West Virginia

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI)

DEPLOYMENT PLAN

July 2023

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1 Introduction

The West Virginia National Electric Vehicle (EV) Infrastructure Deployment Plan (Plan) overviews how West Virginia intends to use the National Electric Vehicle Infrastructure (NEVI) Formula Program funds. The program's purpose is to expand access to electric vehicle charging by:

- Accelerating equitable adoption of EVs, including for those who cannot reliably charge at home.
- Reducing transportation-related greenhouse gas emissions and help put the U.S. on a path to net-zero emissions by no later than 2050.
- Positioning U.S. industries to lead global transportation electrification efforts and help create family-sustaining union jobs that cannot be outsourced.

Additionally, West Virginia legislature passed House Bill 4797 in June of 2022. It directs the West Virginia Department of Transportation (WVDOT) to create the EV Infrastructure Development Plan for the state. It states the plan:

"..shall take a holistic approach, considering the future charging infrastructure needs of school systems, public transportation, counties and municipalities, and other public and private users."

To meet both federal and state goals, West Virginia will need access to new publicly available EV chargers. The West Virginia EV Infrastructure Development Plan is the state's road map to invest the NEVI Formula Program funds.

NEVI program funds are apportioned from the Infrastructure Investment and Jobs Act (IIJA), sometimes referred to as the Bipartisan Infrastructure Law (BIL). This Plan was developed using guidance provided by the NEVI program to create a framework to support build-out of the public EV charging network in the state.

Key Elements of NEVI Program in West Virginia:

- *Five-year program*
- *Estimated $45.7 million will be apportioned to West Virginia over five (5) years*
- *Estimated 912 new public charging ports will be constructed, increasing the public EV charging network by 3,145%*

The program will be implemented in two (2) phases over the five-year program in West Virginia. Phase 1 is focused on build-out of NEVI-required stations along the designated electric Alternative Fuel Corridors (AFC) in the state. The NEVI program requires electric AFCs in each state to have spacing of 50 miles or fewer between EV charging stations. The goal is to provide reliable regional and interstate EV travel across the U.S. It is estimated that Phase 1 will take two (2) fiscal years to complete.

Phase 2 will be focused on community-based public EV charging. Criteria for site selection during this phase will be based on community input and priority setting. The NEVI program requirements for this phase include a station may be on any public road or in other publicly accessible locations that are open to the general public or to authorized commercial motor vehicle operators from more than one (1) company. The focus for this phase will be on increasing access to EV charging and EV-related jobs, particularly in historically disadvantaged communities.

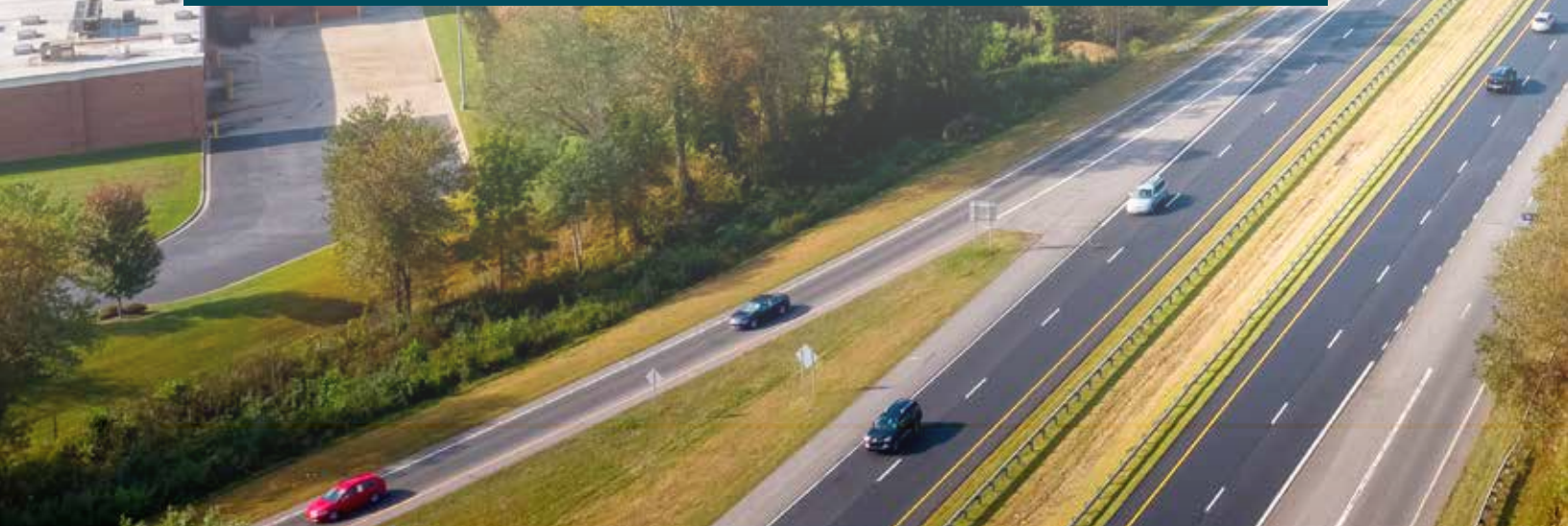
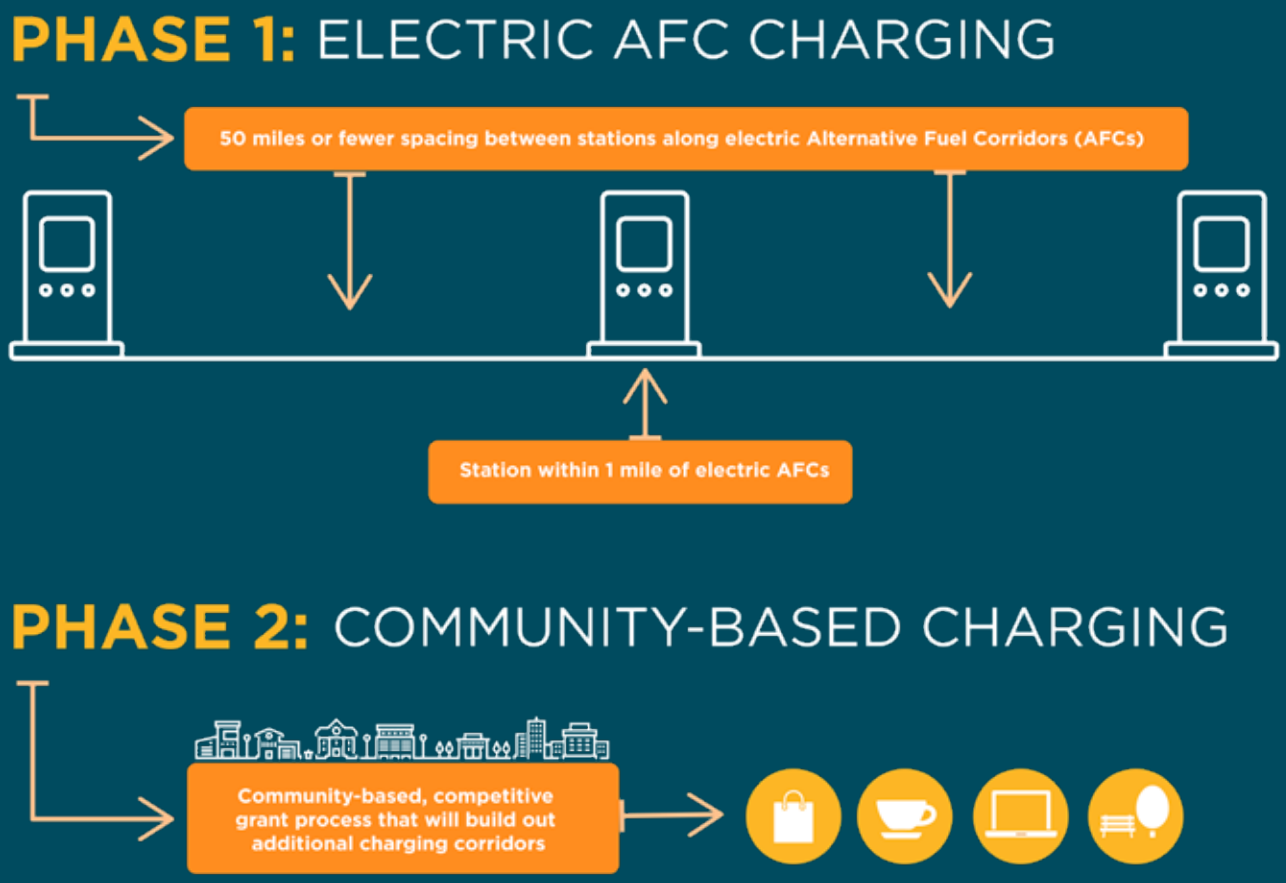


Figure 1. Phases



WEST VIRGINIA MILESTONE SCHEDULE

In West Virginia, NEVI program funds will be administered by the WVDOT Division of Highways. The NEVI program requires each state to submit an EV Infrastructure Deployment Plan. This Plan satisfies this requirement.

Each state plan must be approved by the Joint Office of Energy and Transportation (Joint Office) before NEVI funds can be distributed to each respective state. Each year during the five-year program, the Plan will be updated to document program progress in West Virginia and meet NEVI program requirements related to reporting. Table 1 highlights key dates for the first fiscal year of the NEVI program in West Virginia.

Table 1. Anticipated NEVI Implementation by WVDOT

Anticipated Date	Milestone
May – July 2023	Development of Plan
August 2023	Plan Submitted to Joint Office
September 2023	Plan to be Approved by Joint Office
Winter 2023	Publish Solicitation for Phase 1 AFCs
Spring 2024	Award Contracts for Phase 1 AFCs

UPDATES FROM PRIOR PLAN

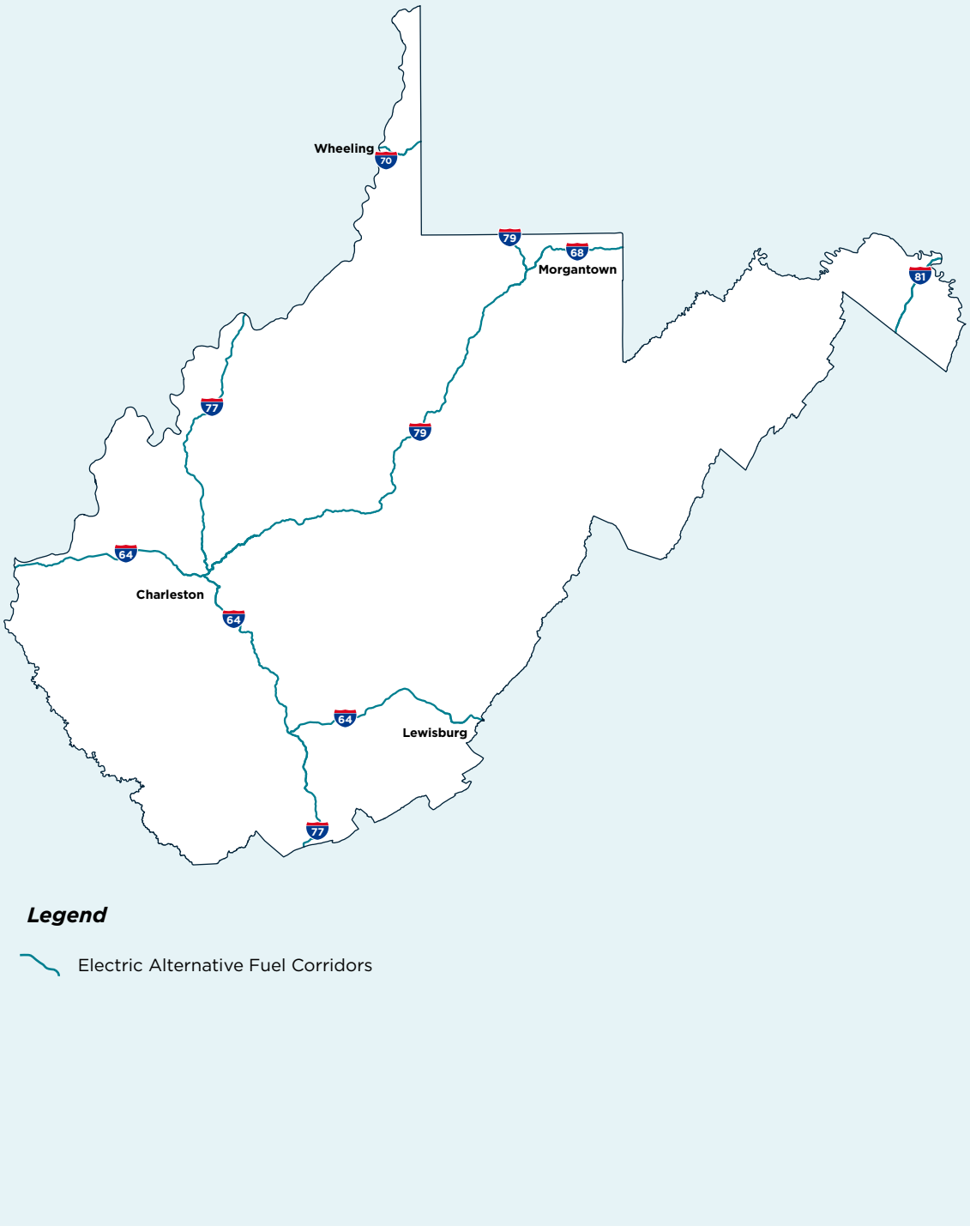
The table below highlights the areas of change between the 2022 and 2023 plan.

Table 2. Synopsis of Updates between 2022 and 2023

Section	Updated/Not Updated	Summary of Update
2. State Agency Coordination	Updated	
Memorandum of Understanding with other agencies	Updated	No MOU is needed with other agencies
Interagency Working Group(s)	Not Updated	Previously "Coordination with Other State Agencies"
3. Public Engagement	Updated	
Community Engagement Outcomes Report	Updated	Additional description of outreach and refined schedule for engagement
Tribal Engagement	Updated	No federally recognized tribes in West Virginia
Utility Engagement	Updated	Formal engagement will take place fall of 2023
Site-Specific Public Engagement	Updated	WVDOT will lead engagement once sites are secured and confirmed by the selected vendor(s)
4. Plan Vision and Goals	Not Updated	No change from NEVI Year 1 Plan
5. Contracting	Updated	Summary of P3 law used for Phase 1 procurement
Status of Contracting Process	Updated	Additional description about how a third party vendor will be selected
Awarded Contracts	Updated	No contracts have been awarded
Scoring Methodologies Utilized	Updated	WVDOT will develop a scoring methodology as part of the program development in fall of 2023
Plan for Compliance with Federal Requirements	Updated	WVDOT will lead oversight of vendor reporting and compliance. Vendor will be required to meet federal requirements as part of contract

Section	Updated/Not Updated	Summary of Update
6. Existing and Future Conditions Analysis	Updated	
Alternative Fuel Corridor (AFC) Designations (EV)	Not Updated	No additional EV AFCs designated since NEVI Year 1 Plan
Existing Charging Stations	Updated	Updated summary of existing stations and market conditions
Future Needs	Updated	Updated future need projections
7. EV Charging Infrastructure Deployment	Updated	
Planned Charging Stations	Updated	Updated detail for phasing by fiscal year
Planning Towards a Fully Built Out Determination	Updated	Update procurement strategy and FY funding timeline for fully built out determination
8. Implementation	Updated	Updated summary of implementation strategy
9. Civil Rights	Not Updated	No change from NEVI Year 1 Plan
10. Equity Considerations	Updated	
Identification and Outreach to Disadvantaged Communities (DACs) in the State	Updated	Summary of outreach strategy
Process to Identify, Quantify, and Measure Benefits to DACs	Updated	Summary of measures to track DAC impacts and benefits of NEVI program
11. Labor and Workforce Considerations	Updated	Additional information added about projected number of jobs to be created
12. Physical Security & Cybersecurity	Not Updated	
13. Program Evaluation	Not Updated	
14. Discretionary Exceptions	Updated	Three additional station locations proposed to reduce exceptions to one

Figure 2. West Virginia Electric Alternative Fuel Corridors



2 State Agency Coordination

Interagency coordination will be a critical part of West Virginia's path to success for the NEVI program. WVDOT will lead NEVI program coordination in West Virginia and work closely with other agencies to ensure all elements of the program are implemented in accordance with federal and state requirements as well as community priorities.

MEMORANDA OF UNDERSTANDING WITH OTHER AGENCIES

WVDOT will be the lead agency administering the NEVI program for West Virginia. WVDOT will not use a Memorandum of Understanding with other agencies to administer the NEVI program for West Virginia.

INTERAGENCY WORKING GROUP(S)

WVDOT will be the lead agency administering the NEVI program in West Virginia. Responsibilities include receiving funds from the federal government, managing program administration, and overseeing program compliance with federal and state requirements.

