2022 State of Idaho
Electric Vehicle Infrastructure Baseline Plan

Idaho Transportation Department
August 1, 2022

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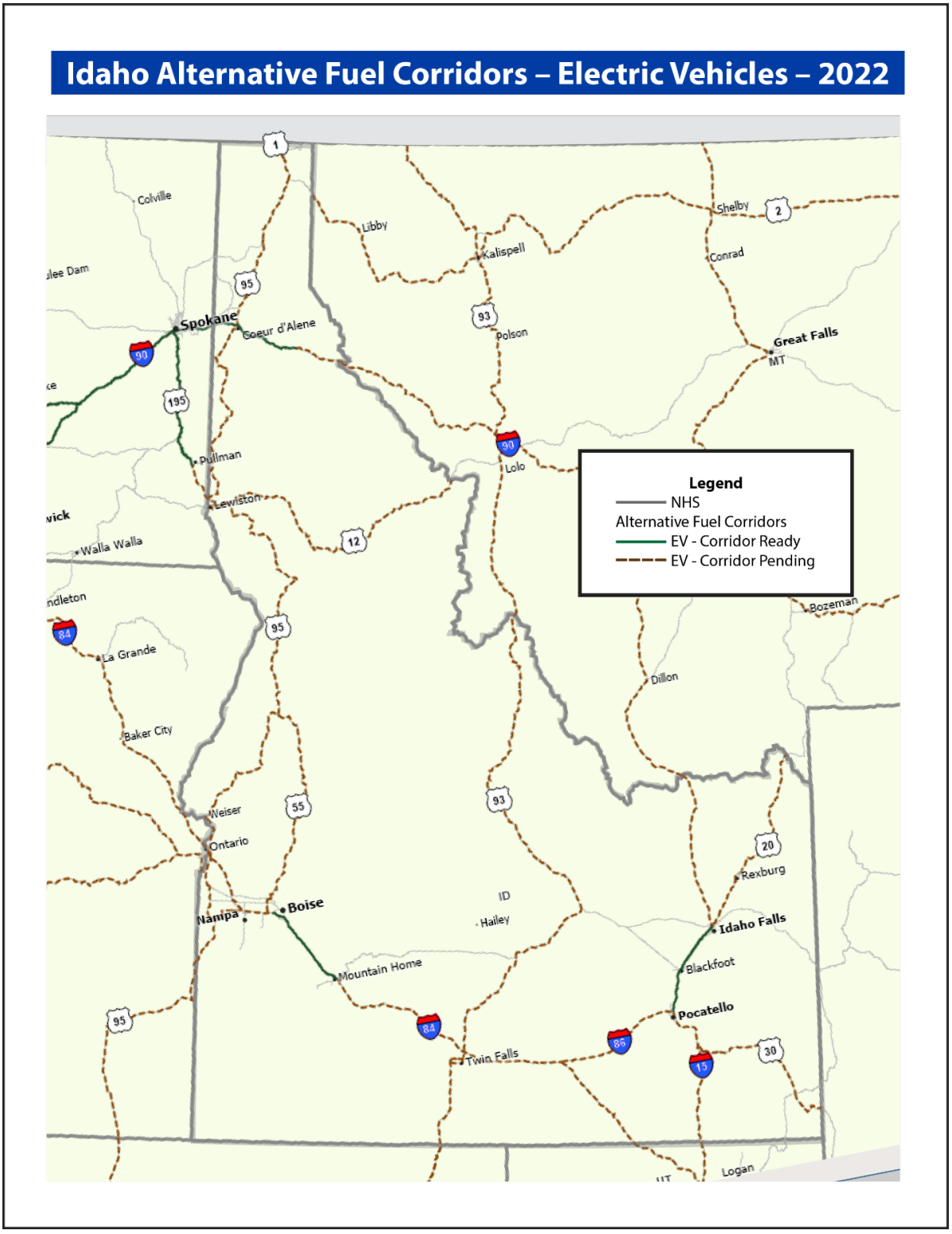
Idaho Alternative Fuel Corridors – Electric Vehicles – 2022
Legend
NHS
Alternative Fuel Corridors
EV - Corridor Ready
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Colville
Libby
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Shelby
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Bozeman
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Nampa
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Hailey
Rexburg
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Blackfoot
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Mountain Home
Twin Falls
Logan

Executive Summary

The State of Idaho is pleased to submit this 2022 State of Idaho Electric Vehicle Infrastructure Baseline Plan (Baseline Plan) to the Joint Office of Energy and Transportation (Joint Office). Numerous Idaho State Agencies developed this Baseline Plan pursuant to the National Electric Vehicle Infrastructure (NEVI) program created under the Infrastructure Investment and Jobs Act (IIJA). This Baseline Plan serves as a guide to effectively deploy direct current fast charger (DCFC) infrastructure throughout the state that is both compliant with NEVI and reflects local deployment preferences.

Idaho has been deploying DCFC since 2017, in part through the Volkswagen Settlement Electric Vehicle Supply Equipment (EVSE) Program. This effort has corresponded with the expansion of Idaho's Alternative Fuel Corridors to include the most travelled corridors in the state, but it has also clearly established that there are numerous factors necessitating a pragmatic, systematic approach DCFC deployment under NEVI. Idaho is a large, mostly rural state with a diverse geographical makeup. Consequently, Idaho's targeted investment in transportation and energy infrastructure will be required to achieve Idaho's vision and comply with NEVI requirements.

Introduction

The Baseline Plan will ensure coordinated, strategic, and responsible deployment of electric vehicle (EV) charging infrastructure in Idaho consistent with NEVI Formula Program and Idaho's Vision and Goals. The Baseline Plan includes the goals of providing predictable service along key transportation corridors, producing equitable outcomes for rural and disadvantaged communities while improving air quality by reducing emissions from transportation. The Baseline Plan serves as a guide to effectively deploy DCFC infrastructure that is compliant with NEVI throughout the state, alongside local deployment preferences.

Dates of State Baseline Plan for EV Infrastructure Deployment Development and Adoption

The Baseline Plan establishes the goals and framework for EV deployment by establishing a vision, goals and setting targets for implementation. Further, the Baseline Plan establishes minimum criteria and guidance for the development of a Siting, Feasibility and Access Study.

The second phase of the Baseline Plan (October 2022 – August 2023) consists of a Siting, Feasibility and Access (Study) to provide detailed analysis of electric vehicle charging deployment and administrative options. Our surrounding states of Oregon, Washington, Montana, Wyoming and Utah have completed such studies prior to the availability of NEVI funding. As a result, they have sufficient data and siting detail to move forward with EV charging station deployment.

A pilot solicitation for 1-2 NEVI compliant stations in Idaho will be included in this second phase. The goal is to select and contract two sites that correspond to NEVI priorities. This pilot will identify changes that need to be made to the contracting and solicitation processes for phase three.

Additionally, after the Study is complete, The State of Idaho will conduct a second round of public involvement and submit an update to the Baseline Plan for Federal Highway Administration (FHWA) review and approval. This update will include phasing, potential locations and deployment strategies for EV infrastructure.

A third phase of the Baseline Plan is the creation of a five-year action Baseline Plan for the development of contractual options and the solicitation for deployment over a multi-year timeframe (2023 – TBD).

Baseline Plan Vision and Goals

Vision

The State of Idaho's vision is to effectively deploy universal and publicly available electric vehicle (EV) charging infrastructure along Idaho's major travel corridors at intervals that provide drivers the confidence to travel throughout the state over a multi-year time period while meeting community and economic needs.

This comprehensive planning process ensures the State coordinates and synchronizes actions to support EV infrastructure.

Goals

Multiple goals inform Idaho's vision:

1. *Enhanced Transportation Experience:* While select EVs can travel 200 to 300 miles per charge, most models on the road today range from 60 to 120 miles per charge. To accommodate for varying EV ranges, it is ideal to locate DCFCs every 50 miles. Idaho seeks to develop an interconnected DCFC network throughout the state to provide ease and confidence for EV drivers and to provide connection to rural areas and tourist destinations, while being fiscally responsible as to deployment at various intervals. Idaho is a popular travel destination for outdoor recreation and has many rural communities. Availability of DCFCs throughout the large rural areas between urban centers is vital to connect drivers with popular travel destinations and rural areas. DCFC infrastructure will provide convenient access to Idaho's visitor destinations while providing economic growth to Idaho's rural economies.

2. *Improve Clean Transportation Access Through the Location of Chargers While Increasing Parity in Clean Energy Technology Access and Adoption:* By selecting corridors for EV infrastructure priority buildout, Idaho will be able to expand its EV charging network and provide more opportunities for EV adoption. Expanding the number of corridors provides more access to clean transportation especially in rural areas where private and municipal investment may be less available.

   Most EV charging investment in Idaho is found in more populous and economically prosperous city centers. In 2021, over 40% of electric vehicle registrations were in Ada County, one of Idaho's most populous and wealthy counties. By designating the proposed corridors across the state, Idaho will be able to prioritize more federal funds for EV charging in rural and disadvantaged communities. This investment will also enable greater adoption of electric vehicles, in turn leading to more community charging options. Those options will be appealing to those that cannot afford private or home charging stations.

   Multiple corridor choices in Idaho will diversify transportation options and reduce reliance on conventional vehicle fuel sources. Diversification of energy choices is a key part of assuring resiliency, especially in rural areas of Idaho. Idaho has a broad range of north-south and east-west Alternative Fuel Corridors that allows for many deployment options.

3. *Connection and Enhancement Within the Region:* Idaho recognizes that an interconnected regional DCFC infrastructure will increase access to highways, promote tourism and recreation in rural communities, and support local economies. Regional collaboration is key to expanding transportation options and Idaho welcomes partnership opportunities with neighboring states and private partners to enhance connections along major roadways throughout the West.
   Ongoing coordination with our surrounding states, Washington, Oregon, Nevada, Utah, Wyoming, Arizona, Colorado, New Mexico and Montana has been continuous since the Alternative Fuel Corridor planning process began in 2016.

4. *Improving Air Quality and Decreasing the Energy Burden and Environmental Exposure:* Idaho's transportation sector makes up 58% of carbon dioxide emissions.[1] Electrifying transportation will assist in reducing emissions which will improve air quality and especially benefit people with heart and/or lung disease, older adults and children, minority and low-income populations, and populated areas within traffic proximity. A secondary benefit is reducing the demand for conventional energy.

5. *Increase Access to Low-Cost Capital, Possibly Leading to Increased Equitable Adoption of Clean Energy Technologies and Deeper Investments Within Disadvantaged Communities:* Statewide corridors allow communities located along a designated corridor to apply for 80% federal cost share of EV charging infrastructure, thereby increasing the uptake and affordability of costly electric vehicle supply equipment. Having EV charging infrastructure will bring more resources, tax revenue, and development to disadvantaged and rural communities. Central to this future deployment is the need for a robust state network of Interstates and National Highway (NHS) routes covering Idaho.

6. *Increase the Clean Energy Job Pipeline, Job Training, and Enterprise Creation:* Deploying EV charging infrastructure will expand the need for workers in the energy job pipeline, including electricians, general contractors, construction workers, planners, and more. Unique skillsets can be developed through deployments across Idaho.

7. *Increase Involvement in Energy Issues/Decision-Making:* Electric vehicle infrastructure expansion is sparking more conversation between local governments, utilities, and private sector site hosts. Idaho utilities are considering proposals to the Idaho Public Utilities Commission for programs that increase the adoption of EV charging.

[1] EIA. "Energy-Related CO2 Emission Data Tables." https://www.eia.gov/environment/emissions/state/

Work Efforts to Date

The State of Idaho has undertaken a deliberative approach to planning for EV deployment in Idaho. Idaho has been deploying EV charging stations through the Volkswagen Settlement Electric Vehicle Supply Equipment (EVSE) Program since 2017. These early efforts have led to several conclusions that apply to both the past and future programs:

- There are large sections of interstates and highways in Idaho that do not have the necessary access, electrical power and user demand to justify EVSE deployment.
- These sections of interstates and highways would require substantial investments to transform corridors into networks.
- Funding is insufficient to meet federal siting requirements systemwide.
- Comparing available state funding under NEVI with the number of necessary EV charging stations on corridors reveals a mismatch of resources for end users.
- Estimating market factors, especially as to uptake of charging capacity, is a struggle for both electric power providers and financial partners who seek to make ends meet when EVSE is deployed.
- Both public awareness and economic wherewithal to purchase and operate EVs in areas outside of urban Idaho is limited. And Idaho is overwhelmingly rural in nature.
- Limited knowledge of EVSE ownership and operational issues in Idaho, including return on investment, energy costs, etc., present additional challenges for attracting potential private partners.
- Idaho has identified and interacted with numerous rural and vulnerable communities as part of our initial public outreach, as described in the following section.
- Integrating planning of transportation and electric power infrastructure is complex and more data needs to be analyzed through the Siting, Feasibility and Access Study before large numbers of EVSE is deployed.

Combining these factors led Idaho to undertake a systematic and thoughtful approach to planning for EV deployment under NEVI. This systematic approach begins with interagency coordination and is made whole by public involvement.

State Agency Coordination

Starting in 2022, multi-agency coordination for the Idaho EV Baseline Plan started with these three state agencies: Idaho Department of Transportation (ITD), Department of Environmental Quality (DEQ), and the Office of Energy and Mineral Resources (OEMR). The majority of this coordination effort has been focused on developing the content of the Idaho EV Baseline Plan, consistent with the Program Guidance issued by FHWA. Since then, there have been interagency coordination meetings every other week which has included representatives from:

- Idaho Transportation Department
- Office of Energy and Mineral Resources
- Department of Environmental Quality
- Idaho Office of Tourism
- Idaho Department of Parks and Recreation

The State Coordination meeting efforts have included the following:

- Development of a comprehensive public outreach/public awareness campaign
- Coordination of grant funding across various state agency grant programs
- Creation of an ongoing EV advisory committee
- Dialogue around Buy America requirements for EV supply equipment
- Ensuring the statewide electrification strategy, including all program activities and funding will benefit disadvantaged, and vulnerable communities in Idaho.

The interagency partnership between ITD, DEQ and OEMR will play a major role in drafting and circulating Request for Proposal (RFP) materials and securing contracting for program implementation. RFP materials will provide guidelines that comply with the Buy American Act in accordance with FHWA guidelines. This working group is responsible for the NEVI Program RFP and VW settlement funding award selections to ensure appropriate agency interaction. The working group will also be instrumental in selecting the NEVI program consultant that will assist the State of Idaho in managing the NEVI Program.

Public Involvement

Public involvement is the backbone of the strategy for advising Idaho's EV Baseline Plan. It was through feedback derived from one-on-one conversations with Idaho road users, public meetings, surveys and submitted written input that the vision for the future of EV charging infrastructure in Idaho was created. The State of Idaho deployed aggressive public outreach to collect this feedback to include numerous stakeholder groups.

Further, the public involvement efforts were designed to find true representation of the unique, diverse values, concerns and opinions of those traveling in and through Idaho. The State of Idaho set out to have those conversations over a two-month period through a wide variety of channels and build a Baseline Plan that the various and numerous stakeholders could not only embrace but would own.

Stakeholders Involved in Baseline Plan Development

ITD targeted feedback from representative groups to ensure equity in planning efforts, by including the following groups to assure diversity in the following demographics:

- **Minority/ Underrepresented Groups**
  - **Latino / Hispanic**
  - **Idaho Tribes**
  - **Low-income**
- Industry / Industry Associations
  - Chambers of Commerce / Business Associations
  - Large employers
  - Trucking
  - Vehicle Manufacturing
  - Automobile Dealers
  - Power and Energy
  - Union/ Labor
  - Contractors
  - Idaho Businesses
  - Economic Development
- Education
  - Idaho universities / community colleges
- Environmental Groups
  - Clean Cities Coalitions, Idaho Conservation League, Conservation Voters for Idaho, Sierra Club, Clean Tech Alliance
- Municipalities
- Government Agencies
  - Idaho Department of Commerce - Tourism
  - DEQ
  - ITD
  - OEMR
  - Counties
  - Idaho State Police
  - Office of Emergency Management
  - Public Utilities Commission
  - Idaho Department of Agriculture
  - Idaho Department of Parks and Recreation
  - U.S. Bureau of Land Management (BLM)
  - Electric Co-Ops
  - Idaho Consumer Owned Utilities

- Metropolitan Planning Organizations (MPOs)
- Idaho Department of Agriculture - Bureau of Weights and Measures
- Idaho Department of Lands
- Idaho Department of Labor

Disadvantaged Communities Participation

Vulnerable, rural and disadvantaged communities that participated in public outreach include:

- **Latino/Hispanic communities (Idaho Commission on Hispanic Affairs)**
- **Idaho Tribal Council (Coeur d'Alene Tribe; Kootenai Tribe; Nez Perce Tribe; Shoshone-Bannock Tribes and Shoshone-Paiute Tribes)**
- **Rural community representatives from across Idaho**

By Alternative Fuel Corridor, rural and disadvantaged communities include (from USDOE/USDOT Interim Guidance for Disadvantaged Communities map):

- US-12: Multiple Disadvantaged Communities and Nez Perce Reservation
- US-30: One Disadvantaged Community
- US-20: Multiple Disadvantaged Communities
- US-95: 18 Disadvantaged Communities
- US-93: Two Disadvantaged Communities

Marketing Feedback Opportunities

The State of Idaho marketed the opportunity to provide comment through numerous methods to increase visibility for the NEVI Formula Program and encourage feedback. The following methods were used to notice the public input period.

Website

ITD developed and hosted a website with content regarding the NEVI Formula program and ways for the public to provide input.

Direct E-Mail Outreach

ITD reached out to more than 420 stakeholders via email to direct interested parties to 1) find more information on the website and submit comments and questions 2) take the survey and/or 3) participate in a public meeting opportunity.

