-between planning stages.

Transparency

- List the names and types of stakeholder groups that the state consulted during NEVI plan development.
- Publish stakeholder feedback in state NEVI plans, including verbatim comments and comment summaries.

Introduction

This report focuses on how NEVI can be implemented equitably and provide maximum benefits to historically underserved communities. The [Infrastructure Investment and Jobs Act](#) (IIJA), enacted in 2021, grants billions of dollars to states to deploy clean technologies and transition away from fossil-fuel infrastructure. IIJA's [NEVI program](#) provides \$5 billion from 2022-2026 to develop a network of public fast-charging stations for EVs within and across states, and is a key component of President Biden's [goal](#) to deploy 500,000 EV chargers throughout the country.

Equity should be central to the NEVI planning process, making the program's implementation an important test of the Biden administration's [Justice40 Initiative](#). Justice40 aims to provide 40 percent of the benefits from climate change and clean energy related spending to DACs that have been historically marginalized by a combination of socioeconomic factors and pollution burden.¹ Through these investments, Justice40 will allow the benefits of the clean energy transition to be targeted in Black, Brown, Indigenous, and low-income communities that have been disproportionately harmed by climate change and longstanding environmental injustices. In addition to being a Justice40 covered program, FHWA's NEVI [program guidance](#) stipulates that each state plan must include sections on public engagement, civil rights compliance, and equity considerations. These elements are required to demonstrate how stakeholders, including DACs, have been incorporated throughout the planning process.

Properly applying Justice40 goals, and FHWA's guidance, to the NEVI program is critically important as the transportation sector is the largest source

[of pollution](#) in the nation. DACs, specifically [low-income communities](#) and [communities of color](#), are disproportionately affected by transportation pollution, and have also suffered particular [harm](#) from past transportation policies and investments. However, due to the NEVI program's strict charger location requirements, states will need to be creative and thoughtful to achieve the goal of providing 40 percent of overall program benefits to DACs.



¹ Given this focus, for the purpose of this report equity refers to racial, ethnic and economic considerations of identity, and the report assesses equity at both the NEVI planning stages and within the approved state plans. Of course, this is only one lens among many to consider equity, and broader considerations of other identities and histories are also important in NEVI planning.

The Fast Lane to Equity: Satisfying NEVI Siting Requirements

Prior to receiving NEVI formula funding from the United States Department of Transportation (USDOT), each state must identify and propose AFCs on existing highways, which must be approved by FHWA. The IIJA [requires](#) NEVI compliant chargers to be placed every 50 miles along AFCs and no more than one mile from the nearest AFC exit.

DACs are not always located along AFCs, and NEVI's strict siting requirements limit how benefits can be delivered to those communities. However, once all AFCs have been fully developed according to these specifications, states can use discretionary NEVI funding to place charging stations in other public locations, such as within communities. **Therefore, states should complete and designate AFCs built-out as quickly as possible to unlock additional flexibility in funding allocation that can more effectively address equity and Justice40 goals.**

State NEVI plans must be revised annually. Each plan iteration is required to create additional co-benefits for the areas hosting the chargers, report on the outcomes of community engagement efforts, and must be approved by the FHWA in order to receive funds for the next fiscal year. This gives states and the federal government repeated opportunities to learn, and to steadily improve equitable deployment of the charging network.

This report seeks to enhance such opportunities. By examining strengths and weaknesses of the first year of NEVI plans, we highlight chances for deeper community engagement, and hence opportunities to better tailor benefits to DACs under Justice40,

even in the first year of the program – opportunities that future plans can seize as the network's complexity grows.

The remainder of this report is divided into two sections:

1. Public Engagement Analysis: Analysis of state NEVI plan development through stakeholder interviews in which we identified opportunities to amplify community voices in NEVI planning.
2. Plan Analysis: Analysis of approved NEVI plans in a cross-section of states using equity indicators to determine best practices for ensuring racial, ethnic and economic equity in future NEVI planning.

NEVI is Just One Piece of the Puzzle

States should also take advantage of the [Charging and Fueling Infrastructure Discretionary Grant Program](#) (CFI), which can more flexibly address equity gaps in EV charging prior to a full build-out of AFCs. Importantly, convenient charger locations alone won't make EVs accessible for all, and should be supplemented with thoughtful policy that addresses vehicle affordability, chargers in apartment buildings, rate design, payment technology, and other considerations to promote equitable EV access.



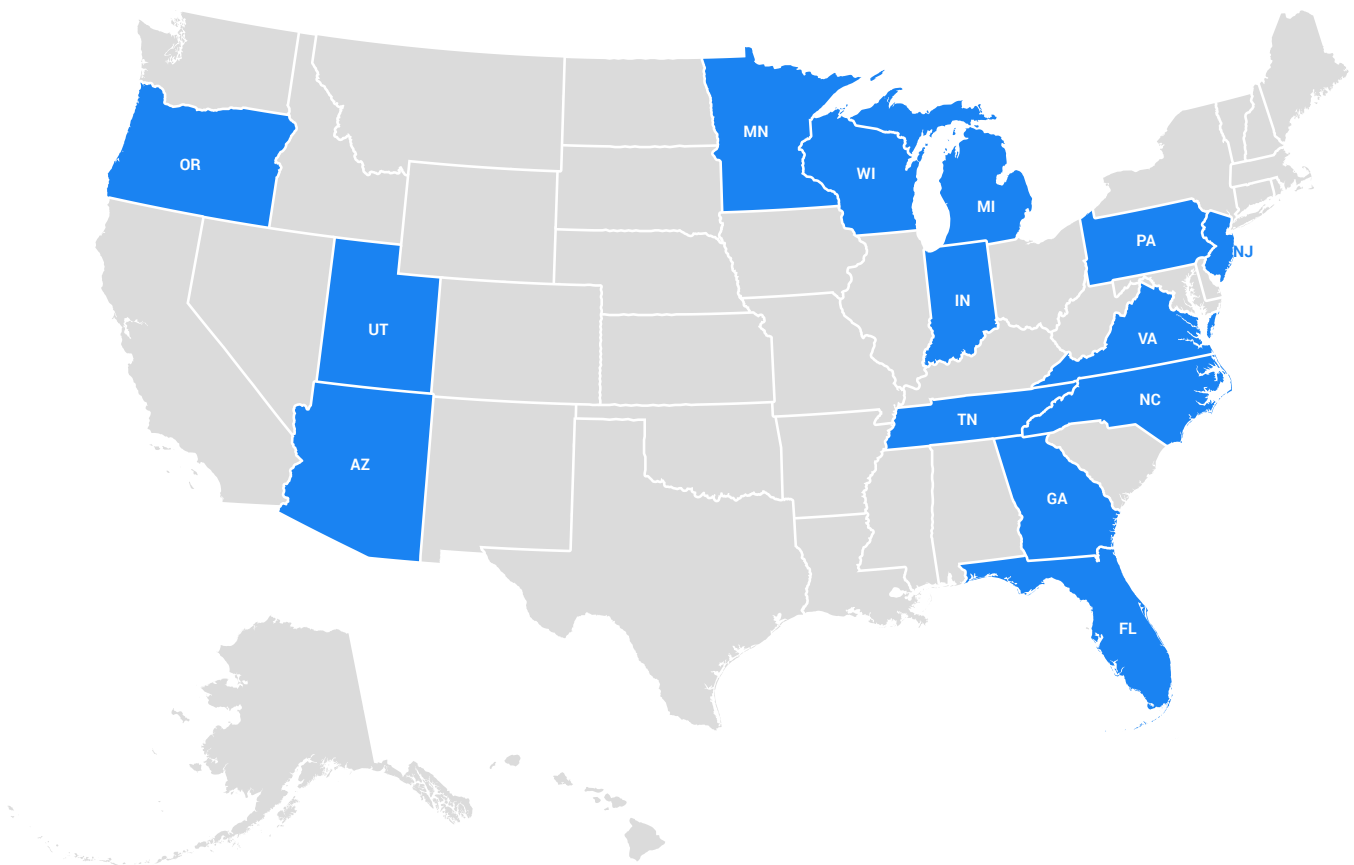
SECTION 1.
**Public Engagement Analysis:
Interviews with Stakeholders
Involved in State NEVI Planning**