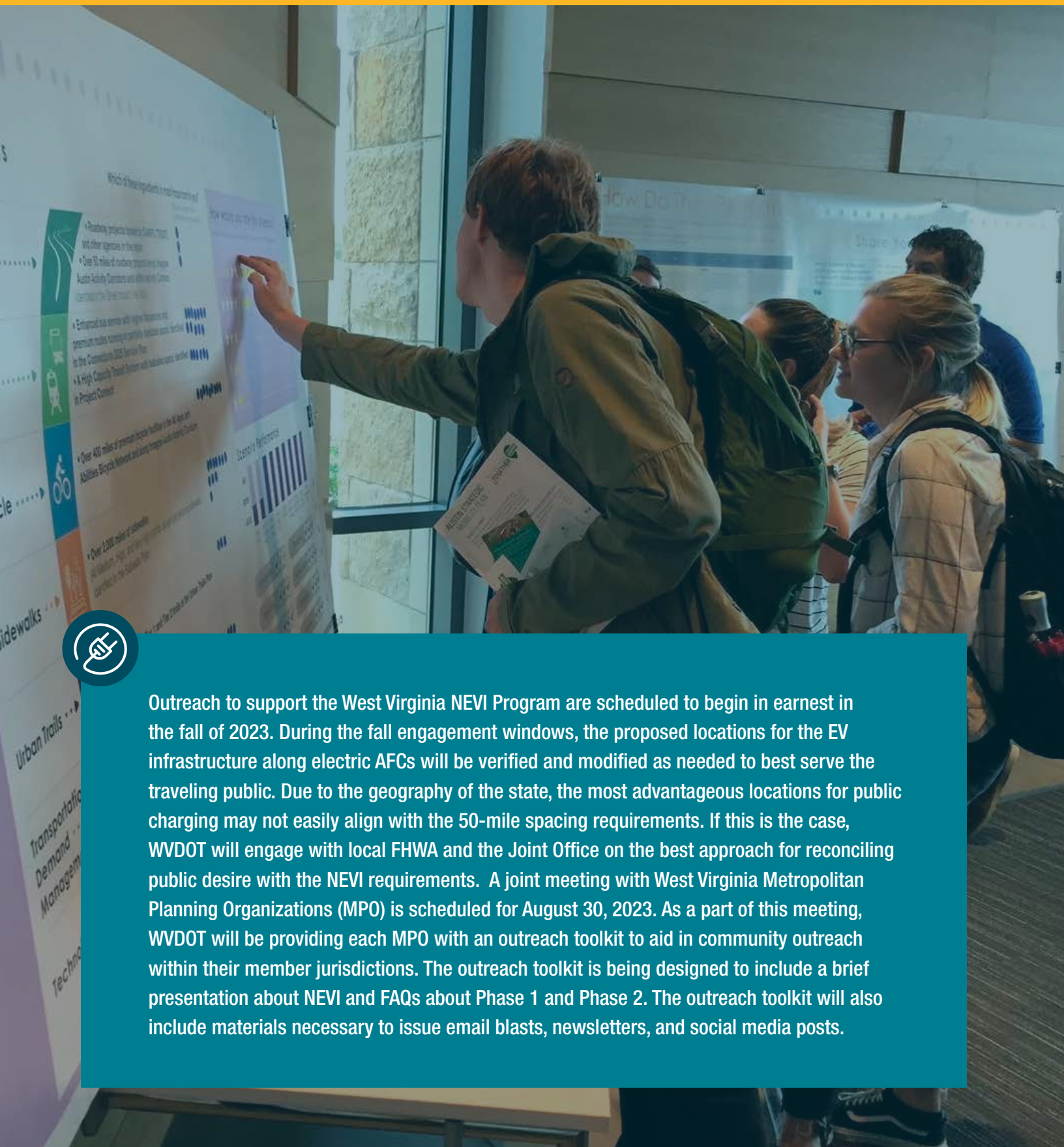
WVDOT is also the lead agency for the Volkswagen (VW) Environmental Mitigation Trust Settlement program. One of four (4) funding priorities for the VW settlement program is EV charging equipment. The VW and NEVI programs will be coordinated to support the shared goal of increasing public access to EV charging.

WVDOT will also work closely with the West Virginia Office of Energy (WVOE). WVOE is responsible for the State's Alternative Fuel program. This program includes research, planning, and funding for alternative fuel infrastructure. WVDOT and WVOE will coordinate infrastructure implementation as well as public engagement with stakeholders and the general public.

Economic development and workforce training will also be a focus with the NEVI program. WVDOT will coordinate with the West Virginia Department of Economic Development (WVDED). WVDED will also be leading the focus on small business opportunities through the Small Business Development Center (SBDC) as well as tourism through implementation of the Tourism Development Act. The goal is to support visitors, businesses, and residents by providing access to public EV charging.

Lastly, WVDOT will work closely with utility partners across the state, including the state's regulated utilities. The focus will be on coordinating investments necessary for grid improvements that support the NEVI-funded EV stations as well as coordinating EV charging investments utilities are making themselves.

3 Public Engagement



Outreach to support the West Virginia NEVI Program are scheduled to begin in earnest in the fall of 2023. During the fall engagement windows, the proposed locations for the EV infrastructure along electric AFCs will be verified and modified as needed to best serve the traveling public. Due to the geography of the state, the most advantageous locations for public charging may not easily align with the 50-mile spacing requirements. If this is the case, WVDOT will engage with local FHWA and the Joint Office on the best approach for reconciling public desire with the NEVI requirements. A joint meeting with West Virginia Metropolitan Planning Organizations (MPO) is scheduled for August 30, 2023. As a part of this meeting, WVDOT will be providing each MPO with an outreach toolkit to aid in community outreach within their member jurisdictions. The outreach toolkit is being designed to include a brief presentation about NEVI and FAQs about Phase 1 and Phase 2. The outreach toolkit will also include materials necessary to issue email blasts, newsletters, and social media posts.

PUBLIC OUTREACH

WVDOT will be working with the MPOs to further refine the strategy and locations for upcoming outreach, which is envisioned to include:

Three (3) joint MPO meetings

- Meeting 1 Objectives
  - » Discuss updated plan
  - » Solicit information about how best to advertise to their region and constituents
  - » Introduce proposed outreach process
  - » Share outreach toolkit
- Meeting 2 Objectives
  - » Updates on Phase 1 implementation
  - » Discussion and refinement of community charging strategy
  - » Distribute updated outreach toolkit
- Meeting 3 Objectives
  - » Share outreach results
  - » Discuss FY 24 plan update

One (1) statewide virtual information session and three (3) in-person public meetings across the state

» WVDOT will host one (1) virtual and three (3) in-person public meetings to provide information on the NEVI program. The purpose of these meetings is to share updates about ongoing program implementation as well as business and workforce development opportunities associated with the program. During these meetings, WVDOT will solicit feedback on proposed Phase 1 locations and adjust as necessary.

Webpage

» WVDOT will continue to maintain a webpage specifically devoted to the NEVI program in West Virginia. The webpage will serve as the central repository for information about the program, including procurement documents, reports, and upcoming events. The official URL for the NEVI webpage is *go.wv.gov/nevi.*

Social Media

» Social media content and a social media schedule will be developed to share information about the NEVI program and create dialogue and awareness.

Issue Tracking and Summary Report

» The primary purpose of public engagement is to inform the public and to understand and respond to community priorities. Input and progress will be documented regularly over the five-year program. At a minimum, WVDOT will create an annual NEVI plan update to report progress and communicate priorities for the upcoming fiscal year of the program.

TRIBAL ENGAGEMENT

There are no federally recognized tribes in West Virginia, as such, outreach will not be conducted.

UTILITY ENGAGEMENT

FirstEnergy and Appalachian Power (AEP) are the primary electric utility providers in West Virginia. WVDOT has begun working with each utility company to understand the electrical capacity at the proposed locations along the electric AFCs. Early coordination with AEP and FirstEnergy indicates that access to three-phase power at the proposed electric AFC locations should not be prohibitive or a major cost contributor at this time. Coordination will continue as implementation progresses later in 2023, and more detailed mapping will be generated to verify the utility access and needs.

SITE-SPECIFIC PUBLIC ENGAGEMENT

Once a vendor is selected and sites are secured, WVDOT will lead site specific outreach in alignment with their established methods for conducting outreach on federally funded projects.

4 Plan Vision and Goals

THE GOALS OF THE WEST VIRGINIA NEVI PROGRAM ARE:

Build a reliable and easily accessible EV charging network

As part of the NEVI plan, corridors will be built out in segments to be immediately used for travel and priority will be given to corridors that do not have existing chargers. As EV adoption and deployment continues in West Virginia, the state will continue efforts in creating a network of EV chargers that are accessible and connected.

Increase overall network reliability

Through data collection requirements in the solicitation process, various performance metrics will be required to ensure the charging infrastructure is operational at least 97 percent of the time. The charger locations and real-time operational status will be available to drivers for seamless trip planning.

Ensure equitable location of EV chargers, particularly in historically disadvantaged communities

For the entire five-year program, disadvantaged communities and rural areas of the state will be prioritized for EV charging infrastructure. Education is a key component of EV deployment. West Virginia will continue to ensure equitable and community-backed decision-making processes to ensure chargers are installed to meet the needs of communities who have historically been under-funded and under-invested.

Expand access to economic opportunities

A portion of the West Virginia NEVI program will focus on jobs, skills training, and business development investments to develop and train local workers in Electric Vehicle Supply Equipment (EVSE) construction and maintenance.

5 Contracting

WVDOT will manage the NEVI program and work with third-party entities to construct, operate, and maintain EV chargers installed with NEVI funds. To do this, WVDOT will manage a competitive bidding and contracting process for NEVI-funded EV stations. Community priorities and federal and state requirements will be incorporated into the contracting process to ensure compliance and goals are achieved.

STATUS OF CONTRACTING PROCESS

WVDOT has received an unsolicited proposal from a vendor to implement Phase 1. The proposal is in line with the state's Public-Private Transportation Facilities Act (West Virginia State Code, Chapter 17, Article 27).

AWARDED CONTRACTS

No contracts have been awarded to date. WVDOT anticipates award of contract in Q4 of 2023 or Q1 of 2024.

SCORING METHODOLOGIES UTILIZED

WVDOT is in the process of developing a scoring methodology to review solicitations. The estimated completion for the scoring methodology is fall of 2023. This methodology will be used to review solicitations for Phase 1 and Phase 2. Scoring methods may include, but are not limited to, station location eligibility, site standards and requirements, cybersecurity protocol, data management procuresses, schedule expectations, and performance guarantees. The scoring methodology will include criteria for projects that benefit DACs as defined by the Justice40 program.

6 Existing and Future Conditions Analysis

STATE GEOGRAPHY, TERRAIN, CLIMATE, AND LAND USE PATTERNS

West Virginia is bordered by Virginia, Kentucky, Ohio, Maryland, and Pennsylvania. The entire state is part of the Appalachian Mountains, with forest covering more than three fourths of the land and an average elevation of 1,500 feet above sea level. Within the system, the state's terrain is subdivided into the Appalachian Plateau Province and the Ridge and Valley Province. The Appalachian Plateau Province covers the western two thirds of the state and drains into the Ohio River Basin. The eastern edge and panhandle of the state falls within the Ridge and Valley Province and drains into the Potomac River Basin.

West Virginia has a humid continental climate except for along the eastern panhandle, which has a marine modification. Mean temperatures range from 56°F in the south, 52°F in the north, and 48°F in the mountainous regions. January is the coldest month and July is the warmest. Average annual precipitation ranges from 60 inches in the mountains to 35 inches in the rain shadow east of the mountains. Snowfall makes up 8% of total precipitation. Flooding and heavy snow are the most common natural disasters in the state.

West Virginia is a rural state. 51% of the population lives in rural areas, with 49% living in urban areas. Most of the counties in West Virginia are designated as rural. With a more dispersed population and longer distances between many destinations, supporting EV charging in all parts of the state will be important. It will support not only interstate and regional travel, but local travel, too.

INDUSTRY AND MARKET CONDITIONS

GRID CAPACITY

West Virginia's electricity is coordinated by the PJM Interconnection, a regional transmission organization (RTO) that operates a competitive wholesale electricity market in 13 states. West Virginia and all state areas that border West Virginia are within the PJM Interconnection network.

In 2021, according to the U.S. Energy Information Administration (EIA), West Virginia ranked second in the nation for coal production, and coal-fired power plants contributed 91% of the state's net electricity generation. Renewable energy, namely hydroelectric power and wind energy contributed 5% of net electricity generation, and natural gas contributed roughly 4%. West Virginia's crude oil production, including natural gas, reached an all-time high in 2020 due to drilling in the state's northern panhandle. Subsequently, the state ranked fourth in the nation for natural gas marketed production in 2021.

In 2021, the EIA reported that West Virginia's net electricity generation was 56,661,533 megawatts per hour. West Virginia ranked fourth in the nation for total energy production in 2020.

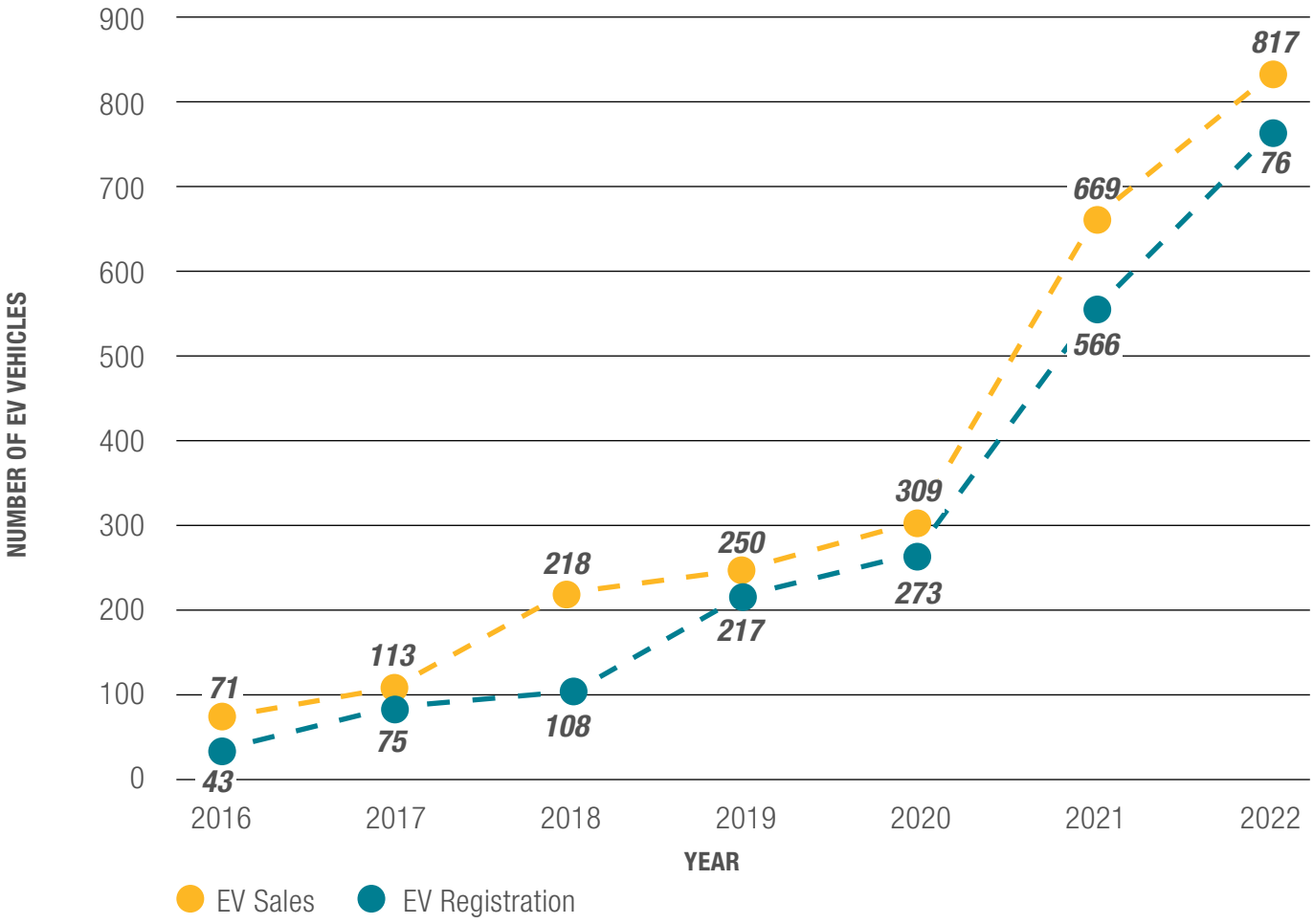
ELECTRIC UTILITIES THAT SERVICE THE STUDY AREA

Residents of West Virginia primarily receive electricity from four (4) investor-owned companies: Appalachian Power Company, Wheeling Power, Monongahela Power Company, and Potomac Edison Company. According to the Public Service Commission (PSC) of West Virginia, these companies account for 96% of residential electric sales and 98% of commercial electric sales. Furthermore, the PSC regulates rates and charges for these companies as well as the reasonableness of their acts, practices, and services. Additionally, five (5) independent non-generation electric companies purchase wholesale power from suppliers served by PJM Interconnection and distribute that power at retail rates to residential, commercial, and industrial customers. These companies are the Harrison Rural Electrification Association, Black Diamond Power Company, Craig-Botetourt Electric Cooperative, New Martinsville Municipal Utilities, and Philippi Municipal Electric.

