

Method to Review NEVI State Plans


Nikki Lam, Carlos Giralt-Ortiz,
Daniel Thu, Nick Borrello



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A close-up photograph of a golden electrical plug, likely a Type 1 or 2 EV charging connector, set against a dark blue background. The plug is illuminated from the side, highlighting its metallic texture and the internal components.

National Electric Vehicle Infrastructure (NEVI) Formula Program

- 5-year, \$5 billion fund
- Provides states with funds to deploy EV charging infrastructure
- State plan proposal requirement



NEVI's Goal

Create an interconnected network of EV chargers nationwide to facilitate data collection and accessibility.

Project Goal

Develop a method to document each state plan's unique response to proposed NEVI guidelines.

Objective 1:

Developed a set of categories & questions based on NEVI's guidelines to facilitate the review of 8 selected state plans.

Key Categories & Qs

- 1. Equity & Justice
- 2. Buildout
- 3. Maintenance
- 4. Evaluation
- 5. Medium Voltage (MDHD)
- 6. Energy Storage
- Renewable Energy

Key Categories & Qs (Focused On)

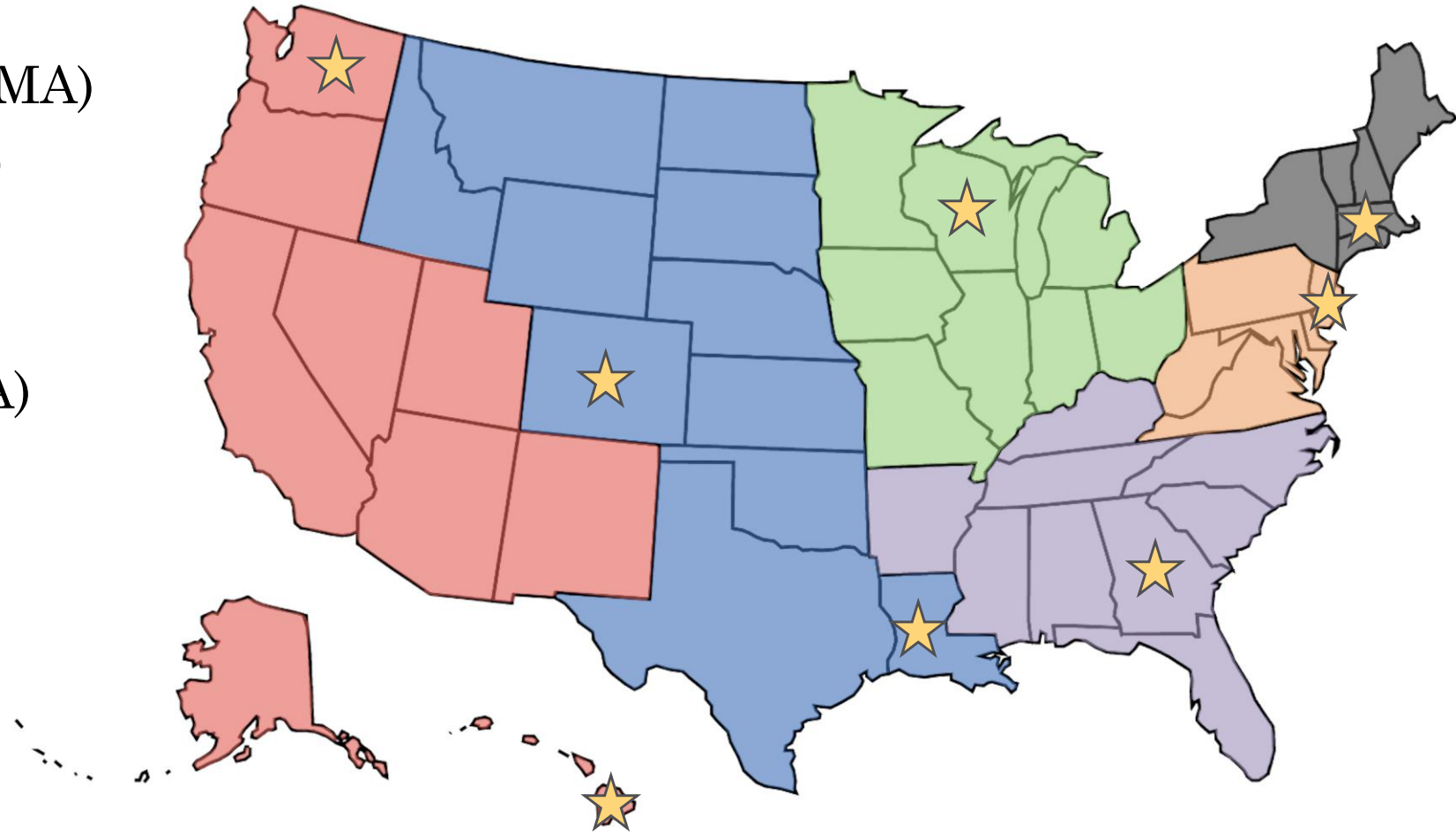
- 1. Equity & Environmental Justice
- 2. Buildout
- 3. Maintenance & Reliability

