ABM
Building Value

EV Charging Infrastructure Deployment Plan

RFI: DOT-RFI-22-9114-PB

Presented to:

Paul Baker
The Florida Department of Transportation

Presented by:

Robbie Astrop
Senior Business Development Manager
ABM | eMobility & Electrical Infrastructure

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2022

ABM Electrical Power Services, LLC

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June 28, 2022

Paul Baker
The Florida Department of Transportation
605 Suwannee Street, MS20, Tallahassee, FL 32399
co.purch@dot.state.fl.us

Dear Paul,

We appreciate the opportunity to offer ABM's eMobility services and experience to FDOT for turnkey projects as well as ongoing maintenance and repair programs. We share in FDOT's mission of powering economic growth across North America by providing clean, reliable energy and innovative energy solutions. ABM has teamed with the world's leading producers of EVSE and electrical equipment to offer the optimal customer experience in the Electric Vehicle business. As one of the largest EVSE supply, installation, and service support companies, ABM's eMobility and Electrical Infrastructure Team is excited to deliver a premier customer experience to FDOT.

Our extensive national coverage of primarily self-performed O&M field services offers a truly hands-on customer experience that spans all facets of EV project lifecycles, including the following programmatic elements:

- Full O&M Field Support Services for both Level 2 & DCFC EVSE to include commissioning and corrective, preventive & campaign maintenance
- Customer education and training
- Site evaluation and preparation
- EVSE product acquisition
- Electrical engineering
- Permitting
- Complete Installation and Validation
- Site management/maintenance (e.g., landscaping, paving/striping, lighting, signage & other required site build-out requirements)
- Third-party logistics including warehousing, inventory management & provisioning
- Training program development and support
- Electrical load testing
- Federal and local regulations
- Centralized monitoring and troubleshooting
- Equipment failures
- Warranty & Repair
- Monthly maintenance and testing
- Tailored Service Level Agreements (SLAs)

If we may provide any additional information or background on ABM to assist during your selection process, please let us know. We look forward to our continued discussions and the opportunity to continue to partner with you.

Sincerely,

Robbie Astrop
Senior Business Development Manager

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Response to RFI

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?

ABM Response: ABM Maintenance Experience:

ABM is the largest turn-key supplier and installer of electric vehicle charging stations in North America. We have installed charging equipment for over 2,000 different organizations, including over 28,000 charge ports, and successfully collaborated on countless EV charging station projects.

We designed a structured approach to pricing, product purchase, shipment, dealership installations, and warranty initialization, as well as post-install preventive maintenance programs. Our strategic partnerships with best-in-class charging manufacturers allow us to offer extremely competitive prices and flexible solutions coupled with an unparalleled service delivery experience. We offer over 30 models of EVSE and our trained experts within the state of Florida enable us to serve over one thousand stations with the ability to expand our capabilities. Additionally, ABM self-performs the majority of our EVSE projects ensuring consistent coverage and quality of service.

ABM has industry-leading experience with facility relationships, evident by our successful client programs and past performance. ABM brings years of eMobility and electrical Infrastructure experience and understands the operational requirements of a successful client's location. ABM's knowledge is key to designing and delivering cost-effective solutions.

FDOT will benefit from ABM's ability to apply past program knowledge to the success of the electrification program. This experience and knowledge make ABM capable of being FDOT's trusted advisor and partner as a combined team manages your utility interconnection relationship.

Preventive Maintenance

Preventive maintenance is an important part of facility maintenance management, planned maintenance helps to improve equipment life and avoid any unplanned maintenance activity. Using preventive maintenance in conjunction with a reactive maintenance strategy, you can control costs by minimizing downtime and maximizing uptime.

ABM's Preventive Maintenance is based upon our OEM equipment trained technicians knowing and understanding the common points of failure in the equipment. The ABM Preventive Maintenance program will be customized to each individual facility. When the equipment use is higher, we can increase the frequency and visits in the program to meet the facilities and equipment's specific needs and requirements.

