Atlas Student Team Data
Addendum
(12/15/2022)

NEVI Analysis: Key Metrics

Categories

1. **Compliance with NEVI Guidelines**
2. **Equity and EJ Metrics**
3. **Timeline for buildout**
4. **Number of and funding per charger**
5. **Reliability metrics and maintenance plan**
6. **Allocation to MDHD**
7. Evaluation plan
8. Any red flags? (e.g., state not allocating all funding)
9. Where states are prioritizing funding (of all the gaps in the network)
10. Administering funding (role of utilities)
11. How complete is a state's buildout of the Alternative Corridors
12. What is the plan to meet non-federal cost share?
13. Labor standards

Compliance with NEVI Guidelines

1. **Maintenance Plans (Required by NEVI)**
2. **EV Chargers and Charger Station Logistics (Required by NEVI)**
3. Self-Evaluation Plans
4. Energy Storage & Renewable Energy
5. Equity Plans
6. Third-party Contracts
7. Data Sharing, Collecting, and Accessibility
8. Physical state characteristics (terrain, weather, temperature, etc.) and their effects on a state's EV infrastructure
9. Allocation of Funding
10. Deployment Strategies of Chargers

NEVI Metrics

Maintenance Plans:

1. Do the states have a maintenance plan in their proposal? (This should be a resounding yes)
2. How detailed is this maintenance plan within the proposal?
    a. Does it factor in a focus on public road safety. (Discussing things such as the rapid repair of chargers whose damaged conditions could cause harm)
    b. Does the plan last for more than the required 5 years.
    c. Does the plan address how it will maintain areas which there is expected to be a lower level of utilization, and to what degree.

3. With existing charger stations today, they may not meet the NEVI's current requirements for charging stations, and states will need to upgrade existing chargers to meet NEVI requirements.
    a. Do states also include how charger upgrade or expansion will operate in years to come, as well as if upgrades are needed again?
4. Does the state have any plans addressing the training and hiring of workers who will be maintaining these charging stations?

EV Chargers and Charger Station Logistics

1. What type of EV chargers are being installed in these new stations, and are they more powerful than the one required by NEVI?
    a. (NEVI Required Chargers: Direct Current Fast Chargers with Combined Charging System (CCS). Each individual charger must be able to service at least 4 cars at the same time at 150 kW each. Each charger must be at least 600 kW in total.
    b. Does it have a higher capacity than the required 600kW?
2. How many chargers are being installed per station on the IHS?
3. How many chargers are being installed per station within more populated areas, such as neighborhoods, towns, and cities?
4. What percentage of the proposed budget will go to installing EVs on the Interstate Highway System?
5. What is the reliability level of the charger stations being installed?
    a. (NEVI Requirement: It should be relatively high, greater than 97%)

Self-Evaluation Plans

1. What states provide an evaluation plan?
2. When doing their self-evaluation, do states outline what benefits these state plans might provide? (Creation of jobs, benefits to EV adoption, etc.)
3. What is this state's timeline for assessing its progress towards completing its 5-year goals and interim goals?
4. How will this state go about assessing its progress?
    a. Performance metrics such as greenhouse gas emissions, equitable distribution and access for chargers, consumer satisfaction.
    b. Program benefits, success, and progress indicators

Energy Storage & Renewable Energy

1. How is this state planning to store energy for chargers or use renewable energy? (Solar panels, energy storage, etc.)
    a. Chargers should be operational all day, year-round.
2. Dose this plan include any plans to use NEVI funding for the construction of renewable energy sources or storage systems?
    a. NEVI Suggestion: Normally, one should not use NEVI funds to construct such infrastructure, however, plans that are able to show that the implementation of these devices would lead to lower overall construction and operating costs can use NEVI funds.

Equity Plans

1. How are states defining their underserved communities?
2. Infrastructure in rural or underserved communities: States must prioritize access to those in rural and underserved communities.
    a. How are states identifying gaps within rural and underserved communities when compared to other communities?
    b. How are states distributing funds to these underserved areas?

c. How do states plan on targeting at least 40 % of benefits toward disadvantaged communities as well as engaging the stakeholders within those communities? (Justice40)

Third-party Contracts

1. Does this plan say that the state will outsource any EV infrastructure responsibilities to private entities?
    a. If not, does it intend to?
2. How are public and private entities being used efficiently within these state plans? Do they state this relationship or their practices in working with both parties?
    a. May connect with job creation and benefits of the program when working with third parties
    b. How is the proposal ensuring that the third parties will deliver EV charging station in a manner that leads to efficient and effective deployment? To what degree is this addressed and elaborated on?

Data Sharing, Collecting, and Accessibility

1. What data do states plan on gathering?
    a. Data including charging usage, related costs, reliability
        i. Charging network providers should gather data including charger locations, equipment available, prices, status
2. How do they intend on collecting it?
3. How do they intend on sharing it for access?
    a. Real-time sharing with USDOT and USDOE
    b. States should require providers to share their data with the public
4. How detailed is the proposal's EV infrastructure data sharing plan? Does it even address all the topics above?

Physical state characteristics (terrain, weather, temperature, etc.) and their effects on a state's EV infrastructure

1. Due to these states belonging to different regions, do states explain and describe how their physical traits, like terrain and weather, affect any aspects within their EV infrastructure?
    a. If yes, how do the states address these issues? Do they adapt to their region and its characteristics for more efficiency?
    b. Some states may have less conditions to worry about than others.

Allocation of Funding Plans

1. Do states have only general ideas of how they would allocate their funds given by NEVI over the 5 years, or do they provide a detailed explanation of how they are distributing their funds?
    a. Would people want to know this information?
    b. Federal cost-share for NEVI projects is 80%. Private and state funds should be used to cover remaining costs.