Initial state NEVI plans were developed quickly – in less than six months. States varied significantly in their ability and capacity to genuinely engage communities in this first round. This section of the report highlights this variation, explains best practices, and recommends that the federal program continue to raise the bar for engagement in coming years based on these practices. We interviewed individuals who had engaged with state agencies during the initial plan development, including transportation advocates, experts and community organizers. Interviews were conducted with individuals and organizations in the following states: Arizona, Florida, Georgia, Indiana, Michigan,

Minnesota, New Jersey, North Carolina, Oregon, Pennsylvania, Tennessee, Utah, Virginia, and Wisconsin.

A complete methodology, including the list of interview questions can be found in the [appendix](#). In order to ensure that interview participants felt able to provide full transparency and detail about their experience engaging with their state DOT, we are providing the list of participating organizations rather than listing individual interviewees by name, which can be found in the acknowledgements section.

Figure 1: Map of States Included in the Public Engagement Analysis



General Findings on Public Engagement

After FHWA released NEVI [program guidance](#), states had fewer than 6 months to conduct meaningful outreach to stakeholders and complete all other NEVI planning requirements. Some interviewees described the 2022 NEVI plans as a “plan to make a plan.” Consistent with this truncated process, the interviews we conducted showed significant variation in engagement success across states.

As states work to improve strategies to deliver Justice40 benefits, it is critical to conduct meaningful engagement that intentionally seeks out and incorporates the perspective of people living and working in DACs. **Community stakeholders expressed a desire to be better informed and have the opportunity to provide input earlier in the process, through direct and targeted engagement by the state and through state proxies like community-based nonprofit organizations.** For our interviewees, meaningful engagement involves public, transparent, and ongoing opportunities to interact with state agencies and have their input incorporated into implementation strategies.

Interviewees emphasized that this level of engagement requires actively reducing barriers to access for DACs – including information barriers – and coming to the communities that the NEVI program would seek to benefit. DACs are often the hardest communities to reach, due to language barriers, geographic distribution, limited internet access, distrust of government intervention in their communities, work demands, and lack of transportation access. Interviewees in several states expressed concern that people from DACs were not adequately solicited or engaged in the NEVI planning processes.

With additional time for future planning, and the recommendations provided below, states

should conduct increasingly thorough stakeholder engagement that centers equity while allowing time to incorporate needs and perspectives of DACs. **Additionally, it’s critical that the Biden administration provide states with actionable recommendations, guidance and resources to enhance state capacity and ensure this program adheres to its Justice40 commitments. The findings in this report, and from further review, should directly inform updates to NEVI program guidance documents and grant program rules.**



Successful Engagement Approaches from the Initial NEVI Planning Stage

Though there was variation in state successes in this first round, individual states pioneered a range of positive approaches. The following section highlights effective public engagement strategies utilized during the first round of NEVI planning, based on our stakeholder interviews and an analysis of a select set of state plans, including creative and successful examples of outreach to DACs, comprehensive and ongoing engagement beyond the planning stage, and accessibility for people from DACs.

Outreach: Getting Information to Those Who Need It

Historically, DACs have been left out of government decision making processes, and states can avoid repeating this pattern through direct outreach to these communities. The following are simple strategies that states used to successfully engage targeted communities:

Social media campaigns: Several states conducted social media campaigns to reach a broader audience. In [Tennessee](#), officials posted on Facebook and Twitter five days a week for a month, sharing graphics explaining the program, ways for stakeholders to engage, in-person meeting announcements and reminders, and links to complete a public survey. The campaign successfully bolstered outreach; social media posts were viewed by over 100,000 individuals and generated 297 active engagements. While a useful tool, social media campaigns should be employed in addition to – not in lieu of – other strategies to reach communities and solicit feedback.

Targeted newspaper ads: To ensure that people of color were represented throughout the process, [Tennessee](#) published advertisements announcing public meetings in five different newspapers known

to be distributed widely in communities of color. Three of the papers targeted African-American communities, while two others targeted Latino communities and were translated into Spanish.

Comprehensive and Ongoing Engagement

State engagement efforts should not be limited to the NEVI planning stages. Given the time constraints of initial NEVI planning, states should have a clear plan to continue engaging communities throughout the 5-year NEVI process, including after and in-between planning stages. Leading approaches to continued engagement included:

Requiring private contractors to conduct public engagement: In most cases, NEVI-funded charging stations will be built and maintained by the private sector. As part of their NEVI plans, states are required to explain how they will select the contractors that will receive NEVI funding. Strong plans considered community engagement as a criteria in contractor selection. Oregon's contracting [strategy](#) centers around public-private partnerships that will allow for continued public input into private sector operations after the funds are distributed to partners. Oregon is working on developing Requests for Proposals that will require contractors to hold public meetings, center economic development and workforce training, and explain how they will meet Justice40 goals. These requirements will create accountability for private companies to continue delivering benefits to DACs beyond the five-year NEVI program timeline. However, in some states private contractors may not be the best situated to conduct community engagement; states should take the approach that allows for robust ongoing engagement, considering relationships with DACs and other state-specific context.

Regular regional workshops: Oregon plans to hold [regional in-person workshops](#) each year in DACs along AFCs. The workshops will educate and inform community members about the NEVI program as well as solicit feedback on community-specific challenges, best practices, and program benefits.

Conducting further engagement before discretionary funding rounds: Once states finish building out AFCs, they will have significantly more flexibility regarding siting. Free from location restrictions, states will use this as an opportunity to site chargers in DACs. Multiple states ([Utah](#), [North Carolina](#), [Oregon](#)) laid out clear plans to conduct additional public engagement before discretionary siting to inform charger locations and better define benefits. Advanced planning lets people from DACs know that there will be future opportunities to engage, and allows them to prepare to do so.