Electrical Power Capabilities

- **40,000+** parking lot lights and poles maintained

- **18,000+** EV charging stations installed
- **100%** funding for facility upgrades through PACE
- **24/7** emergency support service
- **50%** of Fortune 500 companies rely on ABM
- National and local presence

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.**

   ABM Response: We believe NEVI funds should be used for two purposes:

   – Further develop/enhance your current and future alternative fuel corridors: I-95, FL Turnpike, I-4, etc.

   – Provide DCFC along existing evacuation routes

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

   ABM Response: Initiating your program using competent and adequately experienced EVSE providers capable of providing total solutions ensures swift and hassle-free implementation and uninterrupted service. This includes battery storage for load control, resiliency, power needs in rural areas.

   Funding must be allocated to O&M for these assets with SLA's for any service provider. Much of the poor customer experiences we been observed in the marketplace relate to lack of parts from OEM's and lack of budget to properly maintain EVSE equipment. Additionally, because of the load requirements for these DCFC sites, circuit capacity on the utility supply side could become an issue. FDOT will want to ensure that alternative sites are available if a primary site needs significant utility upgrades. Utility upgrades can elongate electrification, particularly with transformer lead times we are seeing in the marketplace. Elongated RFP processes can slow down deployments as can lead times on equipment needed to energize sites. ABM can help mitigate both of these issues.

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?**

   ABM Response: We look forward to the opportunity to jointly develop these locations. Current ABM DCFC projects include such amenities as bathrooms, food/drink availability, and Wi-Fi capability. We recommend planning for adequate parking for current light duty EVs and near-term medium/heavy duty EVs. Modern truck stops, larger convenience stores, and turnpike travel centers are all great potential locations. Pull-through spaces can be advantageous for DCFC installations. Greenspace can help reduce make-ready costs and pulling cables.

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

   ABM Response: As a national facilities management provider, ABM's major commercial real estate partnerships allow for collaboration with convenient store and truck stop developers to jointly choose optimal sites with FDOT's input. We have the ability to perform site contact and scope potential DCFC projects in a programmatic fashion as we have with other largescale deployments. We have the

ability to perform site contact and scope potential DCFC projects in a programmatic fashion as we have with other largescale deployments.

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?**

ABM Response: N/A – ABM looks forward to collaborating with your chosen transportation design/engineering firm. The EVSE Market and technology landscape is evolving so quickly, that we don't know what we don't know to predict the future. We do believe that 'plug-and-charge' is coming as is inductive charging, but how that would affect or benefit DCFC deployments is yet to be seen.

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.**

ABM Response: ABM Partnerships

ABM is a channel value added reseller (VAR) partner to over thirty EV supply equipment OEM manufactures across the EV charging ecosystem. The ABM eMobility team continuously adds new channel partner relationships to our extensive portfolio of partners to facilitate offering a broad range of charging solutions to our clients and maintain a consistent and reliable supply chain of equipment to meet customers' requirements and project timelines.

ABM's partnerships include General Motors, Volvo, Ford, Cadillac, BMW, Electrify America, Electrify Canada, the NY Power Authority, the NY Metropolitan Transit Agency, and the Port Authority of NY/NJ.