EV OWNERSHIP/AVAILABILITY

EV ownership and sales continue to increase in the state. From 2016 to 2023, EV sales have increased by 1,051%. Over the same time period, EV registrations increased by 1,686%.

Figure 3. Existing EV Ownership



In 2020, West Virginia ranked number 44 of 50 states for EV sales. In 2020, electric vehicles sales, including battery electric vehicles (BEV) and plug-in hybrid electric vehicles (PHEV), accounted for less than 1% of all car sales in the state.

While EV sales and ownership are low in West Virginia compared to other states, West Virginia is ranked third in the country for the number of charging ports per 100 EVs. Existing access relative to potential demand is relatively high when compared to other states.

Two (2) regulatory conditions are impacting EV sales and potentially reducing demand for EVs in the state. West Virginia currently does not allow direct-to-consumer sales. Changing this restriction would help EV sales increase, as many auto manufacturers are moving to direct-to-consumer sales business models. Additionally, West Virginia charges an additional registration fee for new alternative fuel vehicles. Adjusting registration fee costs may also be a way to increase EV sales. It should be noted that the higher registration fee for EVs is done in part to offset lost revenue from gas-tax collection to pay for transportation infrastructure. All states are developing policy strategies and researching how to make these adjustments as EVs increase as a share of total vehicles on the road.

TRAVEL PATTERNS, PUBLIC TRANSPORTATION NEEDS, AND FREIGHT NEEDS

WVDOT is aligned with NEVI program goals and is focusing on creating a reliable statewide network of EV chargers. Below is a summary of state travel patterns, freight needs, and supply chain considerations as they relate to EV charging network implementation in the state.

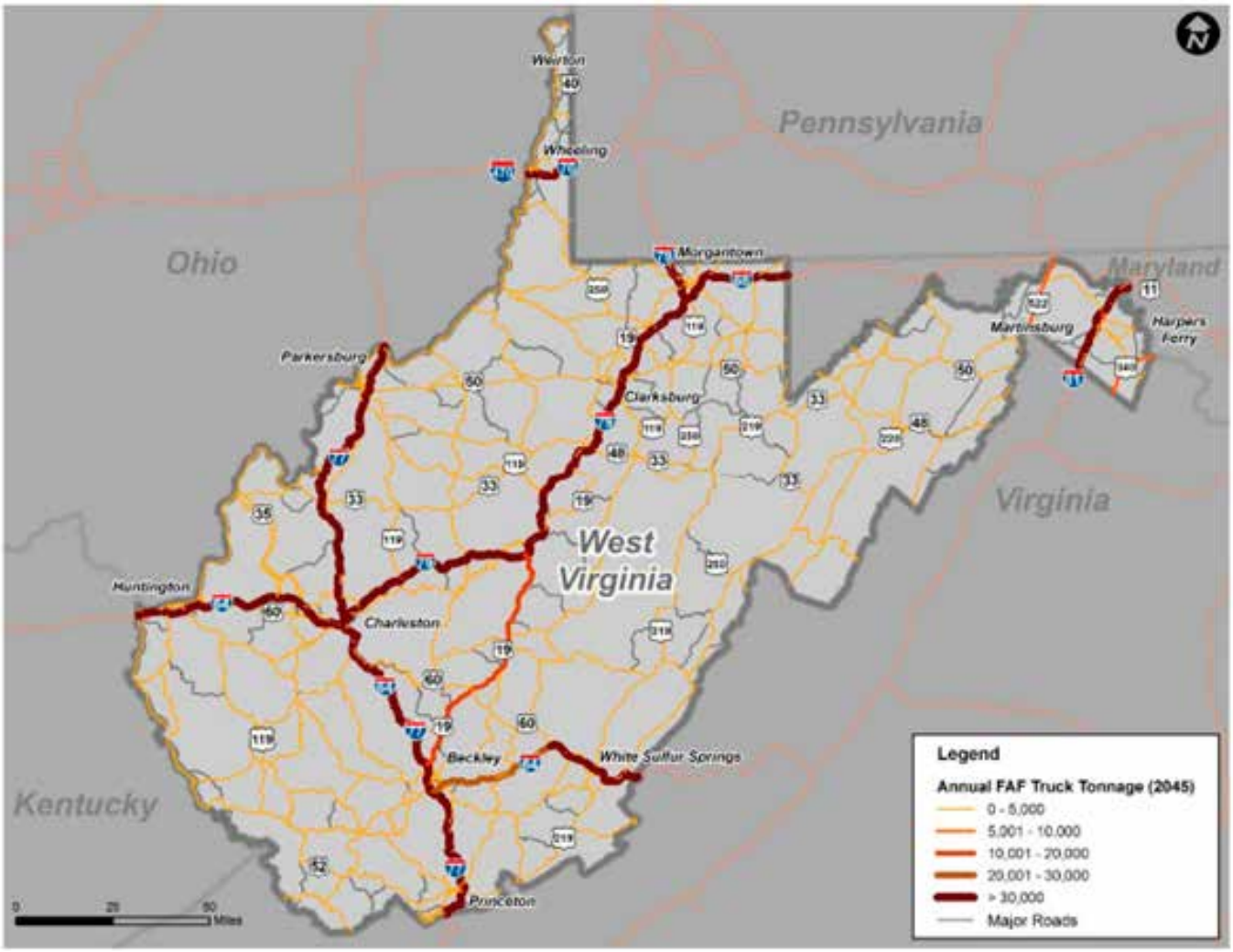
STATE TRAVEL PATTERNS

As of 2019, West Virginia has approximately 39,000 miles of public roads and 19 billion vehicle miles traveled (VMT). Of these totals, there are 555 miles of Interstate System carrying approximately 6 billion VMT per year. West Virginia has a VMT per capita of 10,600 miles, which surpasses the national average of 9,800 miles. This is likely a function of the rural nature of the state and the longer travel distances needed for both local and regional travel.

West Virginia's roadway network is the backbone for moving the state's freight, and there are 302 miles of the National Highway Freight Network (NHFN) in the state. Within the NHFN, there are 285 miles of Primary Highway Freight System (PHFS) routes. This includes 119 miles of I-64 and 39 miles of I-77 in the western part of the state, 14 miles of I-70 in the north, and 26 miles of I-81 in the northeast corner. Additionally, there are 17 miles of intermodal connectors that join to the PHFS surrounding Huntington.

Coal is the most transported good moved to, from, and within West Virginia. Most of the freight shipped from West Virginia goes to Virginia, North Carolina, Maryland, Pennsylvania, and Ohio. The majority of inbound products come from Ohio and Kentucky. West Virginia has a special transportation network called the Coal Resource Transportation System (CRTS) that allows coal haulers to purchase permits that increases the maximum gross vehicle weight (GVW) to 120,000 pounds. By 2045, West Virginia expects over 30,000 tons of annual freight flow along all major interstates within the state, as shown on the following page.

Figure 4. Annual Freight Analysis Framework (FAF) Truck Tonnage (2045)



There are seven (7) public transportation agencies that receive direct funding from the WVDOT Division of Multimodal Transportation Facilities' Public Transit Section. The largest public transportation agency in West Virginia is the Kanawha Valley Regional Transportation Authority (KRT), in Charleston. KRT operate buses and vans throughout the Charleston metro area along U.S. and state highways. Another large agency, the Mountain Transit Authority (MTA), services Greenbrier, Nicholas, Pocahontas, and Webster counties with seven (7) regular bus routes and 250,000 miles covered per year. The Potomac Valley Transit Authority (PVTA) operates bus routes in Grant, Hampshire, Hardy, Mineral, and Pendleton counties.

OTHER SUPPLY NEEDS

COVID related supply chain issues are easing up and Electric Vehicle Supply Equipment (EVSE) is becoming easier to secure. WVDOT anticipates supplies to construct and maintain the NEVI funded stations will not be a major issue.

KNOWN RISKS AND CHALLENGES FOR EV DEPLOYMENT

Deployment of a program of this scope and scale has inherent risks and challenges. WVDOT is focused on four key risk and challenge factors.

- **Site Conditions** – Site conditions will vary across the state of West Virginia. For example, in more remote areas of the state, there may be a need for utility upgrades and enhanced wireless cellular coverage for data transmission.
- **Skilled Labor** – Labor shortages for supportive industries like electricians and installers could contribute to further delays of equipment installation.
- **Safety Risks and Considerations** – There are certain safety-related risks during the installation of equipment or directly by users and the general public. Ensuring safe deployment is a priority and is a known challenge.

ALTERNATIVE FUEL CORRIDOR (AFC) DESIGNATIONS

The FHWA has created the Alternative Fuel Corridors program. The goal of the program is to create a national network of charging and fueling infrastructure along the National Highway System (NHS). The AFCs used for this plan include those approved by FHWA from Rounds 1 through 6. Additionally, AFC corridor segments are designated as “ready” or “pending.” Ready means the corridor meets the AFC requirements for EV station spacing distance and proximity to AFCs. In West Virginia, I-81 is designated as ready. All other electric AFCs are designated as pending. When Phase 1 of the West Virginia NEVI program is complete, all of the electric AFCs will be designated as ready.

Table 3. Electric AFC Ready and Pending

Corridor	Miles	Start	End	AFC Ready or Pending?
I-64	15 Miles	Lewisburg	Virginia State Line	Pending
I-64	15 Miles	Kentucky State Line	Huntington	Pending
I-64	41 Miles	Huntington	South Charleston	Pending
I-64	15 Miles	South Charleston	Kanawha City	Pending
I-64	47 Miles	Tamarack	Kanawha City	Pending
I-64	8 Miles	Beaver	Tamarack	Pending
I-64	44 Miles	Beaver	Lewisburg	Pending
I-68	31 Miles	Morgantown	Maryland State Line	Pending
I-70	5 Miles	Ohio State Line	Wheeling	Pending
I-70	9 Miles	Wheeling	Pennsylvania State Line	Pending
I-77	9 Miles	Virginia State Line	Princeton	Pending
I-77	11 Miles	Ohio State Line	Parkersburg	Pending
I-77	37 Miles	Tamarack	Princeton	Pending
I-77	40 Miles	Ripley	South Charleston	Pending
I-77	39 Miles	Parkersburg	Ripley	Pending
I-79	12 Miles	Pennsylvania State Line	Morgantown	Pending
I-79	37 Miles	Weston	Sutton	Pending
I-79	50 Miles	Weston	Morgantown	Pending
I-79	15 Miles	South Charleston	Elkview	Pending
I-79	52 Miles	Elkview	Sutton	Pending
I-81	13 Miles	Martinsburg	Virginia State Line	Ready
I-81	13 Miles	Maryland State Line	Martinsburg	Ready

EXISTING CHARGING STATIONS

There are 75 networked charging stations in West Virginia. 65% of the stations in the state are along AFCs.

Tesla stations are included in this year's update. They (Tesla stations) are included because of the increasing commitment by vehicle manufacturers to use NECS plugs as an industry standard and on-going discussions about Tesla's charging network becoming public.

Table 4. Existing EV Station in West Virginia

Network	Along AFC	Not Along AFC	Total for State
Non-Tesla Network Stations	27	6	33
Tesla	22	20	42
Total Network Stations	**49**	**26**	**75**

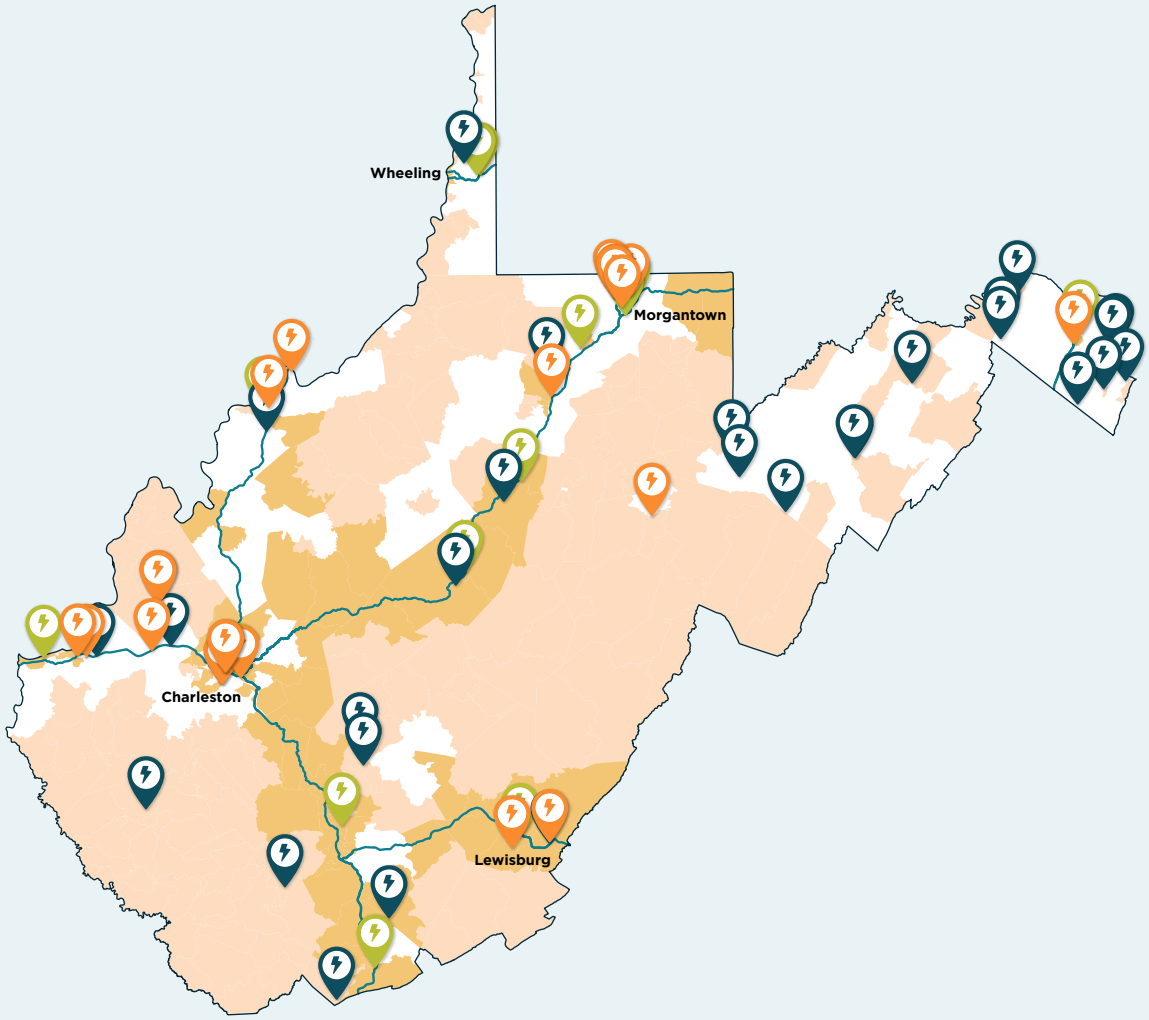
In West Virginia, there are 206 ports at networked charging stations. Tesla ports account for 71% of all ports in West Virginia. By port type, 44% of the ports in the state are direct current fast charging (DCFC). Along AFCs, DCFC ports account for 59% of all ports. Most of these ports are Tesla. Non-networked DCFC ports along the AFCs account for 4% of the ports along AFCs. NEVI-funded stations will increase access to DCFC charging significantly along the AFCs.

Table 5. Existing Public Charging Ports in West Virginia

Non - Tesla Networked Stations	Along AFC	Not Along AFC	Total for State
Level III/DCFC	8	0	8
Level II	57	11	68
Tesla Stations	**Along AFC**	**Not Along AFC**	**Total for State**
Level III/DCFC	106	0	106
Level II	22	58	180
Total Ports All Networked Stations	**Along AFC**	**Not Along AFC**	**Total for State**
Level III/DCFC	114	0	114
Level II	79	69	148
Total	**193**	**69**	**262**

The number of providers and charging stations opening have increased significantly in recent years. Stations constructed in 2021, 2022, and the first half of 2023 account for 53% of all stations in West Virginia. Figure 7 shows the number of stations by year of opening and the network providers.