Accessibility: Meeting Community Members Where They Are

States should foster a convenient NEVI engagement process for DACs and ensure that community members are given the tools needed to meaningfully engage. Notable approaches to enable accessibility included:

Thoughtful in-person meeting locations and logistics: Interviewees reported that they felt most engaged by in-person meetings that were held at a variety of times and locations across the state. In May of 2022, Tennessee held [nine in-person engagement sessions](#) within or adjacent to DACs, including in each of the state's major cities and several rural areas. These sessions were held at publicly accessible locations outside of regular business hours so people did not have to miss work to attend. At the sessions, there were multiple ways for community members to engage and give feedback, including a questionnaire, written note cards, and asking presenters direct questions. As a result, Tennessee had a strong geographic representation in their engagement as a whole. To be sure, offering [hybrid access to meetings](#) is

important – we are not recommending a wholly in-person approach – but planning in-person meetings to be as welcoming as possible is important. There is also room for further improvement: for instance, providing food or childcare during evening meetings, especially, can make meetings much more accessible. [FHWA Division Offices](#) can clarify the community engagement activities that can be covered with NEVI funds.

Educational materials: Interviews revealed that not all people have sufficient understanding of EVs or charging routes to fully participate in the NEVI planning process, and many don't feel that the NEVI program is relevant to their daily lives. To address this gap, states should provide educational materials that are tailored to DACs, which respond directly to questions and needs from community members. For example, [Tennessee](#) ensured that the materials that they produced were easily understandable to all members of the public. This included simple graphs, charts, and maps that clearly explained the program's basics and geography. In a [recorded webinar](#), state officials deployed figures and images to explain the fundamentals of EV ownership and charging for non-experts. This allowed the public to give informed feedback and better engage with the NEVI process.



Public Engagement Toolbox: Best Practices from State Plans

Education

- Thoughtfully-designed in-person meetings
- Webinars
- Program-specific websites
- Fact sheets
- Attend existing community meetings as guest speakers

Outreach

- Targeted email lists (several)
- Social media campaigns
- Newspaper advertisements
- Local media coverage
- Affirming the value of community input

Feedback

- Public listening sessions
- Official public comments
- Regional public workshops
- Public surveys
- Interactive mapping surveys

An expanded list of potential engagement activities can be found in FHWA's [NEVI program Q&A](#). For a detailed look at engagement best practices, see US DOT's "[Promising Practices for Meaningful Public Involvement in Transportation Decision-Making](#)."



Recommendations for Improving Equitable Engagement in future NEVI Plans

Our interviewees also suggested ways that states can take actionable steps to make their engagement processes more equitable, representative, and inclusive. States should consider the following recommendations during subsequent rounds of NEVI planning:

Give People the Information They Need to Engage

Basic education is critical. Several interviewees mentioned that some community members in their state lacked the foundational knowledge on EVs and charging to be able to meaningfully engage with the planning process. Engagement materials such as webinars, surveys, and meetings were often too technical for someone not already invested in the process. Additionally, community members that do not own EVs were not motivated to participate because they could not see clearly how the program impacted their lives. In future rounds, we recommend states deploy strategies that are compelling to community members, such as:

- Provide basic education on EVs and charging infrastructure, such as how they work, benefits of EV ownership, the future of EV adoption and why the transition to EVs is so critical, even for households that don't own vehicles or won't be able to purchase an EV in the near term;
- Offer hands-on experiences that allows people to actually practice plugging in a vehicle and utilizing NEVI-compliant chargers. This will allow people to familiarize themselves with NEVI infrastructure as well as give states feedback on accessibility and convenience of the chargers themselves;
- Educate communities on [clean vehicle incentives](#) in the Inflation Reduction Act (IRA), as well as any relevant state-level incentives, how they stand to bring down the cost of purchasing and owning an EV, and how these investments compliment one another;

- Clearly explain how the NEVI program can benefit communities, including community job pipelines, expanded tourism, improved air quality, etc.;
- Clearly explain how public charging can change the community outlook, including ensuring that chargers benefit people living in the community now, and addressing expressed concerns that EV charging infrastructure can drive up property values and [contribute to gentrification](#) and displacement;
- Simplify materials to make information accessible to people at all levels of education; and
- Provide materials in various languages, especially those commonly spoken in DACs within the state.

Engage All Levels of Community

States should ensure that all voices are heard across the state and in communities. Within DACs there is a range of life experience and perspectives that states should seek to understand, including workers of all skill levels, business owners, community leaders, faith-based communities and more. To accomplish the broadest possible representation, we recommend that states:

- Vary meeting times, and especially consider holding meetings outside of standard work hours so community members do not have to miss work to attend, and fund safe childcare as well as refreshments during evening hours.
- If meetings need to be held during working hours, states should provide stipends/reimbursements to those who travel and miss work for public meetings or provide transportation services for rural areas;
- Vary meeting locations to engage people across the entire state, including those in both rural and urban communities; and

- Expand digital access. While in-person meetings are important pieces of an engagement strategy, states should also provide materials online, including virtual meetings, meeting recordings, and public surveys. Websites should be non-technical and easily navigable for all community members. Here is an example of an [especially strong website](#), published and maintained by the Oregon DOT.
- Based on community feedback, identify priorities that are outside the scope of NEVI (i.e. safer pedestrian infrastructure) and ensure those concerns are shared with the right contacts who can help address them.

Co-determine Justice40 Benefits with Community Members

In accordance with Justice40, state NEVI plans are [required](#) to discuss “which benefits will be measured, what metric will be used to measure those benefits, and the data sources and analysis methods used to track metrics.” In the initial planning round, some states predetermined benefits that they intended to measure, but interviewees expressed a preference to identify which benefits are most important to them. In future NEVI planning rounds, we recommend that states:

- In addition to identifying core standard benefits perceived by state planners, also let people from DACs identify the specific benefits the program would deliver to their community, and then quantify and measure those benefits to meet Justice40 targets;
- Based on community feedback, enhance programs to prioritize benefits important to the community, such as affordable charging, safe charging station access during evening hours, charging for apartment residents, or other potential benefits;
- Provide adequate educational materials and outreach for community members to thoroughly understand the potential benefits and tradeoffs of the program;
- Actively solicit feedback from DACs on benefits throughout the engagement process. In some states, this was accomplished through public surveys and workshops that allowed stakeholders to directly communicate and discuss which benefits were most important to them; and

Build Agency Capacity to do Meaningful Engagement in Future Years

Interviewees repeatedly mentioned that agencies implementing NEVI do not have adequate staffing resources and trained personnel to conduct a robust engagement process. In future rounds of NEVI planning, we recommend that states:

- Train agency staff on the Justice40 program and delivering benefits, the current challenges faced by DACs in their state, and best practices for conducting engagement with hard-to-reach communities;
- Train agency staff on transportation equity, particularly as it intersects with past state investments, and equip them to respond meaningfully to requests for mobility investments beyond EV charging infrastructure;
- Allocate staffing and resources to engagement activities like community education, translation services, digital outreach, in-person presentations, etc;
- Devote NEVI funds specifically toward community engagement activities;
- Leverage additional flexible federal funds, such as Planning Grants from IRA’s [Climate Pollution Reduction Grants](#) program to build more capacity for robust community consultation;
- Consider what other funding resources or planning resources are complimentary and incorporate those into the engagement (corridor planning, transit planning, bicycle network planning, EV carshare rollout, etc.); and
- Co-host public engagement sessions with other federal and state programs.