Deployment of charger strategies Plans

1. Are states planning to improve upon active Alternative Fuel Corridors (AFC) or develop entirely new ones?
    a. If they plan to improve active AFCs, what plans do they have in order to make these improvements?
    b. If they are planning to develop new AFCs, where are they looking to develop these new corridors?
2. Are states taking into consideration any existing off-highway infrastructure when deploying EV chargers?

a. How are these considerations impacting the deployment of chargers?
b. Will the power level or number of chargers be influenced by these?

3. Are states deploying chargers at the minimum distance from the Interstate highway (1 mile), or are they deploying them closer?
    a. If closer, what distance does the state specify?
4. Is the distance between each charging station along the IHS (Interstate Highway System) outlined by the plan less than the required NEVI requirement of 50 miles?
    a. If so, by how much?
5. Do the states address these topics when considering the implementation of charging stations, and if so, how detailed are their plans to address them? (These topics are NEVI suggested)
    a. General safety at EV stations
    b. Accessibility
    c. Inclusion of distributed renewable energy resources
    d. General implementation location: Specifically, regarding already-established rest spots and businesses off the highway

Equity and EJ Metrics

1. How did the state engage with environmental justice communities (per the plan)?
2. Any mention of engagement and/or resources in other languages?
    a. Fair engagement practices – compensation for stakeholders time, do they provide cultural context, do they provide translation for non-english speakers
    b. Do they work together to define local benefits
3. How they reference / engage with Justice40: (select multiple)
    a. Use the mapping tool to identify disadvantaged communities
    b. For benefits, Quantify funding / benefits in J40 areas
    c. Mention but don't specify anything else
    d. Other
4. Do they consider state equity metrics? If so, what are they?
5. How does the plan categorize disadvantaged communities? (select all that apply)
    a. Consider race / minority
    b. Tribal communities
    c. Rural
    d. Income
    e. Other: *(note)*
6. What types of benefits does the plan consider?
    a. Access to charging
    b. Clean Air
    c. Identify procurement benefits (ie owned by minority owned business)
    d. Other
7. Identify disbenefits (negative impacts)?
    a. Gentrification, loss of green space, etc
    b. If so, what are they?

Notes from select state plans on equity

MA

- Forms of engagement
- Identifying DACs
    - Tools used (maps)
    - Criteria for EJ population / community
        - Includes significant minority population

        - Includes income criteria
- Identifying Benefits
    - XX
    - Consideration of negative outcomes (gentrification, loss of green space)
- "A geospatial analysis shows that 48 percent of the population that live within five miles of an EV AFC live in EJ communities, compared to 45 percent of the total Massachusetts population that live in EJ communities."

CO:

- Legislation
    - HB-21-1266 Environmental Justice Act - NEVI program is compliant with this
- Identifying / Outreach to DACs
    - Justice40 Mapping tool
    - EV Equity Dashboard developed by the Colorado Energy Office
    - EnvironScreen – Colorado Department of Public Health and Environment
    - (Pending) interactive environmental justice mapping tool – Colorado Department of Public Health and Environment
- Target groups
    - Low income
    - POC
    - People w disabilities
    - Older adults
    - Rural communities
    - EJ advocacy groups
    - Workforce development
    - Public transit organizations
- Engagement
    - Using relevant language and providing cultural context to stakeholders
    - Providing interpretation and translation of program materials for non English speakers
    - Equitable stakeholder engagement tools like compensating community members
    - Work with local communities to define metrics used to measure community benefit
- Measuring benefits to DACs
    - Justice40
    - Colorado EV Equity Study – 8 step process toolkit that can be used to support equity in transportation electrification projects
    - Other quantitative and qualitative indicators based on community needs
        - EX – quantifying the amount and percentage of NEVI funding invested within the boundaries of Justice 40 areas.
        - EX- education and outreach activities to be tracked
- List of NEVI plan benefits to DACs

WI:

- Identifying / Outreach DACS
    - "Wisconsin-specific approach" - cross agency coordination and analysis of different populations in WI
    - 67 different quity organizations were

Other resources on equity

- Centering Equity in Charging Report EVS.pdf (forthmobility.org)
- Jamboards relating to NEVI:
  - Sept 2022 EVGridX NEVI Brainstorm - Google Jamboard
  - (first page) October NEVI Coordination 2022 - Google Jamboard
- Connect with Taj Salam at Partnership Project to ensure no overlap