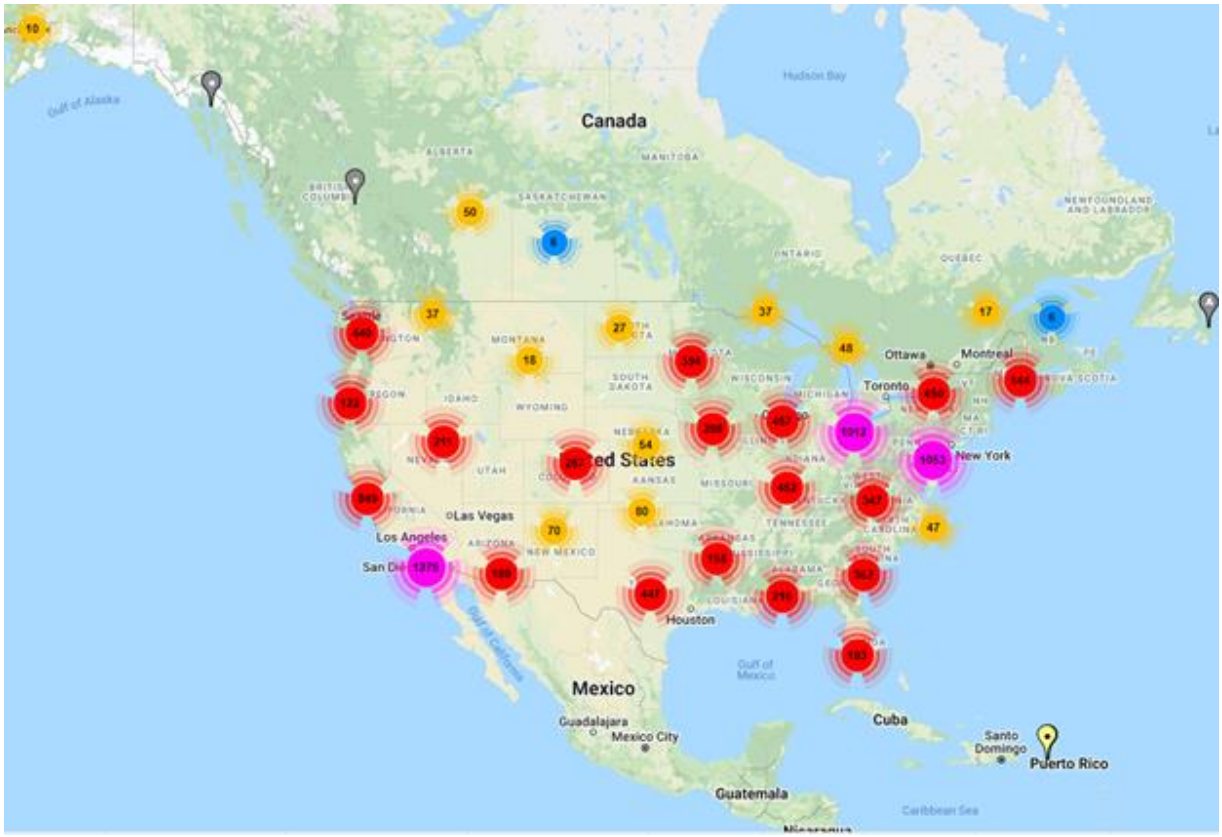
Sample of Current Offerings:

eMobility Service Footprint

ABM has a substantial national footprint across the US and Canada. Future expansion plans are driven by customer service requirements and demand.

ABM has a large network of local service provider partnerships to ensure we properly serve our service clients; this reach will allow us to be available and perform service and maintenance work duties at the specified locations in the allotted response times.

National Service Area Client Locations:



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.**

   ABM Response: Our mutual success depends upon trusting relationships on many levels, fostering open and transparent communication and collaboration. We appreciate FDOT's process of gathering information through this thorough RFI process and look forward to discussing specific projects. We find that continuous engagement, transparency, and strategic planning facilitates the most productive deployments/relationships.

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.

ABM Response: FDOT benefits from our direct experience:

- Selling complete projects
  - Design
  - Engineering
  - Equipment
  - Infrastructure Upgrades
  - Local Service/Support
- Leasing Projects
  - EVs
  - DCFC
- Providing EV Charging-as-a-Service (CaaS)
- Providing Equipment and Support on a Cost Per Mile or Usage Factor

We look forward to collaborating with FDOT to determine the best program for the State of Florida. We can have operated under MSA's that are established for largescale deployments. Additionally, we can leverage an existing agreement with a rider to ease the contracting process; we are open to what works best for the state of Florida.

