REQUEST FOR INFORMATION (RFI) from the Florida Dept. of Transportation | Response of EVgo

General

1. **Please describe your organization's involvement and experience with DCFC infrastructure. What are your long-term EV plans? How many chargers and/or charging stations are you able to build, install, and/or maintain on an annual basis?**

   Founded in 2010, EVgo owns and operates the nation's largest network of public fast charging stations for electric vehicles (EVs). With over 850 DC Fast Charging (DCFC) station locations and more than 1,000 Level 2 chargers across the U.S., EVgo's owned and operated network spans 60 metropolitan areas, with more than 375,000 customer accounts. We are actively expanding our network, with over 3,300 stalls in our active engineering and construction pipeline.

   EVgo leads the way on transportation electrification, partnering with automakers, fleet and rideshare operators, retail hosts such as hotels, shopping centers, gas stations and parking lot operators, and other stakeholders to deploy advanced charging technology to expand network availability and make it easier for drivers across the U.S. to enjoy the benefits of driving an EV.

   Through our EVgo eXtend offering, we also offer the same experience, scale, and customer acceptance developed by our owned and operated charging network to third-party customers who can own EVgo installed, branded, and operated charging stations.

   EVgo forecasts that our network will have 3,000-3,300 stalls in operation or under construction by the end of 2022, and we have set a goal of 16,000 total fast charging stalls by the end of 2027.[1]

2. **Where does your organization see the biggest opportunities for the utilization of NEVI funds? This could be in terms of innovative technology solutions, partnerships, and/or targeting geographic locations.**

   Grant programs play an important role expanding the availability of charging because they can act as a market stimulant to incent credible charging companies to extend their infrastructure footprints ahead of when they otherwise might, based on EV sales alone.

   The funds available from the NEVI program represent a market transformation opportunity for states with well-designed programs. In particular, the ability of NEVI to support operational expenses ("OpEx") as well as capital expenses ("CapEx") could be beneficial for accelerating charger deployment in new areas that may have been underserved in the past. This feature of NEVI is unique, as neither current utility programs nor state-administered Volkswagen "Dieselgate" funding programs can support OpEx; only CapEx.

[1] Including dedicated fleet chargers

3. **What are the biggest challenges or barriers that should be addressed to expedite reaching the goals of the NEVI program?**

Of the numerous goals outlined in FHWA's NEVI guidance, the goal to energize charging stations within six months of funding obligation presents a significant challenge based on the status quo of requirements beyond a charging operator's control. To reach this six-month target, EVgo suggests stakeholders in the EV charging ecosystem work together to address the current bottlenecks impeding rapid third-party charger deployment. The actual construction of a charging station typically takes just 4-8 weeks, but the entire process to bring a fast charger online—from site host outreach through utility engagement and permitting to interconnection and final inspection— currently takes an average of 18 months. Our Connect the Watts™[2] initiative has brought together representatives from automakers, suppliers, utilities, and authorities having jurisdiction (AHJs) to identify best practices for deploying infrastructure, including permitting EV chargers[3] and complementary utility processes.[4] FDOT could help accelerate EV charging infrastructure deployment timelines by encouraging local jurisdictions and utilities to adopt these best practices in the near future. Florida can look to recent legislation in New Jersey as an example of how to streamline and expedite EV charging permitting processes.[5]

Further, EVgo recommends that FDOT align with the Florida Department of Environmental Protection's (DEP) Electric Vehicle Charging Infrastructure (EVCI) Phase 2 program and allow program applicants to build at their own financial risk between the time program starts accepting applications and grants are awarded. Specifically, DEP's Grant Agreement states that "[t]he Grantee shall be eligible for reimbursement for work performed on or after the data of execution through the expiration date of this Agreement… However, work performed prior to the execution of this Agreement may be reimbursable or used for match purposes…"[6] This best practice is critical to ensuring that grant processes themselves, including contracting, do not impede the start of construction for the very projects they are trying to accelerate.