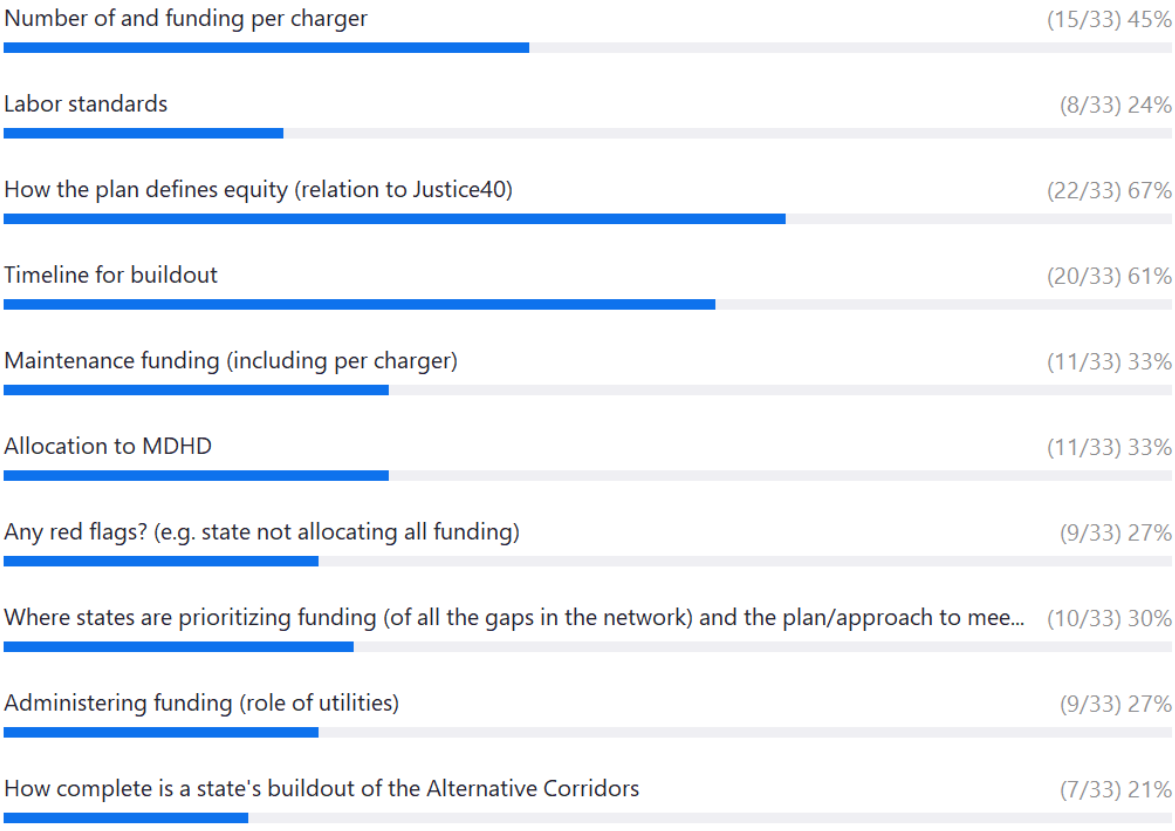
Poll results from EVGridX call on October 3, 2022:

Untitled Poll

Poll | 1 question | 33 of 44 (75%) participated

1. What metrics are most important in assessing the NEVI plans? (Please choose as many as you want) (Multiple Choice) *

33/33 (100%) answered



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?

NEVI State Plan Review (Initial Set)

Researcher	State Plan	Color Code
Nikki Lam	Massachusetts	Massachusetts (MA)
Nikki Lam	New Jersey	New Jersey (NJ)
Daniel Thu	Wisconsin	Wisconsin (WI)
Daniel Thu	Louisiana	Louisiana (LA)
Nicholas Borrello	Georgia	Georgia (GA)
Nicholas Borrello	Washington	Washington (WA)
Carlos Giralt-Ortiz	Hawaii	Hawaii (HI)
Carlos Giralt-Ortiz	Colorado	Colorado (CO)

Categories:

Equity and Environmental Justice

1. How does the state identify, categorize, and prioritize underserved communities within its state plan?
    a. How are states defining their underserved communities?

Massachusetts	Public & stake holder Engagement- specifically disadvantages community members, environmental justice (EJ) organizations, rural Organizations, etc. (using two focus groups, 3 virtual round tables) a. Used Electric Vehicle Charging Justice40 Map & MAs Commonwealth's definition of an EJ population
New Jersey	Public & stakeholder engagement a. identifies underserved communities using both New Jersey's groundbreaking Environmental Justice Law, and Justice40 (both provide their own consensus of in determining underserved communities) *NJs EJ law provides a more expansive definition of underserved communities compared to Justice40
Wisconsin	Engaged with representatives of underserved and disadvantaged communities and stakeholders. a. No mention of how.
Louisiana	Conduct outreach through media channels. a. 18% of population is in poverty. Utilizes Energy Justice Mapping and four steps to identify Disadvantaged Communities (DACs). (Page 40).
Georgia	Engaging the general public, local governments, workforce education, and social/environmental justice organizations. a. The Department of Energy has developed a working definition of "disadvantaged communities" (DACs) that relies on 36 different indicators. These indicators are grouped into the following categories of disadvantaged:

	1. Energy Burden 2. Dependence on fossil fuels 3. Exposure to environmental and climate hazards 4. Social vulnerability
Washington	State is relying on guidance from federal agencies to identify DACs a. Utilize the US DOT and DOE Justice40 mapping tool to identify Disadvantaged Communities and design targeted outreach.
Hawaii	The state is relaying on a list of factors provided by the U.S. Department of Transportation and the U.S. Department of Energy. These factors are listed on page4 of the plan.
Colorado	The state will use the Electric Vehicle Charging Justice40 Mapping tool created by Argonne National Laboratory to identify disadvantaged communities (DACs). It will also use other mentioned state-developed equity tools.

2. Does the state engage and make use of Justice40?

Massachusetts	Yes. Used in identification of disadvantaged and underserved Communities. Engages with Justice40 in public outreach groups and discussions regarding Benefits for DACs and identification of DACS.
New Jersey	Yes. Used in identification of disadvantaged and underserved Communities. Engages with Justice40 in public outreach groups and discussions regarding Benefits for DACs and Identification of DACs.
Wisconsin	One-on-one meetings with 58 stakeholders, including 7 that work with Justice40 initiatives.
Louisiana	Yes. After AFCs are fully built out, the state will constantly check to ensure that stations/fund recipients are meeting Justice40 requirements. The state will also build more chargers in metropolitan areas for redundancy to address Justice40 benefits.
Georgia	Yes, the Georgia NEVI plan addresses equity considerations to satisfy the goals outlined in the Justice40 Initiative
Washington	Yes, Justice40 was utilized when identifying and addressing benefits to DACs.
Hawaii	Yes, to some degree, however it is slightly unclear in the plan. It is referenced but not elaborated on.
Colorado	Yes as mentioned in the above section.

3. How does the state identify and consider the possible benefits and disbenefits of the plan's implementation, including local and environmental advantages and disadvantages?