Earned Media

ITD notified the media of the public meeting opportunities in each district. Numerous outlets picked the story up throughout the state. The following stories were published during the marketing and outreach phase of public involvement efforts:

- KTVB | Public invited to weigh in on electric vehicle infrastructure in Idaho | June 12, 2022 | Story content
- Big Country News | Input Wanted From Idahoans on Where to put Electric Vehicle Charging Stations | Jul 12, 2022 | Story content
- KMVT | ITD seeks public comment on charging stations in Idaho | Jun. 20, 2022 | Story Content
- KMVT | Twin Falls residents voice their thoughts on proposed charging stations | Jun. 21, 2022 | Story content
- KSL | 8 states powering this initiative to provide EV corridors throughout the Mountain West | June 21, 2022 | Story content
- Idaho Business Review | Biz 'Bite:' Public comment sought for Idaho EV infrastructure plan | June 29, 2022 | Story content
- Idaho Capital Sun | There are only 2,700 fully electric vehicles in Idaho. Could that start to change soon? | June 24, 2022 | Story content
- Idaho Capital Sun | Idaho receives $28 million to build EV charging stations every 50 miles of interstate | July 12, 2022 | Story content
- Coeur d'Alene Press | Dude, where's my electric car charging station? | June 11, 2022 | Story content
- Lewiston Tribune | Barra says GM's committed to affordable electric cars | June 24, 2022 | Story content
- KTVB | Americans consider switching to electric vehicles to avoid high gas prices | July 13, 2022 | Story content
- Idaho Capital Sun | From distance to the power grid, electric vehicles face fair share of challenges in rural Idaho | July 14, 2022 | Story content
- Idaho Statesman | The AP Interview: GM's Barra talks electric vehicles, future | July 19, 2022 | Story content

Social Media

The State of Idaho posted on their social channels and boosted / geotargeted the post to ensure visibility. Results of the social media campaign are noted in Figure 1. *Clicks* are individual clicks of a link in the post and *Reach* is the number of people who have been exposed to the post at least once.

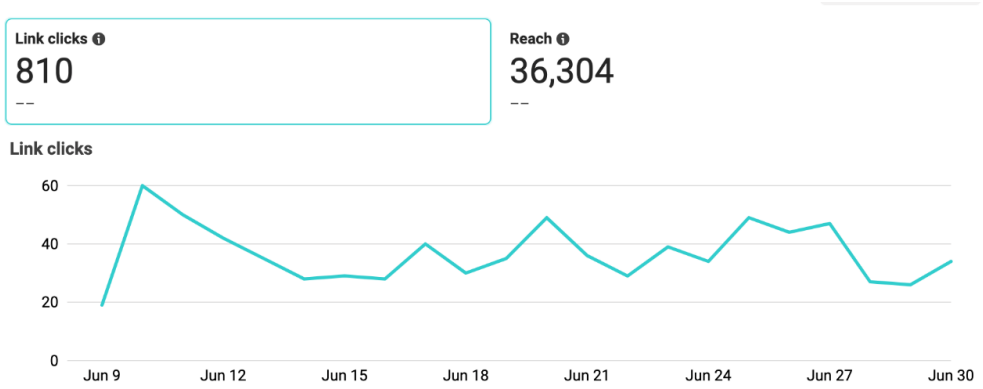


Figure 1: Social Media Clicks and Reach

Community Calendars

ITD posted a flyer and information about public meetings on community calendars online throughout the state to drive attendance and participation in public meetings and the survey.

Outreach Tactics

During the public involvement phase, the State of Idaho was committed to including as much input on the Baseline Plan as possible. Balancing broad, high volume input was as important as collecting more deeply explored content derived from face-to-face or small group conversations. In particular, the State of Idaho encouraged individuals and local communities to consider and articulate what they see as true benefits of NEVI to their community, so that the State Baseline Plan can be shaped to provide those benefits. The stakeholder engagement that the State of Idaho has begun will allow continued work with communities to maximize public input.

Feedback to advise the Idaho Baseline Plan was gathered through a combination of tactics, including:

- An online survey (available in both English and Spanish)
- A written survey of the same content
- Virtual public meeting for those unable to attend in person meetings – July 13, 2022
- Presentation to Idaho Indian Affairs Council
- In-depth interviews with interested stakeholders
    - Eight targeted interviews were conducted. Interviewees included Idaho Power, Avista, Idaho Falls Power, Idaho Petroleum Marketers and Convenience Store Association, conservation groups (Idaho Conservation League, Conservation Voters for Idaho, Sierra Club), Idaho Commission on Hispanic Affairs, Clean Tech Alliance, and Visit Idaho

- Public meetings:
  - June 13, 2022 – Idaho Falls
  - June 14, 2022 – Fort Hall
  - June 21, 2022 – Twin Falls
  - June 28, 2022 – Lewiston
  - June 29, 2022 – Coeur d'Alene
  - July 6, 2022 – Garden City/Boise
- Social media comments
- Submitted written comments
- QR-coded cards for public distribution to increase awareness

Outreach Results

Between June 13, 2022 and July 20, 2022, over 1,300 pieces of feedback were gathered through more than 20 unique opportunities for public comment regarding the NEVI Formula Program Baseline Plan for Idaho. Those surveyed and participants in public meetings were self-selected. Stakeholders who participated in one-on-one or small group meetings were selected and invited to participate based on expressed interest in the program.

- **Online Survey (English and Spanish) Key Statistics and Findings**
  - 1,086 people responded to the online survey
  - 26 submitted a hard-copy response to the survey of the same content
- **Statewide Public Meetings Key Findings**
  - Approximately 200 people participated in public meetings held throughout the state and online.
- **In-Depth Stakeholder Interviews/ Social Media/ Written Submissions Key Findings**
  - Eight one-on-one or small group stakeholder interviews
  - Presentation to the Idaho Council on Indian Affairs, representing all Idaho tribes
  - 12 entities submitted a memo with comments on the program from their organization

More than 80 comments were posted and captured from the Facebook post on ITD's page.

Analysis

The following themes were identified during the public outreach efforts by ITD:

- Locations for infrastructure
- Operations suggestions
- Environment
- Electricity

- Tax concerns
- Diversity
- Variable Charging
- Other (generally positive, generally negative and generally neutral)

Location Suggestions

Public feedback indicates the public has many, varying opinions about where EV charging infrastructure should be located. Trends collected from feedback regarding locations are noted here in Figure 2.

Feedback also indicated the following top three themes regarding locations of EV charging infrastructure:

1. *State Highways*: Idaho should consider state highways as a priority alongside interstates. Idaho's state highway system provides the main throughfare between north and south and many road travelers have or would have range anxiety traveling on these roads without more EV infrastructure. The routes most requested for consideration included I-90, US-95, US-12, SH-55, I-84, I-15, US-20, US-93 and US-30.
2. *Tourist Destinations:* Idaho should prioritize tourist destinations including popular tourist towns, state parks and routes to tourist destinations (scenic byways) throughout the state.
3. *Rural Areas:* Idaho should prioritize rural areas that also serve as transportation routes through the state.

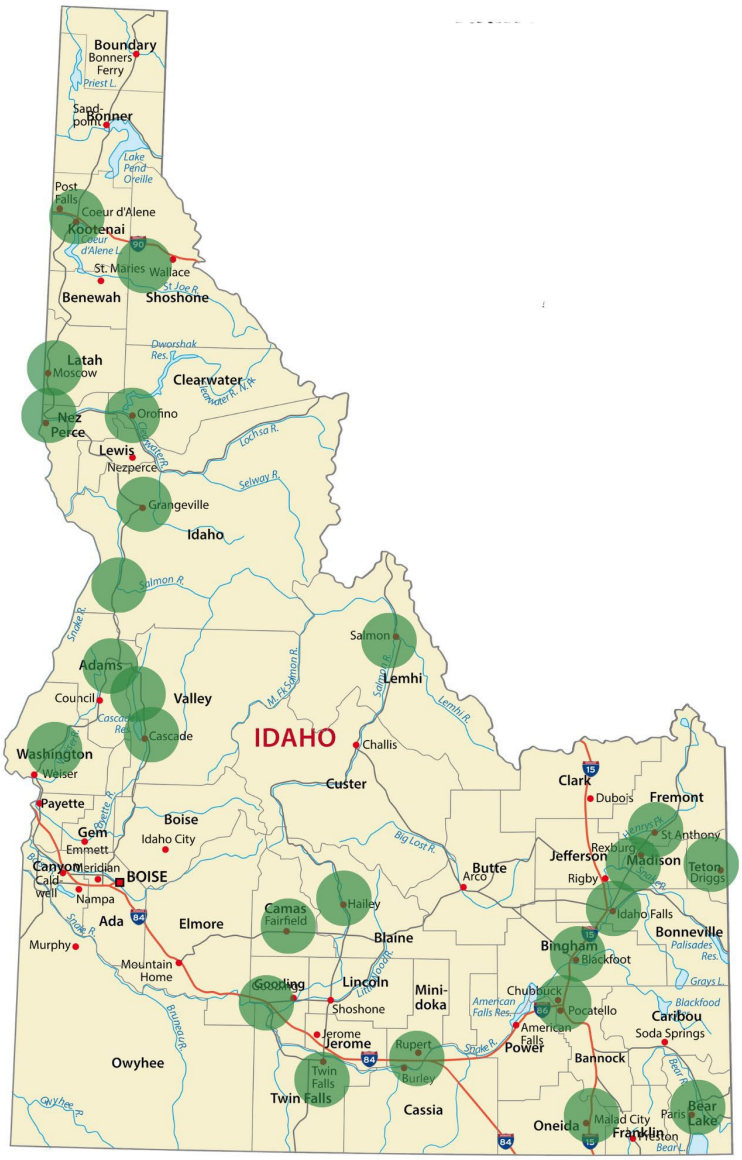


Figure 2: Location Trends based on Public Feedback

Operations Suggestions

The survey, Facebook comments, submitted written comments and in-person feedback from both stakeholder meetings and public meetings indicate the public has alignment on areas of priority regarding operations. Feedback identified the following top three themes regarding operations of EV charging operations:

1. *Amenities*: Idaho should install EV charging infrastructure in areas with existing amenities or where amenities can be built. Amenities suggested included dining, restrooms, retail, seating areas and shelter.
    a. *A note of interest*: Idaho should consider the safety of charging station infrastructure. In the event solo individuals are charging at night, or many miles away from emergency services.
2. *Reliability:* Idaho should provide status information to travelers regarding whether a charging station that is down, or if EV drivers will be required to wait for a significant amount of time for use.
3. *Accommodation of commercial or towing vehicles:* Idaho should ensure charging stations can accommodate a truck with a trailer and large commercial vehicles, as well as individual passenger vehicles.

Public Involvement

Feedback identified the public's desire for more information and ongoing communication about the NEVI Formula Program and ongoing investments in EV charging infrastructure. The following themes related to public involvement were noted:

1. *Expert Counsel*: Idaho should rely on expert partners to continue to advise on Idaho's deployment of EV charging infrastructure.
2. *Engage EV Owners*: Idaho should keep a well-maintained contact list of all EV owners in the state to advise ongoing panning.
3. *Constant Public Communication:* Idaho should prioritize ongoing methods for keeping the public educated, informed and engaged throughout the administration of this program. Particular emphasis was placed on support for those applying for grants and providing clear, easy to understand information for eligible grantees.

Environment

Input collected during outreach efforts indicates some concern about the unintended consequences of EVs. While sentiment also included support for clean energy solutions, Idahoans are concerned about some of the environmental impacts that could be created by adopting more EVs in the state. The following themes related to public involvement were noted:

1. *Renewable Resources:* Idaho should consider solar, hydro and wind energy to provide power to EV charging stations.
2. *Disposal of Batteries*: Idaho should consider the long-term impacts of disposing of EV batteries.

3. *Manufacturing EVs:* More information is needed about the carbon impacts of manufacturing EVs before Idaho should deploy charging stations.

Electricity

Input collected during outreach efforts indicates some concern about electricity grid capacity in the areas where EV charging stations could be located. The following themes related to public involvement were noted:

1. *Renewable Resources:* In tandem with comments related to environment, Idaho should consider solar, hydro and wind energy to provide power to EV charging stations.
2. *Grid Capacity*: Idahoans show strong concern there is not enough grid capacity to accommodate EV charging stations and full adoption of EVs.

Tax Concerns/ Policy

Input collected during outreach efforts indicates conflicting opinions about how individuals driving EVs should or should not be taxed or incentivized. Comments were received expressing concerns about EV drivers not paying their share of the gas tax for road improvements and other comments expressed a desire to incentivize EV ownership through tax credits.

1. *Offsetting Gas Tax:* Idahoans are concerned about increased EV ownership and usage having an impact on roadway improvement budgets. From an equity perspective, many Idahoans do not want to subsidize those paying less because they are not subject to gas taxes.
2. *Incentivizing EV Ownership:* Idahoans who invest in EVs as a way to lower their carbon footprint are interested in tax incentives for doing so.
3. *Public/Private:* Numerous opinions indicated more support for private investment in EV charging stations.
    a. *A note of interest:* Idahoans need more education on the public/ private sector partnerships that will be required to make NEVI successful.

Diversity

Input collected during outreach efforts demonstrate an ongoing need to engage minority and underrepresented populations in Idaho. Both considering locations for chargers and providing ongoing information and education about grants were noted.

1. *Tribes:* Input indicates there is a strong interest to invest in charging infrastructure on tribal lands, ideally near casinos where amenities as noted above are available.

2. *Lower Income:* Idaho should consider programs that make affording an EV more attainable for those with lower income.
3. *Hispanic:* The Hispanic population indicated ongoing interest in the EV charging station deployment and access to materials in Spanish.

Variable Charging

Stakeholders across the state encouraged Idaho to consider dual charging stations that included both Level 2 and DCFC charging stations to accommodate EV owners who were early adopters.

1. *Level 2:* Based on feedback, many early adopters of EVs are interested in additional charging stations that have Level 2 connections or have dual connections (Level 2/DCFC)
2. *Forward looking:* Some comments indicated concern about investing in DCFC charging stations when technology is advancing so quickly, and station connections may have to be replaced in a short period of time.

Contracting

Contracting under the State of Idaho EV Infrastructure Baseline Plan will be managed through a public-private partnership in coordination with ITD's partners. Funding that is available under the NEVI Formula Program will be used to contract with third-party entities for the purchase, installation, operation and maintenance of accessible EV charging infrastructure. A particular focus on small business and Disadvantaged Business Enterprise will be given contractual opportunities during the Siting, Feasibility and Access Study planning process. This will allow for those entities to effectively participate in contracting under the program.

Idaho will implement a contract acquisition method, such as a Request for Proposal (RFP), to ensure consistency in program deployment. Ownership of the EV charging infrastructure will not be returned to the State when contracting with private entities.

The NEVI consultant selection will be a formal competitive procurement process. The section process will begin with a solicitation for Letters of Interest (LOI) and then The State of Idaho will issue Requests for Proposal (RFPs).

The NEVI consultant statement of work (SOW) will require the selected contractor to comply with all NEVI program guidance requirements, outlined by FHWA. In addition, the selected consultant will be required to qualify all station proposals to ensure they meet NEVI federal requirements.

Siting, Feasibility and Access Study

Addressing potential issues and planning for a successful infrastructure deployment requires the collection, analysis and review of additional EV charging infrastructure siting, access and feasibility data and supporting information. Idaho will complete a statewide Study following the approval of this Baseline Plan. Topics for this Study include, but are not limited to:

- Transportation facility access and availability
- Electrical service provision, access and cost
- Equity and access for underserved, disadvantaged and/or rural populations
- Service to public lands, such as National parks and other Federal land management agency units
- Public Health benefits for urban and rural areas
- Near/long term EV charging corridors that support national freight and goods movement

This Study will include numerous partners and stakeholders from across Idaho to develop a strategy and expected timeframe for deployment of NEVI-compliant public electric vehicle infrastructure. In order to implement the Study's outcomes, the necessity of continued federal assistance for construction of charging infrastructure is deemed essential. Central to this effort is the design and implementation of a robust statewide network that is ready for analysis, development, upgrade and deployment.

Examples of Items for Detailed Consideration in Idaho's Siting, Feasibility and Access Study

Federal Requirements:

Administrative, Contracting, Purchasing and Procurement, National Environmental Protection Act, Physical and Cybersecurity, Reporting and Data Submittal, Interoperability, Network and Grid Communications, Operations and Maintenance, Buy America and Technical requirements not yet resolved by rulemaking, administrative waivers and/or guidance:

- System and Operational Performance standards and goals
- Integration of third-party entities for program delivery
- Grid capacity, anticipated usage rates and peak demand
- Non-federal funding for EV charging station deployments
- Installation, maintenance and ownership responsibilities for EV stations
- Labor, safety, training and installation standards
- Emergency, evacuation, snow removal and seasonal needs
- Program evaluation components
- Discretionary Exceptions justifications
- Future year updates and plans

- Description of formalized relationship between State Agencies to administer Baseline Plan

Planning, Design and Implementation Features:

- Integration of private sector initiatives and OEM system applications for mapping, locations, pricing availability and accessibility
- Public Disclosure of Pricing
- Availability of AC Level 2 chargers alongside NEVI compliant deployments
- Free Vend option for continuous charging when payment systems are offline
- Make ready template for location, connection, design and operation of electric vehicle supply equipment (EVSE)
- Pull-through design component for larger vehicles (school buses, delivery vehicles) and vehicles towing

Equity Considerations for Siting, Feasibility and Access Study

- Funding for training, apprenticeships and workforce development in EVSE fields
- Used/older EVs to new owners
- Which benefits are most important to Disadvantaged Communities (DACs) and rural areas:
    - Business (small business, Disadvantaged Business Entities (DBEs))
    - Access
    - Transportation Cost
    - Decreased Emissions
    - Jobs/Job Training
- Provision of operations and maintenance funding to offset DAC/rural locations
- Payment options for unbanked/underbanked and multilingual EV owners
- Local economic development

Existing and Future Conditions

Idaho is a large state with a land area of just under 53.5 million acres and a population of 1.9 million. Almost 40% of Idaho's population resides in Ada and Canyon Counties. The next two most populous counties are Kootenai in northern Idaho (10%) and Bonneville in eastern Idaho (7%). The largest regions by population are Southwestern Idaho (46.2%), Northern Idaho (14%), and Eastern Idaho (13.5%). Average commute time for those 16 and older is 20 minutes. The medium household income is $58,915. Ten percent of the state's residents live below the poverty level.[2] Many public stakeholder session attendees emphasized a greater need for EV

[2] U.S. Census Bureau QuickFacts: Idaho.

charging infrastructure along Idaho's north/south corridors, which connect the largest population centers in the state and contain a wide range of urban and rural areas as well as economic outputs.