state plans engage 40?

Objective 2.1:

Selected & reviewed 8 state plans using the categories and questions.

- Massachusetts (MA)
- New Jersey (NJ)
- Wisconsin (WI)
- Louisiana (LA)
- Washington (WA)
- Georgia (GA)
- Colorado (CO)
- Hawaii (HI)



Adapted from NASEO, Figure 1. <https://www.naseo.org/naseo-regions>

Objective 2.2:

Used the results of the state plan reviews to document state responses.

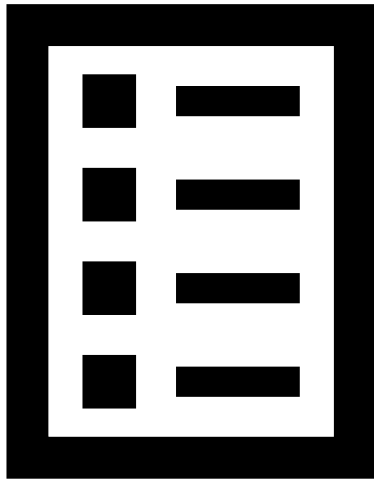
How does the state identify DACs?

What factors did the state impact assessment consider?

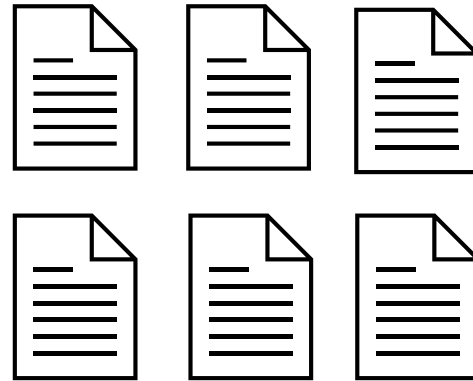
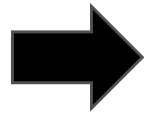
State	Disadvantaged Community (DAC) Identification	Factors Considered
Wisconsin (WI)	State Impact Assessment	Race, Health
Louisiana (LA)	Justice40	
New Jersey (NJ)	State Impact Assessment, Justice40	Socioeconomic, Race

Objective 3:

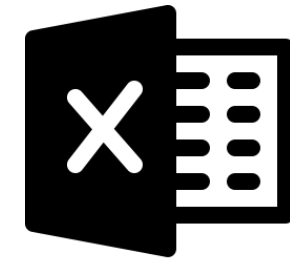
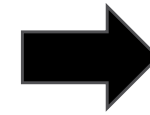
As time permitted, reviewed additional state plans based on the categories & questions.



Categories & Qs



Additional State Plans



Excel

After reviewing the NEVI guidelines:

- Developed a **NEVI State Plan Assessment**
- Distributed to organizations for feedback such as...
 - Joint Office
 - NASEO
 - AASHTO

NEVI State Plan Assessment

A methodology for the comparative assessment of state NEVI plans by an undergraduate student team at Worcester Polytechnic Institute. A project sponsored by Atlas Public Policy.

Equity and Environmental Justice

1. How does the state identify, categorize, and prioritize underserved communities within its state plan? Does the state engage and make use of Justice40?
2. How does the state identify and consider the possible benefits and disbenefits of the plan's implementation, including local and environmental advantages and disadvantages?

Buildout

1. How does the state plan to meet the 20 percent cost share requirement?
2. How does the state plan to leverage the funding and expertise of the private sector, including electric utilities?
3. How does the state fulfill or exceed the minimum standards and requirements for charging stations?
4. How does the state prioritize the distribution of chargers on the Interstate Highway System or within communities?