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.

ABM Response: Yes, we have an extensive workforce in the State of Florida and ensure adequate coverage and proper training. Our robust training programs for all our service offerings include enhanced maintenance and support methods implemented by our Florida-based offices. At this stage, many large deployments are leveraging a third-party for maintenance services; that third part often uses local labor, which can offer a benefit to local communities.

ABM Technician Qualifications:

Installer Training

All ABM Electricians are required to complete OEM Installer Training Certification Programs and comprehensive ABM field training where they learn how to perform the following EVSE activities:

- Site Evaluation – Electrical Evaluation / Charging Station Layout / ADA Evaluation
- Installation of Equipment
- Pinpointing / Activation / Provisioning
- Troubleshooting / Maintenance

Service Technician Qualifications

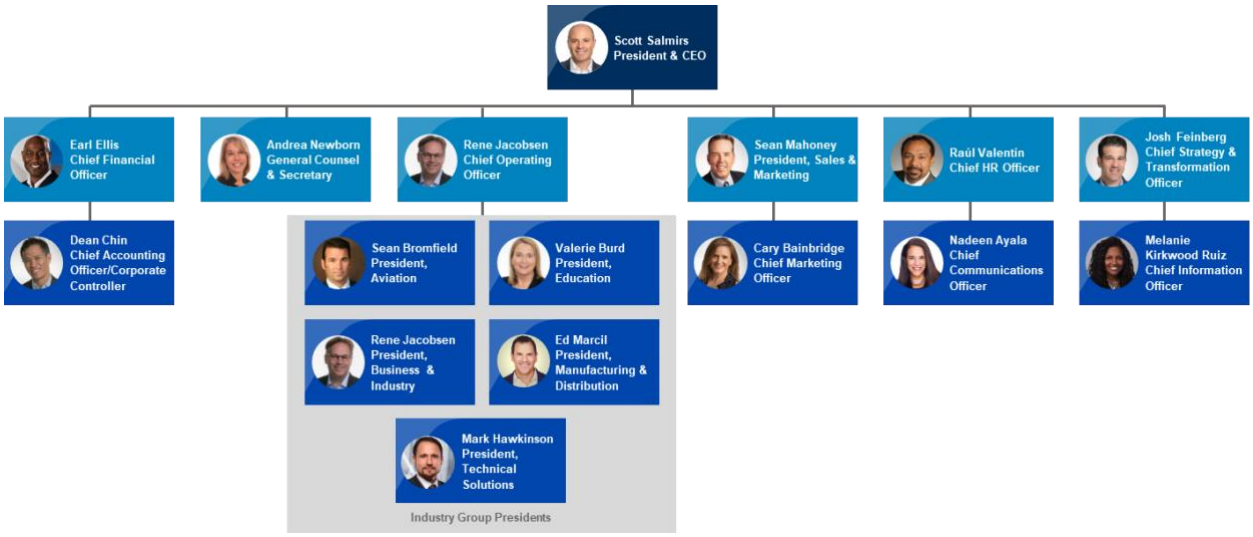
- Proven and documented training/certification in the scope of work they are to perform.
- Proven through observation, they can perform their required scope of work in a logical and well-thought-out manner.

- Proven through observation and training, they can work safely taking their safety and health and the safety and health of others working with them as the utmost priority.
- The foresight to understand that equipment is constantly changing, and training is always needed to keep up with change.
- The willingness to adapt and learn as codes, equipment, and possibly policies/procedures are changed.