Figure 5. Existing Charging Stations in West Virginia



Legend

- Electric Alternative Fuel Corridors
- Justice40 Census Tracts in WV
- Justice40 Census Tracts along AFCs
- Existing Tesla Supercharging Stations
- Existing Tesla Destination Stations
- Existing Non-Tesla Networked Charging Stations

Figure 6. Existing Public DCFC Locations

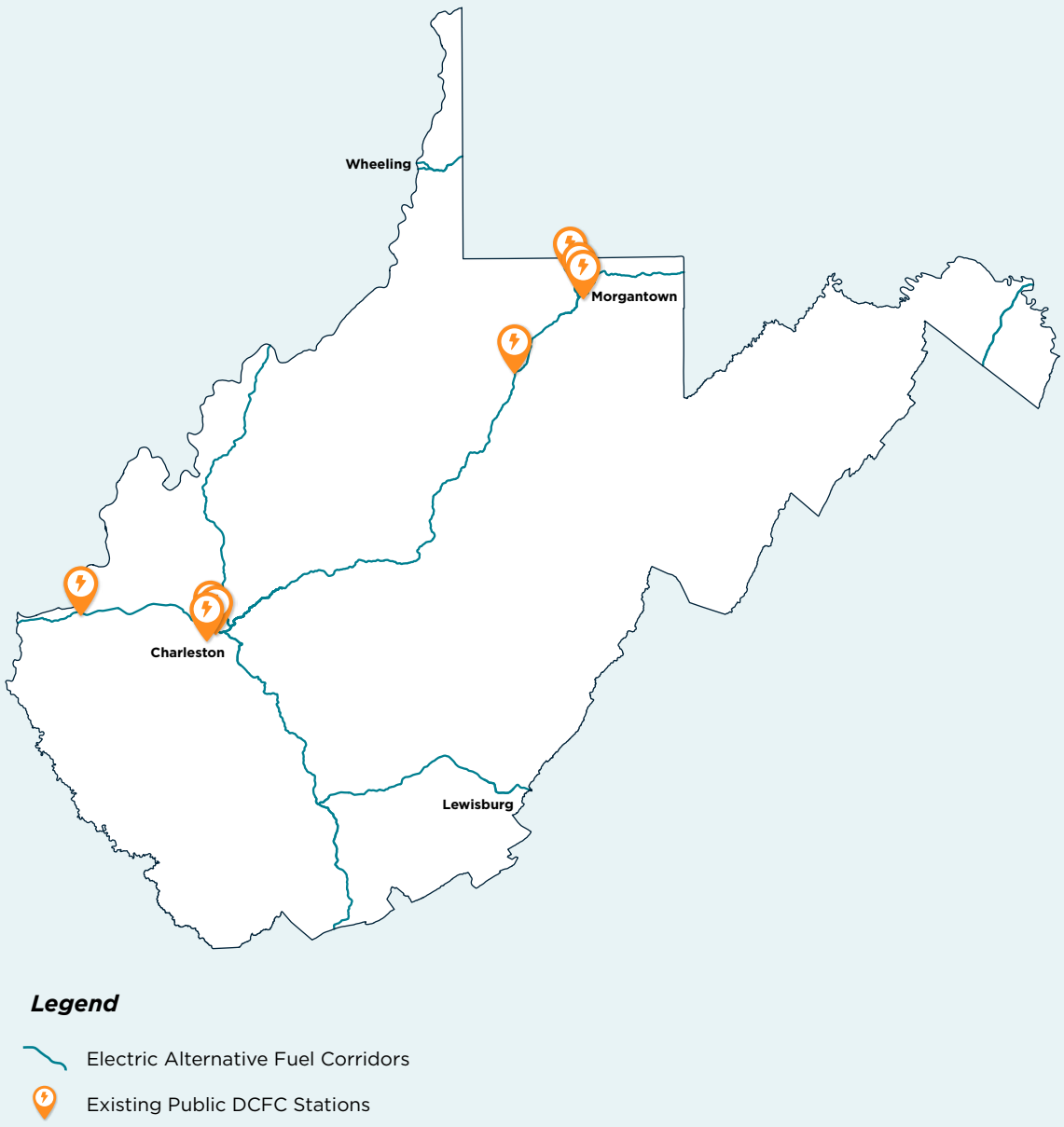
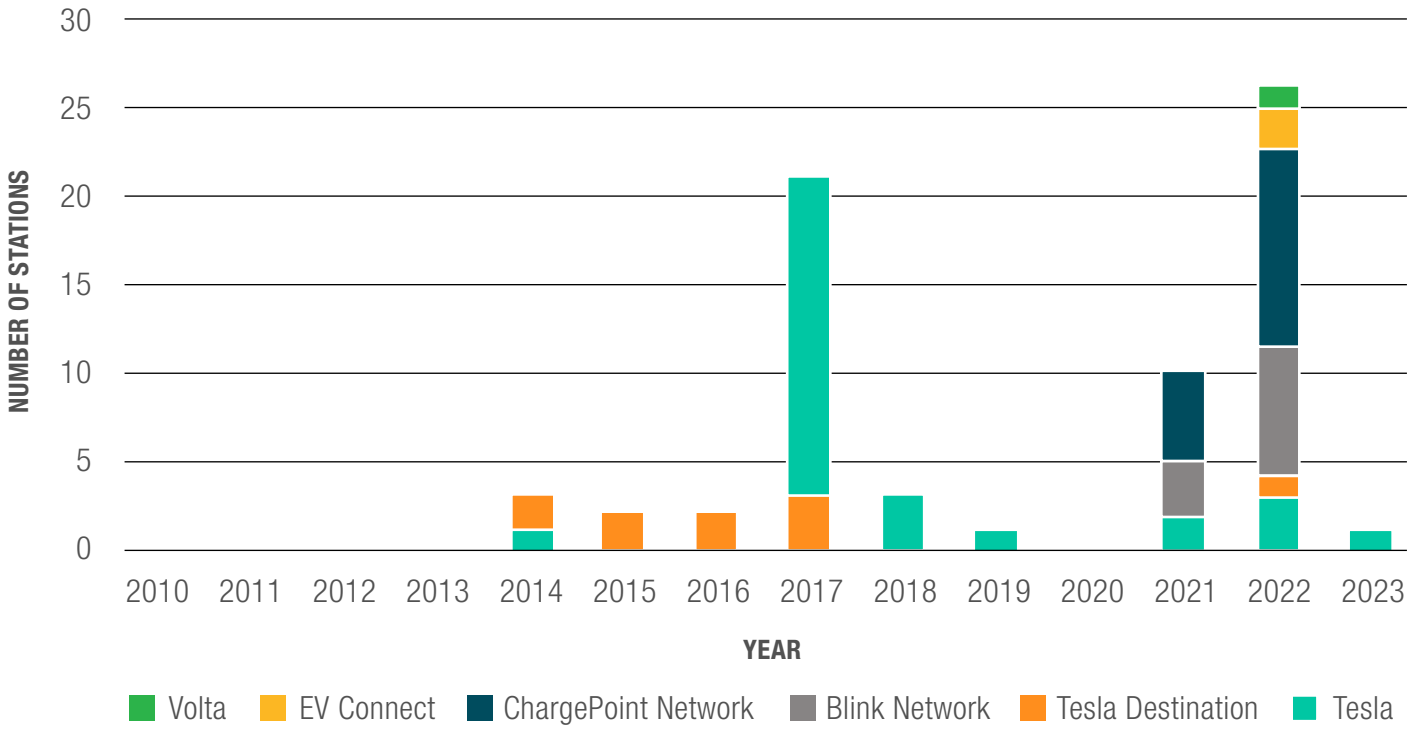
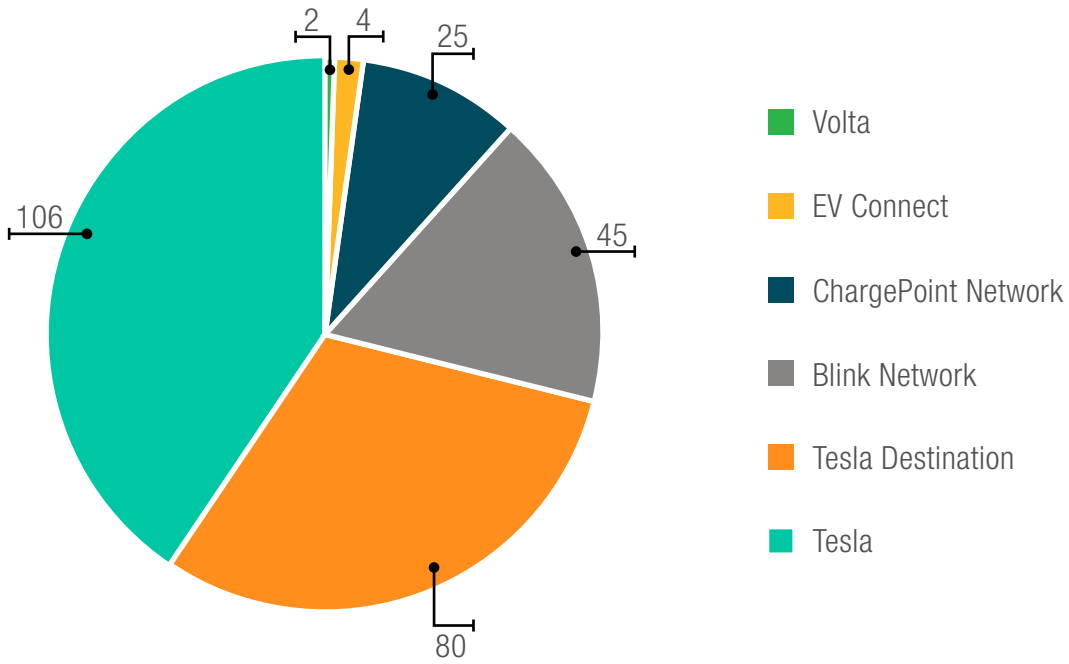


Figure 7. EV Network Providers: West Virginia Public EV Stations by Year of Opening



There are five major charging network providers in West Virginia. Tesla networked ports account for 71% of all ports in the state. Blink is the second largest networked provider by number of ports and accounts for 17% of the public charging network.

Figure 8. EV Network Providers by Share of Total Ports in West Virginia



FUTURE NEEDS

Today, there is a projected gap of 896 public charging ports needed by 2027. This need represents a 71% shortfall of needed public charging ports by 2027. The estimated number of public charging ports for Phase 1 and 2 of the West Virginia NEVI Program will close this 71% gap to just 10%. These estimates highlight the impact the NEVI funds will have on building the public charging network in West Virginia.

Figure 9. West Virginia Existing Ports (2023) and Projected Ports Needed by 2027

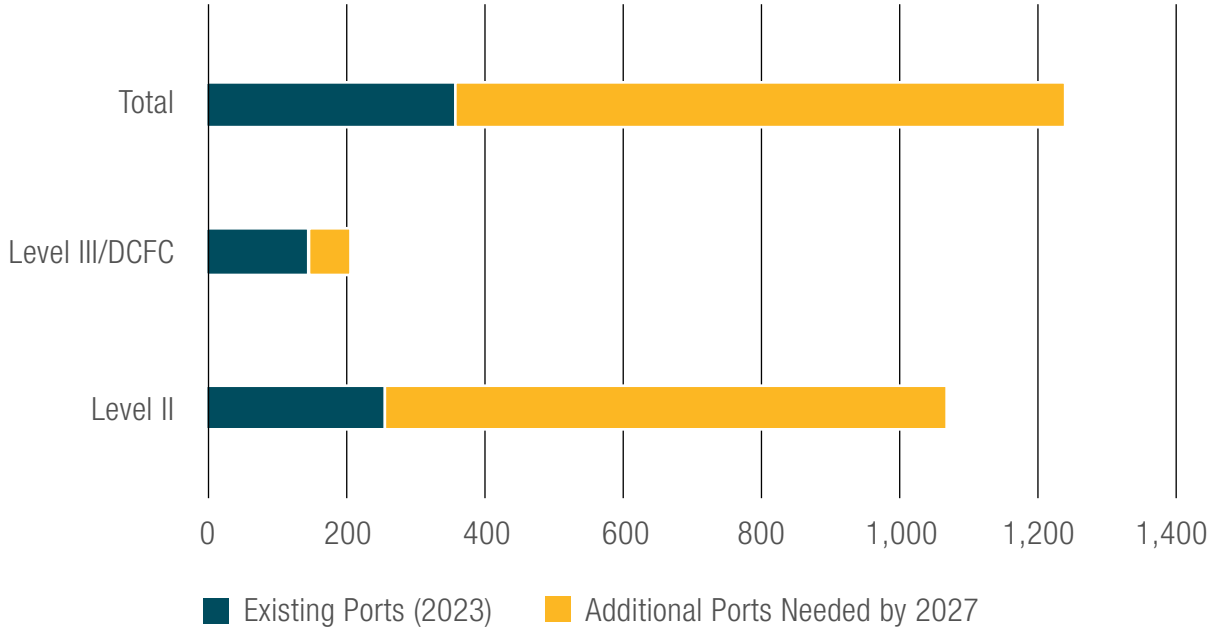
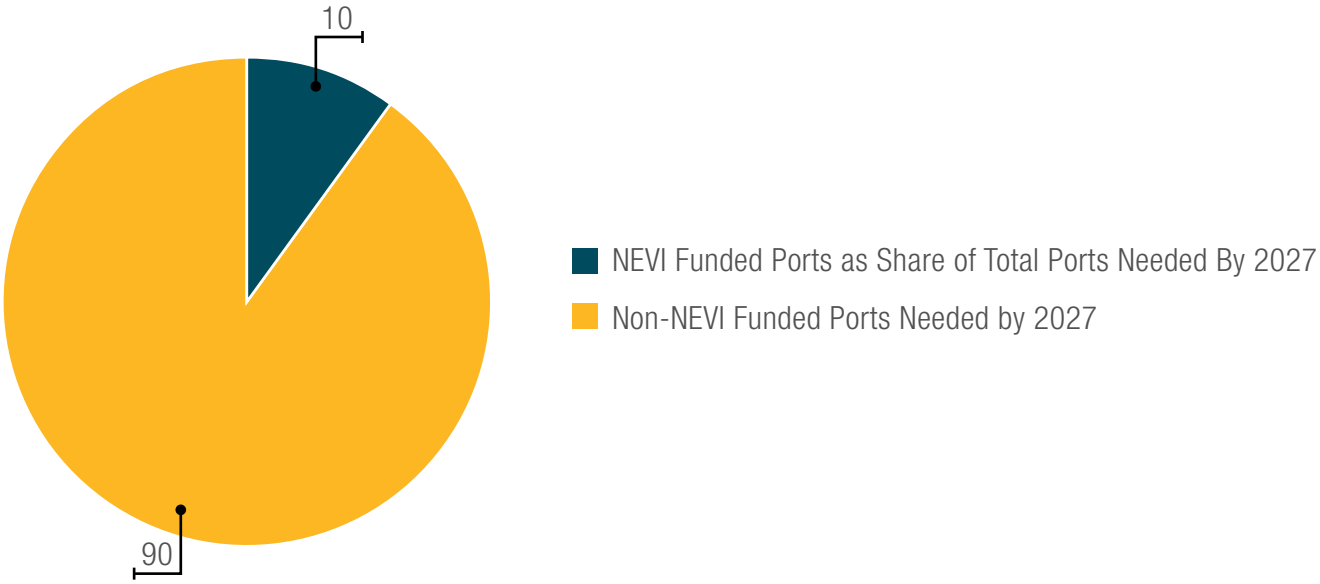


Figure 10. Projected Impact of NEVI Funds for Projected Public Charging Needs by 2027



7 EV Charging Infrastructure Deployment

Deployment for the West Virginia NEVI program will happen in two (2) phases. Phase 1 will focus on station construction along electric AFCs. Stations for Phase 1 will meet the spacing, location, and charging capacity required to designate all electric AFCs in West Virginia as ready. Once all electric AFCs in West Virginia are designated ready, WVDOT will implement Phase 2. Phase 2 will focus on building DCFC 50 kW and Level II chargers along designated Appalachian Development Highway corridors, state parks, colleges, universities, and community colleges.