Reliability and Maintenance

1. How does the state plan to meet the 97 percent reliability requirement?
2. What additional standards and requirements does the state set for reliability and maintenance?
3. How does the state address resilience to power outages or other regional challenges?
4. How does the state address workforce training and development for the construction, operation, and maintenance of the EV charging network?

Evaluation

1. How will the state assess its performance towards completing its goals and objectives?
2. What type of data will the state collect, and how does the state intend to make the data publicly accessible?

Medium- & Heavy-Duty (MDHD) Vehicles

1. Does the state allocate or plan to allocate funding to charging for MDHD vehicles?

Energy Storage & Renewable Energy

1. How does the state address the impact of the EV charging network on the electric grid?
2. How does the state involve electric utilities in the development of the EV charging network?
3. Does the state allocate program resources to the construction of energy storage or renewable energy sources collocated with EV chargers?

After reviewing the 8 state plans:

- State plans were difficult to interpret due to:
 - Content Organization
 - Inconsistent Terminology

Environmental Justice

```
graph LR; A[Environmental Justice] --> B[Environmental Justice]; A --> C[Environmental Equity];
```

Environmental Justice

Environmental Equity

After reviewing the 8 state plans:

- State plans generally described their intentions or considerations
 - Short time for plan development

As a result:

- Charger deployment and maintenance processes are to be determined

Due to the difficulty of locating specific state responses, a team member developed a **State Plan Keyword Search (SPKS)** program.

The screenshot shows a web application window titled "State Plan Keyword Search". The interface is divided into several sections:

- Mode:** A section with two radio button options: "Custom Keywords" and "Preset Keywords".
- States:** A section with a list of checkboxes for selecting states. The visible options are "Select All", "Alaska", "Alabama", "Arkansas", and "Arizona".
- START SEARCH:** A prominent button at the bottom of the interface.

The window has a purple header bar with the title and standard window controls (minimize, maximize, close). The main content area is white with a light gray border.

Choose a Mode

- Mode
- Custom Keywords
 - Preset Keywords

- States
- Select All
 - Alaska
 - Alabama
 - Arkansas
 - Arizona
 - California
 - Colorado

- States
- Select All
 - Alaska
 - Alabama
 - Arkansas
 - Arizona
 - California
 - Colorado
 - Connecticut
 - District of Columbia
 - Delaware
 - Florida
 - Georgia
 - Hawaii
 - Iowa
 - Idaho
 - Illinois
 - Indiana
 - Kansas
 - Kentucky
 - Louisiana

Input Keyword Set(s)

Save Set

Clear Sets

erved Communities, DACs, Rural
ocate, Locating
actors, Outreach, Interview, Collaboration

State Plan Keyword Search

Mode

- Custom Keywords
- Preset Keywords

States

- Select All
- Alaska
- Alabama
- Arkansas
- Arizona
- California
- Colorado
- Connecticut
- District of Columbia
- Delaware
- Florida
- Georgia
- Hawaii
- Iowa
- Idaho
- Illinois
- Indiana
- Kansas
- Kentucky
- Louisiana

Questions

- Equity
- Equity
- Buildout
- Maintenance

Choose a Category

- What methods did the state employ to engage stakeholders?
- How does the state identify disadvantaged communities?
- What factors does the state impact assessment consider?
- Does the state plan to prioritize applications that consider impacts to DACs?
- What benefits/disbenefits to DACs are considered in the state plan?

Then, select the related preset question(s)

START SEARCH

State Plan Keyword Search

State: Alaska

Previous State

Next State

54 Equity Considerations

Alaska Electric Vehicle Infrastructure Implementation Plan

for capabilities, DOT&PF and AEA will require the selected vendor to review, evaluate, and site locations within the EV Study Area using federal requirements and guidelines made available by the Joint Office.

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

Through Executive Order 14038, the Justice40 Initiative was signed by President Biden. The Justice40 Initiative sets a goal that 40% of the overall benefits in certain Federal investments flow to DACs that are marginalized, underserved, and overburdened. Through meaningful and consistent stakeholder engagement, Justice40 will allow stakeholders and community members the opportunity to engage and provide input on project and programs decisions. Through the use of the Climate and Economic Justice Screening Tool, which is the digital tool developed with the use of U.S. Census Bureau data, AEA will identify marginalized, underserved, and overburdened communities within the project area for outreach and DAC participation.