Roles & Responsibilities

- Maintain and repair electrical equipment and systems of all types, for both commercial and industrial customers.
- Diagnose and repair electronic, mechanical, and electrical components of these systems.
- Work with dispatch to ensure schedule is maintained and delays are properly communicated to the customer.
- Responsible to respond immediately to all service emergency needs of our customers.
- Work rotating shifts as required, days, nights, and weekends. Overtime is required as necessary.
- Maintain good working order of company vehicle including refueling as necessary, reporting any mechanical issues. Vehicles should be washed regularly.
- Maintain proper stock, parts, tools, and safety equipment in the vehicle.
- Document all equipment repairs: make, model, serial number, necessary test measurements, and pictures as necessary.
- Diagnose diverse service issues, obtain any replacement parts, calibrate the system to the manufacturer's recommendations.
- Communicate to dispatch, parts procurement, supervisors, and managers, as needed, to keep company and customers informed about work progressions.
- Submit detailed, complete, and timely reporting.
- Participate in company-provided training opportunities on the latest industry technologies.
- Ensure the performance of preventive maintenance on all equipment is completed within the allotted schedule.
- Ensure strict adherence to critical facility work rules and safety procedures.
- Be familiar with all applicable Federal, State, and local rules, codes, and regulations.
- Observe all company procedures and safety rules.

ABM Leadership Team Organizational Chart



Key Roles

- Project Managers: Responsible for ordering materials, scheduling EV equipment deliveries, issues PO numbers to local ABM offices for electrical work. Coordinates any sub-contractor activity such as concrete work.
- Professional Engineers: ABM electrical engineers have been involved in EV charging infrastructure design from the beginning. They are responsible for providing design and permit-ready drawings, ensuring that local electrician builds to approved electrical design and answering all design questions from general contractors and engineering firms.
- Field Audit Engineers: Meets with site contact or general manager, presents *Partnering for Success* presentation, accesses electrical rooms, panels, performs Power Readiness Check, and assists the staff of professional engineers with specific site layout and design.
- Warehouse and Shipping: Coordinates shipping, receives orders from PM, schedules bulk deliveries, if possible, to local ABM office to provide the lowest cost solution for logistical supplies.
- Electricians: Works with staff professional engineers, field audit engineers, and PM to coordinate scope and delivery of EV equipment, provide install services, permit application and submittal, final inspections, site validation, and charging station provisioning.
- Administrative Support: Outreach to site managers to coordinate all activity from initial dealership virtual or onsite visit to uploading site-specific materials to Client Portal, responsible for provisioning, billing, C.A.R.E. call post-installation and delivery of the Site Welcome Kit responsible for the 866.226.2838 EV hotline.
- All key ABM team members have been involved in the most recent OEM auto dealer rollouts & various International EV projects.

Key Personnel:

- **Justin Halstead, Vice President**

  Justin Halstead is the Vice President for the ABM eMobility & Electrical Infrastructure team. Justin is responsible for the leadership, daily activity, and training for the team of sales, accounting, and operations professionals in the Electric Vehicle Infrastructure Industry. He drives sales, revenue, and profit performance for the team through direct P&L responsibility. Through his leadership team he manages thousands of large vehicle manufacturer dealership EV Installations, airport electrifications and fleet EV Infrastructure construction projects. Justin is responsible for a $250 million sales pipeline and $70 million per year revenue performance.

  Justin began his career with ABM in August 2008 as the Operations Manager for the Dayton, Ohio Mechanical business and he has held several roles within the company. Prior to transitioning to the eMobility team, he was the Senior Director of Operations for ABM Technical Solutions. Justin was born and raised in Dayton, Ohio. He joined the United States Navy directly out of high school and served eight years on active duty working as an Electronics Technician aboard the USS Curtis Wilbur (DDG-54) and Work Center Supervisor for the Naval Telecommunications Station, Guam. After his time in the service, Justin returned to Dayton to finish his education and graduated from Wright State University.

- **Barry Carr, Director of Business Development**

  Barry is the Director of Business Development for ABMs' eMobility Group. In that role, he works with public and private fleets to procure, install, and maintain EV charging equipment. Barry also volunteers as the Executive Director/Board chair of the US Department of Energy's local Clean Cities Coalition. Barry has over twenty-five years of experience providing national support to a variety of alternative fueled vehicle, component, and energy infrastructure suppliers.