In addition to building capacity within state agencies, **states should fund organizations and businesses that community members directly interact with.** This is often the most effective way to build and sustain relationships with DACs. In working with these organizations, states should:

- Compensate stakeholders for their input, particularly if there is a focus group or a community organization that is routinely called on to provide feedback; and
- Involve community-based organizations and local leaders early on to give them a preview of the upcoming process, request input on how to improve the state’s public engagement strategy, and leverage their contacts to get the word out to hard-to-reach communities; and
- Ensure that the community groups involved represent the DACs the state is trying to reach and benefit. **In several NEVI plans, states listed equity organizations that they consulted, but were lacking involvement from groups that represented low-income communities, communities of color, and environmental justice communities.**

Engage Tribal Nations

In many cases, interviewees and state plans suggested that Tribal nations were not engaged or included in the public engagement process, despite the fact that they should directly benefit from the program. Future rounds of NEVI planning should include Tribal nations as a key stakeholder group, and states should lead targeted outreach to Tribal governments.

Tribal consultation should be a key component of any Justice40 covered program’s engagement plan, as reaffirmed in President Biden’s recent [Executive Order](#), “Revitalizing Our Nation’s Commitment to Environmental Justice for All”. For more information on engaging tribal nations in the NEVI process, see the updated [NEVI Program Q&A](#).



SECTION 2

Plan Analysis: Determining Best Practices to Ensure Racial, Ethnic and Economic Equity in Future NEVI Plans



Methodology

We analyzed a cross-section of state NEVI plans to evaluate their approaches to equity. We identified 20 states (to ensure geographic diversity, three to four states were selected for each National Association of State Energy Officials region) and pulled data from those plans to answer the following questions:

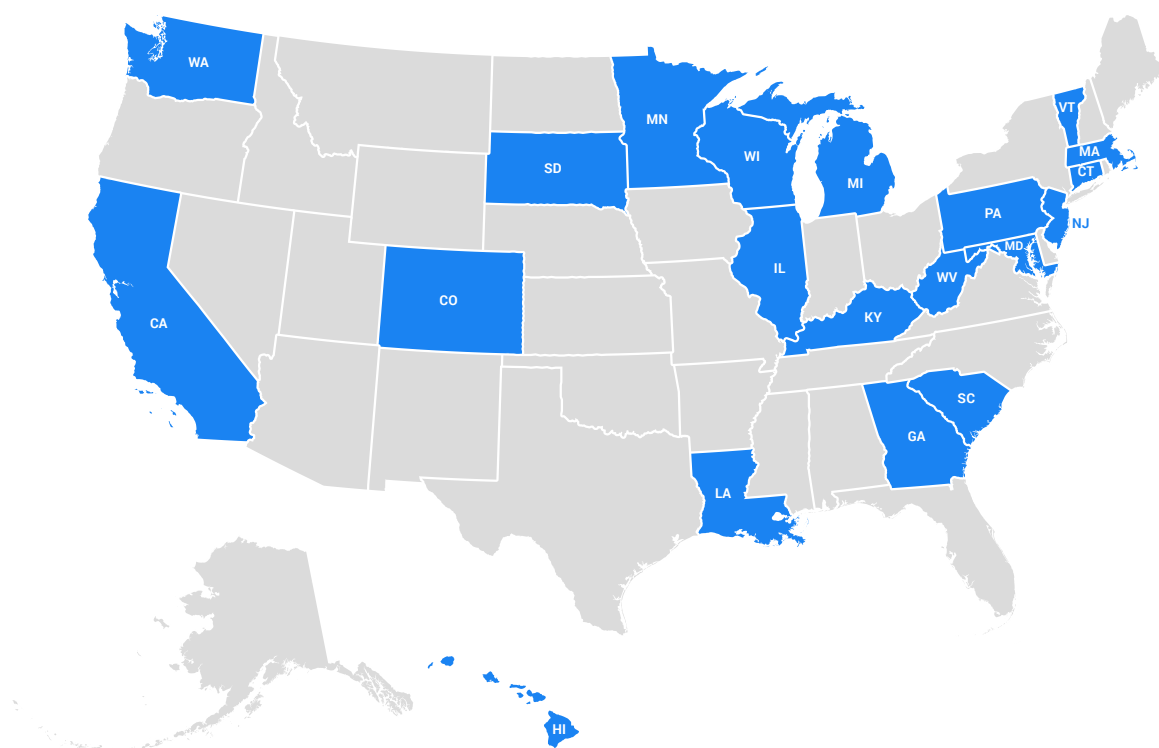
1. How did the state identify DACs?
2. Did the state list the stakeholder groups engaged to develop the plan?
3. How did states engage stakeholders?
4. Did states publish written stakeholder feedback as part of the plan or along with the plan?
5. Did the state identify non-English language support needs, including translation, interpretation or other

interventions (for current or future engagement)?

6. What public safety measures for drivers were accounted for in the plan?
7. What benefits to DACs did the state identify?
8. What disbenefits to DACs did the state identify?
9. Did the state propose any unique approaches to equity in the plan?

We developed these indicators through literature reviews, engagement with key stakeholders (including through interviews), and the extensive expertise and lived experience of our project team members and advisors. Where possible, we created data categories for the indicators to be able to better analyze trends.

Figure 2: Map of States Included in Plan Analysis



Identifying Disadvantaged Communities

Proper identification of DACs plays a major role in guiding NEVI investments, charger siting locations, and determining where program benefits will be prioritized. FHWA [stated](#) that "State DOTs should use the EV Charging Justice40 Map tool developed by the Department of Energy (DOE) and USDOT to

identify DACs." However, states used a variety of methods to identify DACs, and a number of states complemented the Justice40 map with other tools. As seen in Table 1, three of the 20 states analyzed did not use the recommended tool.