Site Location

4. **Please describe what you believe makes an ideal DCFC location including amenities as well as any risk factors that should be considered. How would you rank the relative importance of these factors?**

In EVgo's experience, the most successful grant programs approach siting using a holistic, GIS-based, and comprehensive view that combines distance between publicly accessible chargers with other important siting factors like density of battery electric vehicle (BEV) vehicles in operation, proximity to retail or other amenities, traffic patterns, and population density. To balance these different priorities, FDOT should not specify locations, but rather weigh these factors through a quantifiable and transparent scoring rubric similar to the North Carolina

[2] See https://www.evgo.com/connect-the-watts/
[3] See https://site-assets.evgo.com/f/78437/x/a36897f7b3/connect-the-watts_local-permitting-best-practices.pdf
[4] See https://site-assets.evgo.com/f/78437/x/597fa39fa0/connect-the-watts_utility-best-practices.pdf
[5] See S.3223 https://www.njleg.state.nj.us/bill-search/2020/S3223
[6] See https://floridadep.gov/sites/default/files/Attachment%201%20Sample%20Grant%20EVCI_1.pdf, Attachment 1, p. 1 of 11, Section 3.

Department of Environmental Quality's (DEQ) DC Fast Charging program.[7] This ensures that the outcome is not only filling in spaces in a map, but also recognizes that other factors are pertinent and permits charging station operators to leverage their own analytics so that more chargers are built in places with higher demand (for example, rather than one charger per highway exit every 50 miles, more stations will be necessary near traffic and population dense areas). Furthermore, all these factors must be in balance. A solicitation that rigidly requires, for example, that chargers be within 1/8th of a mile of a highway exit may result in stations at a convenience kiosk with no amenities, while a community shopping center with several restaurants and a grocery store one mile further down the highway could provide enough community usage to require less funding support.

By using a quantifiable scoring rubric, FDOT can achieve both a minimum level of coverage to combat range anxiety but also deploy additional chargers where they are most needed.

5. Please describe your process, including market research, land use requirements, and business development opportunities for determining a DCFC site location.

EVgo has developed our own proprietary siting tool, "AmeriGo," that incorporates several critical factors and years of data, including traffic and EV density, proximity of other DCFC, environmental justice considerations, public funding opportunities, amenities suited for location-specific dwell times, and critically, our existing relationships with potential hosts as stored in our customer relationship management software. Using our proprietary regression analysis, we are able to predict the utilization of sites to within a few percentage points per year.

EVgo is also continually inputting new information into our siting tool based on experience to determine which locations have the greatest need and will see the highest utilization rates from drivers. Like other retail businesses, we choose the locations that have the best economic and technical prospects for our business model. Importantly, our interests are aligned with those of customers since our business relies on customer utilization.

6. What do you think the DCFC site of the future looks like? Will location to amenities be as important or will micromobility be used to get to the amenities? What innovations/disrupters are coming?

In our more than ten years of experience, EVgo has consistently found that the proximity of DCFCs to amenities is crucial to drive utilization and EV adoption. With accelerating EV adoption, we expect this trend to continue as customers discover the ease with which charging fits into their daily lives. This model is in stark contrast to the existing gas station model, which require brief stops but limited amenities. Instead, ubiquitous, conveniently located charging stations can fit seamlessly into drivers' daily routines in their own communities, or offer compelling options for as they pass through on longer trips. Since different amenities will have different dwell

[7] See https://deq.nc.gov/media/27237/download?attachment

times, it will be increasingly important to provide a variety of Level 2 and DC fast charging speeds based on customer expectations at specific locations.

Partnerships and Business Models

7. Please explain any previous partnerships regarding EV infrastructure your organization has had including which parties initiated the outreach and what, if any, contracting mechanisms were used. These should include public and private entities as well as utility owners.

As a first mover in EV fast charging, EVgo has worked with a number of key stakeholders to deploy infrastructure, including first of their kind commercial engagements. EVgo partners with automakers, fleet and rideshare operators, retail hosts such as hotels, shopping centers, gas stations, parking lot operators, and other stakeholders to deploy charging technology. For example, EVgo has partnered with state energy and environmental agencies across the country to utilize grant funding made available through Appendix D of the Volkswagen "Dieselgate" settlement, including but not limited to Colorado, Maryland, North Carolina, and Pennsylvania. EVgo has also partnered with General Motors and Nissan to expand its DC fast charging network, which now spans 60 metropolitan areas.

Additionally, EVgo works closely with utilities to secure cost-effective electric distribution system extensions that support charging installations and have partnered with utilities to deploy utility owned and operated sites. For example, our partnership with Green Mountain Power (GMP), the largest utility in Vermont, resulted in a comprehensive, statewide Level 2 and DC Fast Charging network in operation years before many of its neighboring states.

More broadly, we also offer a white label solution called EVgo eXtend™ for utilities and other entities looking to own charging equipment but in need of experienced providers to deploy and operate those stations on their behalf.