Current Electric Vehicle Use

As of December 2021, Idaho had a total of 3,250 electric vehicle registrations statewide. Ada County (1,865), Kootenai County (290) and Canyon County (228) are the top three counties for EV registrations in the state, with Ada County comprising almost 57% of all registrations. From 2020 to 2021, the number of electric vehicle registrations statewide rose from 1,878 to 3,250.

The State of Idaho expects to continue to see an increase in electric vehicles as more charging stations are available along major corridors.

Geography and Terrain

Idaho can be divided into three major geographical regions: the mountainous northern and central region, the relatively flat southern region, and the valleys and grassy plateaus in the southeast. This geographical variation increases the complexity for deploying EV charging stations as well as Idahoans purchasing and electric vehicle. Almost three quarters of Idaho's land is classified as mountainous and another 9% classified as hills. Plains and tablelands, or plateaus, account for another 16% of the land. Only 1 % of Idaho's land is water. Figure 3 shows the complex and varied terrain in Idaho.

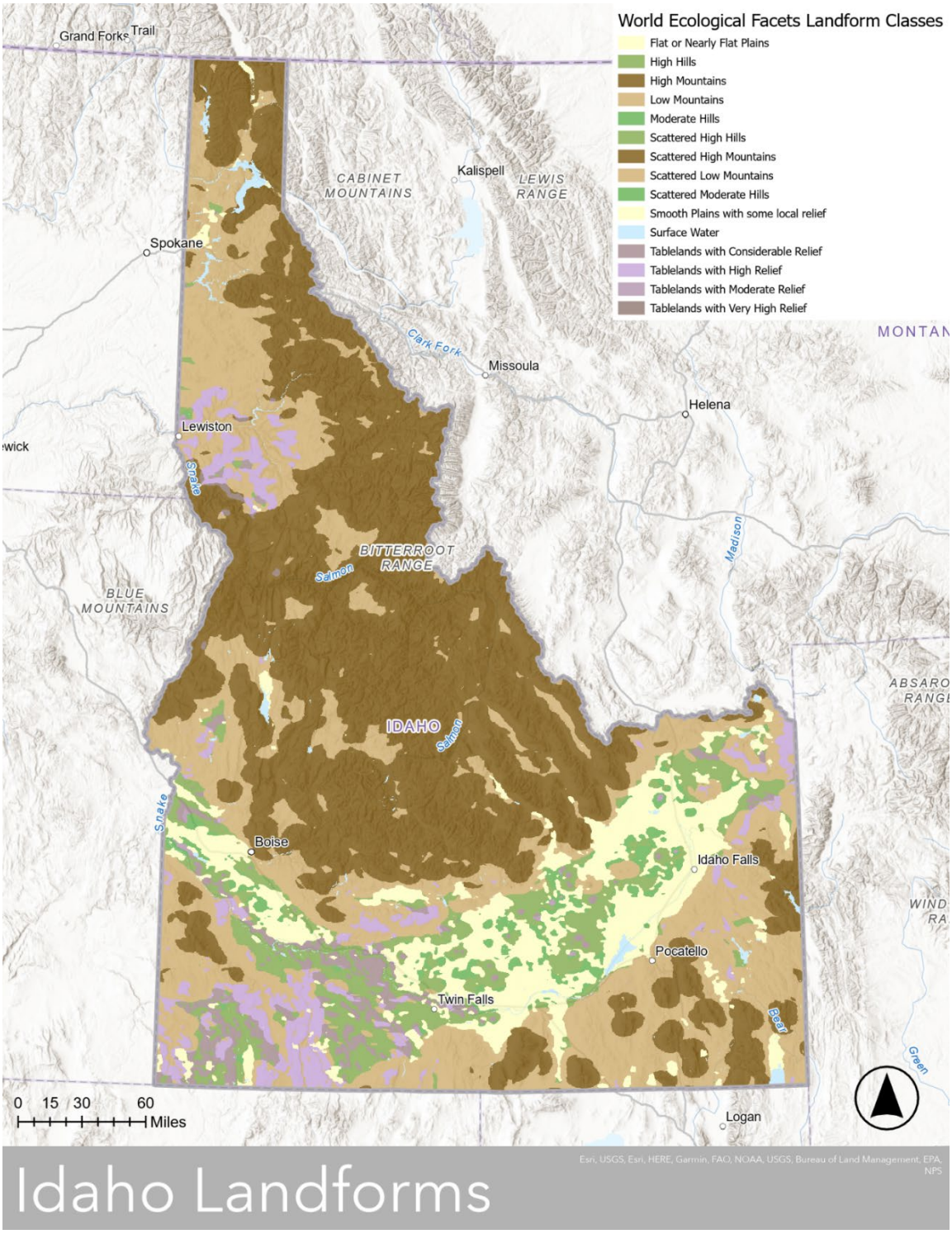


Figure 3. Terrain of Idaho.

Land Use

Of the almost 53.5 million acres, 78% lie south of the Salmon River while the remaining 22% lies to the north of the Salmon River. Using the 2019 National Land Cover Database, only 2% of Idaho's land is defined as urban, with the remaining 98% defined as rural. 10% of Idaho's land is used for agricultural purposes, including both farms and ranches.

According to the US Forest Service (USFS), Idaho's forests cover almost 22 million acres, about 39% of the State's land area. About 80% of Idaho's forest land is owned by the federal government, mainly under the USFS. The State of Idaho owns about 6% of the forest land and is managed by the Idaho Department of Lands for the Idaho Endowment Fund. The remaining 14% of forestland is private or Tribal owned.

Idaho has just under 21 million acres of rangeland. Rangeland is land that is not forested, developed, farmed, or irrigated. 80% of Idaho's rangelands are managed by either a federal or state agency. Typical uses of rangeland in Idaho include wildlife habitat, forage for livestock, mining, watershed, energy development, and recreational uses such as hunting, fishing, hiking, biking, and bird watching.

Climate

In January 2022, National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information and the Cooperative Institute for Satellite Earth System Studies (CISESS) issued a comprehensive update to the 2017 climate summaries for each of the 50 states, Puerto Rico, and the US Virgin Islands (Runkle 2022[3]). The summary for Idaho provides historical data from 1900 – 2020, how Idaho's climate has changed over time, and trends in key climate data.

Idaho's climate has large seasonal differences with cold winters and hot summers. Boise, Idaho's capital located in the southwestern part of the state saw average high temperatures in July of 92.7°F. Coeur d'Alene, in the northern part of the state, saw average high temperatures of at 82.8°F. However, during the winter months both cities have similar average low temperatures of 25.5°F and 26.2°F for Boise and Coeur d'Alene, respectively. Since 1900, temperatures in Idaho have risen almost 2°F with 2015 being the second hottest (after 1934) since records began in 1895 with a statewide annual average temperature of 46.4°F.

Idaho sees regional precipitation patterns due to wide ranges of elevation, from Mt. Borah at 12,662 ft to Lewiston at 738 feet. Southern Idaho, with its low elevation valleys, generally sees

[3] Runkle, J., K.E. Kunkel, R. Frankson, S.M. Champion, L.E. Stevens, and J. Abatzoglou, 2022: Idaho State Climate Summary 2022. NOAA Technical Report NESDIS 150-ID. NOAA/NESDIS, Silver Spring, MD, 4 pp.

lower amounts of precipitation while the higher elevations of northern and central Idaho can get up to four times the amount of rain and snow. Throughout Idaho, most of the precipitation falls during the months of November through May. Even with substantial variation in precipitation throughout Idaho, there is no overall trend in total annual precipitation since 1895. The number of 1-inch extreme precipitation events has been trending upward since 2000 and is expected to continue on this trend in the future.

Annual snowfall in Idaho ranges from 10-20 inches in the southern lowlands to over 100 inches in the higher mountains. Snowpack in Idaho is highly variable year to year but has been generally declined since high values in 1952 and 1969. The snow line, the average lowest elevation at which snow falls, will raise as temperatures are projected to continue to increase. This will increase the likelihood that precipitation occurs as rain instead of snow, which will result in lower water storage in the snowpack. Higher spring temperatures will also result in earlier melting of the snowpack which further decreases water resources during the already dry summer months.

Idaho is very reliant on snowpack for water storage as well as energy production. Hydroelectric power generation is very dependent on the amount of precipitation that falls as snow and timing of snowmelt. According to the U.S. Energy Information Administration (EIA) Idaho produces about two-thirds of the total electricity consumed in state with the other one-third coming into Idaho over interstate transmission lines. In the past, hydroelectric power typically supplied more than two-thirds of Idaho's in-state electricity generation. However, this has decreased in recent years due to drought and increased generation from other renewables. In 2021, hydropower provided 51% of Idaho's total in-state electricity generation.

NOAA-CISESS projected future temperatures in Idaho based on 2 scenarios: greenhouse gas emissions continue to increase (higher emissions), and greenhouse gas emissions increase at a slower rate (lower emissions). In both scenarios, temperatures in Idaho are projected to continue to increase.

NOAA-CISESS provide the following key messages for temperature and precipitation projections during this century (Runkle 2022).

- Temperatures in Idaho have risen almost 2°F since the beginning of the 20th century. Under a higher emissions pathway, historically unprecedented warming is projected during this century.
- Winter and spring precipitation is projected to increase during this century. However, naturally occurring droughts are project to intensify because of warmer conditions, potentially increasing the frequency and severity of wildfires.

- Higher temperatures are projected to cause more of winter and spring precipitation to fall as rain instead of snow, which may increase flood risks.

Economy

Idaho has ample recreational opportunities which contribute greatly to the economy. Tourism is Idaho's third largest industry and nets almost $4 billion annually. Most out of state visits to Idaho are from, in order, California (#1 in EV adoption in US), Washington (#4 in EV adoption in US), Utah, Florida (#2 in EV adoption in US), and New York. In 2021, travelers to Idaho spent $650 million dollars on transportation costs. The southwest region of Idaho (Boise to McCall, driving through SH-55) receives the most visits with over 10 million in 2021. Northern (Coeur d'Alene and north, driving through US-95 and US-90) and central (Sun Valley to Salmon, US-93 and SH-75) were the next most visited regions, with 8 million and over 5 million visits, respectively. Far exceeding the national average, 64% of overnight travelers come to Idaho for outdoor activities and 59% of day trippers come to Idaho for outdoor activities. Many public stakeholder session attendees emphasized a need for charging along routes to popular outdoor tourist destinations such as state parks, national forest lands, and Yellowstone National Park. Many of these travel routes are state highways.

Agriculture makes up another significant portion of Idaho's economy. Nearly three and a half million acres of farmland are irrigated in Idaho. Irrigated and non-irrigated land is used for livestock ranching and farming a variety of crops, including potatoes, beans, sugar beets, hay, barley, fruits, etc.

Estimates show 1,000 dairies in the whole State of Idaho. The dairy industry has grown in the past 15 years to become Idaho's most important agricultural commodity. Field corn acreage has increased in the Magic Valley, mostly to produce silage as feed for the growing dairy industry. According to 2001 county estimates, 80 % of the 111,000 acres planted in corn east of and including Bliss were harvested as silage.

Approximately two million acres of forest lie within the eastern part of the State, mostly in the higher mountainous areas. Lumbering here is done only on a small scale. The southwestern portion of the State has a greater forested area, running into several million acres, and lumbering is a more important phase of the economy than it is farther east. The northern part of Idaho, because of its higher annual precipitation, is more heavily forested than the southern portion of the State, and lumbering has long occupied a prominent place in the economy of the area. Lewiston, Potlatch and Coeur d'Alene are among the sites of important forest product industries. One of the finest white pine stands in the country lies in northern Idaho, principally in Clearwater and Shoshone counties.

Population

Boise and much of Idaho has experienced a population boom in the past 30 years. The Boise/Nampa/Caldwell area now has half of the state's population, and the Boise-Nampa-Caldwell Metropolitan Statistical Area has grown from about 150,000 to 800,000 between 1980 and 2021. Regional experts estimate 1 million people in this valley by the year 2030.

Idaho is often labeled a rural state because of its vast open space, agricultural and forestry industries, and overall low population density. However, it is largely urban when considering demographics and economic activity: the overwhelming majority of Idaho's estimated 1.9 million residents live in designated urban areas, such as Boise-Nampa, Coeur d'Alene, Idaho Falls, Twin Falls, Pocatello, and Lewiston.

The micropolitan areas of Blackfoot, Rexburg, Burley, Moscow, and Mountain Home make up the next largest population centers. There are also several cross-border urban areas in the state, including those who live in Payette, Franklin, and Teton Counties, which are part of the Ontario, OR, Logan, UT, and Jackson, WY urban regions, respectively.

The State of Idaho recognizes that state highways are vitally important to address the mobility needs of the traveling public, and the quality of life for Idahoans depends on a safe reliable, and efficient transportation system. Local Government entities are responsible for land use decisions at the local level. Idaho participates in land use decisions with other planning agencies as we understand that local decisions affect statewide infrastructure demands.

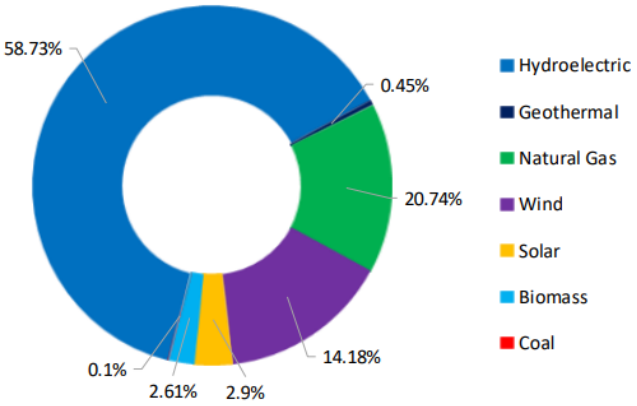
In planning for EV program implementation statewide, Idaho realizes the importance of looking at how existing and future land use development patterns can make EV charging stations more accessible to communities.

Environmental Conditions

The NEVI Program will provide the infrastructure necessary for drivers to have the ability to travel longer distances through Idaho. Along with transportation flexibility that the NEVI Program will provide, it could also lead to significant reductions in air pollution for greenhouse gases as well as criteria pollutants. Such significant reductions could work as a preventative method for reducing air quality impacts, thereby limiting future designations of nonattainment areas under federal air quality regulations.

EPA estimates that in 2020, transportation accounted for 27% of the total US greenhouse gas emissions. While EVs do not emit CO_2 directly, there can still be indirect GHG emissions depending on how energy intensive the electricity generation in a state may be. Idaho is

fortunate to have abundant natural resources that enable the state to generate most of its energy through non-emitting renewable resources. In 2019, Idaho's electric mix was nearly 60 % hydropower, 3 % solar and 14 % wind as shown in Figure 4. The US Department of Energy (DOE) estimates that an all-electric vehicle in Idaho would generate 1,193 pounds of CO_2 equivalent annually per vehicle compared to 11,435 pounds for a gasoline only vehicle. This can be contrasted with the national average for an electric vehicle, which would be 3,932 pounds of CO_2 equivalent. Utilities in Idaho have also made commitments to clean energy.



Note: The fuel mix percentages in this figure are based on Idaho's power sector electrical consumption data and not by generation data since Idaho consumes more electricity than it generates. These percentages only account for electric use of energy resources; neither thermal nor fuel usage are calculated into the percentages.

Figure 4. Idaho's 2019 Electric Grid Mix[4]

The reductions in criteria pollutants would provide more immediate local benefits. Vehicle emissions contribute to particulate matter (PM), nitrogen oxides (NO_X) and ozone pollution which can result in a variety of health issues including adverse effects on pulmonary and respiratory function. More vulnerable populations like children and the elderly can be those most affected. In some areas, transportation is the largest source of criteria pollutant emissions. Those living close to or along highways or busy roadways can be among those who are most exposed to vehicle emissions. The Siting, Feasibility and Access Study will leverage existing tools like the EV Charging Justice40 Map[5] and the Transportation Equity Analysis tools from Argonne National Laboratory to analyze potential air quality benefits to DACs.
Idaho estimated the reduction in emissions that would result from replacing gasoline and diesel vehicles with electric vehicles. Table 1 shows the emissions that an average gasoline and diesel

[4] OEMR. https://oemr.idaho.gov/wp-content/uploads/2022-Idaho-Energy-FINAL.pdf
[5] ANL.GOV. https://www.anl.gov/esia/electric-vehicle-charging-equity-considerations

vehicle in Idaho currently emit. Electric vehicles do not have tailpipe emissions, therefore, emissions for these pollutants would be zero from the electric vehicle.

Pollutant	Gasoline Vehicle pounds/year	Diesel Vehicle pounds/year
Ammonia (NH_3)	0.62	1.13
Carbon Monoxide (CO)	118.48	84.35
Oxides of Nitrogen (NO_x)	11.09	136.12
Primary Exhaust PM_{10} - Total	0.19	4.21
Primary Exhaust $PM_{2.5}$ - Total	0.17	3.88
Sulfur Dioxide (SO_2)	0.06	0.15
Total Gaseous Hydrocarbons	9.81	11.78
Volatile Organic Compounds	9.45	11.80

Table 1. Annual emissions from a single average gasoline and diesel vehicle in Idaho (pounds/year).