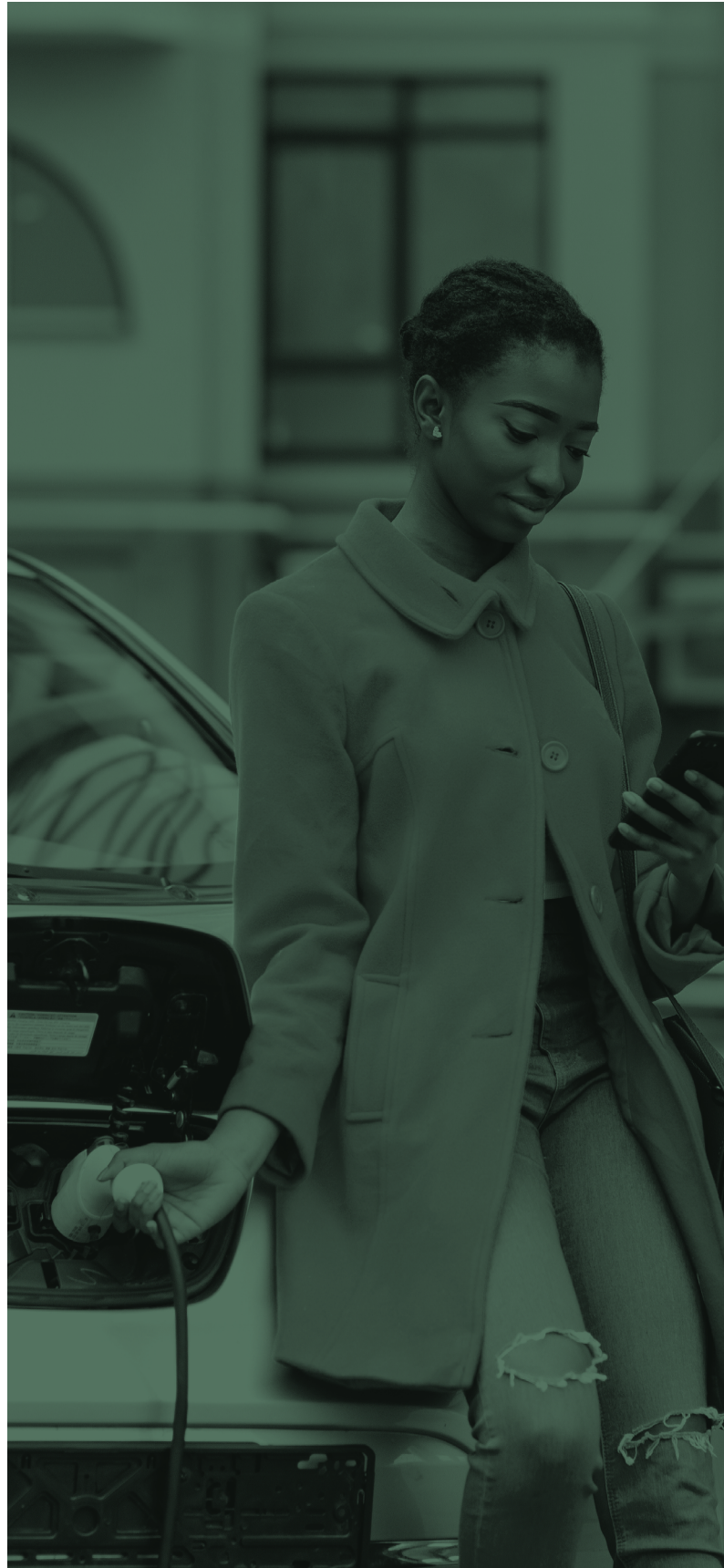
Table 1: Tools States Used to Identify Disadvantaged Communities²

State	CA	CO	CT	GA	HI	IL	KY	LA	MA	MD	MI	MN	NJ	PA	SC	SD	WA	WI	WV
EV Charging Justice40 Map	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
State-developed equity mapping tool	✓	✓	✓			✓			✓	✓			✓	✓					
US DOE Energy Justice Mapping Tool				✓				✓											✓
CEQ Climate and Economic Justice Screening Tool						✓									✓				
UMD EJScreen tool										✓									
FHWA's Screening Tool for Equity Analysis of Projects															✓				
EPA Environmental Justice Screening and Mapping Tool ³															✓				

² This includes tools proposed and used by a state to define DACs." We did not list Vermont as it is not clear how they defined DACs.

There are varying frameworks and indicators that underlie these identification tools. As a result, states refer to different populations when they identify DACs, making comparisons across states difficult. Further, if multiple tools are used simultaneously, more of the population will likely be identified as disadvantaged and so benefits may be less targeted.

Accurate identification of DACs within each state is critical to delivering benefits to historically underserved communities, and states should therefore seek to use tools with relevant indicators, including pollution burden, income, racial demographics, health statistics, and other locally-relevant metrics for determining historic underinvestment. Because federal mapping tools require a nationally consistent and publicly available data set, they may use less precise data than states have available.³ **States should consider developing their own equity mapping tools to align with the goals of Justice40 while incorporating more granular, intersectional and relevant data.**



³ After the plan submission deadline, CEQ released the [CEJST Version 1.0](#) (replacing the beta version released in February 2022), supporting existing DAC identification tools.

Stakeholder Engagement Transparency

As part of NEVI plan development, the FHWA encouraged a comprehensive stakeholder engagement process and recommended that states “list organizations that participated in the development of the plan.” Ultimately, both the quality of the plan and the experience of the stakeholders indicate whether these processes have truly been comprehensive.

All but two of the state plans described some level of public consultation efforts they had already initiated prior to plan submission. The two states that did not initiate any public consultation cited a lack of time and resources to do so. All states analyzed documented plans for future public consultation and engagement.

Understanding the types of organizations that informed the state’s NEVI plan allows the community and other relevant stakeholders to know if there are any gaps in representation.

Going further and naming the specific groups that were engaged in the NEVI process allows for increased transparency into the states’ decision-making process and greater accountability on the quality of the engagement.