8. Describe what makes a successful business model and partnership. Also, please describe threats that can lead to a business and partnership's failure. These can be examples from current and/or previous partnerships.

EVgo believes that a successful EV charging business partnership aligns incentives across organizations and focuses on the ability to deliver sustainable outcomes, both financially and environmentally. This is why EVgo focuses automaker partnerships on win-wins, and does the same with fleets and site hosts. For example, EVgo's partnership with General Motors[8] is enabling us to build ahead of demand for charging in certain markets, which will make fast charging more accessible to General Motors' customers.

To that end, public-private partnerships as part of grant programs can also provide opportunities for projects that advance both public and private sector goals. This is best

[8] https://www.evgo.com/press-release/general-motors-evgo-boost-build-plan-high-power-fast-chargers-across-us/

achieved when public funders include an explicit, points-based score card to evaluate applications. Defining criteria signals the public funder's goals to applicants, and is more likely to result in a win-win than specifying an exact location that may encounter real estate or grid constraints. Charging networks like EVgo that work with utilities across the country to determine optimal EV charging sites are best equipped to lead this effort, which can be accomplished via competitive solicitations that require service commitment letters from utilities.

Further, screening for an applicant's ability to execute on a project will encourage shovel-ready projects and prevent speculative applications with stations unlikely to come to fruition. One method of verifying an applicant's ability is to require a certain level of demonstrated experience. For example, in New York, applicants in NYSERDA's DCFC Program were required to "demonstrate a minimum of 2 years relevant experience installing and operating at least 50 DCFC EVSEs."[9] Another method is to verify that applicants have a higher degree of utility readiness. In the Colorado Energy Office's Charge Ahead Program, for example, applicants are required to share whether that have contacted their utility "to discuss the implications of installing a DCFC charging station" and to "provide documentation demonstrating the discussion that took place around your utility rates and costs." [10] Another example is the Washington Department of Ecology's Appendix D program,[11] which requires applicants to provide a letter of support from the utility describing any impacts the proposed project may have on the local grid, and site readiness for future expansion beyond this project.

9. **Please provide your organization's viewpoints on contracting methods for DCFC infrastructure, including leasing and/or revenue sharing agreements. Have you implemented any cost/revenue sharing models for the operation of DCFC EVSE? If yes, please share what you can about the terms of those partnerships.**

   In our experience partnering with a variety of site hosts to provide charging, EVgo finds that hosts (especially public hosts) prefer a fixed license or lease payment to highly variable revenue sharing.

   EVgo has installed several hundred sites throughout the US with a partial cost share from public funders. To date this has been almost entirely capital expenditure sharing - under which EVgo takes on all operational costs and some portion of capital expenditure. Going forward (especially for more rural sites) operational expenditure support will be required to make some sites commercially viable long-term. This will address the higher maintenance and energy costs that make rural chargers more challenging. Importantly, this would leave applicants financially incented to minimize these costs. As with all these criteria, we recommend that FDOT favorably consider applications that request fewer public funds for the same or better service, which can be implemented by scoring applicants' cost effectiveness based on a $/kW metric.

10. **Does Florida have the workforce required to operate and maintain DCFC EVSE charging sites? If not, please describe what you think is required to develop it.**

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[9] See https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt000000YDm19EAD
[10] See https://cleanairfleets.org/programs/charge-ahead-colorado
[11] See https://apps.ecology.wa.gov/publications/documents/1902033.pdf

EVgo's electrical contractor in Florida uses all Florida-based subcontractors, and we have not yet encountered electrical workforce constraints in the state. However, EVgo does provide local workforce training on general installation and maintenance of DCFCs through a "train the trainer" approach with our contractors to ensure safety and quality related to our stations.

As for operation and maintenance, EVgo works with a nationwide network of field technicians that are trained to repair fast charging equipment. Our team of dedicated field operations staff remotely monitor EVgo's network 24/7 and will immediately engage in remote diagnostics and repair once an issue is flagged. A remote start is often enough to remedy most issues, but if an on-site technician is needed, they will be dispatched by one of our regional maintenance partners. If parts are needed for the repair, they will be sent from EVgo's U.S. warehouse. Both EVgo and our field technician partners are actively recruiting and training for EVSE maintenance and repair positions.

However, as EV infrastructure development is still a nascent industry, utilities commonly lack dedicated infrastructure design and construction staff. EVgo is actively advocating for utilities to add such representatives to manage specific EV charging project portfolios.