Statewide Travel Patterns, Supply Chain Needs and Energy Needs

Statewide Travel Patterns

Idaho is a rural state, with only a handful of urban federal aid roads and vast distances between the more urban centers managed as Metropolitan Planning Organization (MPO) areas. MPOs in Idaho are located in Coeur d'Alene, Lewiston, Boise/Nampa/Caldwell, Pocatello and Idaho Falls. The state's roadway network is made up of 54,000 centerline miles of public road. Of this, 611 miles make up the Interstate network, which is 1.1% of the total road mileage. However, this small number of mileage carries a quarter of the total traffic in the State of Idaho.

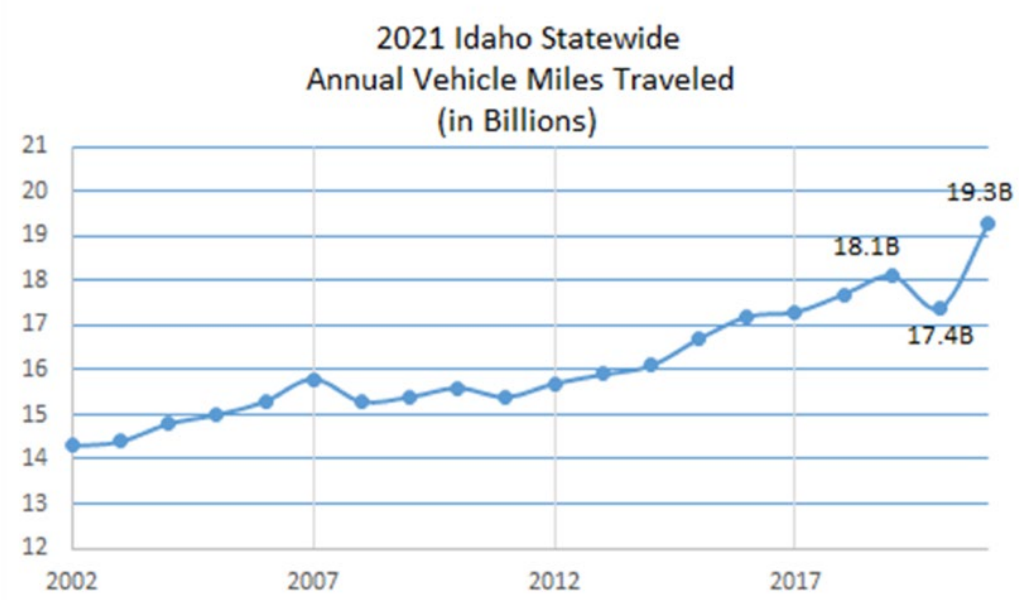
The following graphic provides some important facts about roadway usage and travel patterns in Idaho.

2021 Travel and Extent Facts of Interest

- Interstate:
  - 611 Centerline Miles (1% of all public roads)
  - 25% of all AVMT
- State Highway System:
  - 5,000 Centerline Miles (9% of all public roads)
  - 55% of all AVMT
- Federal Aid System (Including SHS):
  - 12,000 Centerline Miles (20% of all public roads in Idaho)
  - 80% of all AVMT
- Rural (All Roads):
  - 47,000 Centerline Miles (87% of all public roads in Idaho)
  - 58% of all AVMT
- Urban (All Roads):
  - 7,000 Centerline Miles (13% of all public roads in Idaho)
  - 42% of all AVMT

AVMT = Annual Vehicle Miles Traveled

What is important to note is the substantially high growth occurring in Idaho, and how it has shifted travel trends over the past couple of years. Prior to 2020, most of the rural area routes had begun to show much slower growth. In some cases, the traffic had almost no growth. In 2020, traffic patterns changed as people began to explore the outdoors. In the past two years, there has been a shift in travel, which has some rural areas growing significantly. Attached is a graph that shows the statewide Vehicle Miles Traveled (VMT) growth over the last 20 years.



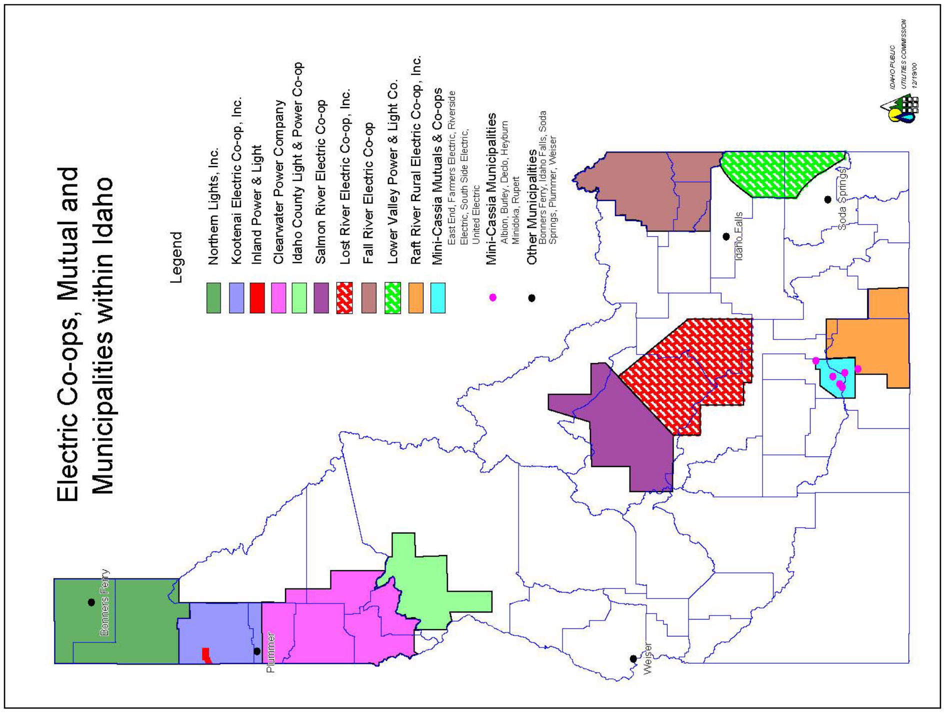
Supply Chain Needs

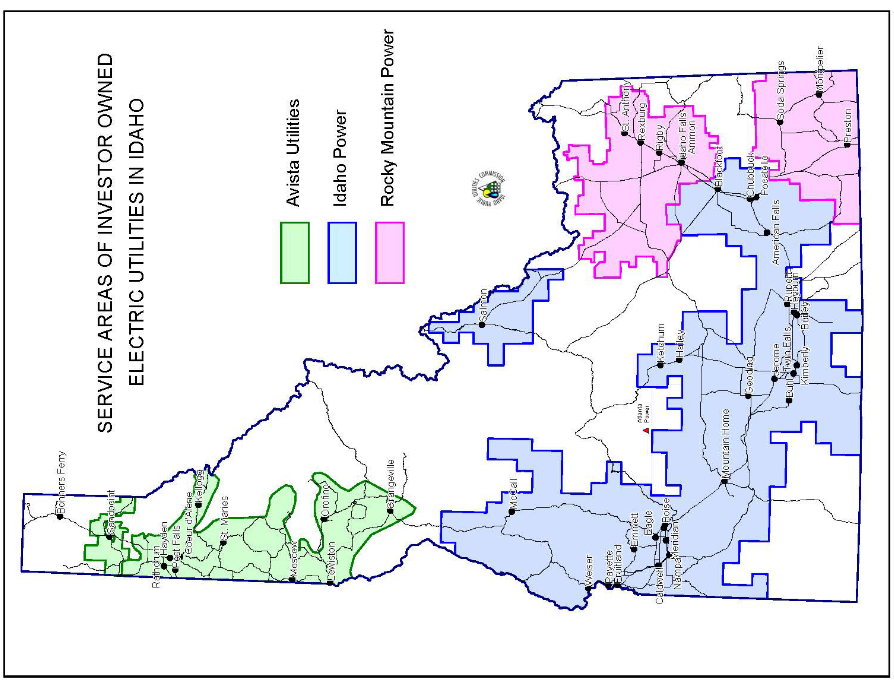
Global semiconductor shortages and COVID-19-related supply chain issues are delaying the ability to manufacture and purchase EVSE. REV West recently received over 20 Request for Information (RFI) responses from EVSE manufacturers to help western states gather information to develop their EV Infrastructure Deployment Plans and implement the NEVI Program. Responses revealed that there are not many EVSE manufacturers that currently comply with the Buy American Act requirements for the NEVI Program.

Energy Needs

Idaho's electrical grid is operated by three investor-owned utilities (IOUs), as well as municipal and rural electric cooperative utilities, as indicated by the maps that follow. The IOUs serve approximately 84% of the State's electricity needs, while the municipal and rural electric cooperative utilities, or public utilities, serve the remaining 16%. Idaho's utilities will need to assess grid capacity and plan for increased demand as EV adoption grows in Idaho.

Today, most challenges relating to EV charging occur at the distribution system level. Energy infrastructure may need to be upgraded to support a 600 kW NEVI charging station. In most, if not all, areas, transformer upgrades will be needed. Additional improvements such as installing new feeder lines and completing substation upgrades may also be required at some sites.


Electric Co-ops, Mutual and Municipalities within Idaho
Legend
Northern Lights, Inc.
Kootenai Electric Co-op, Inc.
Inland Power & Light
Clearwater Power Company
Idaho County Light & Power Co-op
Salmon River Electric Co-op
Lost River Electric Co-op, Inc.
Fall River Electric Co-op
Lower Valley Power & Light Co.
Raft River Rural Electric Co-op, Inc.
Mini-Cassia Mutuals & Co-ops
East End, Farmers Electric, Riverside Electric, South Side Electric, United Electric
Mini-Cassia Municipalities
Albion, Burley, Declo, Heyburn Minidoka, Rupert
Other Municipalities
Bonners Ferry, Idaho Falls, Soda Springs, Plummer, Weiser
Bonners Ferry
Plummer
Weiser
Idaho Falls
Soda Springs


SERVICE AREAS OF INVESTOR OWNED ELECTRIC UTILITIES IN IDAHO
Avista Utilities
Idaho Power
Rocky Mountain Power

Idaho's Alternative Fuel Corridors for Electric Vehicles

Idaho is a rural state with many less populated and inaccessible segments of Interstates and National Highway System (NHS) routes. Concurrent with low population density, factors such as interstate access, electric grid availability, travel demand and feasibility directly affect the likely success of EV charging infrastructure deployment. Like countless rural states, Idaho is significantly challenged to meet the burdensome requirement to place EV charging infrastructure every 50 miles along a given corridor.

Electric Vehicle Corridors Designated as Ready

Annually, the Federal Highway Administration (FHWA) accepts nominations of major travel corridors for Alternative Fuel Corridor (AFC) designation. [6] Subject to exceptions granted pursuant to the state's request, designated EV corridors are targeted to have public DCFC infrastructure available at least every 50 miles and within a mile of the interstate. Designated corridors are labeled "Corridor Pending" until the 50-mile distance requirement for EV stations is achieved along the entire corridor. Once achieved, the corridor is reassigned as "Corridor Ready" which signifies that there is enough DCFC infrastructure to warrant signage alerting drivers of the availability of EV alternative fueling stations.

The following map (Figure 5) displays Idaho's AFC Electric Vehicle Corridors and their designation status. It also gives a sense of the scale of Idaho and the lack of EVSE across the state.

[6] Federal Highway Administration "Alternative Fuel Corridors"
https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/

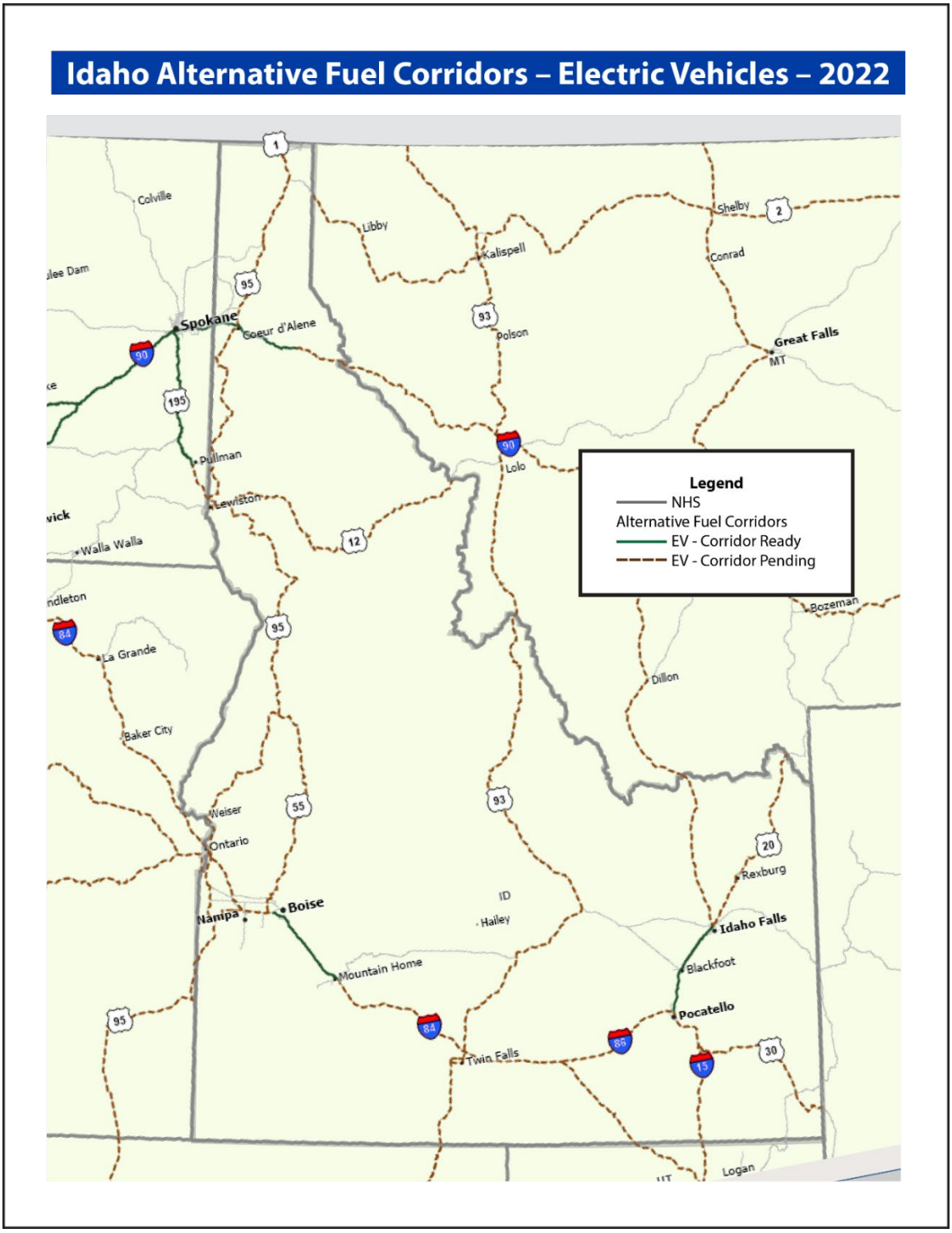


Figure 5: Idaho Alternative Fuel Corridors

As indicated by the routes marked in green on the above map, Idaho has several AFC's for electric vehicles designated as Corridor Ready:

- I-90 from the Washington State Line to Smelterville
- I-84 from Boise to Mountain Home
- I-15 from Pocatello to Idaho Falls

Idaho also has a number of AFC's for electric vehicles designated as Corridor Pending, as identified by the brown dashed line on the map above. Detailed descriptions of the AFC corridors can be found in Appendix C.

The following table provides examples of the largest service gaps in DCFC charging availability along Idaho's AFCs:

Largest Service Gaps in DCFC Charging Availability	*As of July, 2022*
Coeur d'Alene to Lewiston	**124 miles** (US-95)
Lewiston to Boise	**267 miles** (US-95)
Mountain Home to Heyburn	**116 miles** (US-84)

Existing Locations of Charging Infrastructure Along AFCs (as of July 2022)

According to the DOE's Alternative Fuels Data Center[7] Idaho currently has 108 Level 2 and DCFC station locations and 270 EVSE ports. As of July 2022, Idaho has 18 operating DCFCs. There are currently six NEVI compliant DCFC located in Boise, Mountain Home, Heyburn, Smelterville, Idaho Falls, and Chubbuck, as indicated in Figure 6. All NEVI compliant stations in Idaho are located along Idaho's Alternative Fuel Corridors. These six stations were installed through private investment from Electrify America. A more detailed table including Level 2 chargers and Tesla chargers is included in Appendix A.