Massachusetts	Public & stake holder & EJ community engagement

New Jersey	Public & stake holder & EJ community engagement, utilized Justice40 and NJ specific designations
Wisconsin	WI will continually meet with groups that work with DACs. It proposes ways of measuring benefits. (Page 80).
Louisiana	The plan includes multiple metrics to measure the benefits (direct and indirect) of this plan. (Page 42).
Georgia	GDOT is currently gathering feedback on the benefits and measurements found on page 58.
Washington	WDOT has developed a preliminary list of benefits and metrics, found on page 37, that address the NEVI plan's goals, Justice40 policy priorities, and are based on indicators that contribute to the identification of DACs.
Hawaii	Hawaii's Department of Transportation (HDOT) will monitor the plans progress against is 3 main goal, found on page 8, will conduct annual online surveys of electric vehicle drivers, and consult with private entities such as the two power utilities that operate in Hawai'i among others. Many of the potential risk have also been identified by the state plan and stated outright.
Colorado	Well the state sent out a survey which gathered a total of 391 respondents, identifying what EV stockholders and the general public though potential benefits and disbenefits of EV fast chargers. The specific stakeholders are listed on page 8.

4. How did the state engage with environmental justice (EJ) communities (per the plan)?

Massachusetts	EJ communities and their leaders were involved in both Identification of DACs and identification, quantification, and measure benefits to DACs
New Jersey	EJ communities and their leaders were involved in both identification of DACs and identification, quantification, and measure benefits to DACs
Wisconsin	Engaged with stakeholders associated with EJ organizations.
Louisiana	Collaborates with multiple environmental groups, such as the EPA and LDEQ. The state engages EJ groups to identify and work with DACs.
Georgia	Georgia's NEVI Plan is focusing outreach on DACs by engaging the general public, local governments, workforce education, and social/environmental justice organizations,
Washington	WSDOT's Title VI Plan's commitments include incorporating the principles of EJ into its programs, policies, and activities.

Hawaii	HDOTs civil rights office is working directly off of the Title VI/Environmental Justice act, and laws including Chapter 343 – Environmental Policy of the Hawai‘i Revised Statutes. However, no specific Enviromental organizations were named.
Colorado	The state did perform a survey and a set of virtual presentations / meetings with EJ community leaders and representatives.

5. Any mention of engagement and/or resources in other languages? (How does this plan engage with other languages)

Massachusetts	Nothing other than Title IV requirements
New Jersey	Nothing other than Title IV requirements
Wisconsin	WisDOT Transportation Electrification page will be continually updated and can be translated into other languages.
Louisiana	N/A
Georgia	N/A
Washington	Will consider translating methods of public outreach into Spanish (survey and interactive map). Providing language access services to limited English proficient individuals.
Hawaii	Yes, especially in any identified DAC’s based on the categories outlined above. The plan itself has also provided maps outlining these DACs
Colorado	Yes, and the Colorado Department of Transportation (CDOT) will implement them as requested by community partners.

6. How are states identifying gaps within rural and underserved communities when compared to other communities? (Questions)

Massachusetts	In progress, dependable on other aspects
New Jersey	In progress, dependable on other aspects
Wisconsin	
Louisiana	
Georgia	
Washington	
Hawaii	
Colorado	

7. How are states distributing funds to these underserved areas?

Massachusetts	Additional NEVI funds will then be used to focus on zones within the AFC network where there is the most unserved demand, with higher priority given to zones with high percentages of environmental justice communities
New Jersey	In progress

Wisconsin	After interstate highways and AFCs are built out, Wisconsin will proceed to fill in EVSE gaps along other regional routes and within key equity-based areas
Louisiana	LA is prioritizing funds to buildout its corridors. Once approved, it will use its remaining funds to address redundancy in high-use areas and underserved areas. Additionally, underserved areas may receive operating assistance.
Georgia	Over 60 percent of the charging stations likely to be needed for AFC certification will be located within disadvantaged communities.
Washington	$25 million in funding to support EV adoption among low-income households.
Hawaii	HDOT commits to installing one NEVI-compliant charging station or a Community Charging facility in at least one DAC on each island
Colorado	Colorado's NEVI Plan implementation will ensure that at least 40 percent of the benefits of NEVI funding accrue to DACs

Buildout

1. How does the state plan to meet the 20 percent cost share requirement?

Massachusetts	MassDOT is considering the cost-share requirements in contracting Private Entities to implement and operate through NEVI funding even though all sites may not be profitable
New Jersey	Do anything they can to make sure that 90% of total project costs can be covered my federal, state, and utility funding. NJ will capitalize on state and utility programs to meet the federal 80-20% cost chare
Wisconsin	Competitive procurement process. Awardees will be responsible for covering their 20%.
Louisiana	Competitive grant process. Recipients will be responsible for covering their 20%.
Georgia	Through competitive solicitation GDOT will seek to identify and qualify partners who can deploy funds into site locations that meet NEVI requirements.
Washington	Toll credits allow 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/ local funding sources.
Hawaii	HDOT is planning on outsourcing some of the implementation cost to partners it has worked with before.

Colorado	Colorado has also seen progress towards plan goals through private investment in general, following NEVI's 20/80 requirement. In the majority of cases, this 20% eventually falls on the developer or site host responsible for proposing, implementing, and operating the charging facility.

2. How does the state plan to leverage the funding and expertise of the private sector, including electric utilities?
    a. Who will be responsible for building and operating the stations?
    b. How are public and private entities being held accountable to these plans?
    c. How does the state plan to allocate funds?