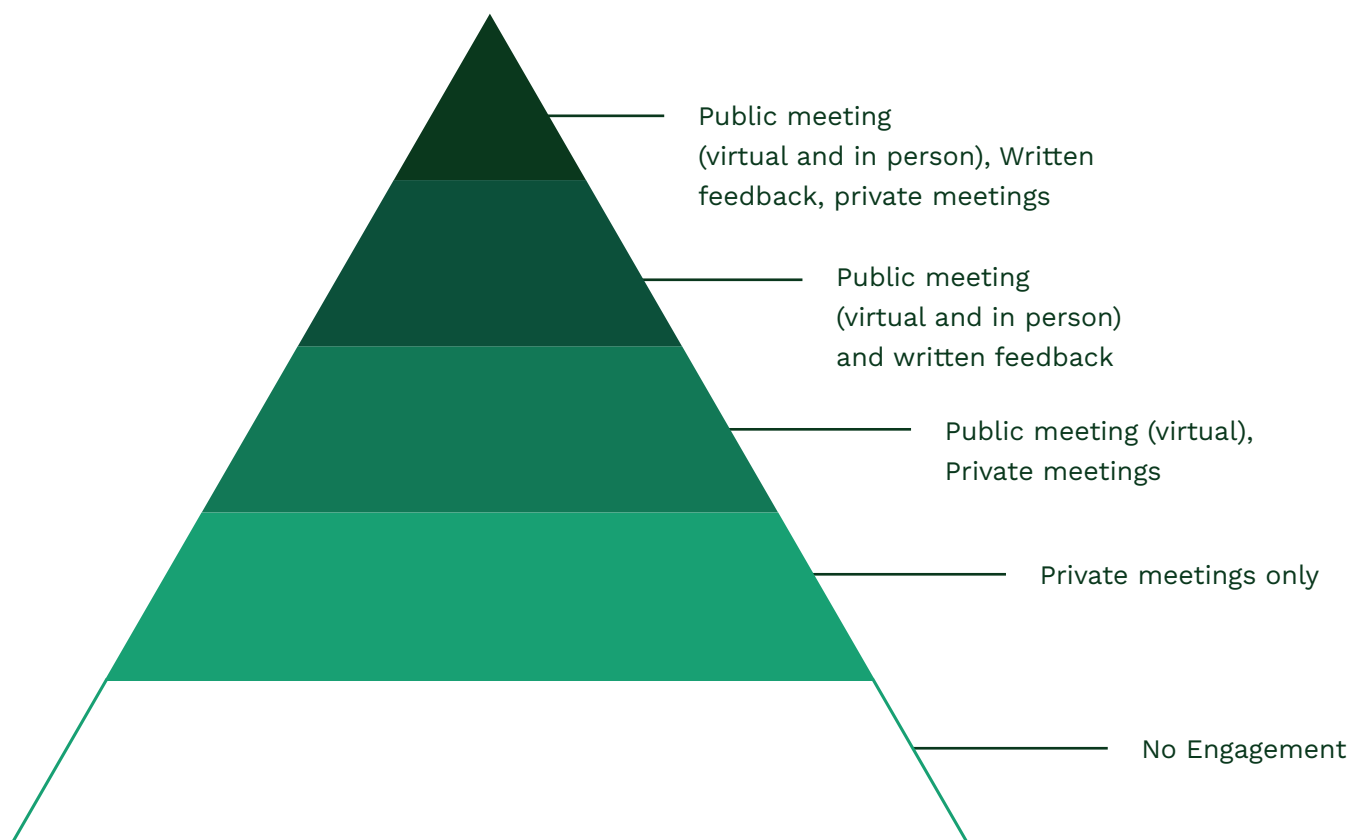
In our assessment of 20 state plans, we tracked whether a state listed stakeholders’ organization type (i.e., electric utilities, environmental and environmental justice groups, etc.) and or organization name (i.e., EVHybridNoire and GreenLatinos). We found that all states noted the types of organizations that they had either engaged with or planned to engage with in the future. However, only nine states listed organizations by name that they either had engaged prior to plan submission or hope to engage in the future. **For future engagement summaries, states should be fully transparent and list each organization that they consulted by name.**

Table 2: Transparency on Stakeholder Groups Consulted

State	CA	CO	CT	GA	HI	IL	KY	LA	MA	MD	MI	MN	NJ	PA	SC	SD	WA	WI	WV
Listed organizations by type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Listed organizations by name		✓		✓	✓		✓		✓		✓			✓		✓		✓	

Engagement Approaches

Figure 3: Engagement Approaches in State Plans



Private meetings refer to targeted outreach to key stakeholders, including one-on-one meetings with invited stakeholders and consultation with public agencies. Virtual public meetings include webinars, online workshops, roundtables, etc. Written feedback refers to online surveys, public comment forums, email submissions, and mailed-in feedback.

Offering multiple forms of public engagement gives more opportunities for community members to participate and inform the NEVI plan, ensuring that engagement is not limited only to other government agencies and private entities, or to those who can attend meetings in-person.

States should deploy a wide range of public engagement opportunities, including – at a minimum – best practices identified in the section above to ensure well-rounded community participation.

The FHWA requires states to provide a summary of their outreach activities to the public, including outreach to DACs. Understanding how and to what extent states engaged stakeholders can uncover accessibility constraints to address in future engagement.

In our review of 20 state plans, we documented some of the public engagement strategies states deployed prior to plan submission, including:

- Virtual public meetings;
- In-person public meetings;
- Collecting written feedback;
- Private meetings (one-on-one meetings with organizations or government agencies); or
- if the state did not conduct any public outreach.⁴

This is not an exhaustive list of possible engagement approaches – additional approaches can be found in the prior section of this report, and in the FHWA’s [NEVI Q&A](#). Six of the 20 states analyzed deployed all four engagement strategies as defined in our engagement hierarchy, fifteen states hosted public engagements in some capacity (i.e., in-person or virtual public meetings, or through publicly solicited written feedback) and four states only conducted private meetings. One state did not conduct any engagement prior to the submission of the plan.

State-led engagement will be ongoing, and states outlined future engagement phases, which can help stakeholders anticipate and hold states accountable to providing sufficient engagement opportunities. For example, [Georgia](#) has identified four phases of engagement with anticipated dates throughout the 5-year NEVI program window that target different stakeholder groups for feedback (Technical Coordination, Organizational Feedback, Organizational Feedback and Ongoing Annual

Plan Updates). [Hawaii](#) noted that the state will monitor charging rates and that if usage rates lag for chargers in DACs, the state will lead additional outreach efforts. [Washington state](#) identified best practices for engagement including “consulting for the best meeting time, translating materials and sharing materials with CBOs representing communities of color and other DACs.” Finally, some states (including [Connecticut](#) and [California](#)) have existing advisory groups they enlisted to help them to prepare for NEVI planning.



⁴ We assumed coordination with public agencies was targeted outreach, and where it is unclear that a meeting was open to the public, we assumed it was not. Additionally, where it was unclear if a public meeting was virtual or in-person, we assumed it was virtual. We did not include planned outreach or outreach conducted after plan submission.

Publishing Stakeholder Feedback

As part of NEVI plans, the FHWA [encouraged](#) states to outline the engagement process as well as the results of their public outreach activities. Providing stakeholder feedback in the plan, either as verbatim comments or in a comprehensive summary, holds the agency accountable to the public's goals and concerns. Half of the states analyzed published stakeholder feedback in some form. While Maryland published verbatim comments from stakeholders, other states summarized feedback

from stakeholders (see [Washington](#), [Wisconsin](#), and [Minnesota](#)). Some states posted video recordings on their NEVI specific website (including [Illinois](#) and [Connecticut](#)).⁵ **In addition to making stakeholder input publicly accessible, states should transparently communicate how feedback is incorporated into NEVI plans. This will allow communities to better understand intervention opportunities and be better able to engage in the future.**



⁵ We did not count these recordings as published stakeholder feedback because the feedback was buried in videos and not easily accessible to crosscheck with the plans.