[7] USDOE. https://afdc.energy.gov/fuels/electricity_locations.html#/find/nearest?fuel=ELEC

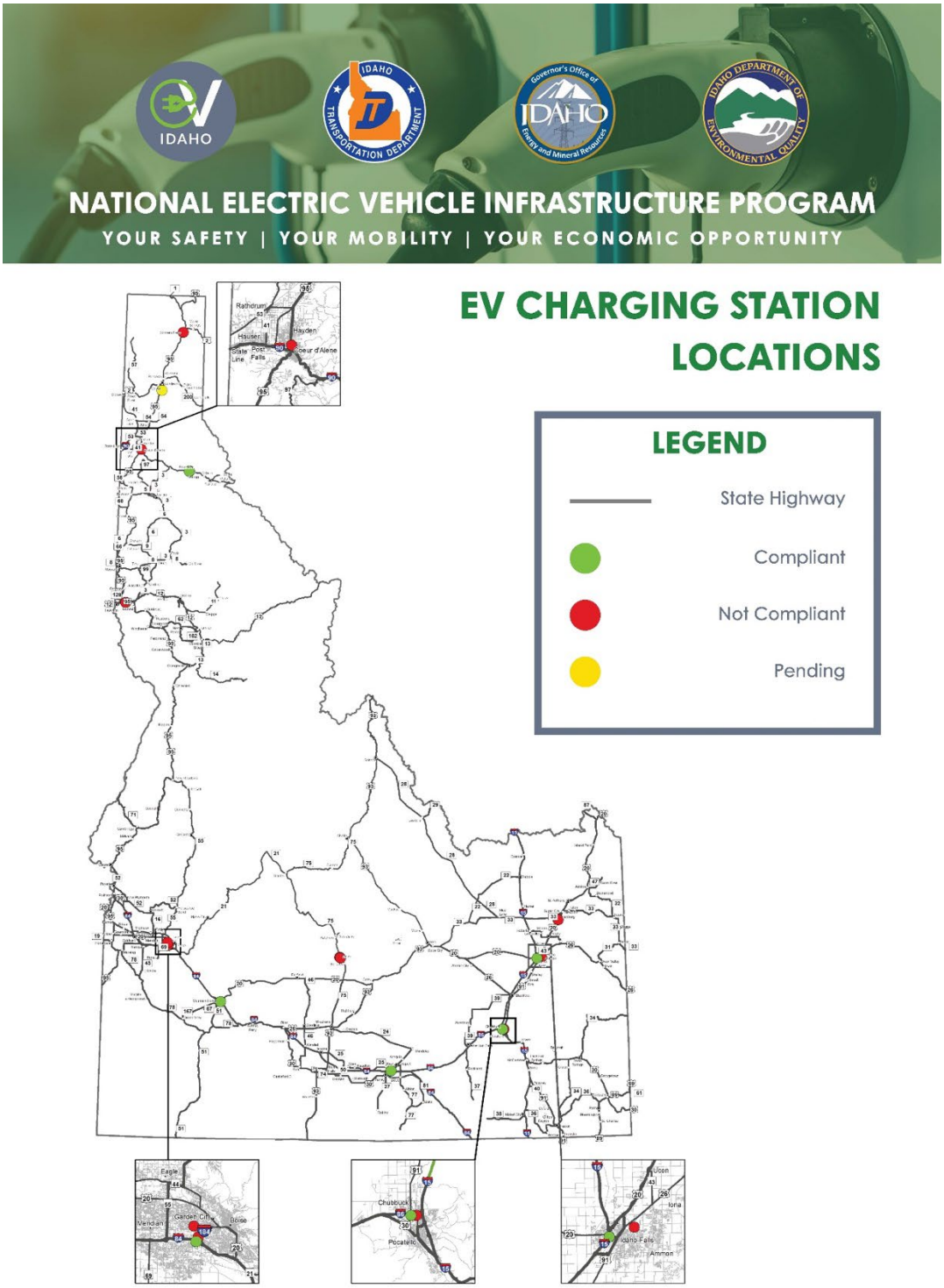


Figure 6: EV Charing Station Locations

Known Risks and Challenges

Barriers to Consumer Adoption

The State of Idaho collected feedback from EV drivers, prospective EV buyers, the general public as well as other key stakeholders, throughout the public engagement process. Many dealerships said that their EV inventory sells quickly, especially recently due to higher gas prices. Moreover, there have been significant pre-orders for new vehicle models hitting the market, including the popular segment of full-size electric trucks.

Many members of the public expressed that there is not adequate access to purchase EVs in Idaho because of manufacturer delays and because manufacturers' limited supplies of EVs are shipped to states with more demand and incentives for purchasing EVs. Idahoans often need to travel to other states such as California, Utah and Oregon to purchase, or even test drive, an electric vehicle. Capital cost of EVs is another barrier to consumer adoption in Idaho.

Climate and Geography

Idaho has a diverse climate which includes areas that often experience harsh weather. A common concern throughout the public engagement sessions was the impact of cold weather and wind on battery range. Drivers also expressed feelings of range anxiety when travelling through rural mountainous areas with steep inclines.

Rural

The Alternative Fuel Corridors Program currently requires EV charging stations to be placed no more than 50 miles apart for corridors to qualify for "Corridor-Ready" status. This distance is impractical in remote areas, where electric service is not available along highways for dozens of miles, geography is prohibitive for extension of electric service and opportunities for EVSE installation along certain portions of federal highways are few. Idaho's NEVI siting, access, and feasibility Study will identify areas that will require a geographical exception request due to lack of highway infrastructure such as exit ramps.

Factors impacting utilization rates such as Idaho's low population density and low EV adoption rate may impact the ability for a NEVI station operator to achieve profitability, especially in the first few years of operation.

Electric and Electrical Upgrade Costs

Utility rate structures that include demand charges is another significant challenge that station operators face. A 2021 report from the National Association of State Energy Officials assessed the impact of electricity demand charges on EV fast charging in western states. Under a low-use scenario in which one 150kW station is used one time per week, the average utility bill impact for a single charging session would be $353.82. Typically, the site host or station owner would be responsible for paying this cost. Under a low-use scenario, demand charges account for over 85% of the additional electricity costs from EV fast-charging. Demand charges as they are currently configured in utility rate structures will be a significant barrier to building out an EV fast-charging network in Idaho that meets NEVI program requirements. It will also be challenging to estimate the utility bill impacts of demand charges over five years.

Charging stations installed with NEVI formula funds must be able to provide a power output of at least 600kW. In Idaho, most NEVI sites will require transformer upgrades. Additional improvements such as installing new feeder lines and completing substation upgrades also may be needed. At the very least, new electrical upgrades for a new transformer cost approximately $20-30,000.

Operating Costs/Revenue

Station viability will be impacted by the ability to recoup monthly operating costs from driver user fees. In Idaho, lower EV adoption may impact the ability to recoup monthly operating costs in the short term.

Operating costs include networking services, maintenance, and electricity costs.

- Networking services include services to connect the station to a Wi-Fi or cellular service, to track use, process payments and monitor for reliability, and troubleshoot maintenance issues. Cellular and broadband services could be an issue in rural areas.
- Maintenance costs include cost to maintain, service and repair equipment. There is currently not a sufficiently trained workforce in Idaho to service stations.
- Electric costs for stations are based on utilization rates and capacity needs of the station. While utility rates structures and rates vary, commercial rates are typically comprised of two energy related components in addition to administrative fees. These are:
  - Demand Charge. Measured in kilowatts, this capacity related charge covers costs related to the equipment needed to supply a maximum amount of power to the site. For NEVI sites, the wires, transformers, lines, distribution and transmission and generation sources must be ready to provide up to 600 kilowatts of power at any time.

- Usage charge: Measured in kilowatt-hours this charge is based on how much energy is supplied over time. Usage charges represent the power that needs to be generated to supply the customer. A 2021 report from the National Association of State Energy Officials assessed the impact of electricity demand charges on EV fast charging in western states. Under a low-use scenario in which one 150kW station is used one time per week, the average utility bill impact for a single charging session would be $353.82.
    - 1 kW x 1 Hour = 1 kilowatt-hour
- It is important to note, that although most utilities have demand charges, according to the Energy Information Agency, as of 2022 Idaho has the lowest average electricity retail price of any state[8]. Idaho also has one of the cleanest energy mixes in the country (as noted in the Environmental Section earlier in this report).

Stations may recover costs from drivers. Currently, NEVI compliant fast charging station in Idaho charge between 31¢ and 43¢ a kilowatt hour, depending on charging plan.

The ability to recover costs will depend on the utilization rates of stations which will be driven in part by EV adoption rates in both Idaho and regionally.

Buy America and Supply Chain

Global semiconductor shortages and COVID-19-related supply chain issues are delaying the ability to manufacture and purchase EVSE. Few EV charging manufacturers comply with the Buy American Act, which is a requirement for the NEVI Program.

In addition, current supply chain issues and pandemic related resource constraints are causing additional delays of at least 18 months in delivery of electrical components such as transformers. Cost estimates are directly affected by these supply chain delays.

A revised state Baseline Plan will include the following four sections as determined by the Siting, Feasibility and Access Study development process:

EV Charging Infrastructure Deployment

Idaho seeks to install DCFC at 50-mile intervals along designated AFCs. In some instances, an exception request may be submitted as addendum to the annually revised State of Idaho Electric Vehicle Infrastructure Baseline Plan for areas that experience grid capacity, geographic, equity, or extraordinary cost challenges. The Siting, Feasibility and Access Study will develop a

[8] EIA data from U.S. Energy Information Administration - EIA - Independent Statistics and Analysis

strategic approach to EV charging station deployment that aligns with the vision and goals of Idaho's program. As part of this Study, a pilot solicitation will be undertaken for 1-2 NEVI compliant stations.

Funding Sources

Federal cost-share for NEVI Formula Program projects is 80%. It is expected that stations built through the NEVI Program will be funded through public-private partnership. As of July 2022, there is no source of state funding dedicated to EV charging that could provide match for NEVI. The Siting, Feasibility and Access Study will develop a strategic approach to funding EV charging station deployment that aligns with the vision and goals of Idaho's program.

2022 Infrastructure Deployments/Upgrades

The Siting, Feasibility and Access Study will identify strategic locations based on approved multi-factor selection criteria. These criteria serve as basic principles for selecting locations of EV charging stations. Private installations may also occur during the Study timeframe. A revised state Baseline Plan will include planned deployments and upgrades as determined by the Study. A pilot solicitation for 1-2 NEVI compliant stations will be let in late spring of 2023 using the multi-factor selection criteria developed as part of the Study. The results of this solicitation will be included in the revised state Baseline Plan for submittal in the summer of 2023. Preference for siting will be given to interstates with service gaps, followed by NHS highways with service gaps.

Such multi-factor selection criteria can include, at a minimum:

- Preference for siting NEVI-compliant charging facilities will be along interstates where service gaps exist
- Secondary preference will be given to NHS AFC highways in Idaho to expand the network and utilize all available program funding
- Proximity to existing NEVI-compliant charging facilities along interstates and state highways
- Availability of electricity and amenities
- Provision of benefits to rural, and underserved and disadvantaged communities (EJ40)
- Publicly identified corridor priorities, including the interstates I-90, I-84, I-15; and National Highway System routes: US-95, US-12, SH-55, US-20, US-93 and US-30
- Climate, public health and environmental concerns
- Rural locations that connect EV services on alternative fuel corridors
- EV services for public lands and tourist destinations
- State travel patterns, public transportation needs, freight, and other supply chain needs

- EV industry and market conditions, including EV ownership, usage and availability
- Electric grid capacity and constraint
- Other criteria to be determined.

Increases of Capacity/Redundancy along Existing AFC

USDOE provides early analysis of Planning Considerations for Electric Vehicles in Idaho[9]. These options include a Charging Results analysis for needs and a Corridor Charging approach as guideposts for Idaho, as shown in Figure 7. The publicly available tools used to complete this analysis, along with extensive technical support, will support the work performed in the Siting, Feasibility and Access Study.

It is worth noting that under an aggressive EV growth rate scenario (assuming 10% of all light duty vehicles are electric), Idaho would need to install 2,650 public DCFC ports, or about 663 four port charging stations. For reference, Idaho currently has 24 NEVI compliant DCFC ports across six charging stations. This underscores the significant mismatch between a few dozen possible installations of EV chargers under the NEVI Program in Idaho and the rapidly growing market share for EVs.

As of December 2021, Idaho had a total of 3,250 electric vehicle registrations statewide. From 2020 to 2021, the number of electric vehicle registrations rose from 1,878 to 3,250, an increase of 73 %.

[9] USDOE. https://evstates.org/resource/planning-considerations-for-electric-vehicles-in-idaho/

Charging Need Results

Two sample "Charging Need" estimates were obtained for the state of Idaho. The conservative scenario estimate uses a 10% annual EV growth rate each year from 2016 to 2023. This results in an increase in the number of electric vehicles on the road to 1,949 in 2023 (a simple exponential increase that neglects any COVID-19 impacts in 2020-2022.) The aggressive scenario estimate considers that 10% of the **entire** 2016 light-duty vehicle population will be electrified, or 163,339 vehicles. The red underline highlights the vehicle count used in each scenario.

CONSERVATIVE SCENARIO

Your Results

In Idaho, to support 1,949 plug-in electric vehicles you would need:

32	Workplace Level 2 Charging Plugs
24	Public Level 2 Charging Plugs *There are currently 183 plugs with an average of 2.1 plugs per charging station per the Department of Energy's Alternative Fuels Data Center Station Locator.*
49	Public DC Fast Charging Plugs *There are currently 79 plugs with an average of 3.8 plugs per charging station per the Department of Energy's Alternative Fuels Data Center Station Locator.*

AGGRESSIVE SCENARIO

Your Results

In Idaho, to support 163,339 plug-in electric vehicles you would need:

2,575	Workplace Level 2 Charging Plugs
1,629	Public Level 2 Charging Plugs *There are currently 183 plugs with an average of 2.1 plugs per charging station per the Department of Energy's Alternative Fuels Data Center Station Locator.*
2,650	Public DC Fast Charging Plugs *There are currently 79 plugs with an average of 3.8 plugs per charging station per the Department of Energy's Alternative Fuels Data Center Station Locator.*

For the conservative scenario, EVI-Pro Lite projects needing 49 Public DC Fast Charging Plugs, with Idaho already having 79 plugs deployed. The geographic locations of these chargers likely factor more strongly into whether more are needed or not. Even though Idaho already has 79 plugs deployed, they may not be collocated where EV adoption or charging need is the greatest.

For the aggressive scenario, EVI-Pro Lite estimates a significantly larger number of Public DC Fast Charging Plugs, as shown above. It is worth noting again that the aggressive scenario is based off the number of vehicles in Idaho, but a high estimate may also account for transient traffic (traveling through the state, but not actually an Idaho vehicle). This aspect will be especially important for electrifying critical transportation corridors.

Figure 7: Planning Considerations for Electric Vehicles in Idaho

Corridor Charging Scenario

Figure 8 shows areas with the following criteria: near the FHWA-designated corridors, near transmission-level
substations, distance from existing charging locations, within a DAC or tribal area, and with high population density. A second model not shown on the map was used to help locate areas along the corridors that might be more challenging for siting EV chargers. Challenges include a lack of infrastructure and lacking the added funding opportunities of being within a DAC or tribal area.

The highlighted results could help narrow down areas that might present better opportunities for funding, as well as focus follow-on/detailed discussions with stakeholders. For example, a nearby transmission substation would prompt discussions with the local utility to determine what is feasible or if other factors should be considered. It is important to note, though, that a designated challenge area does not necessarily mean that it is a poor fit for an EV charging station. There may be other factors, such as economic development, that decision makers prioritize.

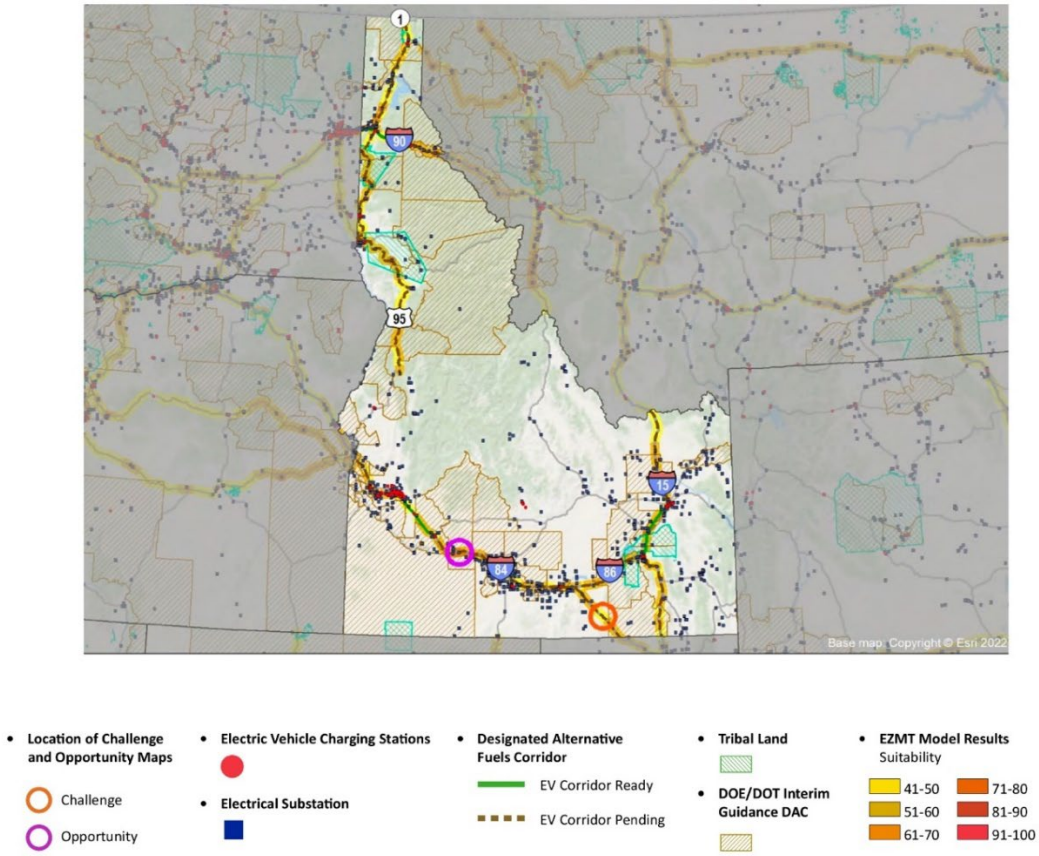


Figure 8: Corridor Charging Scenario

In particular, EZMT modeling results show low suitability along the majority of Idaho's interstates and NHS routes. For Idaho, the graphic clearly identifies only one opportunity in Idaho. Such analysis underscores the many challenges faced by Idaho in determining EV siting and feasibility. These reports, along with work prepared by Charge West, will inform the Siting, Feasibility and Access Study work to be performed next.

FY23-26 Infrastructure Deployments

At this time, the State of Idaho does not plan to propose any new or upgraded installations that will meet minimum NEVI Formula Program standards. The Siting, Feasibility and Access Study will identify strategic locations based on approved multi-factor selection criteria described above. Idaho expects that this will include a mixture of possible interstate and state highway locations along corridors in a sequential manner.