The initial stakeholder list contains many government communities that fall within Justice40 boundaries as other DACs, including tribal councils. AEA commits to furthering outreach through promotion of efforts on social media and through newsletters so AEA can continue to foster engagement with all communities.

Large parts of the AFC lie within DACs, so initial outreach will occur in these communities for deployment, while outreach in other communities will be used to update and refine the plan for the outyears. The investments beyond the AFC will focus on the AMHS, where many of the port communities fall within Justice40 boundaries, and then community and destination charging where AEA can provide charging access in rural DACs to foster growth for EVs. The expected penetration in the early years in these communities is expected to be low, but the investment will ensure that the DACs are not left behind as the vehicle fleet shifts

Figure 16. Alaska's Justice40 Tracts

Source: [https://services.arcgis.com/P3ePLMYs2RVChkXj/arcgis/rest/services/Justice40 Tracts May 2022/FeatureServer](https://services.arcgis.com/P3ePLMYs2RVChkXj/arcgis/rest/services/Justice40_Tracts_May_2022/FeatureServer)

Output

Current Page: 61

Previous Page

Next Page

Exit

Documented state responses using Excel. Each category was made into its own Excel spreadsheet.

Equity Spreadsheet

State	Stakeholder Engagement Methods	DAC Identification	Factors Considered	Benefits Considered
MA	Focus Groups, Events, Survey, Online Platforms, Interviews	Justice40, State Impact Assessment	Socioeconomic, Race	AFCs, Contracts, Emissions, Workforce
NJ	Online Platforms, Events, Survey, Direct EJ Engagement	Justice40, State Impact Assessment	Socioeconomic, Language	AFCs, Contracts, Emissions, Workforce, Transit Programs
WI	Workshops	Justice40, State Impact Assessment	Socioeconomic, Language	Contracts, Emissions, Workforce, Transit Programs
LA	Workshops	Justice40, State Impact Assessment	Socioeconomic, Language	Contracts, Emissions, Workforce, Economics
WA	Events, Survey, Online Platforms	Justice40, State Impact Assessment	Socioeconomic, Language	Contracts, Emissions, Workforce, Economics
GA	Events, Interviews	State Impact Assessment	Socioeconomic, Language	Contracts, Emissions, Workforce, Economics
HI	Survey, Events	Justice40, State Impact Assessment	Socioeconomic, Language	Contracts, Emissions, Workforce, Economics
CO	Online Platforms, Event, Survey	Justice40, State Impact Assessment	Socioeconomic, Race, Health	Workforce, Emissions, CO ₂
TX	Events, Online	Justice40, State Impact Assessment	Rural	Economics, Emissions, Workforce

Stakeholder Engagement Methods

Stake Engagement Methods

What methods did the state employ to engage stakeholders in the development of the plan?

State Responses

particularly notable about the state's approach to equity?

Equity Spreadsheet

State	Stakeholder Engagement Methods	DAC Identification	Factors Considered	Benefits Considered
MA	Focus Groups, Events, Survey, Online Platforms, Interviews	Justice40, State Impact Assessment	Socioeconomic, Race	AFCs, Contracts, Emissions, Workforce
NJ	Online Platforms, Events, Survey, Direct EJ Engagement	Justice40, State Impact Assessment	Socioeconomic, Language	AFCs, Contracts, Emissions, Workforce, Transit Programs
WI	Webinars, Events, Direct EJ Engagement, Online Platforms	State Impact Assessment	Race, Health	AFCs, Contracts, Emissions, Workforce, Transit Programs
LA	Webinars, Events, Survey, Direct EJ Engagement	Justice40		Contracts, Emissions, Workforce, Economics
WA	Events, Survey, Online Platforms	Justice40, State Impact Assessment	Socioeconomic, Housing, Transportation, Health	Contracts, Emissions
GA	Events, Interviews			Contracts, Emissions, Workforce
HI	Survey, Events			Contracts, AFC, Workforce
CO	Online Platforms, Event, Survey	Justice40, State Impact Assessment	Socioeconomic, Race, Health	Workforce, Emissions, CO
TX	Events, Online Platforms	State Impact Assessment	Rural	Economics, Emissions, Workforce

Blank Cells indicate that a state plan response is not explicitly mentioned in the state plan.

Notes
Was there anything particularly notable about the state's approach to equity?