Non-English Language Support

Language accessibility is important for community trust-building and allows a broader range of community members to be engaged, informed, and provide feedback on the NEVI planning process. The FHWA recommends that materials be provided for those with “limited English proficiency.” We focused on the states’ efforts to make any part of the process accessible or a commitment to include those with limited English proficiency.

Twelve of 20 states analyzed mentioned either translation options or at least noted an intention to engage communities in languages other

than English. For instance, Maryland identified Multilingual Graphic User Interfaces and Multilingual Materials as important in ensuring access. States should ensure that language services are comprehensive in providing access in spoken and written form for the primary non-English languages spoken within the state. **State agencies should also work with CBOs that serve non-English speaking communities to improve engagement and build trust. Additional FHWA recommendations for how to engage limited-English populations can be found [here](#).**

Table 3: Language Support in State Plans

State	CA	CO	CT	GA	HI	IL	KY	LA	MA	MD	MI	MN	NJ	PA	SC	SD	VT	WA	WI	WV
Non-English language support available	✓	✓	✓	✓	✓		✓			✓		✓	✓					✓	✓	✓

Personal Safety Considerations

Safety while charging is important for all drivers but is particularly important for drivers that may be at higher risk of attacks based on their identity, [especially people of color](#). We assessed how states addressed this issue and their commitments to make personal safety an element of charging station design.

Of the 20 state plans analyzed, 13 referenced lighting as an important safety amenity, and five mentioned visibility (i.e., locating chargers in well-trafficked areas). Four states did not make any reference to public safety, and two referenced general safety but did not specify any related actions or goals. Pennsylvania had the most comprehensive set of goals related to the personal safety of users, and is one of the only states with safety considerations in the state's deployment plan.

Most other states only listed safety as an issue brought up by the public. The [Pennsylvania plan](#) mentioned lighting, foot traffic, ADA accessibility, and regular staffing on-site. Four states noted that stakeholders raised safety concerns during feedback sessions; given that only ten states published feedback, this is a high prevalence that indicates the importance of the issue to the general public. In addition, states highlighted the importance of other personal safety measures, such as on-site surveillance and security, during the deployment phase. **During the RFP and contracting processes, states should prioritize applicants that commit to safety measures so that drivers feel safe accessing chargers.**



Identifying NEVI Benefits to DACs

NEVI plans must identify benefits that the program will deliver to DACs within the state. The FHWA [lists](#) a number of potential benefits that could flow from the NEVI program. **The FHWA benefits should be taken only as a starting point and public input should shape the benefits considered and reflected in the state plans, including in contracting and evaluation efforts.**

Our analysis of 20 state plans revealed that some states directly incorporated the FHWA list of benefits, while others removed or added benefits. Multiple states acknowledged the differences between greenhouse gas (GHG) emissions reductions and other air quality improvements that flow from the NEVI program. For instance, Minnesota noted its intention to “reduce GHG emissions that cause climate change while also improving air quality, particularly for LMI and BIPOC Minnesotans who are disproportionately exposed to tailpipe emissions.”⁶ In total, 16 states identified air quality benefits and seven states identified emissions reductions. Further, 14 states noted workforce participation as an important benefit.

States also mentioned indirect benefits that may flow to DACs, including economic development from tourism and charging that can serve transit and rideshare. Meanwhile, Georgia identified grid benefits, “as many NEVI-funded EV charging installations will be in remote areas or lower income neighborhoods with aging utility infrastructure, necessary electricity upgrades can improve grid resilience and increase equitable access to a safer and more secure electrical grid.”

The FHWA requires states to describe how program benefits will be quantified and measured. California, for instance, identified three benefits and proposed metrics, including:

- Air Quality Improvement: Particulate matter reductions and nitrogen oxide reductions;
- Greenhouse Gas Emission Reductions: Carbon dioxide-equivalent reductions; and
- Petroleum Displacement: Gasoline or diesel gallons displaced.

As another example, Louisiana identified two key workforce participation opportunities and the following metrics for measurement:

1. The number of people from disadvantaged communities who receive apprenticeships or job training related to EV infrastructure, and how many are hired; and
2. Percentage of disadvantaged business enterprises (DBE) vendors who receive EV-related contracts.

States should continue to engage with people from DACs to identify and refine NEVI benefits. Further, states should identify the metrics with which they will measure these benefits. State agencies can look to federal agencies like the Joint Office of Energy and Transportation, FHWA and CEQ for additional resources on benefits and metrics.

⁶ LMI refers to low- and moderate-income and BIPOC refers to Black, Indigenous, and People of Color

Table 4: Benefits to DACs from NEVI as Identified in State Plans⁷

State	CA	CO	CT	GA	HI	IL	KY	LA	MA	MD	MI	MN	NJ	PA	SC	SD	VT	WA	WI	WV
Air Quality	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓
Emission Reductions	✓		✓						✓			✓		✓				✓	✓	
Workforce Participation		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	
Transportation Cost Reductions		✓		✓		✓	✓	✓			✓	✓	✓		✓		✓		✓	
Other	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓	✓	✓	✓



⁷ We considered all benefits to DACs for which a state either identified specific metrics or indicated an intention to measure the benefit

Identifying NEVI Disbenefits to DACs

Acknowledgment of the ways the NEVI program can harm DACs can push agencies and the public to avoid them during implementation. The NEVI template did not include a section on disbenefits, and most states that we analyzed did not mention any disbenefits.

Six of the 20 states analyzed mentioned gentrification (including increases in property

value), though how the states define and use this word varied considerably.⁸ Some states did not identify disbenefits explicitly but mentioned “risks to be minimized”. For instance, [New Jersey](#) and [Illinois](#) identified the risk of gentrification and recommended actions to mitigate that risk. **States should continue to engage people from DACs to identify their concerns about disbenefits and develop mitigation plans for perceived disbenefits.**

Table 5: Disbenefits Considered in State Plans

State	CA	CO	CT	GA	HI	IL	KY	LA	MA	MD	MI	MN	NJ	PA	SC	SD	VT	WA	WI	WV	
Gentrification		✓				✓	✓		✓				✓	✓							
Quality of Life			✓																		
Loss of Green Space									✓												
Resource Allocation									✓												

We noted disbenefits when a plan mentioned disbenefits or burdens. While stakeholders may mention a disbenefit, it is not “considered” by the state plan unless identified by the state. Quality of life refers to a diverse array of potential impacts including increased traffic and safety concerns.

⁸ A number of the plans (including Maryland, Massachusetts, Washington) included comments from stakeholders who referenced concerns about disbenefits, but these were not counted as a state mentioning disbenefits in our analysis.

Unique Approaches

NEVI offered states flexibility in designing and implementing the program. This section highlights several unique strategies that states employed to promote equity and meet Justice40 goals.