A revised state Baseline Plan to be submitted in 2023 will include planned deployments and upgrades as determined by the Study. Similarly, the revised state Baseline Plan will provide strategies for:

- Identifying Electric Vehicle Charger Service Providers and Station Owners
- Describing EVSE Data Collection and Sharing
- Addressing Resilience, Emergency Evacuation, Snow Removal/Seasonal Needs
- Promoting Strong Labor, Safety, Training, and Installation Standards

State, Regional, and Local Efforts

State Efforts

Electric Vehicle Supply Equipment Program

In 2017, the Volkswagen Clean Air Act Civil Settlement enabled the State of Idaho to allocate $2.6 million to provide funding for public and private entities to install electric vehicle supply equipment (EVSE). Idaho's EVSE Program provides cost-share funds for the deployment of public direct current fast charging (DCFC) equipment along Idaho's major travel corridors. EVSE hosts are eligible for reimbursement of costs associated with the purchase and installation of EVSE equipment. As of July 2022, Idaho has funded five DCFC through the EVSE Program in Lewiston, Hailey, Bonners Ferry, Coeur d'Alene, and Sagle.

Process for Non-Utility Sales of Electricity for EVs

In 2015, the legislature amended rules to allow entities other than utilities to sell electricity for the purposes of EV charging (Idaho Code Section 61-119). The modification allows EVSE charging stations to purchase electricity from their utility and resell it to drivers. There is no standard as to how the electricity sold to drivers must be priced. It can be by the minute, kilowatt-hour (kWh) or a flat fee. Note, taxes collected to support highways (that are normally collected through gas taxes) are recovered through higher registration fees assessed to electric vehicles. From the utility perspective, nothing needs to be done to resell that electricity.

Finally, current state regulation does not specifically encourage rate modification for provision of electricity to EV charging stations. Nor does it limit on-site delivery rates for EV chargers. The Siting, Feasibility and Access Study will undertake additional analysis of state regulation and its impacts on EV charging station deployment and operation.

Regional Efforts

REV West

In 2017, former Governor Otter signed a Memorandum of Understanding (MOU)[10] between Idaho and seven other western states (Signatory States) to collaborate on Regional Electric Vehicle infrastructure development in the West (REV West). The State of Idaho welcomes partnership opportunities with other REV West partners to create additional connection along major travel corridors.

In 2019, Governor Little and the Signatory States signed a revised REV West MOU[11] to update their EV corridor goals based on progress to date. Signatory States are committed to:

- Educating consumers and fleet owners to raise EV awareness, reduce range anxiety, and increase EV adoption;
- Coordinating on EV charging station locations to achieve a consistent user experience across Signatory States;
- Using and promoting the REV West Voluntary Minimum Standards[12] for EV charging stations and exploring opportunities for implementing the standards in Signatory States;
- Identifying and developing opportunities to incorporate EV charging stations into planning and development processes such as building codes, metering policies, and renewable energy generation projects;
- Encouraging EV manufacturers to stock and market a wide variety of EVs within the Signatory States;
- Identifying, responding to, and collaborating on funding opportunities to support the development of the Baseline Plan; and
- Supporting the build-out of DCFC stations along EV corridors through investments, partnerships, and other mechanisms.

CORWest/Charge West

Charge West , formerly known as CORWest, is an intermountain west (Idaho, Montana, Wyoming, Nevada, Utah, Colorado, New Mexico, and Arizona) effort that aims to support consumer education, stakeholder engagement and rural infrastructure development of electric

[10] NASEO. "2017 REV West MOU." https://www.naseo.org/issues/transportation/rev-west
[11] NASEO "2019 REV West MOU." https://www.naseo.org/issues/transportation/rev-west
[12] NASEO. "REV West Voluntary Minimum Standards." https://www.naseo.org/issues/transportation/rev-west

vehicle charging from the expansion of alternative fuel corridors. The goal of Charge West is to support electrifying AFCs in three main areas[13]:

- Remove investment barriers to enable private station development.
- Identify key infrastructure gaps and develop solutions to deploy charging stations in rural regions required to complete corridors.
- Develop replicable educational tools to encourage EV consumer awareness.

Western Governors' Association

In 2020, the Western Governors' Association (WGA) developed the *Electric Vehicles Roadmap Initiative* which focused on the planning, siting, and coordination of EV charging infrastructure in western states and explored several federal policy issues that affect the buildout of this infrastructure.[14]

In January 2022, WGA submitted Policy Resolution 2021-07 to the Office of the Assistance Secretary for Research and Technology's Request for Information (RFI) on the development of the Department of Transportation's Research, Development, and Technology Strategic Plan for FY 22-26. Policy Resolution 2021-07 included the following regarding EV infrastructure[15]:

- Emphasize collaborative efforts between western states and encourage federal agencies to coordinate with multi-state groups.
- Request that the FHWA promote additional flexibility within the Alternative Fuel Corridors program to recognize unique geographic and infrastructure conditions.
- Support legislative measure to address prohibitions within 23 U.S.C 111 that limit the siting of EV charging stations at Interstate System rest areas and the issuance of a free for the use of that infrastructure.
- Welcome opportunity to work with federal agencies to promote the buildout of EV charging infrastructure on federal land.
- Support legislative efforts to extend and expand the Alternative Fuel Vehicle Refueling Property Investment Tax Credit.
- Emphasize the importance of Clean Cities Coalitions. In Idaho these consist of the Treasure Valley coalition and the Yellowstone/Teton coalition.
- Support strengthening domestic supply chains of critical minerals vital to EV battery production.

[13] CORWest. "EV Charging in the West." https://corwest.org
[14] Western Governors' Association. "Electric Vehicles Roadmap Initiative." https://westgov.org/images/editor/2021_EV_Special_Report_Final_July_1.pdf
[15] Western Governor's Association. "DOT_RDT_Strategic_Plan_WGA_Comments" https://westgov.org/images/editor/DOT_RDT_Strategic_Plan_WGA_comments.pdf

Clean Cities Coalitions

- Offers training, education and technical assistance on EVs and EVSE.

County Efforts

Some of Idaho's 44 counties have begun organized efforts to install publicly accessible EV charging infrastructure within county limits. For example, Blaine County received funding through the State of Idaho's EVSE Program to install one DCFC in Hailey near SH-75.

City Efforts

Several cities in Idaho have expanded, implemented or plan the installation of publicly accessible EV charging infrastructure in their communities.

- The City of Bonners Ferry received funding through the State of Idaho's EVSE Program to install one DCFC at the Bonners Ferry Visitor Center near US-95.
- Cities within Blaine County (Bellevue, Carey, Hailey, Ketchum, and Sun Valley) have established a renewable energy goal to have 100% clean energy powered vehicle fleet and clean energy powered maintenance equipment by 2030.[16]
- The City of Boise is currently installing charging stations for employee and visitor use at city government and public facilities and is developing guidelines for installing EV charging stations.[17]
- The Nez Perce Tribe received funding through the State of Idaho's EVSE Program to install two DCFCs at the Clearwater River Casino in Lewiston near US-95.

Utility Efforts

Many electric utilities in Idaho are working to support the adoption of electric vehicles.

- Setting fleet electrification goals for utility fleets
- Providing customer education and outreach including robust websites for passenger and fleet vehicles
- Providing technical assistance to customers looking to install EVSE or convert their fleets.

[16] City of Ketchum. "Recommendation to Approve Resolution 20-031, Regarding Clean Energy Goals" https://mccmeetingspublic.blob.core.usgovcloudapi.net/ketchid-meet-4c14e903e1b841a7950c2c57e16847ff/ITEM-Attachment-001-f809b68ddfee41179f13c6a46cefe452.pdf.

[17] City of Boise. "Boise's Climate Action Roadmap." https://www.cityofboise.org/media/12984/boise-climate-roadmap.pdf

The sites will have work on their side of the meter (work to install the station). Contractors will have to follow all electric and building codes when installing the station and pass all permitting inspections before the utility will energize the site.

Implementation

Idaho will assess the feasibility of new or upgraded state funded EV charging installations that exceed the minimum NEVI Formula Program standards. Therefore, future operations and maintenance considerations are limited to the requirements of the NEVI program. A revised state Baseline Plan will include operations and maintenance requirements as determined by the Study. The Baseline Plan will also include a public outreach and involvement component to increase public awareness. The Siting, Feasibility and Access Study will identify strategic locations based on approved multi-factor selection criteria.

Examples of Strategies for EVSE Operations and Maintenance

- DCFC infrastructure hosts should purchase at least a 5-year warranty and maintenance plan through the charger manufacturer.
- Uptime requirement for station owners/hosts of at least 97%.
- Customer support service that is accessible 24/7 with either an onsite station operator or a tollfree telephone number clearly posted near the charging equipment that is available to EV drivers accessing the charging equipment.
- Customer support service capable of providing or dispatching service to address customer concerns at the charging station including rebooting the system if necessary.
- Proactive station health monitoring which enables charging station service providers to repair faulty equipment before a customer submits a complaint.
- Signage indicating the availability of EV charging
- Signage near the station indicating price of charging and charger output capability

Idaho's Department of Agriculture, Bureau of Weights and Measures has advised that Electric Fueling System Code in NIST Handbook 44 takes effect in January 2023 in Idaho with an exception for certain DC charging equipment that will exempt them until January 1, 2028. The entire electric vehicle fueling code can be viewed online at Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices (nist.gov).

Executive Order 14008

Executive Order 14008 establishes a whole of government approach to advancing environmental justice by stating that 40 % of all Federal investments flow to disadvantaged communities.

The State of Idaho will coordinate with FHWA Division office to ensure that current and new Metropolitan plans will prioritize advancement of Federal funds to disadvantaged communities. Along with our NEVI partners, the State of Idaho will also support the goals and vision specifically addressing economic opportunity in disadvantaged communities which have been historically marginalized by housing underinvestment, transportation, water infrastructure, recreation and public health.

When determining the "40 % of the overall benefits" for the NEVI Formula program, the State of Idaho will consult with our stakeholders within the vulnerable communities (state, local and Tribal entities, Hispanic/Latino and rural, low income) to ensure that we are receiving direct input as to what constitutes the "benefits" of this program.

Civil Rights

The State of Idaho will require within all contracting guidelines that all key components of the NEVI State Baseline Plan implementation will follow Federal, state and local laws, regulation, and statutes to ensure compliance with the Americans with Disabilities Act (ADA), Title VI of the Civil Rights Act of 1974, and Section 504 of the Rehabilitation Act.

On August 11, 2000, the President signed Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency." The Executive Order requires Federal agencies to examine the services they provide, identify any need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so LEP persons can have meaningful access to them. The State of Idaho will comply with the requirements of the Executive Order, to ensure that all recipients of Federal financial assistance provide meaningful access to their LEP applicants and their beneficiaries.

Executive Order 12898 requires Federal agencies to identify and address any disproportionately high and adverse human or environmental effects of their programs, policies and activities on minority and low-income populations. The State of Idaho will ensure that the public is provided with meaningful opportunities to submit comments and recommendations specifically in relation to Environmental Justice strategies.

The State of Idaho does not and will not exclude from participation in or deny the benefits of its programs or activities; or subject anyone to discrimination or treat persons unfavorably based on race, color, religion, national origin, sex (pregnancy, sexual orientation, and gender identity), age, genetic information, disability, veteran status, limited English proficiency or economic status. In addition, the State of Idaho will not retaliate against any person who complains of discrimination or who participates in an investigation of discrimination.

The State of Idaho will ensure that no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program, including the NEVI program. The State of Idaho will comply will all Title VI requirements in the implementation of the NEVI program.

Equity Considerations

The State of Idaho is committed to providing equitable EV charging access for all Idaho drivers. Our state has identified a number of vulnerable, rural communities which experience environmental burdens due to factors such as unemployment, health care, extreme high cost of housing, transportation costs relative to income, access to food sources, and linguistic barriers. Outreach efforts will continue to expand within the next year, and vulnerable rural communities will be engaged during the life of the NEVI Program.

Since Idaho is a rural state, Idaho's Baseline Plan will use NEVI Formula funds to work to achieve the Justice 40 initiative which aims to deliver at least 40% of project benefits to underserved, rural, and disadvantaged areas.

State agencies have benefitted greatly from the various targeted outreach sessions that we hosted as part of the Public Involvement effort for the state Baseline Plan. The State of Idaho will continue to engage with organizations such as: Idaho Tribal Council, Idaho Commission on Hispanic Affairs, Idaho Power, Conservation Voters for Idaho, Idaho Conservation League, Idaho Sierra Club, Clean Tech Alliance, Visit Idaho, Idaho Falls Power, Idaho Consumer-Owned Utilities Association, Avista and the Idaho Petroleum Marketers Association who have resources that will help inform best practices for equity considerations in EV charging infrastructure statewide.

At this time, specific routes for equitable distribution have not been identified. Results and input received from stakeholders, as part of the Siting, Access, and Feasibility Study will better inform which corridors will be prioritized for EV charging infrastructure within the state in an equitable manner.

Identification and Outreach to Disadvantaged Communities (DACs) in Idaho and Process to Identify, Quantify, and Measure Benefits to DACs

The State of Idaho has engaged a very diverse range of stakeholders and communities statewide through extensive public outreach, representing both rural and urban areas. All participants have had the opportunity to provide input through public meetings as well as an online survey. The Siting, Feasibility and Access Study will identify strategic locations based on

approved multi-factor selection criteria. A revised state Baseline Plan will include strategies for identifying, quantifying and measuring benefits to DACs in Idaho.

These sections are under development pursuant to additional technical guidance from USDOT and other federal sources. Examples of multi-factor selection criteria are identified in the previous section on FY23-26 Infrastructure Deployments.

Figure 9 displays the current designation of Disadvantaged Communities and Tribal Lands in Idaho.

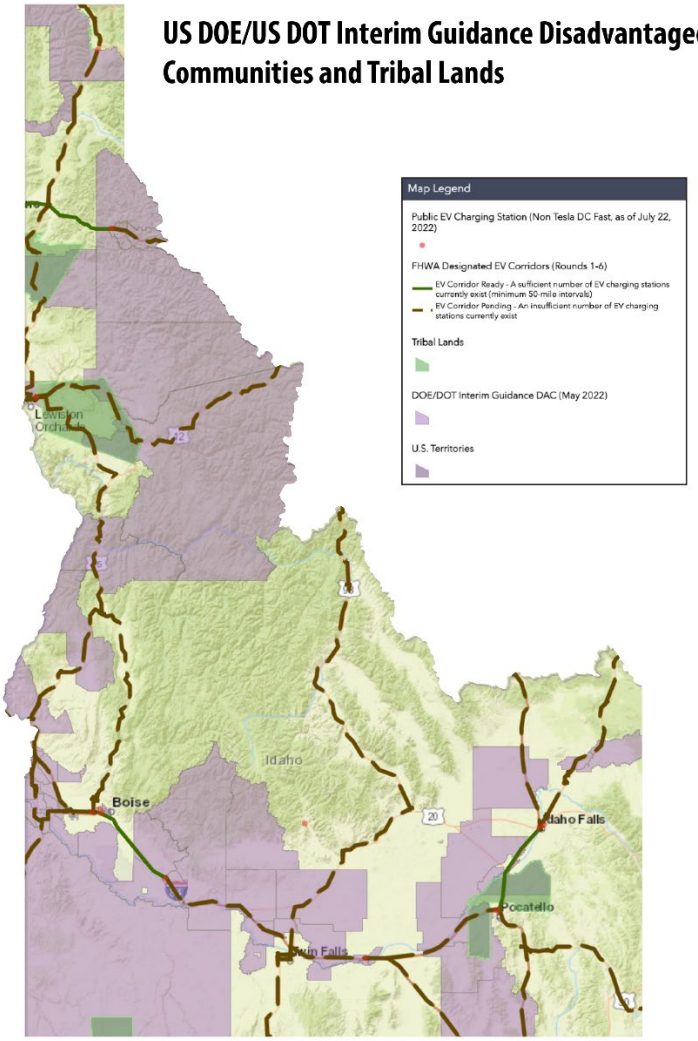


Figure 9: USDOT/USDOE map

Benefits to DACs through this Baseline Plan

This section is under development pursuant to additional technical guidance from USDOT and other federal sources. Continued public involvement during the Siting, Feasibility and Access Study, along with the revised Baseline Plan submittal, will address benefits to these communities.

Labor and Workforce Considerations

ITD has a very well established "On The Job" (OJT) training program. ITD is viewed as a best practice model by other states and our staff are frequently invited to attend webinars and peer exchanges to shares our experiences. Recently the ITD Office of Civil Rights, joined forces with the Idaho Department of Labor (DOL) and Idaho Workforce Development Council. All three agencies are a serving on a National Governors Association task force that helps identify other funding sources and helps us best utilize our resources.

There are four additional funding sources that ITD is planning to set aside between $400,000 - $600,000 in funding for workforce development in addition to funding from the ISTIC program and annual OJT allocation. The ITD Office of Civil Rights has discussed the idea of starting a pre-apprentice in the state to provide individuals with basic trainings and certifications, with the intent to allow them to enter the construction industry. After completing the program, people will be placed on a roster for construction contractors to use on their jobs to fulfill their training hour obligations, while using a DOL apprenticeship program that is sponsored by ITD. Contractors would ideally be reimbursed at a higher rate than the federal hourly rate if selected from our roster.

These programs seek to target minority and disadvantaged populations. During our 2022 programs, of those who responded to the demographics request, 50% were minority and 45% were female. Students who identify barriers in the program are provided with supportive services. These services could include childcare, gas/fuel reimbursements, housing assistance, language services, additional training and education and so on. 75% of our students in our 2022 programs have found jobs within 30 days of completing the short five-week program.

The Siting, Feasibility and Access Study will include strategies for EV labor and workforce considerations for the NEVI program in Idaho which will be incorporated into the existing ITD workforce development program. The Study will also assess whether existing ITD workforce development program funding is sufficient to produce a workforce that meets NEVI program needs and whether NEVI funds will be used to augment workforce training. These will become part of the Baseline Plan update submittal in 2023.