  Based in New York, Barry has worked with many advanced energy and alternative fuel companies in the role of project management, education/outreach, training, government relations, direct sales, and marketing. He is currently involved in multiple EV Charging Implementation projects, working with utilities, educational fleets, and government fleets to provide charging solutions. Barry is a member of the US DOE's Clean Cities Hall of Fame and has authored several publications related to the alternative fueled vehicle industry.

- **Robbie Astrop, Senior Manager of Business Development**

  Robbie Astrop has been in a technical sales role in the electrical industry since 2014, primarily working with electric utilities. Previous projects supported include EV charging, distribution automation, demand response, renewable deployments, LED lighting, transmission/substation/ distribution builds, metering/AMI, and digital twin. Robbie has experience supporting some of the largest utility owned EVSE programs in the country with both investor owned and public power utilities. He has a B.S. in business from the University of Tennessee and an MBA from Virginia Commonwealth University.

- **Thomas Berton, Director**

  Thomas Berton is the Director for the eMobility and Electrical Infrastructure group at ABM Electrical Power Services, LLC, a $250 million business within the ABM Enterprise. Thomas is responsible for the leadership, daily activity, and training for the team of Engineers, Estimators, and Project Managers with a heavy emphasis on the United States and Canada. He leads

Engineering, Estimating, and technical solutions for the business with a focus on operational excellence and customer satisfaction.

Thomas began his career with ABM in May 2010 as the Project Manager for ABM's Bundled Energy Solutions business. Before joining ABM, he held positions as Vice President of Villi Electrical Group, Inc., Applications Engineering Manager for ASI/Robicon a division of High Voltage Engineering, and Project Manager and Project Electrical Engineer for Mannesmann Demag (SMS Demag). Thomas has 29+ years of heavy construction, design, equipment manufacturing, commercial and industrial experience in controls, power, mechanical and electrical systems.

Thomas graduated from Penn State University in Harrisburg, PA. He achieved Eagle Scout, class of 1986, from Troop #2 in Bridgeville, PA. In addition, he is also the President of Impacted, Inc. (www.impactedinc.org) a 501(c)3 nonprofit whose mission is, "impacting the effects of concussion in youths through prevention, education, advocacy, and support."

- **David Redys, EV Design Engineer**

  David is the Design Engineer for ABM's eMobility team. In this role, David is involved in hardware and software development and design. David has 32 years of experience in electrical design engineering.

  David graduated from the University of South Carolina with an MBA in finance and international business. He also earned a BA in electrical engineering from the Georgia Institute of Technology.