PLANNED CHARGING STATIONS

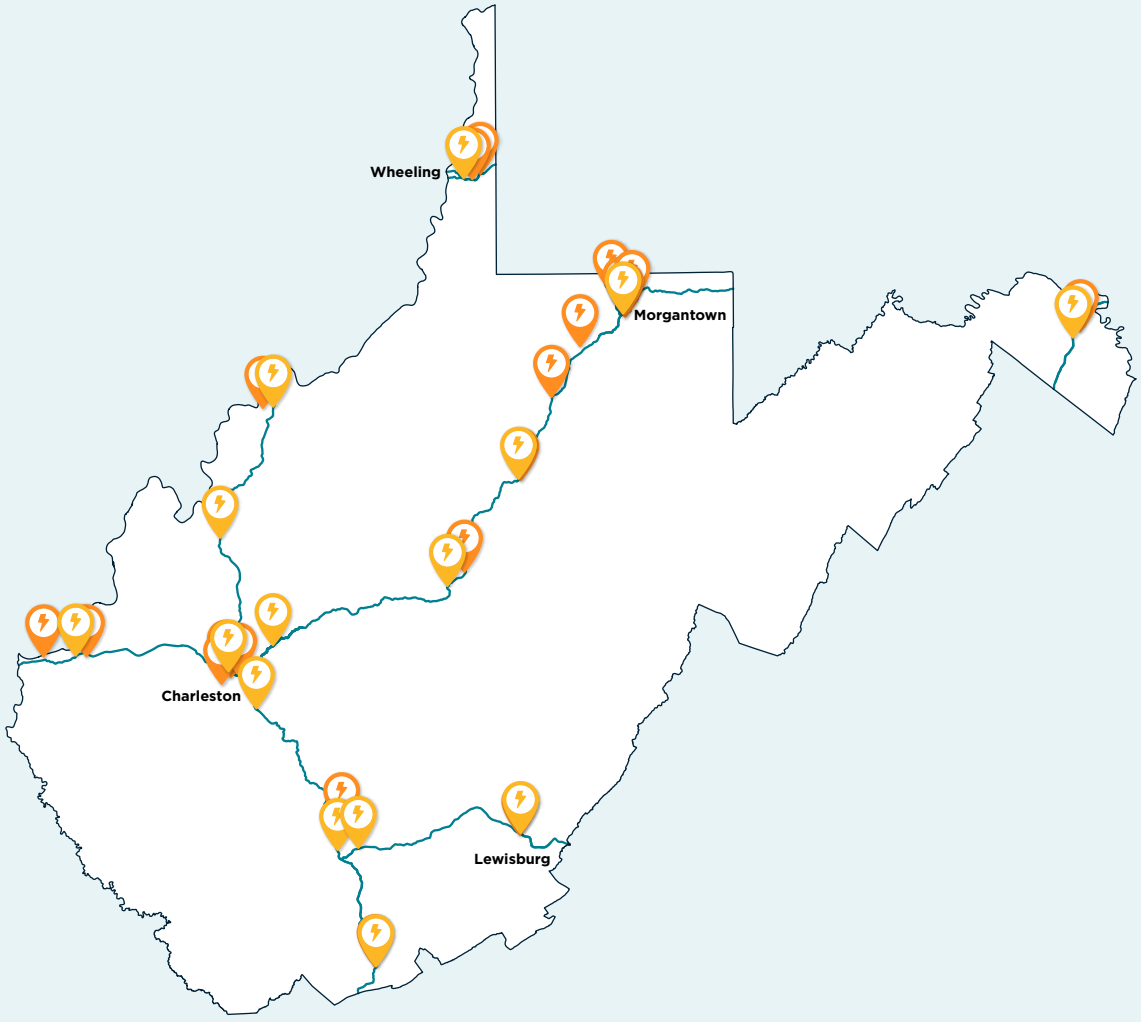
There are 15 stations proposed for Phase 1 of the West Virginia NEVI program. When constructed, all of the electric AFCs in West Virginia will be designated "ready." Phase 1 will use an estimated 30% of the total West Virginia NEVI funds.

Table 6. Planned Charging Stations

State EV Charging Location Unique ID	City Name	Route	Along AFC?	Location (Interstate Exits)	Number of Ports	Estimated Year Operational	Estimated Cost*	NEVI Funding Sources
1	Huntington	I-64	Yes	15	4	2025	$1,200,000	FY22/FY23
2	South Charleston	I-64	Yes	56	4	2025	$1,200,000	FY22/FY23
3	Ripley	I-77	Yes	138	4	2025	$1,200,000	FY22/FY23
4	Parkersburg	I-77	Yes	176	4	2025	$1,200,000	FY22/FY23
5	Tamarack	I-64	Yes	42	4	2025	$1,200,000	FY22/FY23
6	Princeton	I-77	Yes	9	4	2025	$1,200,000	FY22/FY23
7	Lewisburg	I-64	Yes	169	4	2025	$1,200,000	FY22/FY23
8	Sutton	I-79	Yes	62	4	2025	$1,200,000	FY22/FY23
9	Weston	I-79	Yes	99	4	2025	$1,200,000	FY22/FY23
10	Morgantown	I-68	Yes	1	4	2025	$1,200,000	FY22/FY23
11	Wheeling	I-70	Yes	4	4	2025	$1,200,000	FY22/FY23
12	Martinsburg	I-81	Yes	13	4	2025	$1,200,000	FY22/FY23
13	Kanawha City	I-64	Yes	89	4	2025	$1,200,000	FY22/FY23
14	Elkview	I-79	Yes	9	4	2025	$1,200,000	FY24
15	Beaver	I-64	Yes	125	4	2025	$1,200,000	FY24

* Estimated cost is the 80% federally funded share of the total estimated project cost. The total estimated cost for each site is $1,500,000. This estimate includes site construction costs as well as five (5) years of operations and maintenance costs.

Figure 11. FY22/FY23 EVSE Deployments/Upgrades



Legend

- Electric Alternative Fuel Corridors
- Proposed FY22/FY23 DCFC NEVI Station
- Existing DCFC Stations/Tesla Supercharging Stations/Not Targeted for Upgrade or Improvement

The number of stations and number of ports at each station is not yet determined for Phase 2. The current estimate is based on the goal of providing DCFC 50kW and Level II chargers at Phase 2 sites.

Phase 2 stations will focus on locations along Appalachian Development Highway corridors, state parks, and universities, colleges, and community colleges. NEVI funds for Phase 2 are estimated to be $28.9 million, or 63% of the total NEVI funds estimated for the state.

Figure 12. Proposed Phase 2 Locations

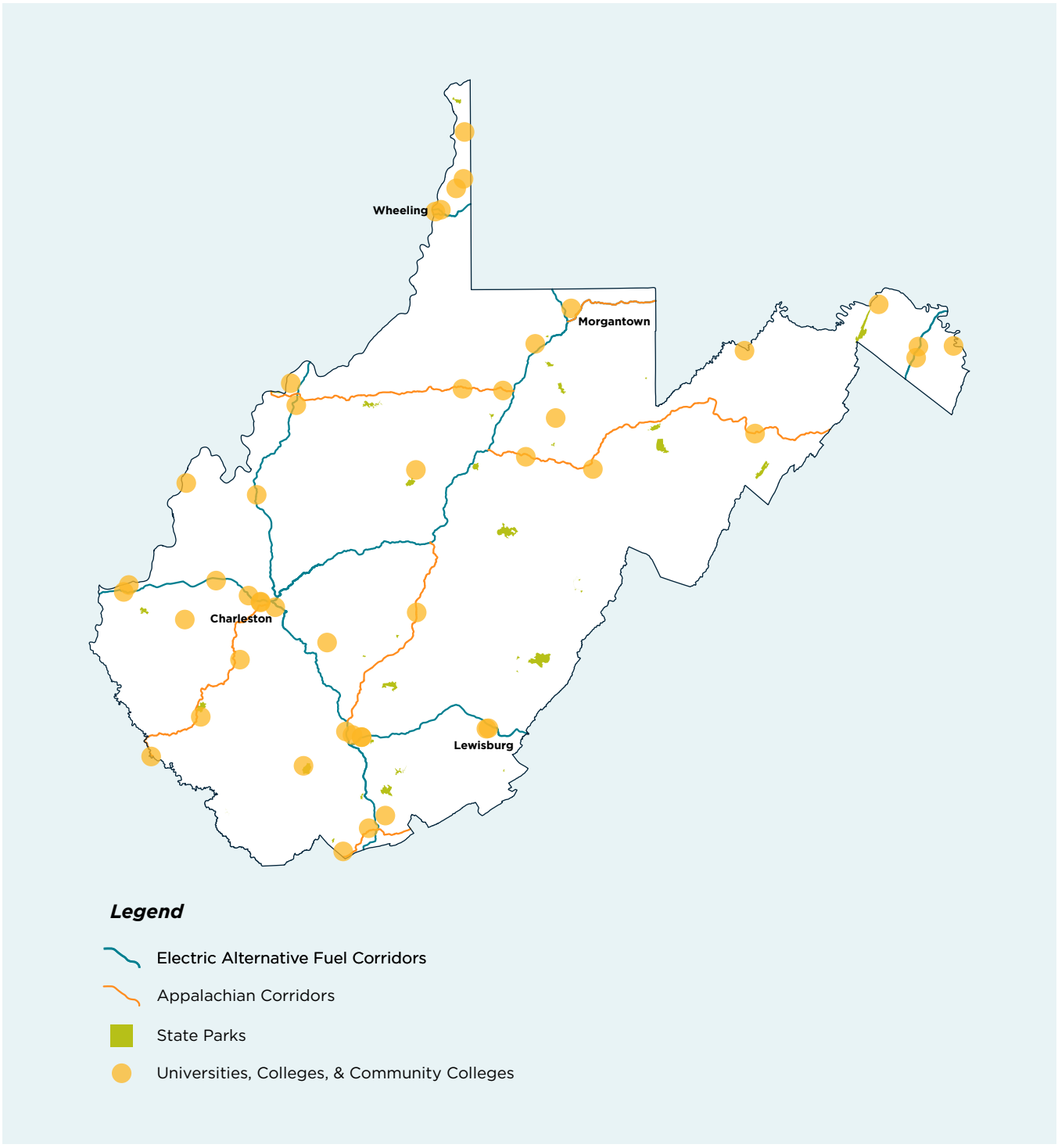


Table 7. Phase 2 Summary of Sites, Ports, and Estimated Costs

	Stations	Ports	Site Costs	O&M	Estimated Cost of Federally Funded Share of Project	Federal Share of Costs
Level III/DCFC 50 kW	104	416	$24,440,000	$1,560,000	$26,000,000	$20,800,000
Level II/6.6-19.2 kW	83	332	$2,490,000	$415,000	$2,905,000	$2,324,000
Total	187	748	$26,930,000	$1,975,000	$28,905,000	$23,124,000

PLANNING TOWARDS A FULLY BUILT OUT DETERMINATION

West Virginia is planning to select a single vendor to construct and maintain Phase 1 of the state's NEVI-funded charging stations. When Phase 1 is complete, all electric AFCs in the state will be designated as "ready." The current estimate for costs will require funds for FY22/23 and FY24. Not all of the FY24 funds will be needed to designate all electric AFCs in West Virginia as ready.

When Phase 2 is complete, the remaining funds will be used to build stations along designated Appalachian Development Highway corridors, at state parks, and universities, colleges, and community colleges. Phase 2 will focus on building stations with DCFC 50kW chargers and Level II chargers. Procurement and process for selection of sites will be determined once Phase 1 is complete.

8 Implementation

An important part of the public charging network in West Virginia is that it is reliable and easily accessible. This section covers topics that will be addressed over the five-year program to ensure EV stations funded by the NEVI program support this goal.

STRATEGIES FOR EVSE OPERATIONS & MAINTENANCE

Entities awarded contracts under the WVDOT NEVI program will be required to provide a cost and implementation plan for five (5) years of operations and maintenance (O&M). O&M costs should include comprehensive warranties for the EV chargers and associated electrical equipment. O&M costs for five (5) years at each station is estimated at 7% of the installation cost.

Table 8. Estimated Operations and Maintenance Costs for Proposed EV Stations

	# of Stations	Total O&M
Phase 1	15	$1,500,000
Phase 2	187	$1,975,000
Total	202	$3,475,000

Monitoring of sites and individual ports will be required under this program. The station owners will be expected to report to the state regarding uptime availability of the individual ports, usage, and explain any downtime greater than 3%.

WVDOT will develop a program policy and funding provisions that will make maintenance and operations funding contingent on meeting uptime requirements. For example, operations and maintenance funds may be distributed as a reimbursement at the end of each fiscal year after station owners have submitted operations and maintenance reports documenting they met operation and performance requirements.

STRATEGIES FOR EVSE DATA COLLECTION & SHARING

To ensure accountability and the implementation of a data-driven program, WVDOT will require regular reporting of charger utilization and reliability. Requirements will be compliant with NEVI program requirements. This reporting may include the following data points, collected quarterly or annually as required by FHWA and submitted to WVDOT. This data will be shared with the United States Department of Transportation (USDOT) and the United States Department of Energy (USDOE) as required by NEVI Program guidance.

- **Summary report per EV charging station**
  - Location: Site name, EVSE ID number, address, city, zip, county
  - Operational uptime
  - Number of charge events
  - Number of unique vehicles
  - Average charge time per event (mins)
  - Average kW per charge event
  - Total kW consumed
  - Gallons of gasoline and/or diesel fuel displaced
  - Estimated cumulative miles driven from charge
  - Estimated cumulative gallons of gasoline and/or diesel fuel displaced
  - Total monthly cost of electricity for charging station operator
  - Monthly maintenance and repair cost
- **Details per charging event**
  - Location: Site name, EVSE ID number, address, city, zip, county
  - Charge event date time
  - Time charging
  - Length of time connected
  - kW provided
  - Vehicle make, and model year (on events where available)
- **Additional data to be reported**
  - EV charging station owners are required to share real-time data on charger location, charger status, and fees publicly on online directories, including on the Alternative Fuel Data Center's Station Locator

STRATEGIES TO ADDRESS RESILIENCE, EMERGENCY EVACUATION, SNOW REMOVAL/SEASONAL NEEDS

According to the National Oceanic and Atmospheric Administration (NOAA), West Virginia is afflicted with a variety of extreme weather events, such as floods, droughts, extreme temperatures, residual hurricane effects, tornadoes, ice storms, and snowstorms. While tornadoes occur on average two to five times a year, they are usually weak. The state experiences extreme precipitation due to its rugged topography, causing flooding, which is the state's costliest and most severe weather event. Precipitation is also projected to increase over this century with the largest increases occurring in the winter and the spring. Due to the frequency and severity of flooding, the West Virginia Emergency Management Division (WVEMD) has educated people about emergency preparedness, including measures that can be taken to protect properties. Some strategies to mitigate flood damage can be extended to EV chargers. For example, EV chargers should be installed above base flood heights when possible.

During emergency events, people rely on the performance, reliability, and accessibility of EV chargers. This Plan prioritizes implementing stations along major transportation routes, and future planning should ensure that EV charging stations located along major routes are prepared to serve intense periods of increased demand and withstand extreme weather conditions.

EVs, EV chargers, and EV cables are designed to be weatherproof, especially regarding water. EV charging ports are designed to flush water and drain when they are charged, and EV chargers and cables are designed to protect users from electric shock. Additional steps during charger installation can maximize their resistance to severe weather, such as watertight covers on any outlets and plugs.

WVDOT will continuously explore opportunities to incorporate emergency preparedness into NEVI program planning and implementation. Examples include the incorporation of EV stations along major routes as a scoring criteria or promotion of battery storage (an eligible expense with NEVI funds) as part of station development. Reliability is a goal for the NEVI program in West Virginia. Reliability includes the use of EV charging stations during emergency events.

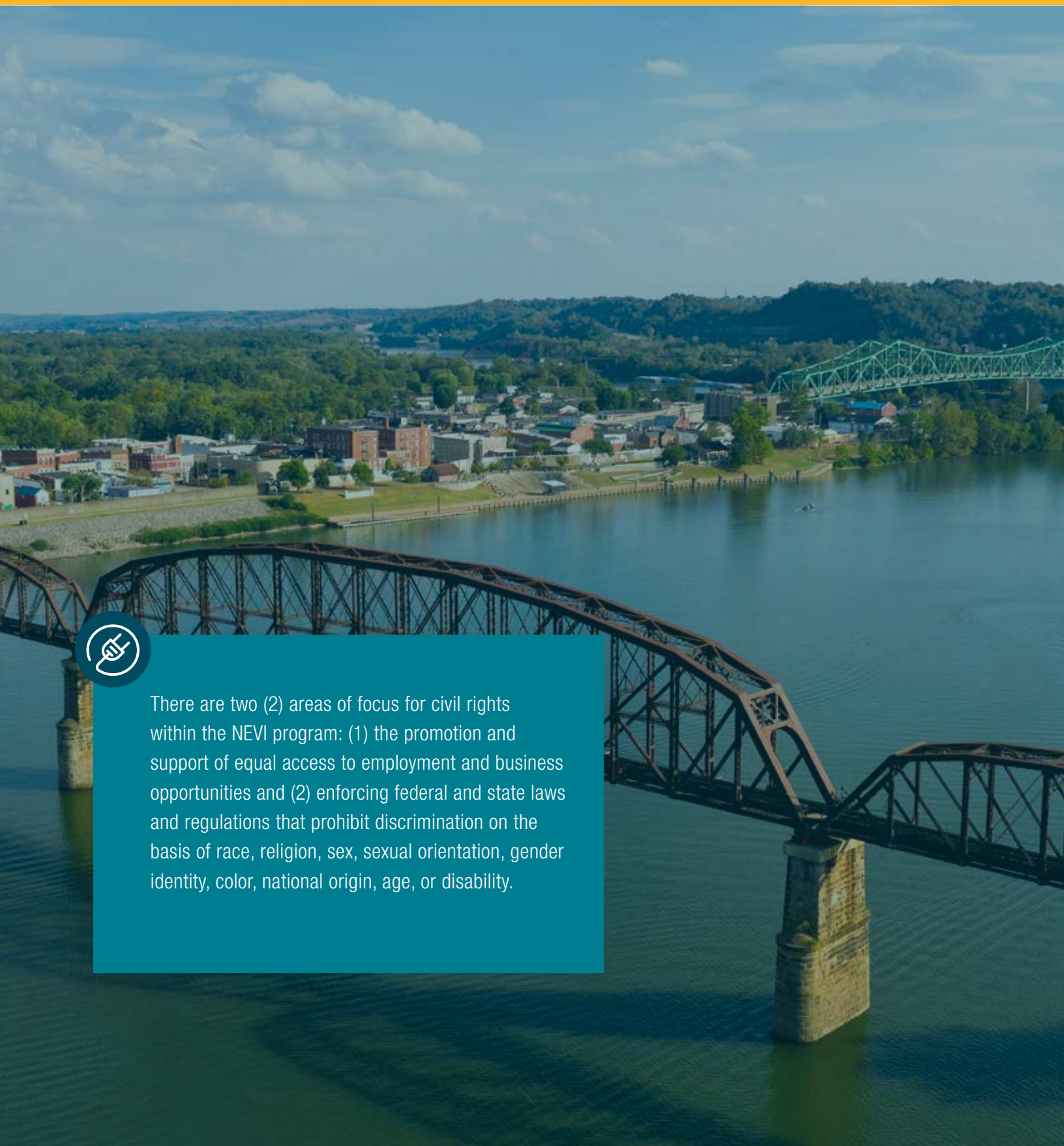
STRATEGIES TO PROMOTE STRONG LABOR, SAFETY, TRAINING, AND INSTALLATION STANDARDS

The West Virginia Department of Economic Development (WVDED) will lead workforce training initiatives related to the NEVI program. Additionally, WVDOT will work with other partners across the state to create a skilled workforce, as well as new opportunities for business and employment.