Massachusetts	MassDOT is considering the cost-share requirements in contracting Private Entities to construct, maintain and operate DCFC equipment through a competitive solicitation process. Range for public- private partnership during plan implementation a. Private Entities (specifically single contractor) b. Single contractor solicitation after competitive solicitation process c. Contracting Private Entities to implement and operate through NEVI funding
New Jersey	a. Multiple private entities (avoid reliance on single entity) b. Establish contracting criteria and private entity requirements c. Fund will be given to multiple competitive competitors and use funds for workforce training programs, outreach to communities, inform, educate and train
Wisconsin	a. Third-party contractors who receive the grants will own and operate the stations. b. The contracts with these third parties will include all federal rulemaking provisions. c. Third parties will apply and compete for grants in the form of a competitive procurement process.
Louisiana	a. Third parties that received the grants. b. LA DOTD will continuously monitor to ensure all stations are properly built out and maintained. c. Third parties will apply and compete for grants in the form of a competitive grant process.
Georgia	
Washington	
Hawaii	a. Technicians and electricians trained by methods to which the state is researching into. b. HDOT issued an Electric Vehicle and Charging Infrastructure service contract back in 2020 which ensures

	accountability and the installation of NEVI approved chargers. c. For the first two years following the plan's implementation, they plan to focus on installing a total of eight charging stations on the major roads and within DACs. After that the plan is vague.
Colorado	a. CDOT is plaining on growing their workforce through increasing the quality and quantity of their pre-stablished associated training programs. CDOT also created a ZEV Workforce Development group to address the training and skill sets needed for this transition b. In the past year, CDOT has been closely working with partner agencies and key stakeholder groups to ensure implementation is done smoothly. c. CDOT will use its funds to pay off third party contractors who be the ones installing the EV chargers, along with the necessary safety requirements and other accommodations asked by DACS, and in the continued improvement of their labor training facilities.

3. How does the state fulfill or exceed the minimum standards and requirements for charging stations?
    a. How many chargers are being installed per station on the IHS?
    b. How many chargers are being installed per station within more populated areas, such as neighborhoods, towns, and cities?
    c. What is the reliability level of the charger stations being installed?
    d. Are states deploying chargers at the maximum distance from the Interstate highway (1 mile), or are they deploying them closer?

Massachusetts	a. 4 chargers per station b. In progress c. Goal: 97% (5-year goal) d. 1. mile from IHS
New Jersey	a. 4 chargers per station b. In progress c. Goal: 95%-98% d. 1 mile
Wisconsin	WI will try to have chargers within a 25-mile radius buffer of each other. (Model shown on page 59). a. No specific number of chargers specified. b. No specific number of chargers specified. c. They don't mention reliability levels. They just state the reliability/maintenance data they will collect. d. All stations are within 1 mile of the IHS.
Louisiana	a. No specific number of chargers specified.

	b. No specific number of chargers specified. c. They don't mention reliability levels. The owners and operators of the chargers will collect and report reliability/maintenance data. d. All stations are within 1 mile of the IHS.
Georgia	a. 4 chargers per station b. In Progress c. N/A d. 1 mile
Washington	a. 4 chargers per station b. In progress c. N/A d. 1 mile
Hawaii	a. Not stated directly but implied to be one charger per-station b. Not stated c. Not stated by it was mentioned that HDOT will monitor the chargers carefully to ensure reliability. d. All of the proposed distances fall under the maximum of 1 mile.
Colorado	Colorado is proposing to install chargers without four 150kw charging ports in areas where such utility may not be needed (like more rural areas). a. Not directly states, but in total they are plaining to install over 1,500 chargers across the state. b. The Colorado Energy Office (CEO) then worked with graduate students from the University of Colorado to incorporate additional considerations for station placement including elevation and population centers. c. Not stated d. For the most part yes but they are asking for a few exceptions. These are elaborated on in the document on page 49.

4. How does the state prioritize the distribution of chargers on the Interstate Highway System or within communities?
    a. Are states planning to improve upon active Alternative Fuel Corridors (AFC) or develop entirely new ones?
    b. Are states taking into consideration any existing off-highway infrastructure when deploying EV chargers?

Massachusetts	a. Using both existing and new ones designated for EV AFCs
New Jersey	a. Yes (nominated new ones), but not stated if using existing ones (listed in a table)

	b. Not specifically stated
Wisconsin	a. Both. They proposed new AFCs and got them approved, and they will build these out while also adding more chargers to existing AFCs. b. WI has specific guidelines for amenities near a charger station, to see if 3-phase power is available. (Pages 51-53)
Louisiana	a. Both. LA proposed new AFCs that were approved, and they will build these out while also adding more chargers to existing AFCs. b. LA will prioritize some locations for buildout according to characteristics such as parks and travel destinations nearby.
Georgia	Georgia will focus early deployment efforts on building out AFCs to NEVI standards, if additional capacity is needed the state will evaluate whether to add more ports to existing sites or to add additional sites. They will also consider installing higher power chargers at some locations. a. Two additional AFCs were approved by FHWA in July 2022 that Georgia will be building out. b. Yes, clusters of hotels, gas stations, grocery stores, and shopping centers were analyzed when determining charger placement.
Washington	a. Council will nominate additional AFCs in 2024 b. State is taking suggestions through an interactive map and also different surveys
Hawaii	Hawaii has asked for some exemptions to the 50 mile maximum and 600kw requirements when it comes to their charger on the IHS, all listed on page 39 of the plan. a. Hawaii is planning to use their existing AFCs as much as possible. b. Not directly mentioned
Colorado	Colorado also has asked for some exemptions to the 50-mile maximum requirement when it comes to their charger on the IHS, outlined in page 49 a. Yes, but specifically Colorado is looking to expand their corridors to meet NEVI standards b. Yes, but the plan states that many will need expanding.

5. Due to these states belonging to different regions, do states explain and describe how their physical traits, like terrain and weather, affect any aspects within their EV infrastructure?