Equipment

11. On average, how long does it take to install a DCFC from start to finish? This includes site determination, design, permitting, site preparation, utilities, and installation.

While the actual construction of a charging station typically takes 4-8 weeks, the entire process to bring a fast charger online—from site host outreach through utility engagement and permitting to interconnection and final inspection— currently takes an average of 18 months. Some key drivers of this timeline include utility easement, interconnection, and design approval practices, but grant processes that prohibit or disallow reimbursement for work undertaken prior to final contract signature can also delay project development by up to 12 months in some cases. As described previously, EVgo recommends that FDOT allow program applicants to build at their own financial risk as soon as the program starts accepting applications, so site engineering and utility timelines do not further delay deployments.

12. Are you currently able to meet the requirements of Buy America for DCFC infrastructure projects? If not, please explain your plans to meet the requirements and any potential issues.

No. EVgo is a technology-specifier that works with a number of charging equipment manufacturers to deploy safe, reliable, and cost-effective infrastructure solutions. EVgo is carefully reviewing the notice of proposed rulemaking issued by U.S. DOT to ensure our potential NEVI sites comply with all legislative requirements. Existing state programs that utilize U.S. DOT funds currently waive Buy America requirements for EV chargers under Federal

Highway Administration's (FHWA) existing manufactured products waiver,[12] but EVgo carefully monitors developments in this area to remain compliant.

As the largest public fast charging network in the United States, EVgo works with a number of suppliers to create redundancy and supply chain resiliency for our network. We are in regular communication with all our suppliers regarding Buy America requirements and the NEVI program to prepare for increases in demand. Nevertheless, overcoming current lead times for inventory and onshoring and scaling charger manufacturing capacity to serve the NEVI program will take time and resources, which the FHWA should take into account when considering waivers or phase-ins.

13. **Are there any components required for DCFC infrastructure that are in short supply that could delay the goals of the NEVI program? Please describe what steps you have taken or what processes you have implemented to ensure the continuity of your supply chain.**

One example of a potential supply chain challenge is the availability of utility transformers, which currently have very long lead times. EVgo is incorporating these delays into our planning process and communicating regularly with our suppliers and utilities to prepare accordingly. FDOT can assist in this effort by publishing clear and specific timelines for its NEVI program so this can be incorporated in our supply chain forecasting. More broadly, the manufacturing of EV chargers of all types is still a fairly young industry with significantly long lead times at the moment.

14. **Please describe how your organization mitigates cybersecurity vulnerabilities. Is this consistent with industry standards? If not, where are the differences? Do you follow national cybersecurity standards including National Institute of Standards and Technology (NIST) Cybersecurity Framework? Do you comply with Florida's 60GG-2 for ensuring the security of your infrastructure? What other technologies do you offer for an end-to-end secured operation?**

Our continuous monitoring program monitors vulnerabilities in our information systems and alerts responsible parties when vulnerabilities are discovered. A system hardening configuration standard is being developed for all system components using Security Technical Implementation Guides (STIGs) provided by the Defense Information Systems Agency (DISA). EVgo follows industry standards and enforces NIST 800-53 security controls in our environment, which aligns with Florida's Cybersecurity Standards (60GG-2).

Further, EVgo continues to review the FHWA's notice of proposed rulemaking establishing minimum standards and requirements for the NEVI program. As is typical for proposed rulemakings, we expect the minimum standards to change before they are finalized in the coming months. However, EVgo plans to comply with all relevant minimum standards in order to participate in FDOT's program.

[12] See https://www.fhwa.dot.gov/construction/contracts/831125.cfm

Operation, Maintenance and Data Sharing

15. What are your current or planned fee structures (time-based, energy-based, power-based, etc.) and what payment mechanism do you accept? Please explain any issues you have encountered or identified.

In Florida, EVgo currently provides customers charging service with pricing offers on a dollar per minute basis. Pricing varies between Level 2 and DC fast charging stations but is consistent across the state. EVgo is focused on providing customers with a positive and predictable charging experience to facilitate the transition to electric vehicles and help drive charger utilization. While EVgo is currently piloting time of use pricing in select cities, EVgo does not currently offer time-of-use pricing in Florida. EVgo is evaluating pricing options as we learn from pilots in California and elsewhere. We believe that as mass adoption of EVs evolves and grows, and EV charging becomes more ubiquitous, more sophisticated pricing structures may have the opportunity to be tested and proliferated more broadly.