Requirements for training certifications through the West Virginia NEVI program solicitation process can help ensure installation standards across EV charging infrastructure projects. The Electric Vehicle Infrastructure Training Program (EVITP) is one example of a training program that provides skill upgrades to help electricians meet the new demand for EV charging station installations. Training computer technicians is also an important component since most of the EVSE internal workings are computer based. Partnerships with trade schools and community colleges, as well as state and local workforce development programs, particularly in disadvantaged communities, could provide training programs like this to West Virginia workers at a low or no-cost.

Lastly, one of the goals of this Plan is to create opportunities for small businesses to participate in the construction of West Virginia's EV charging network. As part of the solicitation process for the NEVI program, small and disadvantaged business requirements will be included to ensure opportunities for participation with implementation.

9 Civil Rights



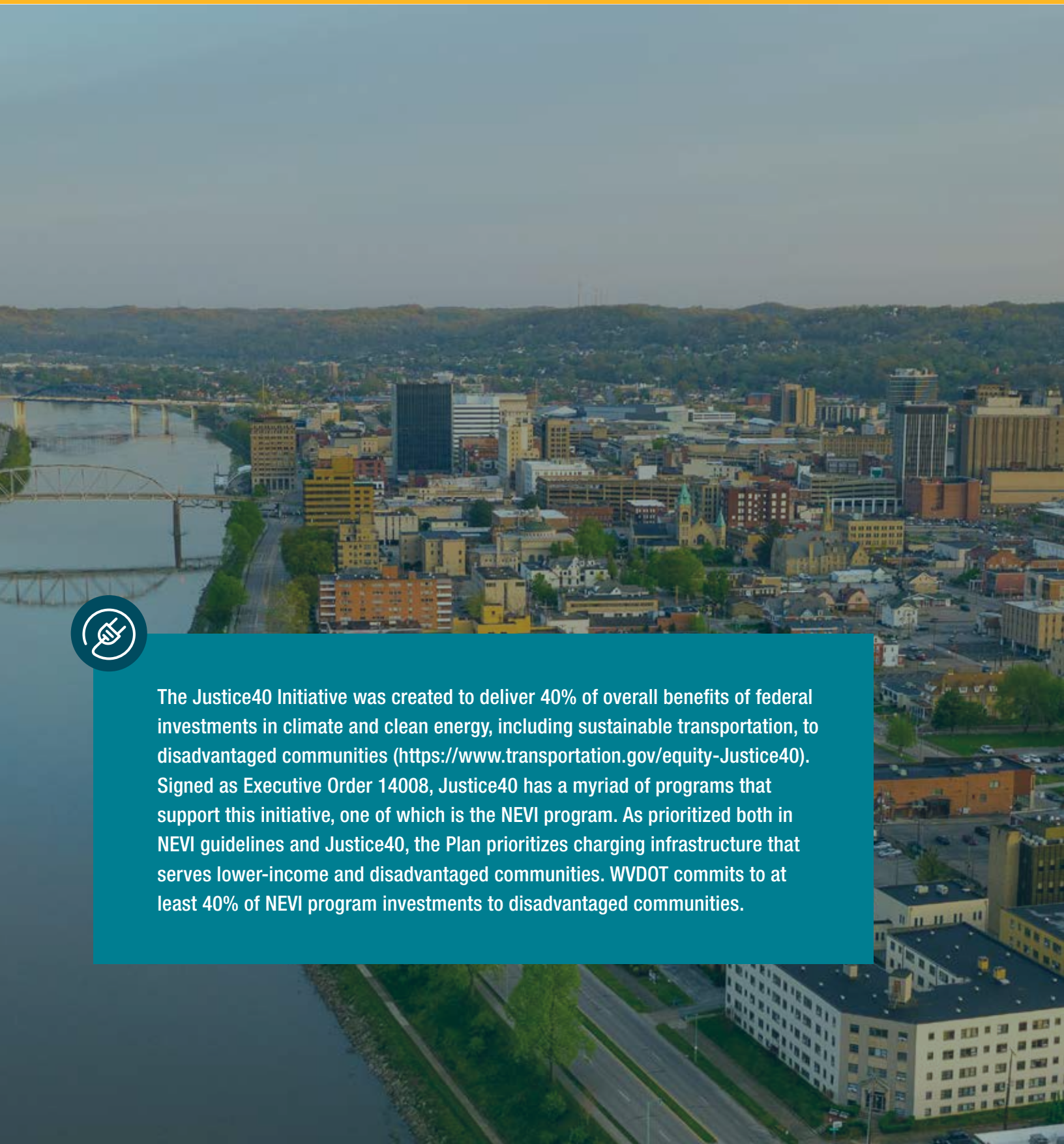
There are two (2) areas of focus for civil rights within the NEVI program: (1) the promotion and support of equal access to employment and business opportunities and (2) enforcing federal and state laws and regulations that prohibit discrimination on the basis of race, religion, sex, sexual orientation, gender identity, color, national origin, age, or disability.

The WVDOT Civil Rights Compliance Division will be responsible for leading NEVI activities related to civil rights. Specific programs managed by the WVDOT Civil Rights Compliance Division are:

- Americans with Disabilities Act (ADA)
- Contract Compliance
- Disadvantaged Business Enterprise (DBE)
- Internal Equal Employment Opportunity (EEO)
- Labor Compliance
- Title VI

WVDOT's Division of Highways and Civil Rights Compliance Division will work closely to share staff resources. The goal is to ensure state and federal requirements for the NEVI program are met by WVDOT, supporting agencies, and any awarded contracts for NEVI projects.

10 Equity Considerations



The Justice40 Initiative was created to deliver 40% of overall benefits of federal investments in climate and clean energy, including sustainable transportation, to disadvantaged communities (https://www.transportation.gov/equity-Justice40). Signed as Executive Order 14008, Justice40 has a myriad of programs that support this initiative, one of which is the NEVI program. As prioritized both in NEVI guidelines and Justice40, the Plan prioritizes charging infrastructure that serves lower-income and disadvantaged communities. WVDOT commits to at least 40% of NEVI program investments to disadvantaged communities.

IDENTIFICATION AND OUTREACH TO DISADVANTAGED COMMUNITIES (DACs) IN THE STATE

Transportation planning and associated infrastructure investments in West Virginia follow a decision-making process driven by performance measures and metrics. WVDOT and the State are committed to EV implementation throughout the State, especially those areas that have disadvantaged communities. This Plan adopts the updated Justice40 initiative criteria, Climate and Economic Justice Screening Tool (CEJST). The CEJST was used to identify disadvantaged communities using 2010 census tracts. The CEJST identifies communities as disadvantaged if the census tract meets the threshold for at least one of the categories of burden or if the census tract is located on land within the boundaries of Federally Recognized Tribes. Other considerations identify a census tract as being disadvantaged if the tract is surrounded by disadvantaged communities and is at or above the 50th percentile for low income. The categories of burden include many datasets as indicators. The eight (8) categories of burdens are listed as the following: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. The definition itself is consistent with the Office of Management and Budget and relevant statutory authorities. As of fall 2022, an updated tool was developed by the USDOT to indicate whether a proposed project is located in a DAC (USDOT Equitable Transportation Community (ETC) Explorer (arcgis.com)). This tool was developed to be used in accompaniment with CEJST.

In West Virginia, 56% of the population lives in a census tract designated as a disadvantaged community according to the CEJST 2010 census tracts. Additionally, 23% of the State's population is within a disadvantaged community and along an AFC. For Phase 1 and Phase 2 NEVI implementation in West Virginia, priority and focus will be given to ensure job opportunities and infrastructure are in identified disadvantaged census tracts.

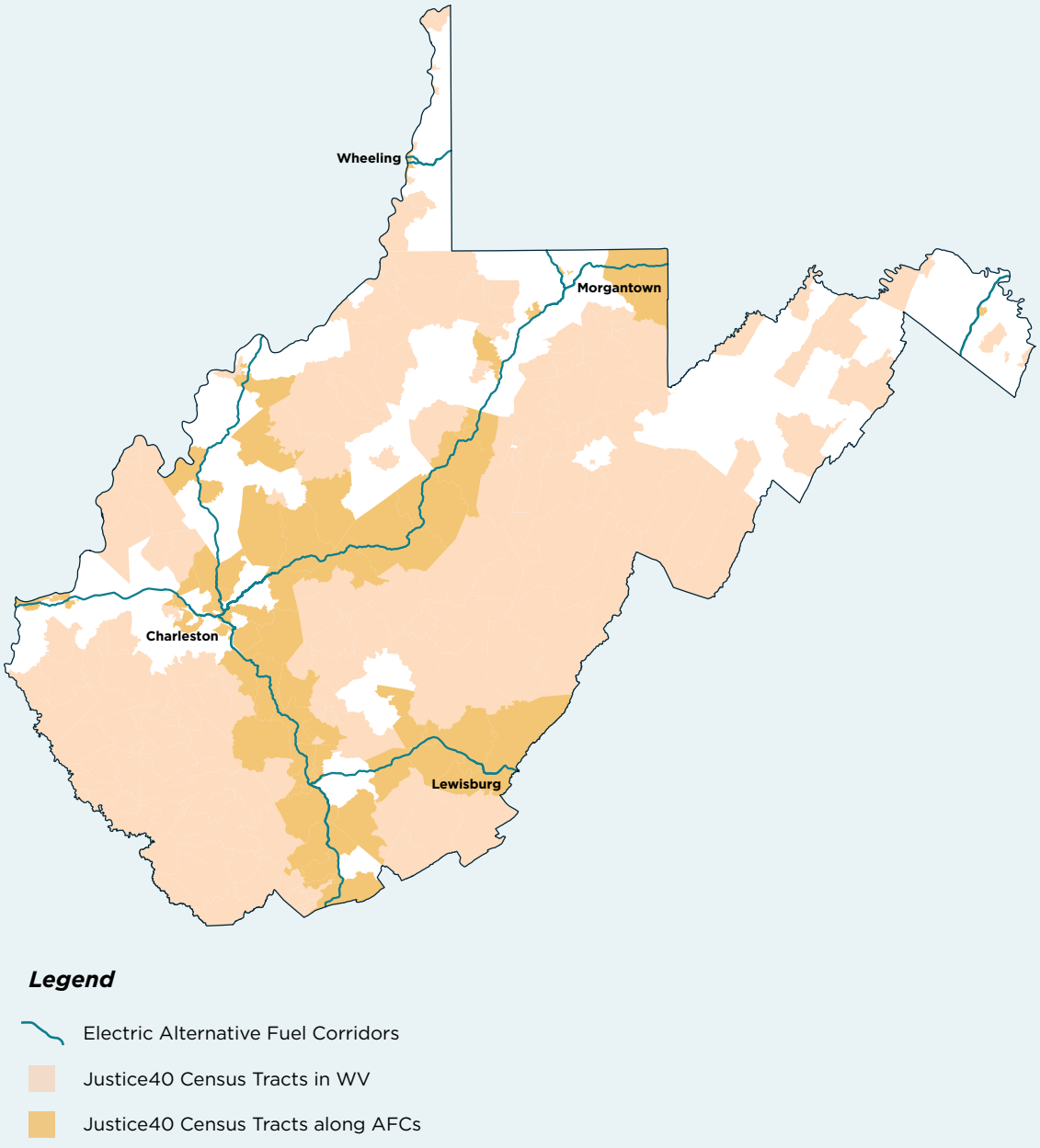
Table 9. West Virginia Disadvantaged Communities (DACs)

	Population	% of Statewide Population
Statewide Justice40 Communities	1,023,684	56%
Alternative Fuel Corridor Justice40 communities	409,235 (within 2 miles of AFCs)	23%

WVDOT will start its NEVI program public engagement in the fall of 2023. Engagement will be conducted virtually as well as in person.

One statewide virtual meeting will be held to share information about the program. WVDOT will work with state partners, such as MPOs and WVDED, to promote meetings and engage with businesses and residents in DACs. When selecting locations for in-person meetings, priority will be given to locations that are in a federally-designated Justice40 census tract. WVDOT will track and report how DAC residents and business are engaged throughout the process. The goal is to use input from DAC residents and stakeholders to shape how and where NEVI program funds are invested in West Virginia Justice40-designated areas.

Figure 13. West Virginia Justice40 Disadvantaged Communities

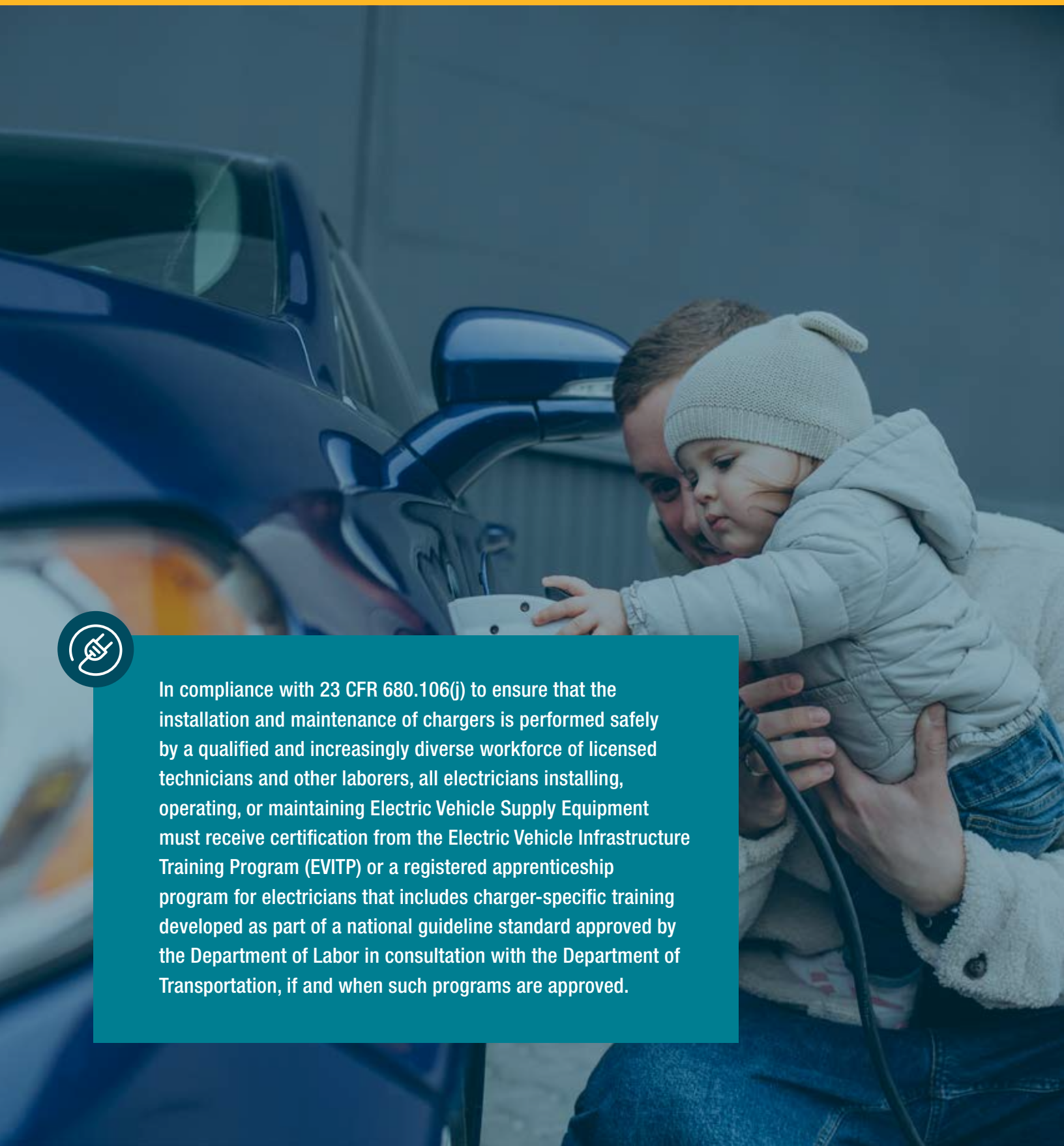


PROCESS TO IDENTIFY, QUANTIFY, AND MEASURE BENEFITS TO DACs

Table 10. West Virginia Disadvantaged Communities (DACs)

Benefits Category (examples)	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Improve clean transportation access through the location of charging stations; Decrease the transportation energy cost burden by enabling reliable access to affordable charging;	As infrastructure is deployed, WVDOT will refine and update the analysis to identify where there may be network gaps and develop an implementation plan to address gaps that exist within DACs. Data and maps will be developed so the deployment can be actively updated. Information regarding the location, deployment type, charge capacity, and overall coverage (and coverage within DACs) will be tracked. A critical consideration in increasing access will be created through the Phase 2 implementation which focuses on the Appalachian Development Highway System (ADHS) in West Virginia. Building out community charging stations on West Virginia's ADHS corridors will be critical to connect the rural populations to charging.
Reduce environmental exposures to transportation emissions;	In partnership with the West Virginia Department of Environmental Protection (WVDEP) Division of Air Quality, WVDOT will monitor changes in air quality where data is available in DACs over the five-year NEVI program. The goal is to improve air quality, particularly in DACs, across the state.
Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities; Increase energy resilience;	WVDOT will partner with the West Virginia Community and Technical College System to evaluate and understand if there are opportunities to modify existing curriculum to support workforce training and development for EV charging infrastructure, including installation, operations, and maintenance.