Massachusetts	Yes, but not specifically states how it will affect their EV infrastructure, all considerations. MassDOT anticipates asking bidders to describe their procedures to ensure DCFC site uptime that meets or exceeds federal standards including how they will ensure DCFC operation during all weather conditions, including heavy rain, snow, and ice events and high winds and procedures for detecting and remedying incidents of equipment malfunction or damage
New Jersey	Yes, EVSE vendors will be required to prepare emergency action plans, consistent with the New Jersey State Hazard Mitigation Plan (New Jersey Office of Emergency Management)
Wisconsin	There shouldn't be any specific challenges related to geography or terrain. Temperature and precipitation aren't expected to significantly impact chargers at existing facilities.
Louisiana	Louisiana Climate Action Plan: goal of 250 stations per 100,000 residents by 2050.
Georgia	Yes, GDOT coordinates with other state agencies to manage responses to weather-related events and emergencies. Also, potential AFCs with segments on evacuation routes were prioritized when deploying chargers.
Washington	Preference to sites that will not be impacted by potential impacts of climate change, extreme weather events, and flooding.
Hawaii	Yes, Hawaii has to deal with very violent weather, and dangerous natural phenomena (which includes lava flows). The plan identifies these problems and states that EV charging stations will only be built in areas that don't frequently experience these occurrences.
Colorado	

6. Do the states address these topics when considering the implementation of charging stations?
    a. General safety at EV stations
    b. Accessibility
    c. Inclusion of distributed renewable energy resources
    d. General implementation location: In addition, already-established rest spots and businesses off the highway

Massachusetts	a. Yes, MassDOT may develop site requirements which may include factors such as accessibility, and presence of amenities and safety features. MA noted that 15–30-minute EV recharging times were potentially concerning for safety and convenience purposes. b. Yes, access for DACs and general public as stated in (a) c. Not specifically stated but it is included that MA has state programs that support renewable energy such as the Solar

	Massachusetts Renewable Target (SMART) Program and the Massachusetts Clean Peak Energy Standard can be used to fund projects such as solar generation systems that are complementary to NEVI projects d. Not specific spots but maps are provided to show general locations of chargers, existing chargers are shown. Rest spot, etc. are not stated
New Jersey	a. Yes, the Electric Vehicle Infrastructure Training Program (EVITP) was designed to provide installers with training in the safe and qualified installation of EVSE infrastructure. There is a goal that safe equipment installation by local qualified electricians can be assured by providing access to electric vehicle charging station installation and maintenance education b. Yes, access for DACs and general public c. Board is exploring how best to address grid capacity concerns, including how to integrate renewables, storage d. Not specific spots but maps are provided to show general locations chargers. Already existing chargers are shown. Rest spot, etc. are not stated
Wisconsin	a. WI has several strategies that address issues including lighting, charger locks, tampering, etc. b. List of ADA requirements for measuring accessibility. (Page 82). c. Stakeholders have expressed excitement for renewable energy use in EV infrastructure, but nothing is currently planned. d. Specific guidelines for amenities near a charger station, to see if 3-phase power is available. (Pages 51-53).
Louisiana	a. At least regarding emergency evacuation, LA will prioritize placing chargers in safe, well-lit locations near interchanges and crossroads that have physical security and are easily accessible b. LA will meet all regulations to comply with the ADA and Title VI of the Civil Rights Act of 1964. c. LA may consider backup generation, such as solar & battery storage for EV chargers along major evacuation routes. d. LA wants to install chargers in certain areas to promote access to locally owned businesses, cities, and towns for economic activity.

Georgia	a. Yes, each employee working on EVSE must be trained in safety-related practices and procedures. b. Yes, easily accessible from HIS and DACs c. Distributed energy resource installed, kW capacity and type, per charging station is mentioned in the Quarterly Data Submittal d. GDOT anticipates that interchanges (for interstates) or intersections (for the US highways) with amenities such as restaurants, shopping, parks, or hotels, will be prime candidates for locating NEVI-funded EV charging stations.
Washington	a. Washington will require that electrical contractors and electricians involved in the installation, operation, and maintenance of station electrical components be certified through a Registered Electrical Apprenticeship program that includes EVSE specific training, such as the Electric Vehicle Infrastructure Training (EVITP) or comparable programs. b. Yes, for both DAC and also on AFCs c. Yes, mention of renewable generation resources and grid service. d. Yes, the state has an interactive map showing all the locations of planned chargers
Hawaii	a. Yes, specifically in regards to extreme weather, cybersecurity, and vandalism / destruction. They are also outreaching to their general community to identify any other areas of concern they may have neglected. b. Yes, both for DAC and in general c. Not mentioned d. Yes, in detail as well. There are maps on pages 14-17 outlining these areas.
Colorado	

Reliability and Maintenance

1. How does the state plan to meet the 97 percent reliability requirement?

Massachusetts	Does not specifically say but state that their goal is to provide 97% reliability, MassDOT anticipates asking bidders to describe their procedures to ensure DCFC site uptime that meets or exceeds federal standards
New Jersey	Does not specifically say but state that their goal is to provide 97% reliability through qualified workforce
Wisconsin	Does not state 97% reliability goal. WI states that it will collect data pertaining to reliability and maintenance from the station owners and operators.

Louisiana	Does not state 97% reliability goal. Station owners and operators will report data pertaining to reliability and maintenance.
Georgia	GDOT will consider methods to minimize incidences of and ensure prompt repair of damaged cords or equipment, broken screens, unreliable communication, and other similar issues to maintain the 97 percent uptime requirements of NEVI, as best as possible.
Washington	Does not mention this percentage, but it does mention establishing plans for operations, maintenance, and emergency response.
Hawaii	The plan does not mention how it will keep a specific percentage, but it mentions that HDOT will continuously monitor the charging stations to ensure reliability.
Colorado	

2. What additional standards and requirements does the state set for reliability and maintenance?
    a. Does it factor in a focus on public road safety. (Discussing things such as the rapid repair of chargers whose damaged conditions could cause harm)
    b. What is the duration of the maintenance plan?