EVgo maintains multiple payment options to ensure optionality for our customers, including credit cards, membership ID cards, mobile applications, and a 1-800 number. We continue to review the FHWA's notice of proposed rulemaking establishing minimum standards and requirements for the payment standards for NEVI stations, and will track changes in those standards as the rule is finalized.

16. Describe the typical maintenance for your organization's EVSE infrastructure as well as the maintenance schedule including any required hardware and software updates. Please include the typical lifecycle for your DCFC and what performance measurements are monitored.

As an owner-operator, EVgo takes responsibility for all operations and maintenance expenses for our charging stations. We are motivated to maintain maximum uptime and reliability to continue serving customers in need of reliable charging, as charger utilization is necessary sustain our business.

With over a decade of experience in the EV charging industry, EVgo has a track record of operating and maintaining chargers with a data-driven approach to corrective and preventative maintenance. EVgo is committed to 98% annual uptime, with on-site technician response times determined by both severity and agreed upon service level standards. EVgo is always responsible for the chargers for their entire lifecycle, including removal and recycling of the decommissioned hardware at the end of their lifecycle. We expect the typical EVSE's useful life to be approximately 7 – 10 years.

EVgo's operations and maintenance service begins with proactive monitoring of all networked hardware. All customers are supported through EVgo customer care centers, including our primary center in Florida, which offer 24/7 phone support for both hardware and software issues. Oftentimes, first time users of public charging infrastructure are unclear on how to initiate a charge, and our experienced team can walk new EV drivers through the charging process. If an issue with the hardware or software is reported, it is then triaged and tracked by EVgo's Field Operations team. We also monitor station utilization to better understand customer usage and inform our future commercial investments.

Proactive Monitoring

All chargers are monitored 24/7/365 over a 4G connection, providing real-time status and fault codes to the EVgo operations team in Los Angeles, California as well as updating charger availability directly on the EVgo mobile app and websites. Many issues can be remedied with a remote start, but we also send service technicians to sites promptly as needed.

Corrective Maintenance

Corrective maintenance starts with immediate remote diagnostics and when onsite repairs are needed, they will be scheduled based on the type of repair that is required and the customer impact. The table below provides an example of EVgo's corrective maintenance escalation plan.

Annual Preventative Maintenance

All EVgo chargers receive a comprehensive annual inspection, which includes performance testing, cleaning, and functional validation by a technician, as detailed below:

- Visual inspection: a technician will inspect the charging station to ensure that all system components are clean and functioning within design specifications.
- Performance testing: a technician will verify and document the charging station is within operating conditions and inspect the charging connections and operational controls.
- Functional validation: a technician will verify and implement all required field advisories and modifications if needed.
- Reporting: a technician will describe the current condition of the charging station and make recommendation for corrective action if required. A detailed report will be provided to EVgo for record keeping.

17. How would your EVSE share data to a FDOT sponsored central data repository? What type(s) of data can you provide?

While EVgo will comply with the final minimum requirements established by U.S. DOT, we anticipate that the data elements will be similar to those commonly requested by state funding programs:

- Quarterly construction reports for DC fast chargers
- Annual aggregated utilization reports for all chargers, which may include:
    - Number of charging events
    - Number of unique vehicles connected
    - Total kWh dispensed
    - Average kWh per charging event
    - Average duration of charging events

In public funding program design, it is important to achieve an appropriate balance between protecting commercially sensitive information and ensuring the prudent use of public funding. As with any other emerging industry, data in the EV charging industry is highly sensitive. We

recommend that FDOT avoid requesting commercially sensitive data, including individual charger utilization and session data, as well as personal identifiable information (PII).

As FDOT is likely aware, Federal Highway Administration's notice of proposed rulemaking establishing minimum standards and requirements for the NEVI program included data reporting requirements. EVgo plans to offer several recommended changes to the federal minimum standards via the public comment period. This will likely include comments on the need to aggregate charger session data to avoid violating customer privacy by reporting PII.