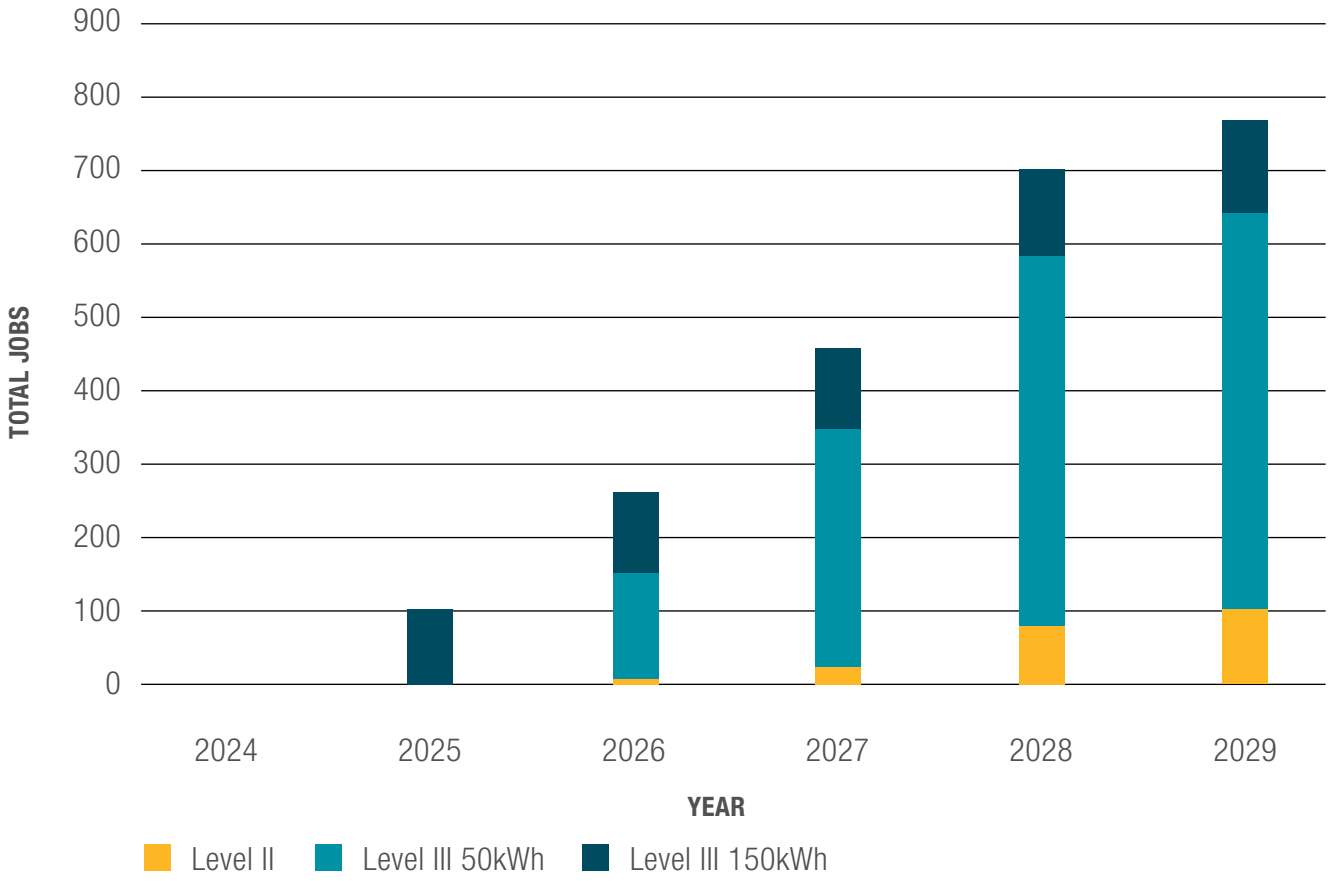
11 Labor and Workforce Considerations



In compliance with 23 CFR 680.106(j) to ensure that the installation and maintenance of chargers is performed safely by a qualified and increasingly diverse workforce of licensed technicians and other laborers, all electricians installing, operating, or maintaining Electric Vehicle Supply Equipment must receive certification from the Electric Vehicle Infrastructure Training Program (EVITP) or a registered apprenticeship program for electricians that includes charger-specific training developed as part of a national guideline standard approved by the Department of Labor in consultation with the Department of Transportation, if and when such programs are approved.

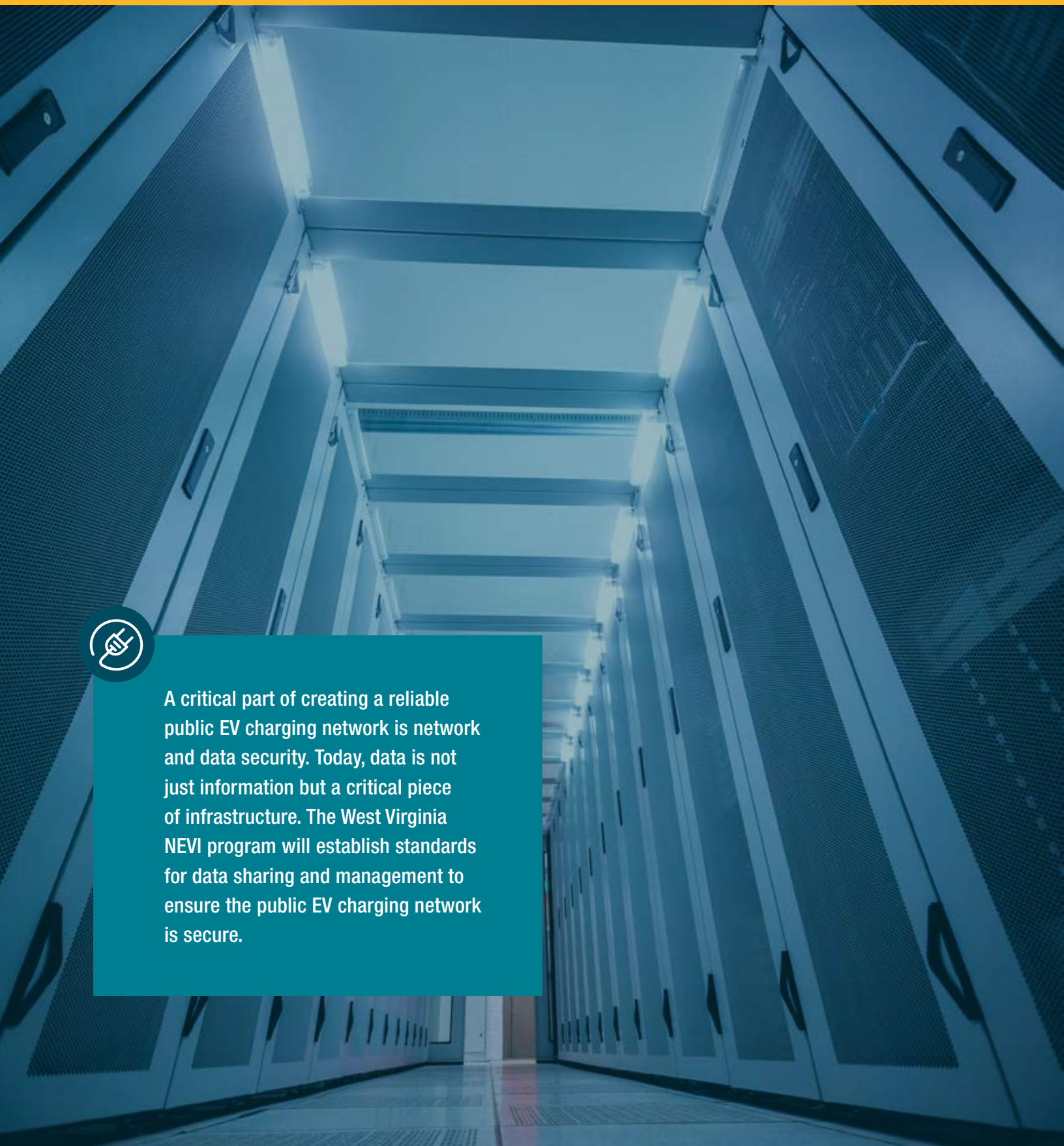
WVDOT and WVDED will be responsible for workforce training and education. Both agencies have programs, resources, and partnerships with school districts and universities across the state. They will be leveraged to support skills acquisition that can be quickly applied during the five-year NEVI program. It is anticipated that from 2024 to 2029 over 750 jobs may be created as EV charging infrastructure is rolled out.

Figure 14. Total Jobs Created



For all West Virginia NEVI program solicitations, vendors will be required to submit a workforce performance plan. The workforce performance plan will identify the number and type of qualified and licensed technicians that work on a project for a vendor. It will also identify the number of full-time equivalent jobs created by a project. The purpose of the workforce performance plan will be to track and report the number of jobs and skilled workers supported by the West Virginia NEVI program. WVDOT and WVDED will work together to report, monitor, and support the NEVI program labor and workforce standards and requirements.

12 Physical Security & Cybersecurity



A critical part of creating a reliable public EV charging network is network and data security. Today, data is not just information but a critical piece of infrastructure. The West Virginia NEVI program will establish standards for data sharing and management to ensure the public EV charging network is secure.

As part of the West Virginia NEVI program, WVDOT will focus on five (5) policy topics:

- **Asset, Catalog, and Push Asset Data.** Cataloging where chargers are located and pushing real-time data about charger availability is essential to ensure ease of travel, access, and reliability. WVDOT will require all vendors to participate in the latest national and industry open-data specifications to ensure the traveling public has accurate and timely data about the public EV charging network in West Virginia.
- **Open Data Specifications and Interoperability.** Hardware and software should work for customers, regardless of the vendor or system. Open-data standards will create a seamless marketplace for customers. WVDOT will work with FHWA and industry partners to incorporate the latest open-data specifications for the NEVI-funded EV network in West Virginia.
- **Data Management.** Data management will be important for WVDOT and third-party providers building and operating EV chargers funded by the NEVI program. WVDOT will develop policies for the data it receives and establish standards for data management grant recipients, particularly as it relates to data security and privacy. WVDOT will also consider cybersecurity strategies such as addressing user identity and access management, intrusion and malware detection, event logging and reporting, management of software updates, and secure operation during communication outages.
- **Data Capacity.** As part of the grant application process, proposals will need to document that EV charging providers have sufficient data capacity to meet operations and reporting requirements for the NEVI program. Additionally, WVDOT will create sufficient storage policies to ensure collected data is managed and maintained for the entire five-year program.
- **Data Privacy.** WVDOT will require vendors to adopt and maintain a data privacy policy. The policy will confirm customer privacy related data is collected, stored, used, and shared. Additionally, WVDOT will require that any data that is reported and shared as part of the NEVI program is anonymized. This requirement will ensure that data can be used to analyze trends and performance while also protecting consumer privacy.

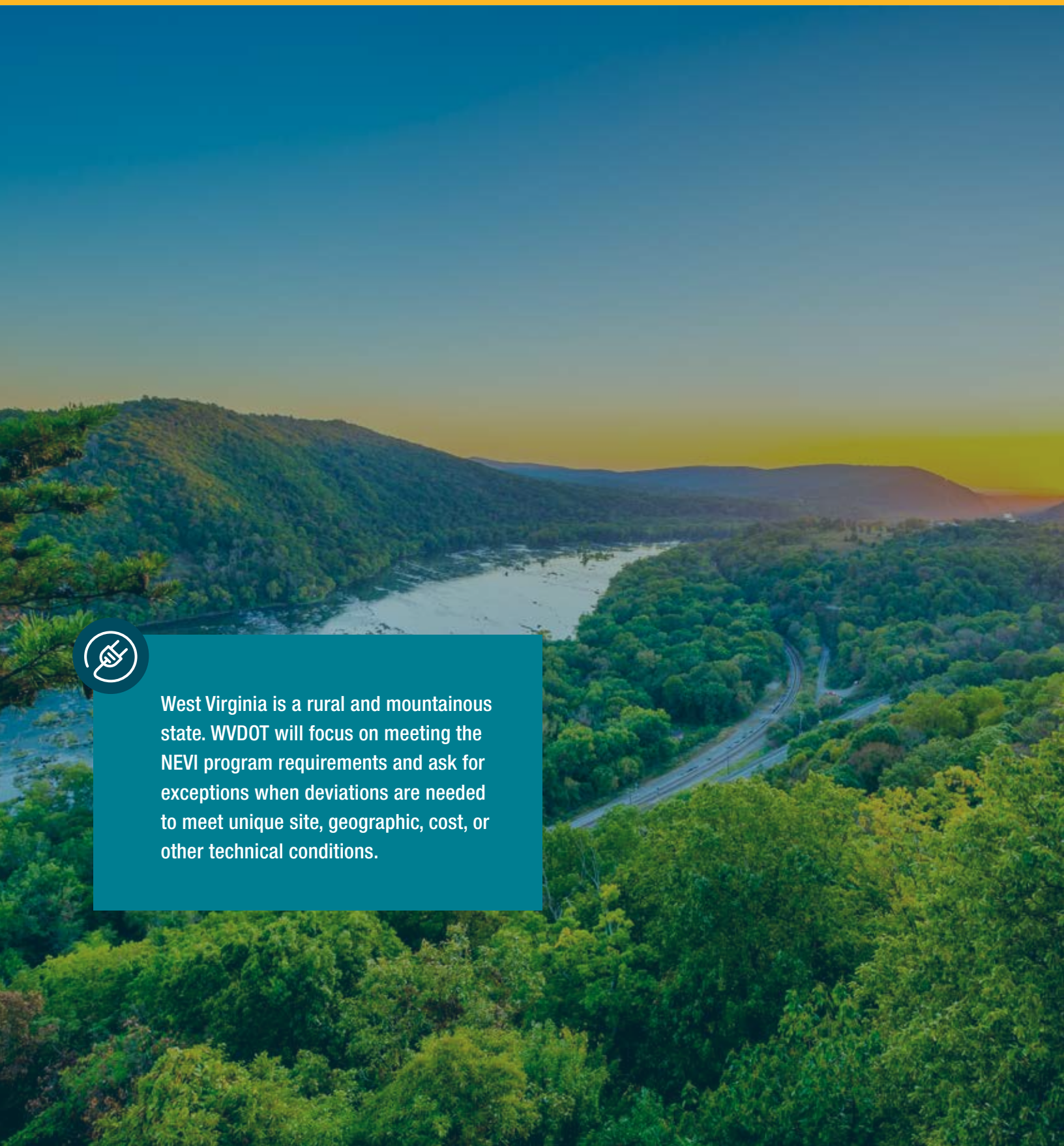
13 Program Evaluation

The reporting and monitoring progress will be a regular part of the West Virginia NEVI program. The purpose of the program evaluation will be to document regulatory compliance and create public transparency about the benefits and impacts of the program.