State Plan Exceptions

State	Number of Exceptions
MA	
NJ	7
WI	
LA	
WA	
GA	2
HI	5
CO	1
TX	

Unique State Plan Responses

- Hawaii (HI) directly mentioned including a maintenance plan that would go beyond the NEVI program.

State	Exceeds 5 Year Minimum
MA	
NJ	
WI	
LA	
WA	
GA	
HI	Yes
CO	
TX	

Exceeds 5 Year Minimum
Does the state require site developers to maintain stations beyond the minimum 5 years?

Excerpt from HI State Plan

Through this contract, HDOT will also be able to include the operation and maintenance activities for the duration and beyond the NEVI program.

Unique State Plan Responses

- Most states will monitor charging stations for NEVI compliance.
- Louisiana (LA) will perform on-site visits to charger stations.

State	Evaluation Methods
MA	Data Collection, Monitoring
NJ	Data Collection, Monitoring
WI	Data Collection
LA	Site Visits, Data Collection
WA	Data Collection
GA	Data Collection
HI	Survey, Data Collection
CO	Data Collection
TX	Data Collection

Evaluation Methods
How does the state intend to monitor and evaluate site reliability?

Excerpt from LA State Plan

DOTD's 5-year plan includes monitoring the grant recipients' sites through **site visits** to ensure proper maintenance and compliance with state and federal guidelines, as well as monitoring usage at the sites.

Unique State Plan Responses

- Washington (WA) will use **toll credits**.
- Reduces or eliminates amount of funding the state contributes.
- Allows WA 100% federal funds vs. 80%-20% cost-share.

State	Cost Share
MA	Private
NJ	Private
WI	Private
LA	Private
WA	Toll Credits
GA	Private
HI	Private
CO	Private
TX	Private

Cost Share
Who will provide the 20% required match?

Excerpt from WA State Plan

Washington earns toll credits when capital investments are made in federally approved tolled facilities including toll roads and bridges. These credits can then be used as a 'soft match', meaning do not provide additional money for the project but reduces or eliminates the amount of funding the state contributes. This allows the state's EV infrastructure program to be funded with 100 percent federal funds as opposed to the traditional 80/20 percent split between federal and state/

Recommendations

For Atlas Public Policy:

Use the methods developed for this project to **review the remaining state plans:**

- Recruit team with at least 1 data analyst
- Become “State Experts” or “Category Experts”

Recommendations

For NEVI:

Organize an annual **state plan workshop** where:

- State representatives provide a **summary statement** regarding evaluations
- Discuss significant findings, best practices, and problem-solving strategies

Recommendations

For USDOT and FHWA:

Require standard terms to be used by all state plans.

- Inconsistent terminology

Required NEVI Terms	Definitions	Terms used by State Plans
Equity	A subject addressing aspects in the state plan dealing with environmental justice, community advocacy organizations, Justice40, etc.	N/A
Environmental Justice	Implementation practices which deal with fair treatment from environmental impacts, communicating with environmental advocacy groups, etc.	Environmental Equity
Disadvantaged Community (DAC)	An area identified by the state as being at-risk, or that displays the specifications described within Justice40.	Underserved Community, Rural

Recommendations

For Atlas Public Policy:

Review updated state NEVI funding and expenditures on an annual basis.

- How did the state:
 - Prioritize funding
 - Distribute funding
 - Match the 20% cost-share

Recommendations

For States:

Develop methods for EV users to **provide feedback** on their use of NEVI charging stations:

- Feedback forms
- Surveys
- QR codes

Recommendations

For Atlas Public Policy:

Expand upon the State Plan Keyword Search (SPKS) Program:

- **Make compatible** with docx files
- Improve the **user interface** and **ease of use**
- **Implement** file uploads

Recommendations

For Atlas Public Policy:

Develop a keyword searching program that:

- Allows users to input multiple sets of keywords to **search simultaneously**
- Supports multiple search “modes”
 - **custom** searches
 - **preset** searches
- Outputs **all page #s** containing instances of keywords

Acknowledgements

WPI Advisors:

Fred Looft, Professor

Linda Looft, Professor

Atlas Public Policy Representatives:

Nick Nigro, Founder

Rob Fitzgerald, Senior Policy Analyst

Spencer Burget, Policy Analyst

Tom Taylor, Policy Analyst

Moe Khatib, Policy Associate

Thank you!
Questions?

(All images used are free-use)

Contact us at: gr-DC22-ATLAS@wpi.edu