18. **What should FDOT do to ensure the end-users of EVSE infrastructure have the most convenient and reliable charging experience? Please include how emergency evacuations and power outages should be addressed.**

EVgo agrees with FDOT that the customer experience is paramount to stimulating widespread EV adoption. As an owner-operator of DC fast chargers, EVgo maintains metrics related to uptime and reliability and is committed to 98% uptime across our network. EVgo also monitors station utilization to inform customer and commercial benefits. In addition to considerations like corridor coverage or reaching underserved areas, EVgo strives to site chargers at convenient locations with amenities so drivers can grocery shop or visit a park while they charge. Locations that are more convenient for drivers can increase utilization. Owner-operators of EV chargers are motivated to maintain maximum uptime and reliability to continue serving customers in need of reliable charging, as charger utilization is necessary sustain their businesses. EVgo maintains 24/7 coverage through our Network Operations Center (NOC) to monitor metrics related to uptime and reliability and is committed to a 98% uptime across its network. We accomplish this by following rigorous testing standards provided by the Nationally Recognized Testing Laboratory (NRTL) Program, including Underwriters Laboratories, Inc. Accordingly, EVgo supports FDOT's adoption of a network-wide 97% uptime target.

Emergency preparedness and resiliency are crucial to support a robust EV charging network. Florida DEP's EVCI Phase 2 program included a focus on evacuation corridors, and the state has already made important progress. Going forward, encouraging a distributed charging network with multiple providers, selected through a competitive solicitation, can ensure that customer impact is limited. EVgo continues to work with our utility partners to improve communications with EV drivers so we can alert them and amplify calls for energy conservation during critical times.

Strategies for Low Utilization

19. **FDOT is looking to provide DCFC in rural and disadvantaged communities that may have a lower return on investment and is interested in how to make these projects more desirable to potential applications. What strategies can FDOT utilize to encourage deployment of DCFC EVSE into rural, underserved, or disadvantaged communities? When answering please include information on driving factors. a. Guaranteed number of projects for economies of scale b. Short term operation and maintenance agreements (5 years or less) c. Long term operation and maintenance agreements (longer than 5 years) d. Any others?**

As an owner-operator, EVgo assumes all risk associated with the potential lower return on investment caused by low station utilization. EVgo appreciates FDOT's interest in considering the

levels of capital and operational funding support needed to enable the private market to develop fast-charging stations in rural area, which will be different in different geographies even within the state. In terms of

The ability of the NEVI program to support operational expenses ("OpEx") is unique, as neither current utility programs nor state-administered Volkswagen "Dieselgate" funding programs can support OpEx; only capital expenses. However, OpEx costs are a dominant component of the financial outlay for most of our chargers. While DCFC is absolutely a necessity for corridor and long-distance travel, we currently find the most economically optimal locations for DCFC to be in urban and dense suburban locations. This means geographic coverage in less-used corridor locations may be economically more challenging than in urban and suburban ones. OpEx support will enable EVgo and other EV charging providers to serve less-dense areas and fill gaps in the network.

EVgo recommends that FDOT offer additional operational assistance for chargers outside of dense urban areas. Specifically, we recommend that all sites *outside* of Census-designated urbanized areas with a population above, for example, approximately 500,000, be eligible for operational assistance equal to 80% of the demand portion of energy and maintenance costs for **five years**, subject to competitive selection. This can be included as an upfront net present value of the requested operating expense in an overall $/kW metric, evaluated through a scoring rubric. However, EVgo plans to continue to own and operate any chargers funded through the NEVI program beyond the 5-year in-service requirement. As mentioned, EVgo has many years of experience in the EV charging industry operating and maintaining chargers. We underwrite assets on a long-term basis and have a track record of operating chargers well beyond the standard five-year terms of public funding program contracts.

To meet goals for siting chargers in impacted communities, FDOT should the EPA's EJ Screen[13], a free and public standard GIS tool that identifies communities disproportionately impacted by certain air pollutants. Using EJ Screen in a scoring rubric will help encourage siting chargers in disadvantaged communities. FDOT should also account for community charging use cases when developing its program, as corridor charging investments do not adequately serve EV drivers across all demographics. Critically, charging development in community locations enables EV access for drivers that may otherwise not have access to home charging. A study of EV charging data from the University of California — Los Angeles[14] found that residents of multifamily housing units rely largely on public charging for their refueling needs. A report from the International Council on Clean Transportation[15] reached a similar conclusion, that EV-owning apartment dwellers in the U.S. rely primarily on public charging sites. EVgo recommends that FDOT provide a clear pathway to open charging deployment beyond just corridor charging once the corridors are fully built out, and encourage locating chargers at sites that serve both corridor and community use cases.

20. To increase utilization rates to rural, underserved, or disadvantages communities what considerations or innovation solutions should be considered?