Massachusetts	a. Yes but not specifically stated b. Not specifically stated but is included in 5 year implementation/funding plan
New Jersey	a. Yes, but not specifically stated, just promoting the hiring of a qualified to increase the safety and reliability of charging stations
Wisconsin	a. Not stated. b. Chargers must be maintained for at least 5 years after installation.
Louisiana	a. Not stated. b. LA wants the charger owners to have a strategy for continued maintenance beyond the 5 years of funding from the state.
Georgia	a. Not stated. b. GDOT partners are responsible from operations and maintenance of chargers, duration is not specified
Washington	a. No b. No specified duration of maintenance plan, but included within the 5-year implementation.
Hawaii	a. Yes b. +5 years, and it is expected to continue after NEVI funding stops.
Colorado	

3. How does the state address resilience to power outages or other regional challenges?

Massachusetts	Does not specifically address but overall plan is to minimize any stress of the grid
New Jersey	Still exploring best ways to address grid capacity concerns in the process of advancing Grid modernization which address capacity, assuring high efficiency, and utility to identify prioritizations for upgrades
Wisconsin	WI utilizes its Highway Maintenance Manual for dealing with issues in winter months, such as snow removal. It also has plans for emergencies and evacuations, and it is creating an assessment tool to identify areas at risk of flooding.
Louisiana	Major evacuation routes must support EVs in the event of flooding from Hurricanes. LA is also considering solar and battery storage for these situations. It also proposes new technologies and businesses for future plans.
Georgia	Power Outages were not mentioned,
Washington	Power outages were not mentioned. State is avoiding charger deployment in locations that could be damaged by weather.
Hawaii	Power Outages: Not mentioned directly, but 600kw charges are not being installed in areas with a generally low overall voltage. Regional Challenges: Yes, form extreme weather to language barriers.
Colorado	

4. How does the state address workforce training and development for the construction, operation, and maintenance of the EV charging network?

Massachusetts	MassDOT will work with the selected industry partner(s) to monitor the supply of workers with skills needed to support construction and maintenance of NEVI program DCFC infrastructure through, training, trade school, and technical institute
New Jersey	Electric Vehicle Infrastructure Training Program (EVITP) was designed to provide installers with comprehensive classroom and hands-on training in the safe and qualified installation of EVSE infrastructure. Installer must pass certification exam for proof of knowledge and skill
Wisconsin	WI will offer opportunities to all communities. It encourages a diverse workforce, and it promotes training and certification with the Electric Vehicle Infrastructure Training Program (EVITP).
Louisiana	LA will create new workforce opportunities, including installers, maintenance technicians, electrical workers, and other trades. DOTD will work with the Louisiana Workforce Commission and

	other organizations to establish training programs. It also encourages community participation.
Georgia	Training courses through programs such as the Atlanta Joint Apprenticeship and Training Committee to ensure electricians are certified to do EVSE work
Washington	Strategies to promote strong labor, safety, training, and installation standards will be addressed through a mandatory training requirement as outlined in the Labor and Workforce section of this plan
Hawaii	Currently determine the most effective strategies to train such a workforce to operate and maintenance the installed EV chargers. Hawaii is looking into private firms for charger installations.
Colorado	

5. Is the state planning on upgrading existing charging stations to meet the NEVI requirements?

Massachusetts	Not specifically mentioned, but stated that there are stations that don't meet NEVI requirement and some that do
New Jersey	Not specifically mentioned, but existing charging stations are seen as opportunities to improve
Wisconsin	Yes, it plans on updating certain chargers to fit into its overall network.
Louisiana	Yes, it plans on updating certain chargers to fit into its overall network.
Georgia	Some gaps in AFCs have existing DCFC that are geographically compliant but either lack sufficient overall station power, have too few ports, or do not use CCS ports. It is anticipated that such sites will be eligible to be upgraded as part of the program.
Washington	Not specifically mentioned, but all existing chargers meet the NEVI requirements.
Hawaii	Yes, as the main island already had some chargers installed in previous years.
Colorado	Yes, specifically CDOT is looking to improve by adding additional chargers and increasing power as required by NEVI standards

Evaluation

1. How will the state assess its performance towards completing its goals and objectives?
    a. Does state provide an evaluation plan?
    b. What is this state's timeline for assessing its progress towards completing its 5-year goals and interim goals?

Massachusetts	a. Yes (in a form of a table) b. Ranging from "conclusion of program" and annual evaluation for different aspects

New Jersey	a. Yes (outlined) b. Assessing each phase in their plan quarterly for each aspect of installation, maintenance, reporting, etc.
Wisconsin	a. WisDOT has the Mobility, Accountability, Preservation, Safety, and Service program (MAPSS) to help operationalize its evaluation. b. It will quarterly and annually assess its program progress by monitoring statewide buildout and data collection.
Louisiana	a. No detailed plan, but it will constantly evaluate stations to ensure they are meeting maintenance and Justice40 goals. b. LA has a very detailed 5-year timeline. (Pages 9-11).
Georgia	a. Yes, through the table on page 61 b. Evaluation will be done annually
Washington	a. Data collected will include items from the list on page 40 b. Evaluation will be conducted throughout the 5-year implementation
Hawaii	a. No set plan was mentioned but the state does mention that it will try to evaluate itself. b. The state is palling on achieve three specific goals, listed on page 8, and it will measure itself against these goals as a method of self-evaluation. These goals set up a rough timeline.
Colorado	

2. What type of data will the state collect, and how does the state intend to make the data publicly accessible?
    a. What data do states plan to gather specifically?
    b. How do they intend on collecting it?
    c. How often do they intend on collecting it?
    d. How do they intend on sharing it for access?