Cybersecurity

Of note, The State of Idaho does not intend to own and operate EV charging stations, making cybersecurity the responsibility of contractors. These contractors will be contractually required to ensure the chargers and back-office network that operate the chargers are secure. Therefore, the State of Idaho's role is focused on the procurement and management oversight roles.

The most prevalent policies are that all contractors are expected to agree to and comply with ITD's computer usage policies, ITD's network usage policies, and state IT policies and standards. Contractors must pass required background checks for any personnel who may have access to CJIS data, be employed by the DMV, or have any kind of administrative access. Additionally, no contractors are to be granted global or domain administrative permissions, and no permissions should be granted to a contractor that exceeds their contracted roles and responsibilities. Finally all contractor personnel must be uniquely identified, access cannot be shared between multiple personnel and all access and actions must be audited, retained for a period of time dependent on the system needs but no less than 6 months, and be accessible directly by ITD or attained from a contractor's system upon request."

This section is under development pursuant to additional technical guidance from USDOT and other federal sources. Specific considerations identified in future technical guidance will be incorporated into the revised Baseline Plan.

Program Evaluation

Idaho's Baseline Plan will be evaluated on an annual basis and submitted for approval as needed during the future. The Siting, Feasibility and Access Study will include strategies for program evaluation considerations for the NEVI program in Idaho. The State of Idaho anticipates these strategies will become part of the Baseline Plan update submittal in 2023.

Discretionary Exceptions

The State of Idaho will evaluate the need for discretionary exceptions and provide specific strategies for mitigating those exceptions in the revised Baseline Plan update in 2023. The Siting, Feasibility and Access Study will identify initial requests for discretionary exceptions by corridor for the NEVI program in Idaho. These strategies will become part of the Baseline Plan update submittal in 2023. Examples of multi-factor selection criteria, including discretionary exceptions, are identified in the previous section on FY23-26 Infrastructure Deployments.

Appendix A: Idaho's Existing DCFC/Level 2 Electric Vehicle Charging Locations

Name	Charger Level (DCFC, L2)	Route	# of EV Connectors	EV Network	Location
Discovery Center of Idaho	L2	US-20/ US-26 (not an AFC)	2	Non-Networked	131 W Myrtle Street Boise, ID 83702
Dennis Dillon Nissan	L2	I-84/ US-30	1	Non-Networked	8727 Fairview Ave Boise, ID 83704
Dennis Dillon Nissan	DCFC	I-84/ US-30	1	Non-Networked	8727 Fairview Ave Boise, ID 83704
Ron Sayer Nissan	L2	US-20/ US-26 (not an AFC)	1	Non-Networked	1175 N Woodruff Ave Idaho Falls, ID 83401
Ron Sayer Nissan	DCFC	US-20/ US-26 (not an AFC)	1	Non-Networked	1175 N Woodruff Ave Idaho Falls, ID 83401
SpringHill Suites	L2	I-90	2	Non-Networked	2250 W Seltice Way Coeur d'Alene, ID 83814
Boise Airport	L2	I-84/ US-30	4	Non-Networked	3201 Airport Way Boise, ID 83705
Corwin Ford	L2	I-84/ US-30	1	Non-Networked	5707 E Gate Blvd Nampa, ID 83687
Idaho Falls Power	L2	I-15/ US-20/ US-26 (not an AFC)	2	Non-Networked	140 S Capital Ave Idaho Falls, ID 83042
Sierra Club	L2	US-20/ US-26 (not an AFC)	1	Non-Networked	503 W Franklin Street Boise, ID 83702
Kendall Ford	L2	I-84/ US-30/ SR-55	2	Non-Networked	250 E Overland Road Meridian, ID 83642
Boise State University - Lincoln Garage	L2	US-20/ US-26 (not an AFC)	4	Non-Networked	1 Belmont Street Boise, ID 83725
Boise State University - Brady Garage	L2	US-20/ US-26 (not an AFC)	8	Non-Networked	1323 S Brady Street Boise, ID 83725

Whole Foods Market	L2	US-20/ US-26 (not an AFC)	2	Non-Networked	401 S Broadway Avenue Boise, ID 83702
Mercedes Benz of Boise	L2	I-84/ US-30	1	Non-Networked	351 Auto Drive Boise, ID 83709
Porsche of Boise	L2	I-84/ US-30	1	Non-Networked	7607 W Gratz Drive Boise, ID 89709
Lyle Pearson Boise Volvo Cars	L2	I-84/ US-30	1	Non-Networked	7805 Gratz Drive Boise, ID 83709
Cole Nissan Kia	L2	I-86/ I-15	1	Non-Networked	1900 Flandro Drive Pocatello, ID 83202
Cole Nissan Kia	DCFC	I-86/ I-15	1	Non-Networked	1900 Flandro Drive Pocatello, ID 83202
Fairly Reliable Bob's	L2	US-20/ US-26 (not an AFC)	2	Non-Networked	2304 Main Street Boise, ID 83702
Boise Towne Square Mall	L2	I-84/ US-30	1	Non-Networked	350 N Milwaukee Street Boise, ID 83704
Library! at Bown Crossing	L2	US-20/ US-26 (not an AFC)	2	Non-Networked	2153 E Riverwalk Drive Boise, ID 83706
P44 EV Eagle River V1	L2	SR-55	2	ChargePoint Network	839 S Bridgeway Place Eagle, ID 83616
CBW Properties BM-1	L2	I-84/ US-30	2	ChargePoint Network	7196-7274 Colonial Street Boise, ID 83709
CBW Properties RP-1	L2	SR-55	2	ChargePoint Network	1436 N Cormorant Place Boise, ID 83713
CBW Properties WR-1	L2	SR-55	2	ChargePoint Network	3065-3091 N Five Mile Road Boise, ID 83713
Silver Creek Hotel	L2	US-75 (not an AFC)	2	ChargePoint Network	721 N Main Street Bellevue, ID 83313
Boise City Hall	L2	US-20/ US-26 (not an AFC)	1	Non-Networked	150 N Capitol Boulevard Boise, ID 83702
LPCO	DCFC	I-84/ US-30	1	ChargePoint Network	7805 W Gratz Drive Boise, ID 83709
Oxford Suites Boise	DCFC	I-84/ US-30	8	Tesla	1426 S Entertainment Avenue Boise, ID 83709
Neider Retail	DCFC	US-95	6	Tesla	3458 N Fruitland Lane Coeur d'Alene, ID 83815

Snake River Landing	DCFC	I-15	8	Tesla	940 Pier View Drive Idaho Falls, ID 83402
The Clarion Inn	DCFC	I-15	8	Tesla	1399 Bench Road Pocatello, ID 83201
Twin Falls Visitor Center	DCFC	US-93	8	Tesla	2015 Neilsen Point Place Twin Falls, ID 83301
College of Southern Idaho - Applied Tech & Innovation Center	L2	US-93	1	Non-Networked	2-364 N College Road Twin Falls, ID 83303
Pizzeria and Soda Fountain	L2	US-20	4	Tesla Destination	511 Main Street Ashton, ID 83420
The Silver Creek Hotel	L2	US-75 (not an AFC)	1	Tesla Destination	721 N Main Street Bellevue, ID 83313
Paradise Valley Chalet	L2	N/A	4	Tesla Destination	2969 Paradise Valley Road Bonners Ferry, ID 83805
Fairfield Inn & Suites by Marriott Burley	L2	I-84	3	Tesla Destination	230 W 7th Street N Burley, ID 83318
Coeur D' Alene Resort	L2	US-95/ I-90	3	Tesla Destination	115 S 2nd Street Coeur d'Alene, ID 83814
The Golf Club at Black Rock	L2	US-95	1	Tesla Destination	18168 S Kimberlite Drive Coeur d' Alene, ID 83814
SpringHill Suites Coeur d'Alene	L2	I-90	2	Tesla Destination	2250 W Seltice Way Coeur d'Alene, ID 83814
Estate on the Lake B and B	L2	N/A	2	Tesla Destination	277 Lakeshore Avenue Dover, ID 83825
Grand Teton Distillery	L2	N/A	2	Tesla Destination	1755 N Highway Driggs, ID 83422
Super 8 - Grangeville	L2	US-95	3	Tesla Destination	801 SW 1st Street Grangeville, ID 83530
Candlewood Suites Meridian	L2	I-84/ US-30/ SR-55	3	Tesla Destination	1855 S Silverstone Way Meridian, ID 83642
Home2 Suites by Hilton Nampa	L2	I-84/ SR-55	2	Tesla Destination	5750 E Franklin Road Nampa, ID 83687
Red Lion Post Falls	L2	I-90	3	Tesla Destination	414 E 1st Avenue Post Falls, ID 83854
The Stagecoach Inn	L2	US-93	1	Tesla Destination	201 Riverfront Drive Salmon, ID 83467
Best Western Edgewater	L2	US-95	2	Tesla Destination	56 Bridge Street Sandpoint, ID 83864

Sun Valley Resort	L2	US-75 (not an AFC)	2	Tesla Destination	1 Sun Valley Road Sun Valley, ID 83353
Knob Hill Inn	L2	US-75 (not an AFC)	1	Tesla Destination	960 N Main Street Sun Valley, ID 83353
Blue Lakes Inn	L2	US-93	1	Non-Networked	952 Blue Lakes Boulevard N Twin Falls, ID 83301
Walmart	DCFC	I-84/ US-30	4	Electrify America	8300 W. Overland Road Boise, ID 83709
Walmart	DCFC	I-15	4	Electrify America	500 S. Utah Avenue Idaho Falls, ID 83402
Walmart	DCFC	I-84/ US-30	4	Electrify America	2745 American Legion Boulevard Mountain Home, ID 83647
Walmart	DCFC	I-86	4	Electrify America	4240 Yellowstone Avenue Chubbuck, ID 83202
Walmart	DCFC	I-90	4	Electrify America	583 Commerce Drive Smelterville, ID 83868
HDHD	DCFC	I-84/ US-30/ SR-55	1	ChargePoint Network	2310 E Cinema Drive Meridian, ID 83642
Involve Training Center	L2	I-84/ US-30/ SR-55	1	Non-Networked	224 17th Ave S Nampa, ID 83651
Stage Stop Boise	L2	I-84/ US-20	2	ChargePoint Network	31917 S Orchard Access Road Boise, ID 83716
Altenergy Solar	L2	US-20	1	Non-Networked	206 W 36th Street Garden City, ID 83714
Capitol & Main	L2	US-20/ US-26 (not an AFC)	3	SemaCharge Network	770 West Main Street Boise, ID 83702
City Center Plaza Garage	L2	US-20/ US-26 (not an AFC)	3	SemaCharge Network	195 South Capitol Boulevard Boise, ID 83706
City of Caldwell - 6th Ave	L2	I-84/ US-20	2	Non-Networked	601 Main Street Caldwell, ID 83605
City of Caldwell - 9th Ave	L2	I-84/ US-20	2	Non-Networked	114 N 9th Avenue Caldwell, ID 83605
Meridian Crossroads	L2	SR-55	2	Volta	3355 E Fairview Avenue Meridian, ID 83642
Boise State Bronco Circle	L2	US-20/ US-26	2	ChargePoint Network	1402 Bronco Lane Boise, ID 83706

		(not an AFC)			
Best Western Plus Peppertree	L2	I-84/ US-30/ SR-55	1	SemaCharge Network	205 3rd Street S Nampa, ID 83651
Boise State University - Ron and Linda Yanke Family Research Park	L2	US-20/ US-26 (not an AFC)	2	Non-Networked	220 W Parkcenter Boulevard Boise, ID 83706
Rivergate Crossing	DCFC	I-84	8	Tesla	240 East 5th Street N Burley, ID 83318
The Residences	L2	US-26 (not an AFC)	1	SemaCharge Network	246 North Curlew Drive Ammon, ID 83401
The Falls Apartments	L2	I-15	2	SemaCharge Network	1415 Whitewater Drive Idaho Falls, ID 83402
Candlewood Suites Boise - Town Square	L2	I-84	1	Tesla Destination	700 N Cole Road Boise, ID 83704
Coeur D Alene Resort	L2	I-95	3	Tesla Destination	115 S 2nd Street Coeur d'Alene, ID 83814
Idaho Wildlife Museum	L2	I-90	2	Tesla Destination	2000 John Loop Coeur d'Alene, ID 83814
Schweitzer Mountain Resort	L2	N/A	2	Tesla Destination	10000 Schweitzer Mountain Road Sandpoint, ID 83864
SpringHill Suites Coeur d'Alene	L2	I-90	2	Tesla Destination	2250 W Seltice Way Coeur d'Alene, ID 83814
Sun Valley Auto Club	L2	US-75 (not an AFC)	2	Tesla Destination	1930 1930 Electra Lane Hailey, ID 83333
VC Station	DCFC	US-95	1	ChargePoint Network	6373 Bonner Street Bonners Ferry, ID 83805
Liberty Asset	L2	I-84/ US-30/ SR-55	2	ChargePoint Network	16635 N Idaho Center Boulevard Nampa, ID 83687
Annex EVCS	DCFC	US-75 (not an AFC)	1	ChargePoint Network	219 S 1st Avenue Hailey, ID 83333
Stinker Store #68	DCFC	US-30	4	Electrify America	326 ID 24 Heyburn, ID 83336
Fairfield Inn and Suites Hailey Sun Valley	L2	US-75 (not an AFC)	2	SemaCharge Network	711 North Main Street Hailey, ID 83333
5th and Front Station 1	L2	US-20/ US-26	2	ChargePoint Network	504 W Front Street Boise, ID 83702

		(not an AFC)			
HDHD	L2	I-84/ US-30/ SR-55	2	ChargePoint Network	2310 E Cinema Drive Meridian, ID 83642
Clearwater River Casino	DCFC	US-95/ US-12	1	ChargePoint Network	17500 Nez Perce Road Lewiston, ID 83501
Liberty Asset	L2	I-84/ US-30/ SR-55	2	ChargePoint Network	16635 N Idaho Center Boulevard Nampa, ID 83687
Liberty Asset	L2	I-84/ US-30/ SR-55	2	ChargePoint Network	16635 N Idaho Center Boulevard Nampa, ID 83687
Monarch Motel	L2	US-95	2	Blink Network	120 W 6th Street Moscow, ID 83843
Cambridge World Market	L2	US-95	1	SemaCharge Network	20 East Central Boulevard Cambridge, ID 83610
Simple Suites Boise Airport	L2	I-84/ US-30	3	SemaCharge Network	2909 Elder Street Boise, ID 83705
Homewood Suites by Hilton Eagle Boise	L2	SR-55	5	SemaCharge Network	710 East Riverside Drive Eagle, ID 83616
Teton VW	L2	I-15	1	ChargePoint Network	2220 W Sunnyside Road Idaho Falls, ID 83402
Clearwater River Casino	DCFC	US-95	1	ChargePoint Network	17500 Nez Perce Road Lewiston, ID 83501
The Clara	L2	N/A	2	Blink Network	225 S Linder Road Eagle, ID 83616
Ten Mile Medical Office Building #1	L2	I-84/ US-30/ SR-55	4	SemaCharge Network	875 South Vanguard Way Meridian, ID 83642
AAA	L2	I-84/ US-30	2	ChargePoint Network	7155 W Denton Street Boise, ID 83704
Wood River Inn and Suites	L2	US-75 (not an AFC)	2	SemaCharge Network	603 North Main Street Hailey, ID 83333
Pioneer Crossing	L2	US-20/ US-26 (not an AFC)	2	SemaCharge Network	1290 W Myrtle Street Boise, ID 83702
9th & Front	L2	US-20/ US-26 (not an AFC)	3	SemaCharge Network	321 South 9th Street Boise, ID 83702

Holiday Inn and Suites	L2	I-15	6	SemaCharge Network	3005 South Fork Boulevard Idaho Falls, ID 83402
Columbus Building	L2	I-84/ US-30/ SR-55	6	SemaCharge Network	2775 W. Navigator Drive Meridian, ID 83642
Tamarack Resort	L2	N/A	2	SemaCharge Network	800 Village Drive Tamarack, ID 83615
Dennis Dillon	L2	I-84/ US-30	1	ChargePoint Network	9485 W Fairview Avenue Boise, ID 83704
Dennis Dillon	L2	I-84/ US-30	1	ChargePoint Network	9485 W Fairview Avenue Boise, ID 83704
Treasure Valley Subaru	L2	I-84/ US-30/ SR-55	1	Blink Network	5605 East Gate Boulevard Nampa, ID 83687

Appendix B: Travel Trends for Tourism [1]

In 2021, 37 million people travel to and through Idaho. This is up 4.5% over 2019 numbers. $3.7 billion was estimated to be spent by those travelers within Idaho. This is up 9.5% over 2019. 72% of travelers used their own car to reach their destination in Idaho. This is slightly higher than the national average (70%). Once in the destination, 51% used their own vehicle; 25% used a rental car, 21% used a camper/RV.

Overnight Data

Of those overnighting, 14.8 million, or 40%, stayed overnight in Idaho. $2.3 billion, or 63%, was spent by overnight travelers in 2021. $329 million was spent on transportation costs for overnight trippers. This is up 8.6% over 2019. That is the second highest cost for an overnight trip to Idaho, about 14% of the total cost. Lodging is the highest, about 39%.

Repeat visitors to Idaho make up 84% of overnight travelers. 65% have visited Idaho in the past year. The top 5 states visiting Idaho in 2021, in order: Idaho, California, Washington, Utah, New York. Of those, the top 5 origin cities, in order: Salt Lake City, Boise, Los Angeles, New York, Spokane (Seattle is a close 6th).

Idaho sees travel throughout the year, but most overnights are happening Jul-Sep (29%) with Apr-Jun as a close 2nd (27%). Most overnight travelers came to Idaho for outdoor activities, 64%. Much higher than the national average (48%). The next two highest activities chosen were entertainment (63%) and cultural (47%); both significantly higher than the national average (55% and 29%, respectively).