EVgo reiterates that including OpEx costs will be critical to ensure successful deployments in rural communities. To encourage utilization in rural areas as well as underserved or disadvantaged

[13] See https://www.epa.gov/ejscreen

[14] See https://innovation.luskin.ucla.edu/wp-content/uploads/2021/03/Evaluating-Multi-Unit-Resident-Charging-Behavior-at-Direct-Charging-Behavior-at-Direct-Current-Fast-ChargersCurrent-Fast-Chargers.pdf

[15] See https://theicct.org/sites/default/files/publications/US_charging_Gap_20190124.pdf

communities, we recommend that FDOT compare sites with a heavy emphasis on a site and an applicant's viability, expected usage, and customer experience. For example, locations with amenities that are convenient for drivers can increase utilization, as drivers can grocery shop or visit a park while they charge. Including these factors in a scoring rubric along with EJ Screen will appropriately encourage sites in disadvantaged communities that are more likely to see higher utilization.

Specific Information Requested

Interested vendors may respond to some or all the following topics, based on their proposed role in the creation of a DCFC EVSE network:

1. ***Summary of Experience***
   FDOT is interested in a summary that describes your organization's experience with DCFC EVSE.

   Founded in 2010, EVgo owns and operates the nation's largest network of public fast charging stations for electric vehicles (EVs). With over 850 DC Fast Charging (DCFC) station locations and more than 1,000 Level 2 chargers across the U.S., EVgo's owned and operated network spans 60 metropolitan areas across 30 states, with more than 375,000 customer accounts. As of the end of the first quarter of 2022, we had 2,200 stalls in operation or under construction. The DCFC chargers we currently install are typically 100-350kW, however as a first mover, there are still legacy 50kW chargers and Level 2 chargers in our existing network, in addition to the dedicated fleet chargers from L2 through to high powered DCFC we have built and continue to build.

2. ***System Block Diagram***
   FDOT is interested in a high-level system block diagram that illustrates all components and connections required to create the proposed system.

   EVgo is available to discuss specific questions in a meeting with FDOT regarding the components and connections for an EVSE system.

3. ***Hardware Information***
   FDOT is interested in datasheets and technical specifications for components included and required to create a typical DCFC system.

   EVgo invests significant time, effort, and financial resources into EVSE testing and development at our EVgo Innovation Lab. The final technical specifications for EVgo hardware, and other requests in this section, may contain confidential business information, particularly at this early stage of market development. We have attached a high-level specification sheet for some of our hardware, but can answer any questions about confidential information in a meeting with FDOT.

4. ***Software Information***
   FDOT is interested in information on software components included and needed to create a typical DCFC system.

   Please see response to question 3.

5. ***Maintenance Plan***
   FDOT is interested to know about the maintenance services and typical maintenance schedule for DCFC infrastructure.

   Please see response to question 16

6. ***Project Approach***
   FDOT is interested in the approach that your organization would take to deliver the DCFC EVSE.

   EVgo would follow our typical project development approach to identify and propose potential DCFC sites that align with FDOT's priorities.

50kW DCFC

KEY FEATURES

- CCS1/CHAdeMO
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE
- CELLULAR COMMUNICATION TO EVgo BACKEND
- EVgo CERTIFIED
- ADA COMPLIANT
- UL CERTIFIED: UL 2202, UL 2231-1, UL 2231-2
- EVgo OPTIMA INTEGRATION READY FOR SMART ENERGY MANAGEMENT

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	50kW
EFFICIENCY	95%
SYSTEM	All-in-one
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	920V
OUTPUT CURRENT MAX (DC)	125A
DIMENSIONS	30.7” x 22.2” x 74.8”
INGRESS PROTECTION	IP 54, NEMA 3R
ENCLOSURE PROTECTION	IK 10

180kW DCFC

KEY FEATURES

- SIMULTANEOUS CHARGING
- UL CERTIFIED
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE
- EVgo OPTIMA INTEGRATION READY FOR SMART ENERGY MANAGEMENT
- DUAL CCS1
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- EVgo CERTIFICATION IN PROGRESS, Q1 2022

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	180kW
EFFICIENCY	95%
SYSTEM	All-in-one
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	920V
OUTPUT CURRENT MAX (DC)	200A
DIMENSIONS	34.6” x 22.2” x 74.8”
INGRESS PROTECTION	IP 54, NEMA 3R
ENCLOSURE PROTECTION	IK 10

180kW DCFC

KEY FEATURES

- SIMULTANEOUS CHARGING
- UL CERTIFICATION IN PROGRESS
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE
- EVgo OPTIMA INTEGRATION READY FOR SMART ENERGY MANAGEMENT
- DUAL CCS1
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- EVgo CERTIFICATION IN PROGRESS, Q1 2022