Massachusetts (need to read again to clarify different types of data referred to)	a. Data specific to their "performance metric" stated in section 12.0 b. In the progress, contracting with third parties require some type of data collection c. Not specified d. Yes, to the U.S. Department of Energy's Alternative Fuels Data Center and prohibit requiring subscription fee for public chargers On the other hand: MassDOT will consider data reporting requirements that support the efficient and reliable operation of the NEVI network and enable MassDOT to evaluate program

	success based on defined metrics. MassDOT does not anticipate including data reporting requirements that are more stringent or periodic than those required by applicable federal regulations.
New Jersey	a. Not specified, data regarding reliability and performance b. Using a software control system for online users c. Not specified e. Online portal
Wisconsin	a. List of data that may be collected and reported. (Page 70). b. Charger owners and operators must report all relevant data, as stated in their contracts. c. Annually, at least. d. Provide data in real time via Application Programming Interface (API) to third parties free of charge.
Louisiana	a. List of data that must be reported in real time. (Page 36). b. Charger owners and operators must report all relevant data, as stated in their contracts. c. Quarterly and annually. d. Data will be available through an open API for third-party access.
Georgia	a. (Refer to table on page 61) b. (Refer to table on page 61) c. Annually d. Made public through an online dashboard
Washington	a. (Refer to list on page 40) b. Contract provisions will stipulate the mandatory EVSE data collection and sharing requirements c. Not mentioned d. Not mentioned
Hawaii	a. Data on how often a particular charger is used b. In the plan it just says that Sustainability Partners will be responsible for collecting the data c. Not mentioned d. Some data will be made public on their website, but other than that it isn't elaborated on.
Colorado	

Medium- & Heavy-Duty (MDHD) Vehicles

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

Massachusetts	Not specified but anticipated date of roles of MDHDs in moving freight is November 2022 (identifying near and long term needs for, and location of charging supporting MDHDs.
New Jersey	Not specified but there are considerations or adjustments that need to be made for MDHDs to be addressed (batter weight, battery charging time, etc.)
Wisconsin	Not currently, but WI may prioritize stations with "pull through" capabilities for funding in the future.
Louisiana	No current plans, but LA wants to expand its infrastructure to aid in the transition of medium-duty and heavy-duty transportation
Georgia	No mention of MDHDs
Washington	Pre-existing policies for tax exemption on the sale or lease of new or used passenger vehicles, light-duty trucks, and medium-duty passenger alternative fuel vehicles
Hawaii	Yes, and specifically towards Hawaii's tram system.
Colorado	Yes, and their goal is to eventually have an entirely zero-emission vehicle fleet across all weight classes

Energy Storage & Renewable Energy

1. How does the state address the impact of the EV charging network on the electric grid?

Massachusetts	Not specified but board is exploring how best to address grid capacity concerns
New Jersey	Still exploring best ways to address grid capacity concerns in the process of advancing Grid modernization which address capacity, assuring high efficiency, and utility to identify prioritizations for upgrades
Wisconsin	WI concludes that its energy generation and pricing will be minimally impacted.
Louisiana	LA utilities state that there is ample grid capacity, but some exceptions may be required where grid capabilities are limited.
Georgia	Providing sufficient power for the EV charging network outlined in the plan is not expected to create undue burdens on the state's generation capacity.
Washington	Plan acknowledges that the states power system requires substantial alteration but does not provide insight on those alterations.
Hawaii	The state is currently working with its local electric companies to ensure the strain on the grid is manageable, especially in areas with a low overall voltage.
Colorado	CDOT is looking to incorporate resilience into strategic decisions about transportation assets and operations to ensure that the potential stress is mitigated.

2. How does the state involve electric utilities in the development of the EV charging network?

Massachusetts	Not specified but mentioned in labor and workforce consideration for electricians
New Jersey	Not specified but mentioned in labor and workforce consideration for electricians
Wisconsin	WI's electric grid is overseen by the Midcontinent Independent System Operator (MISO). It lists the distribution companies and displays a map of all the service areas. (Pages 37-38)
Louisiana	LA lists multiple utilities and their service companies. (Pages 14-15).
Georgia	GDOT has convened with 9 different electric utilities to discuss NEVI-related issues.
Washington	Electric utilities with more than 25,000 customers must analyze how their resource plans support and account for anticipated levels of ZEV use, relevant infrastructure forecasts and associated energy impacts, and information from the utilities' transportation electrification plans.
Hawaii	Yes, and the state is currently working with Hawaiian Electric Company
Colorado	Yes, and specifically they are working with the Colorado Public Utilities Commission (CPUC).

3. Does the state allocate program resources to the construction of energy storage or renewable energy sources collocated with EV chargers?

Massachusetts	Not specified but board is exploring how best to address grid capacity concerns, including how to integrate renewables, storage
New Jersey	Not specifically stated but it is included that MA has state programs that support renewable energy such as the Solar Massachusetts Renewable Target (SMART) Program and the Massachusetts Clean Peak Energy Standard can be used to fund projects such as solar generation systems that are complementary to NEVI projects
Wisconsin	Not currently, but stakeholders have demonstrated interest in this.
Louisiana	LA may prioritize funding for a location if it includes solar and energy storage that reduce project costs. Also considering solar and energy storage for emergencies and evacuation routes.
Georgia	Not mentioned
Washington	Not mentioned
Hawaii	Not mentioned

Colorado	Not program resources but it talked about how they are using their own resources to supply energy to charges through a mix of renewable and non-renewable energy.