WVDOT will evaluate the West Virginia NEVI program annually. Performance measures will be developed in partnership with the Joint Office, state agencies, the business community, and community members. During the fall of 2023, WVDOT will develop key performance indicators (KPIs) for the five-year program. The indicators will be developed based on FHWA program guidance as well as public input. WVDOT will focus on four (4) main topics:

- **Regulatory Compliance.** These KPIs will focus on documenting and reporting the federal and state regulatory and performance requirements for the NEVI program. Examples include the number of NEVI-compliant stations constructed each fiscal year and funding distributed each fiscal year.
- **Community Characteristics and Demographics.** These KPIs will document community characteristics about who is using the NEVI-funded charging network as well as access characteristics, like the population within a certain distance of stations.
- **Economic Impact.** This topic will focus on how NEVI funds are supporting the West Virginia economy. Examples of KPIs include jobs created, people trained, and number of small business or disadvantaged businesses supported by the NEVI program.
- **Equity.** In line with the Justice40 initiative at the federal level, this topic will focus on measuring impacts and benefits of the NEVI program in historically DACs. Examples of KPIs include the number of stations and chargers installed in DACs and the number of people hired that live in DACs. The WVDOT Civil Rights Compliance Division will take the lead developing and tracking these KPIs.

14 Discretionary Exceptions



West Virginia is a rural and mountainous state. WVDOT will focus on meeting the NEVI program requirements and ask for exceptions when deviations are needed to meet unique site, geographic, cost, or other technical conditions.

Over the course of the five-year NEVI program, there may be a need to adjust the federal NEVI program requirements for a particular site. WVDOT will work with the Joint Office to coordinate and receive approval for exceptions. There is one exception request for a NEVI station location along the electric AFCs. This exception is for the 50-mile spacing requirement. A description of this exception is provided on the subsequent pages of this chapter.

EV DEPLOYMENT PLAN EXCEPTION REQUESTS

Table 11. Summary of Requests

Exception 1	Type	Distance of Deviation	Included in Round 6 AFC Nomination	Reason for Exception Request
Elkview to Sutton	50 miles apart	1.6 miles	Yes	Geography

JUSTIFICATION FOR EXCEPTION(S)

An exception to the 50-mile EV charging station spacing NEVI criteria is requested for the station proposed at Elkview and Sutton. Sutton is approximately 50 miles from Elkview, WV. Due to the existing geography and spacing of communities along the elecric AFC, Sutton is the closest community to Elkview that has the necessary services and amenities for an EV charging station. Sutton also has various retail locations already developed within one (1) mile of the electric AFC corridor, as well as regional draw due to its recreation areas and it is the preferred location for a NEVI-compliant charging station.

The 2022 WV NEVI Plan requested an exception for stations at Charleston and Flatwoods, located 66.3 miles apart. As a part of the planning update, WVDOT and FHWA met to review the locations and minimize the distance of deviation, resulting in the newly proposed locations. However, due to the rural nature of the state, no interchange exits allowed for less than 50 miles spacing AND provided the necessary development to support EV charging.

15 Appendix A: Existing Station Information

The table below shares information about the existing stations across the state.

Table 12. Existing Stations

ID	Station Name	Location	Street Address	Number of Charging Ports	Charger Level		AFC?	Route	EV Network	Meets 23 CFR 680 Require-ments?	Intent to count towards Fully Built out standard?
					Level 2	DC Fast Charging					
186058	Joe Defazio Oil	Westover	49 Red Dog Way	3	3	0	yes	SR 79	Blink Network	no	no
187882	Wingate Hotel	Hurricane	417 Hurricane Creek Rd.	4	4	0	yes	SR 64	Blink Network	no	no
195933	McCoy's Inn	Ripley	2 Fitness Lane	4	4	0	yes	SR 77	Blink Network	no	no
206048	Black Bear Village	Morgantown	380 Richard Harrison Way	3	3	0	yes	SR 79	Blink Network	no	no
222159	McDonalds - Ronceverte	Ronceverte	8721 Seneca Trail S	1	1	0	yes	SR 64	Blink Network	no	no
224492	Econolodge Inn	Triadelphia	87 Jenkins Lane	4	4	0	yes	SR 70	Blink Network	no	no
224525	Suburban Extended Stay	Triadelphia	40 Robinson Drive	4	4	0	yes	SR 70	Blink Network	no	no
229386	The Greenbrier Resort - Valet Area	White Sulphur Springs	101 Main Street West	6	6	0	yes	SR 64	Blink Network	no	no
229387	The Greenbrier Resort - Train Lot	White Sulphur Springs	101 Main Street West	4	4	0	yes	SR 64	Blink Network	no	no
229388	The Greenbrier Resort - North Entrance	White Sulphur Springs	101 Main Street West	6	6	0	yes	SR 64	Blink Network	no	no
238088	901 Lee Street Parking	Charleston	901 Lee Street	4	4	0	yes	SR 64	Blink Network	no	no
241214	Elkins Fordland	Elkins	696 Beverly Pike	1	1	0	yes	SR 77	Blink Network	no	no
257440	Subaru of Morgantown	Morgantown	1730 Mileground Road	1	1	0	yes	SR 68	Blink Network	no	no
187938	VOLVOCHARLESTON CHARGER	Charleston	7 Dudley Farms Ln	2	2	0	yes	SR 64	ChargePoint Network	no	no
193730	TRIPLE S H-D DCFAST HOG	Westover	7300 Willie G Ave	1	0	1	yes	SR 79	ChargePoint Network	no	no
197829	ALMOST HEVEN HD DC FAST HOG	Bridgeport	2260 Murphys Run Rd	1	0	1	yes	SR 79	ChargePoint Network	no	no
201239	UNIVERSITYMOTOR MB 1	Morgantown	58 Don Knotts Blvd	2	2	0	yes	SR 68	ChargePoint Network	no	no
204867	Ohio River Islands National Wildlife Refuge	Williamstown	3982 Waverly Rd	1	1	0	yes	SR 77	ChargePoint Network	no	no
204868	FREEDOM KIA FAST DC CHARGER	Morgantown	601 Mary Jane Wood Circle	1	0	1	yes	SR 79	ChargePoint Network	no	no
211834	UNIVERSITYMOTOR ABB STATION	Morgantown	58 Don Knotts Blvd	1	0	1	yes	SR 68	ChargePoint Network	no	no
220421	MBPKB 1 MBPKB 1	Parkersburg	2908 7th St	2	2	0	yes	SR 77	ChargePoint Network	no	no
227869	TOYOTA - WV PHARM - MIDDLE	Buffalo	18562 Buffalo Rd	2	2	0	no	n/a	ChargePoint Network	no	no

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227870	TOYOTA - WV PHARM - NORTH	Buffalo	18562 Buffalo Rd	2	2	0	no	n/a	ChargePoint Network	no	no
227871	TOYOTA - WV PHARM - SOUTH	Buffalo	18562 Buffalo Rd	2	2	0	no	n/a	ChargePoint Network	no	no
227872	TOYOTA - WV SECURITY - WEST	Buffalo	92 Sugar Maple Ln	2	2	0	no	n/a	ChargePoint Network	no	no
227873	TOYOTA - WV SECURITY - EAST	Buffalo	92 Sugar Maple Ln	2	2	0	no	n/a	ChargePoint Network	no	no
237841	JH HYUNDAI SHOWROOM FRONT	South Charleston	131 MacCorkle Ave SW	1	0	1	yes	SR 64	ChargePoint Network	no	no
237842	JH HYUNDAI SHOWROOM SIDE	South Charleston	131 MacCorkle Ave SW	1	0	1	yes	SR 64	ChargePoint Network	no	no
237861	ASTORG AUTO JLR CHARLESTON	Charleston	5 Dudley Farms Ln	1	0	1	yes	SR 64	ChargePoint Network	no	no
251825	BARBOURSVILLE DUTCH MILLER	Barboursville	6400 U.S. 60	1	0	1	yes	SR 64	ChargePoint Network	no	no
235527	Pikeview Manor	Beckley	315 Pikeview Dr.	2	2	0	yes	SR 64	EV Connect	no	no
237737	Country Club	Huntington	6275 Country Club Dr	2	2	0	yes	SR 64	EV Connect	no	no
102505	Courtyard by Marriott - Tesla Supercharger	Charleston	2 Kanawha Boulevard E.	8	0	8	yes	SR 64	Tesla	no	no
102506	Sheetz - Tesla Supercharger	Huntington	432 18th Street West	8	0	8	yes	SR 64	Tesla	no	no
102507	Sheetz - Tesla Supercharger	Martinsburg	1465 Edwin Miller Blvd	8	0	8	yes	SR 81	Tesla	no	no
102508	Sheetz - Tesla Supercharger	Morgantown	21 Asturias Lane	8	0	8	yes	SR 68	Tesla	no	no
102509	Sheetz - Tesla Supercharger	Mt. Hope	5481 Robert C. Byrd Drive	8	0	8	yes	SR 64	Tesla	no	no
102510	Hampton Inn & Suites Wheeling- The Highlands - Tesla Supercharger	Triadelphia	35 Bob Wise Drive	4	0	4	yes	SR 70	Tesla	no	no
102511	Sheetz - Tesla Supercharger	Weston	39 Berlin Rd	8	0	8	yes	SR 79	Tesla	no	no
122309	Sheetz - Tesla Supercharger	Parkersburg	1102 7th Street	6	0	6	yes	SR 77	Tesla	no	no
196255	Sheetz - Tesla Supercharger	Triadelphia	25 Gantzer Ridge Road	8	0	8	yes	SR 70	Tesla	no	no
200862	Sheetz - Tesla Supercharger	Morgantown	1901 Earl L Core Road	8	0	8	yes	SR 68	Tesla	no	no
214081	Sheetz - Tesla Supercharger	Fairmont	1000 Fairmont Avenue	8	0	8	yes	SR 79	Tesla	no	no
233044	Little General - Tesla Supercharger	Sutton	2001 Sutton Lane	8	0	8	yes	SR 79	Tesla	no	no
236873	Little General - Tesla Supercharger	Princeton	1000 Oakvale Road	8	0	8	yes	SR 77	Tesla	no	no
258268	Holiday Inn Express - Tesla Supercharger	Lewisburg	222 Hunter Ln	8	0	8	yes	SR 64	Tesla	no	no

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116213	Hawks Nest State Park - Tesla Destination	Ansted	49 Hawks Nest Park Rd	3	3	0	no	n/a	Tesla Destination	no	no
116214	Hampton Inn Huntington/ Barboursville - Tesla Destination	Barboursville	1 Cracker Barrel Dr	4	4	0	yes	SR 64	Tesla Destination	no	no
116215	The Country Inn of Berkeley Springs - Tesla Destination	Berkeley Springs	110 S Washington St	3	3	0	no	n/a	Tesla Destination	no	no
116216	Mountain View Solar - Tesla Destination	Berkeley Springs	11500 Valley Rd	1	1	0	no	n/a	Tesla Destination	no	no
116217	Cacapon Resort State Park - Tesla Destination	Berkeley Springs	818 Cacapon Lodge Rd	3	3	0	no	n/a	Tesla Destination	no	no
116218	Bluefield Inn, a Select Registry Property - Tesla Destination	Bluefield	2109 Jefferson St.	2	2	0	no	n/a	Tesla Destination	no	no
116219	North Fork Mountain Inn - Tesla Destination	Cabins	235 Canyon View Ln	2	2	0	no	n/a	Tesla Destination	no	no
116220	American Public University System - Finance Center - Tesla Destination	Charles Town	393 N Lawrence St	3	3	0	no	n/a	Tesla Destination	no	no
116221	Blackwater Falls State Park - Tesla Destination	Davis	1584 Blackwater Lodge Rd	2	2	0	no	n/a	Tesla Destination	no	no
116222	Canaan Valley Resort State Park - Tesla Destination	Davis	6263 Appalachian Hwy	3	3	0	no	n/a	Tesla Destination	no	no
116223	Clarion Inn - River Riders Family Adventure Resort - Tesla Destination	Harpers Ferry	4328 William L Wilson Fwy	3	3	0	no	n/a	Tesla Destination	no	no
116224	Hampton Inn Winfield/Teays Valley - Tesla Destination	Hurricane	511 WV-34	4	4	0	yes	SR 64	Tesla Destination	no	no
116225	Chief Logan Lodge - Tesla Destination	Logan	1000 Conference Center Dr	3	3	0	no	n/a	Tesla Destination	no	no
116226	Hampton Inn Parkersburg-Mineral Wells - Tesla Destination	Mineral Wells	64 Elizabeth Pike	4	4	0	yes	SR 77	Tesla Destination	no	no
116228	Potomac Lanes & South Branch Cinema 6 - Tesla Destination	Moorefield	185 Hyde St	2	2	0	no	n/a	Tesla Destination	no	no
116229	Twin Falls Resort State Park Lodge - Tesla Destination	Mullens	97 RR	3	3	0	no	n/a	Tesla Destination	no	no
116230	Pipestem Resort State Park - Tesla Destination	Pipestem	3405 Pipestem Dr	6	6	0	no	n/a	Tesla Destination	no	no
116231	Stonewall Resort - Tesla Destination	Roanoke	940 Resort Dr	2	2	0	yes	SR 79	Tesla Destination	no	no
116232	South Branch Inn Romney - Tesla Destination	Romney	64 Heritage Cir	2	2	0	no	n/a	Tesla Destination	no	no
116233	Bavarian Inn, Hotel/Restaurant/ Resort - Tesla Destination	Shepherdstown	164 Shepherd Grade Rd	2	2	0	no	n/a	Tesla Destination	no	no
116234	Clarion Hotel & Conference Center Shepherdstown - Tesla Destination	Shepherdstown	233 Lowe Dr	4	4	0	no	n/a	Tesla Destination	no	no
116235	Gillum House Bed & Breakfast - Tesla Destination	Shinnston	35 Walnut St	2	2	0	no	n/a	Tesla Destination	no	no

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116237	Summit Point Motorsports Park - Tesla Destination	Summit Point	201 Motorsports Park Cir	8	8	0	no	n/a	Tesla Destination	no	no
116238	Cafe Cimino Country Inn - Tesla Destination	Sutton	616 Main St	2	2	0	yes	SR 79	Tesla Destination	no	no
116239	Oglebay Resort - Tesla Destination	Wheeling	465 Lodge Dr	3	3	0	yes	SR 70	Tesla Destination	no	no
116240	The Greenbrier - Tesla Destination	White Sulphur Springs	300 W Main St	2	2	0	yes	SR 64	Tesla Destination	no	no
122584	South Branch Inn Moorefield - Tesla Destination	Moorefield	1500 US Hwy 220	2	2	0	no	n/a	Tesla Destination	no	no
251006	The Historic Morris Harvey House Bed and Breakfast - Tesla Destination	Fayetteville	201 W. Maple Avenue	1	1	0	no	n/a	Tesla Destination	no	no
220214	The Giant Company #6107 -Martinsburg	Martinsburg	901 Foxcroft Avenue	2	2	0	yes	SR 81	Volta	no	no

16 Glossary of Terms

AADT – Annual Average Daily Traffic

ADA – American Disabilities Act

ADHS – Appalachian Development Highway System

AFC –Alternative Fuel Corridors

BEV- Battery Electric Vehicles

BIL – Bipartisan Infrastructure Law

DACs – Disadvantaged Communities

DBE – Disadvantaged Business Enterprise

DCFC – Direct Current Fast Charging/Level III

EEO – Equal Employment Opportunity

EIA – U.S. Energy Information Administration

EPA – Environmental Protection Agency

EV- Electric Vehicle

EVITP – Electric Vehicle Infrastructure Training Program

EVSE – Electric Vehicle Supply Equipment

FAF – Freight Analysis Framework

FHWA – Federal Highway Administration

IIJA – Infrastructure Investment and Jobs Act

Joint Office – Joint Office of Energy and Transportation

KPI – Key Performance Indicators

KRT – Kanawha Valley Regional Transportation Authority

kWh – Kilowatt-hours

MPO – Metropolitan Planning Organization

NEHC – National Electric Highway Coalition

NEVI Formula Program – National Electric Vehicle Infrastructure Formula Program

NHFN – National Highway Freight Network

NHS – National Highway System

O&M – Operations and Maintenance

PHEV – Plug-in Hybrid Electric Vehicles

PHFS – Primary Highway Freight System

PSC – Public Service Commission of West Virginia

RTO – Regional Transmission Organization

SBE – Small Businesses Enterprise

USDOE – United States Department of Energy

USDOT – United States Department of Transportation

VMT – Vehicle Miles Traveled

WVDED – West Virginia Department of Economic Development

WVDEP – West Virginia Department of Environmental Protection

WVDOT – West Virginia Department of Transportation

WVEAA – West Virginia Electric Auto Association

WVEMD – West Virginia Emergency Management Division

WVOE – West Virginia Office of Energy