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	180kW
EFFICIENCY	95%
SYSTEM	All-in-one
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	920V
OUTPUT CURRENT MAX (DC)	400A peak, 300A continuous
DIMENSIONS	34.6” x 22.2” x 74.8”
INGRESS PROTECTION	IP 54, NEMA 3R
ENCLOSURE PROTECTION	IK 10

50kW DCFC

KEY FEATURES

- DYNAMIC POWER SHARING
- CCS1/CHAdeMO
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- SIMULTANEOUS CHARGING
- EVgo CERTIFIED
- UL CERTIFIED
- EVgo OPTIMA INTEGRATION FOR SMART ENERGY MANAGEMENT
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	50kW
EFFICIENCY	94%
SYSTEM	All-in-one
INPUT VOLTAGE (AC)	208V
OUTPUT VOLTAGE MAX (DC)	950V
OUTPUT CURRENT MAX (DC)	125A
DIMENSIONS	23.2” x 31.5” x 59.1”
INGRESS PROTECTION	IP55, NEMA 3R
ENCLOSURE PROTECTION	IK 10

100kW DCFC

KEY FEATURES

- DYNAMIC POWER SHARING
- DUAL CCS1 or CCS/CHAdeMO
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- SIMULTANEOUS CHARGING
- EVgo CERTIFIED
- UL CERTIFIED
- EVgo OPTIMA INTEGRATION FOR SMART ENERGY MANAGEMENT
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	100kW
EFFICIENCY	94%
SYSTEM	All-in-one
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	950V
OUTPUT CURRENT MAX (DC)	200A
DIMENSIONS	23.2” x 31.5” x 59.1”
INGRESS PROTECTION	IP55, NEMA 3R
ENCLOSURE PROTECTION	IK 10

200kW DCFC

KEY FEATURES

- DYNAMIC POWER SHARING
- DUAL CCS
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- SIMULTANEOUS CHARGING
- EVgo CERTIFIED PENDING, EXP Q3 2022
- SMART ENERGY MANAGEMENT
- UL CERTIFIED: UL 2022, UL 2231-1, UL 2231-2
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	200kW
EFFICIENCY	96%
SYSTEM	All-in-one
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	950V
OUTPUT CURRENT MAX (DC)	400A Peak, 300A Continuous
DIMENSIONS	26.8” x 33.5” x 70.9”
INGRESS PROTECTION	NEMA 3R
ENCLOSURE PROTECTION	IK 10

200kW DCFC

KEY FEATURES

- DYNAMIC POWER SHARING
- EVgo CERTIFICATION, 2021 SEP
- UL CERTIFICATION IN PROGRESS
- EVgo OPTIMA INTEGRATION FOR SMART ENERGY MANAGEMENT
- DUAL CCS1, SIMULTANEOUS CHARGING
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	200kW
EFFICIENCY	95%
SYSTEM	1 cabinet + 1 dispenser
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	950V
OUTPUT CURRENT MAX (DC)	540A
DIMENSIONS	Cabinet: 31.5” x 39.4” x 78.8”, Dispenser: 19.1” x 26” x 78.7”
INGRESS PROTECTION	IP55, NEMA 3R
ENCLOSURE PROTECTION	IK 10

350kW DCFC

KEY FEATURES

- DYNAMIC POWER SHARING
- EVgo CERTIFICATION IN PROGRESS
- UL CERTIFICATION IN PROGRESS
- EVgo OPTIMA INTEGRATION FOR SMART ENERGY MANAGEMENT
- DUAL CCS1, SIMULTANEOUS CHARGING
- ADA COMPLIANT
- CELLULAR COMMUNICATION TO EVgo BACKEND
- RFID, CREDIT CARD, ISO 15118 READY, AUTOCHARGE

TECHNICAL SPECIFICATIONS

POWER LEVEL (kW)	350kW
EFFICIENCY	95%
SYSTEM	1 cabinet + 1 dispenser
INPUT VOLTAGE (AC)	480V
OUTPUT VOLTAGE MAX (DC)	950V
OUTPUT CURRENT MAX (DC)	540A
DIMENSIONS	Cabinet: 31.5” x 39.4” x 78.8”, Dispenser: 19.1” x 26” x 78.7”
INGRESS PROTECTION	IP55, NEMA 3R
ENCLOSURE PROTECTION	IK 10