Program Design, Sites, and Vendor Selection

- [California](#) intends for at least 50 percent of program funds to benefit low-income and disadvantaged communities, above and beyond the 40 percent target of the Justice40 initiative.
- A number of states identified equity as a priority in their contracting, siting, and evaluation decisions. For instance, states (including [Kentucky](#) and [New Jersey](#)) ranked charging stations based on Justice40 adherence, and set minimum thresholds for hiring diverse contractors respectively.
- [South Dakota](#) identified two novel approaches. The first was a proposal to split "locations into multiple sites... to facilitate the investment and involvement of DAC businesses." The second was a formula to calculate the benefits to a DAC, including factoring in median household income, total jobs in the county, workers whose commute is greater than 50 miles, and other metrics.
- [Colorado](#), like many other states, identified existing efforts and research to complement and strengthen their NEVI program. The state highlighted the Colorado EV Equity Study which includes "an eight-step process toolkit" to ensure equitable outcomes in EV projects that involves "incorporating community-grounded indicators", "modifying program design based on feedback", and "reporting back to the community".
- [South Carolina](#), [Pennsylvania](#), and [Maryland](#) considered the unbanked as part of their NEVI

plan. In South Carolina's NEVI plan, "not requiring that a sole payment method be credit card takes into consideration the needs of the unbanked and underbanked who may need to pay via another payment method, such as a prepaid card."

- A number of states also referred to the affordability of EVs as a barrier to EV adoption for low-income communities, an important consideration.

Accounting for Race

- [Vermont](#) developed a BIPOC score and map for the state at the census tract level (the same level as CEJST). Vermont was one of the few states that identified the geography of racial groups in the state.
- [Illinois](#) stated that to identify charging station locations, the DOT will include "several environmental justice indicators ... including PM 2.5 concentration [and] concentrations of racial minorities."
- [Massachusetts](#) prioritized state defined environmental justice communities for non-AFC funding.

Evaluation will be important in future years to assess how states implemented these approaches. The federal government should closely track equity approaches across the planning cycles and pull successful approaches into program guidance, letting states and communities lift each other up while continuing to raise standards and encourage innovation.

Broadening the Equity Lens

This report's focus on the initial planning process, its pitfalls, and innovations is, of course, only part of the path toward an equitable charging network. A truly equitable process needs to be at the core of planning, but there is much more to be done. At its core, EV charging needs to be not only convenient and widely distributed, but fairly priced, possible to pay for with a wide range of methods (including for the unbanked), and accessible regardless of one's living situation. People from all walks of life deserve easy access to clean transportation. Apartment dwellers, people experiencing homelessness, residents of truly rural areas, and people living in the core of cities need ready access to the network. And, critically, charging needs to be fairly priced and reliable – with strong regulatory standards ensuring access and performance.

Moreover, there are important opportunities to link together the charging network and other zero emission regulatory and incentive efforts. For instance, state incentive programs for zero emission transportation can help focus resources in and around DACs even before the AFCs are fully built out – and should do so. And regulatory regimes can help too, for instance, the [Advanced Clean Cars II](#) Regulation, which sets a path toward 100 percent EVs by 2035, provides “Environmental Justice Credits” for a range of programs that provide affordable EVs in disadvantaged communities. Pairing EV regulatory design, corporate EV sales strategies, and infrastructure design can further accelerate EV access in many communities. In short, states and federal regulators can think creatively about layering initiatives together to enhance equitable EV access, using the NEVI process as scaffolding for a broader policy effort.

Ultimately, the NEVI design considerations – which focus first on long-distance travel along the AFC

network – inherently only begins to build the future of the network. Thus, while this report points toward workable planning processes which the federal government and states can develop and deepen, the process is just the start. We need to see continued engagement with stakeholders throughout the development of an EV charging network to ensure the entire network experience genuinely serves the public.



Additional Resources

Program Information

- [National Electric Vehicle Infrastructure Formula Program Guidance | FHWA](#)
- [National Electric Vehicle Infrastructure \(NEVI\) Formula Program Q&A](#)
- [Examples of potential NEVI benefits | NEVI Q&A](#)
- [NEVI Program | FHWA](#)

Public Engagement

- [Promising Practices for Meaningful Public Involvement in Transportation Decision-making | US DOT](#)
- [Virtual Public Involvement | FHWA](#)
- [How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decision Making | FHWA](#)

Technical Assistance

- [Technical Assistance and Resources for States and Communities | Joint Office](#)
- [Technical Assistance and Resources for Tribal Nations | Joint Office](#)
- [Modeling, Equity, and Climate Impact Tools | Joint Office](#)
- [The Environmental Justice Thriving Communities Technical Assistance Centers Program | EPA](#)



Appendix: Detailed Methodology of Interviews with Stakeholders of State NEVI Plan Development

In order to assess how equity and Justice40 goals factored into the development of state NEVI plans, we interviewed individuals and organizations that engaged directly with state DOTs during the initial plan development – including transportation advocates, experts and community organizers. Interviews were conducted with individuals and organizations in the following states: Arizona, Florida, Georgia, Indiana, Michigan, Minnesota, New Jersey, North Carolina, Oregon, Pennsylvania, Tennessee, Utah, Virginia, and Wisconsin.

The goals of the interviews were to:

1. Understand how stakeholders were engaged and to what extent;
 2. Understand how equity was incorporated into the stakeholder engagement process;
 3. Identify barriers to engagement for people from DACs; and
 4. Identify strong practices that can be adopted by other states as NEVI implementation continues, or could be incorporated into other federal program engagement processes.
- a. If so, where/how did you hear about it?
 - b. If so, was the meeting location accessible? (particularly for disadvantaged communities)
 - c. If so, were there translation services available? Were materials printed in languages other than English?
 - d. If so, what time were the meetings? Did you find that time to be accommodating? (particularly for disadvantaged communities)
 - e. Did you have the information you needed to engage properly?
 - f. Were there questions that were not asked but should've been asked?
5. Were there any barriers to engagement for environmental justice groups and disadvantaged community members? (for yourself or for others)
 6. What do you think your state did well as far as engagement with stakeholders, and disadvantaged communities in particular?
 7. Have you engaged in any other federally funded projects within your state/community? If so, how did this compare when considering equity and access for disadvantaged communities?

Interviewees were asked following questions:

1. What were your main priorities relating to equity, disadvantaged communities, and the NEVI funding?
2. Have you had a chance to read the state plan? If so, do you have any reflections on how it handles equity and/or environmental justice? If not, is there anything you think we should look for in particular?
3. In what ways did you and your organization engage with the state about the NEVI plan?
4. Were you aware of any public meetings held by your state?
8. Was there anything that your state should have done differently to better engage community members, in particular disadvantaged groups?
9. Outside of the equity section, were equity and EJ seriously considered in other parts of the state plan? (i.e., contracting, workforce development, etc.)
10. How does the state ensure 40 percent of the benefits will flow to DACs? What are their metrics for evaluating this?
11. Do you feel like the state did a good job of prioritizing equity and EJ in the plan? What could they have done differently?