The southwest region of Idaho (Boise to McCall) received the most overnight visitors, 4.5 million, down slightly from 2019. Northern (Coeur d'Alene and north) and eastern (Idaho Falls) Idaho were the next two regions most visited, 2.9 million and 2.4 million, respectively. Every region except southwest Idaho either saw the same amount or an increase in visitation over 2019.

Day Trip Data

Day trippers include 22.2 million, or 60%. Spending estimates for day trippers in Idaho equate to $1.4 billion. Of that, $321 million was spent on transportation costs for day trippers. This is up 20.1% over 2019, the highest increase in cost of a day trip. This is the third highest cost for a day trip to Idaho, food and retail purchases were listed as higher expenditures. The top 5 states visiting Idaho in 2021 for the day, in order: Idaho, California, Washington, Utah, Florida. For the top 5 origin cities, the order is: Boise, Spokane, Idaho Falls, Salt Lake City, Los Angeles.

Day trip travelers are fairly consistent throughout the year, with only a slight spike in the months of July-September. Most day trippers came to Idaho for outdoor activities, 59%. This is much higher than the national average (36%). Entertainment and cultural activities were the two other top attractions at 58% and 34%, respectively. This was again much higher than the national averages.

The southwest region of Idaho (Boise to McCall) received the most day trip visitors, 5.7 million. Down slightly from 2019. Northern (Coeur d'Alene and north) and central (Sun Valley to Salmon) Idaho were the next two regions most visited, 5.1 million and 3.8 million, respectively. Northern and southwestern Idaho were the only two regions to see a decrease in visitation over 2019. Everyone else saw growth.

Appendix C: 2022 Idaho Alternative Fuel Corridor-Pending Routes

US-12

Jurisdiction	Idaho Transportation Department
Description	US-12 is a significant North-Central Idaho route providing a corridor for commercial traffic connecting Washington and Central Idaho to Montana. It is one of the only west-east routes that runs completely through the State of Idaho. US-12 follows the Northwest Passage Scenic Byway that Lewis and Clark traveled along the Lochsa Wild and Scenic River Corridor and brings in tourists from all over the country. Through the city of Lewiston, which is the largest city on this route, US-12 currently sees over 29,000 passenger vehicles on it and is predicted to see over 41,000 passenger vehicles in 2045. The commercial volume is expected to be 2,700 in 2045. US-12 is a very heavy use route for recreation which includes hunting, fishing, rafting, bicycling and hiking. US-12 also runs through the Nez Perce Indian Reservation. From the city of Kooskia (Milepost 79.00) to the Montana State Line (Milepost 174.11), the Federal Highway Administration and ITD have a Memorandum of Understanding with the Nez Perce – Clearwater National Forests for Maintenance and Construction on this route.
Mileposts	0 to 174.11
Fuel Type	EV: Clearwater River Casino, 17500 Nez Perce Road Lewiston, ID 83501 Electric Vehicle Charging - DC Fast 1, CHAdeMO CCS
Coordination with Neighboring States	Yes, Washington and Montana
Rural/Disadvantaged Population	Yes, multiple DOE/DOT IG DACs and Nez Perce Reservation
Designation	Pending
Plans for Signage	Alternative Fuel Corridor signing will be provided at the beginning of the corridors identifying the alternative fuel type. The extents of the corridor and the end point will be identified as appropriate. On freeway facilities, General Services signing identifying alternative fuel availability will be posted in advance of freeway exits with directional signing provided at the ramp terminals in accordance with the MUTCD. On non-freeway facilities, the need for alternative fuel general service signing will be evaluated and if determined

	necessary will be provided at a suitable distance in advance of the service station or turn-off point.

US-30

Jurisdiction	Idaho Transportation Department
Description	US-30 from McCammon to Wyoming is an essential east-west corridor for commercial traffic between I-15 in Idaho and I-80 in Wyoming. US-30 also carries important commercial traffic from mining operations near Soda Springs and is a tourist route to Lava Hot Springs and Bear Lake. The US-30 corridor carries between 4,000 and 7,100 vehicles per day. At McCammon, where I-15 and US-30 meet, US-30 carries up to 4,500 and 8,300 vehicles per day. Communities serviced by US-30 include Soda Springs (pop. 2,966), Montpelier (pop. 2,518), McCammon (pop. 814), and Lava Hot Springs (pop. 232). Bear Lake Regional County Airport serves the Montpelier area and Soda Springs has a general aviation airport. Pocatello Regional Transit provides limited bus service along US-30 to Montpelier.
Mileposts	359.49 to 455.08
Fuel Type	EV: Idaho NEVI Baseline Plan corridor
Coordination with Neighboring States	Yes, Wyoming and Utah
Rural/Disadvantaged Population	Yes, DOE/DOT IG DAC
Designation	Pending
Plans for Signage	Alternative Fuel Corridor signing will be provided at the beginning of the corridors identifying the alternative fuel type. The extents of the corridor and the end point will be identified as appropriate. On freeway facilities, General Services signing identifying alternative fuel availability will be posted in advance of freeway exits with directional signing provided at the ramp terminals in accordance with the MUTCD. On non-freeway facilities, the need for alternative fuel general service signing will be evaluated and if determined necessary will be provided at a suitable distance in advance of the service station or turn-off point.

US-20

Jurisdiction	Idaho Transportation Department
Description	US-20 from Idaho Falls to the Montana border is a significant corridor to Yellowstone National Park, the Island Park area, and Montana. Approximately 80% of the traffic travelling north on I-15 turns onto US-20. The corridor carries between 16,500 and 21,850 vehicles per day. US-20 also provides access to Rexburg (home of Brigham Young University-Idaho), and a number of rapidly growing satellite communities to Idaho Falls. At the junction of US-20 and Idaho Falls (pop. 61,459), daily traffic is between 19,000 and 30,500 vehicles per day. Communities north of Idaho Falls include Rexburg (pop. 28,414), Rigby (pop. 4,117), St. Anthony (pop. 3,519), Ucon (pop. 1,557), Ashton (pop. 833), and Island Park (185).
Mileposts	307.45 to 406.3
Fuel Type	EV: Idaho NEVI Baseline Plan corridor
Coordination with Neighboring States	Yes, Montana and Wyoming
Rural/Disadvantaged Population	Yes, multiple DOE/DOT IG DACs
Designation	Pending
Plans for Signage	Alternative Fuel Corridor signing will be provided at the beginning of the corridors identifying the alternative fuel type. The extents of the corridor and the end point will be identified as appropriate. On freeway facilities, General Services signing identifying alternative fuel availability will be posted in advance of freeway exits with directional signing provided at the ramp terminals in accordance with the MUTCD. On non-freeway facilities, the need for alternative fuel general service signing will be evaluated and if determined necessary will be provided at a suitable distance in advance of the service station or turn-off point.

Idaho also nominated the following additional routes for EV Corridor Pending designation in previous rounds of nomination (2016 and 2020). The following routes were selected for EV pending designation in 2022:

- US-95 (ID/NV State Line MP 0 to ID/Canadian Border MP 538.54 – 2016 and 2020) This route functions as a north-south interstate for western Idaho with connections to Oregon and Nevada to the south and Canada to the north. This route also serves the Port of Lewiston and Tribal Reservations of the Coeur d'Alene and Nez Perce. Four (4) public charging stations are found along this route. In addition, 18 DOE/DOT IG DAC's are represented along this route on the Electric Vehicle Charging Justice40 Map. The route is currently designated as EV pending from the Canadian border to the New Meadows SH-55 junction. The remainder of the corridor to the south is proposed for designation as a pending EV corridor (MP 0 to MP 161).

- US-93 (ID/NV State Line MP 0 to ID/MT State Line MP 350.82 – 2016 and 2020) This route functions as a major north-south corridor for Central Idaho with connections to Nevada to the south and Montana to the north, allowing travel from Las Vegas to Glacier National Park. One (1) public charging is found along this route. In addition, two (2) DOE/DOT IG DAC's are represented along this route on the Electric Vehicle Charging Justice40 Map.

- SH-55 (Boise MP 0 to US-95 at New Meadows MP 156.05 - 2016) – This route provides travelers with a scenic route accessing multiple cities that are vacation destinations. This corridor is most likely to include users who maintain and operate alternative-fuel passenger vehicles. Further, the corridor provides north-south connectivity from I-84 to US-95 through mountainous terrain. Three (3) public charging stations are found along this route.

Appendix D: Idaho Freight Flows

Idaho's freight network is a vital component in the State's current and future economic success, servicing more than 64,945 companies[18], 924,000[19] employees, and $74.08 billion in 2020[20] GDP that call Idaho home. Of all the industries in the state, eight are freight-reliant or freight-intensive. These industries utilize the State's transportation infrastructure on a daily basis for their basic operations and produce, ship/receive, or transport the majority of goods within Idaho. These industries are Agriculture, Forestry, Fishing and Hunting; Mining; Utilities; Construction; Manufacturing; Wholesale Trade; Retail Trade; and Transportation and Warehousing. These eight industries account for approximately 33.2 % of the firms, 35.8 % of the employees, 70.1 % of sales revenue, and 40 % of 2019 GDP in the state.[21]

Truck freight dominates the mode split by both value and tonnage. This coincides with the fact that most freight trips in Idaho either begin or end with a truck movement. Of the 198 million tons of freight originating in Idaho in 2017, trucks carried 57 %. In addition, of the nearly $115 million in value of freight originating in Idaho in 2017, 68 % was carried by trucks.

Freight Truck Flows

Idaho's freight flows are characterized by rural and urban micro economies along with pass through truck flows. Rural areas support agricultural and resource-based activities while urban areas support high-tech and industrial manufacturing. Pass through trucking consists of truck movement from U.S. interior State to the Pacific Northwest port, specifically Portland and Seattle.

Rural Flows

Agricultural and resource-based freight activities are more geographically diverse and linked to those regions where production activity is concentrated. The characteristics of this type of movement from fields, farms and forests are relatively short distance truck trips to processing facilities that possess wide seasonal fluctuations associated with the production characteristics

[18] On line at: https://commerce.idaho.gov/

[19] Idaho Economic Situation Report, March 2022. On line at: https://lmi.idaho.gov/

[20] On line at: https://www.statista.com/statistics/187861/gdp-of-the-us-federal-state-of-idaho-since-1997/#:~:text=In%202020%2C%20the%20real%20Gross,at%2074.94%20billion%20U.S.%20dollars.

[21] Idaho Department of Commerce InfoUSA (2019) for employment, firms, and revenue. GDP from U.S. Bureau of Economic Analysis (2019).

of the crop produced. Many of these trips originate on roads and highways that are not primary freight corridors and often under the jurisdiction of local cities/counties to maintain. Generally, transportation requirements are based on movements to the closest processing facility (grain-to-grain elevator, potato to cold storage or processing plant, hay to broker, timber to sawmills, etc.)

Urban Flows

Manufacturing/warehouse distribution centers are primarily concentrated around Boise/Nampa/Caldwell, Twin Falls and Idaho Falls along I-84, I-15 and I-86 and differ from the freight needs of the agricultural and resource based industries in that large volumes of both inbound/outbound shipments require transportation that is consistent, dependable, resilient and accessible at all times. This is primarily due to the greater importance of timing in warehouse/distribution activities and manufacturing processes that are expensive to start/stop.[22] Freight volumes leaving these processing facilities are influenced by a wider array of factors outside the state as these products compete in domestic and international markets. Linking the export component with the ocean ports at Seattle/Tacoma, WA and to a lesser degree the ports in Oakland, CA whereas the domestic markets are primarily urban centers in the west (Salt Lake City, UT, Seattle, WA, Portland, OR, Denver, CO). Improved efficiencies for the outbound component of agricultural processing facilities can include:

Pass through Flows

Pass through truck traffic consists of trucking which does not originate in Idaho but pass through Idaho from the interior of the U.S. to the ports in the Pacific Northwest and vis-versa. It is important to understand that Idaho, specifically Boise on I-84 and Coeur D'Alene on I-90 play a key role on pass through traffic. On I-84, Boise lays between Salt Lake City (344 miles/5.30 hours) and the Pacific Northwest Ports (500 miles/8 hours). This makes Boise a necessary stop for drives required rest period and fuel stops. On I-90, Coeur D'Alene's location between Seattle (311 miles/5 hours) and Missoula (166 miles/3 hours) makes it a primary stop for fuel and rest. Compounding the I-90 route is the need to negotiate the Cascade Mountain Range in Washington and the Bitterroot Mountain Range on the Idaho/Montana border. Both of these mountain ranges geography places additional demands on driver safety and fuel economy making Coeur D'Alene a primary stopping location for truck traffic.

[22] ITD Research Report; "*Idaho Statewide Freight Data and Commodity Supply Chain Analysis."* September 2019. Accessed at" Link

Appendix E: Idaho Public Transportation Needs

Location	Transit Provider	Website
Coeur d'Alene, Wallace, Smelterville, Kellogg, Osburn,	Shoshone County Silver Express	shoshonecounty.id.gov/silver-express/
Mullan, Pinehurst		
Coeur d'Alene, Dalton Gardens, Hayden, Huetter, Post Falls	Kootenai County Citylink North	kcgov.us
Coeur d'Alene, Worley, Plummer	Coeur d'Alene Tribe Citylink South	kcgov.us
St. Maries	Valley Vista Benewah Area Transit	valleyvista.org
Sandpoint, Ponderay, Dover, Kootenai, Bonners Ferry	Selkirks - Pend Oreille Transit (SPOT)	spotbus.org
Kooskia, Kamiah, Greer, Orofino, Lenore, Lapwai,	Appaloosa Express	nezperce.org
Lewiston, Lenore, Peck, Culdesac		
Latah, Nez Perce, Clearwater, Idaho, & Lewis counties	Council on Aging & Human Services (COAST)	www.coacolfax.org
Lewiston	Lewiston Transit	ridethevalley.org
Lewiston, Clarkston	Interlink	interlinkvolunteers.org
Lewiston, Moscow, Clarkston	Disability Action Center	dacnw.org
Moscow	SMART Transit	smarttransit.org
Moscow to Riggins, Riggins to Boise, Intercity Services	Northwestern Stage Lines	northwesternstagelines.com
Ada & Canyon Counties	Valley Regional Transit (VRT)	valleyregionaltransit.org
Canyon County	Metro Community Services	metrocommunityservices.net
Nampa, Caldwell, Kuna, McCall	Treasure Valley Transit (TVT)	treasurevalleytransit.com
Southwest Idaho	Elderly Opportunity Agency (EOA)	eoaidaho.org
Treasure Valley	Ada County Highway District Commuteride	commuteride.com
Treasure Valley and Magic Valley	Living Independent Network Corporation (LINC)	lincidaho.org
Sun Valley, Ketchum, Hailey, Twin Falls	Mountain Rides	mountainrides.org
Twin Falls, Kimberly, Hansen	Trans IV Buses	csi.edu/trans-iv-bus-service
Mackay, Arco	Valley Vista Lost River Area Transit	valleyvista.org
Pocatello, Blackfoot, Preston, Logan	Pocatello Regional Transit (PRT)	pocatellotransit.com
Driggs, Victor, Jackson Hole	Southern Teton Area Rapid Transit (START)	jacksonwy.gov/587/START-Bus
Driggs to Grand Targhee Resort	Grand Targhee Resort Teton Valley Shuttle	grandtarghee.com
Fort Hall	Shoshone-Bannock Tribes Public Transit	shobandot.com/transit
Salmon, Elk Bend, Carmen, Baker	Lemhi Ride	lemhiride.com
Southern Idaho & beyond	Salt Lake Express	saltlakeexpress.com

Estimated Future Ridership by District

For planning and administrative purposes, ITD divides Idaho into six districts, from north to south and east to west. District 1 is in north Idaho, centered around Coeur d'Alene. District 2 is in north central Idaho, with Lewiston as its office. District 3 is located in southwest Idaho, or the Boise/Nampa/Caldwell area. District 4 is in south central Idaho with Shoshone as the district office. District 5 is in south eastern Idaho with Pocatello as its area office. Finally, District 6 is in eastern Idaho with Rigby as its office location.

Overall, the largest growth in transit ridership between 2015 and 2028, estimated on the basis of population growth and current rates of transit ridership, will be in District 1, which will see an increase in transit ridership of approximately 49%. District 3, District 4 and District 6 will also see notable growth by 2028 (36%, 23%, and 23%, respectively). District 2 will see the least growth, with an estimated increase of approximately 4% by 2028.

Despite the large growth in Districts 1, 4 and 6, District 3 will see the largest numerical growth in transit ridership (at a minimum estimate almost 700,000 one-way passenger trips). District 3's 2028 transit ridership will represent more than half (54%) of statewide transit ridership in 2028 (a slight increase from, the 52% of statewide transit ridership in 2015). See Figure 10.

Figure 10: Estimated 2028 Transit Ridership by District

District	**Transit Ridership (2015)**	**Transit Ridership (2028)**	**Percent Change (2015 – 2028)**	**2028 Ridership as Percent of State Total**
1	454,904	676,800	49%	14%
2	262,105	273,600	4%	6%
3	1,900,219	2,591,500	36%	54%
4	560,755	691,400	23%	14%
5	325,802	378,600	16%	8%
6	176,149	215,400	22%	4%
State Total	3,679,934	4,827,217	31%	100%

Resources Needed to Maintain Existing Network of Public Transportation Services

The public transportation providers that receive federal transit funding, either directly from FTA or through ITD-PT, received a total $29.8 million in operating assistance from federal, state, and local sources in 2022, and a total of $4 million in capital assistance. These providers represent the majority of the organizations that provide public transportation services in Idaho, but a number of other public and nonprofit entities operate transportation services and are not included in those totals. The total of $33.8 million in FY22 operating and capital funding, would need to increase between 2 and 3 % annually to maintain the existing level of public transportation services in the future. Bringing the total estimated funding needs to over $40 million by FY28.