- **Christopher Malm, Service Manager**

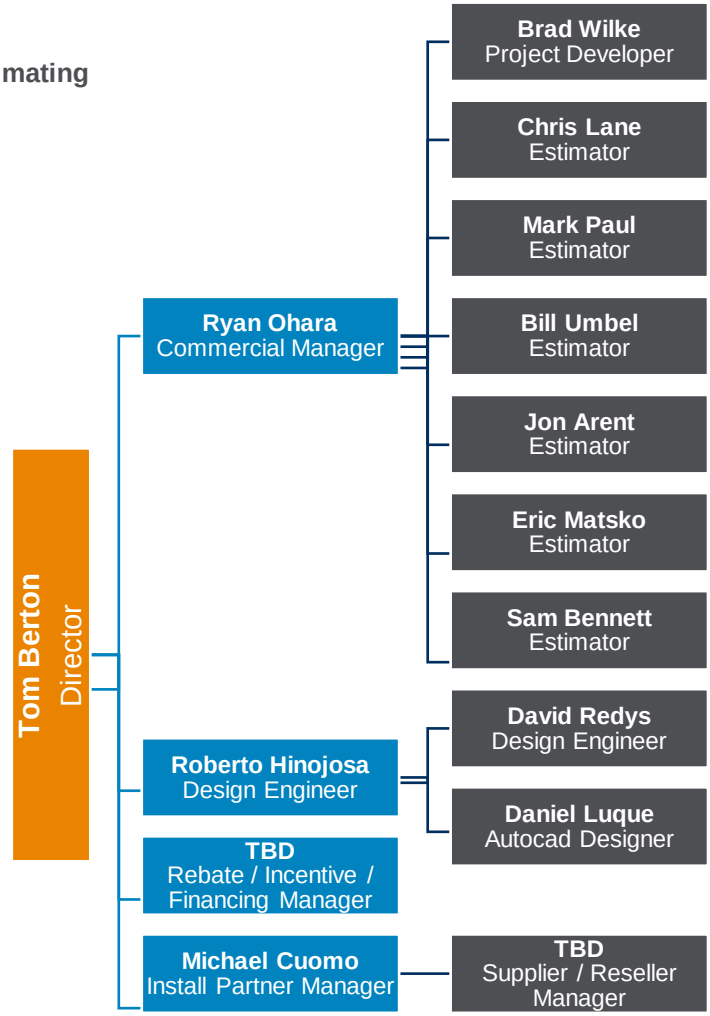
  Chris is the Service Manager for the ABM eMobility & Electrical Infrastructure team. He is responsible for the development, growth, and implementation of service for ABM eMobility customers and partners. He drives service through implementing new market requirements by working with both ABM OEM partners and current contract customers. Through his leadership and operations team, he manages hundreds of annual maintenance contract customers and locations along with developing break fix services for ABM OEM partners.

  Chris began his career with ABM in August 2021 as the Service Manager for ABM eMobility & Electrical Infrastructure. Prior to joining to the eMobility team, he spent more than 20 years developing and managing service programs from both a manufacturer market to third party maintenance providers focusing on Mission Critical Service.

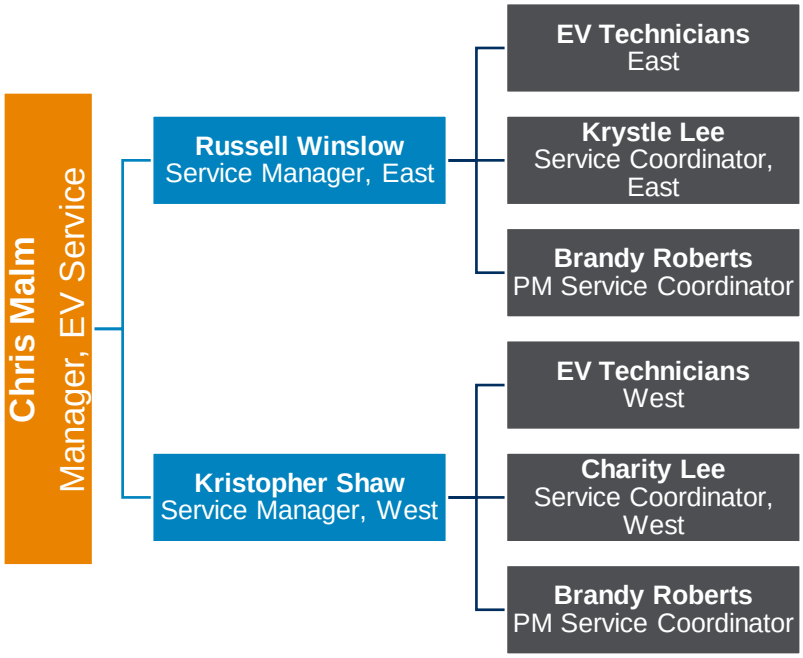
  Chris joined the Navy directly out of high school and served 10 years on active duty working as an electronics technician aboard the USS Pennsylvania SSBN 735, USS Toledo SSN 769, and Oxygen Generator Instructor at TTF Kings Bay, GA. After his time in the service, Christopher returned to New York as Service Manager for ASCO Power Technologies. During that time, he received his degree in business management and project management.

Organizational Charts

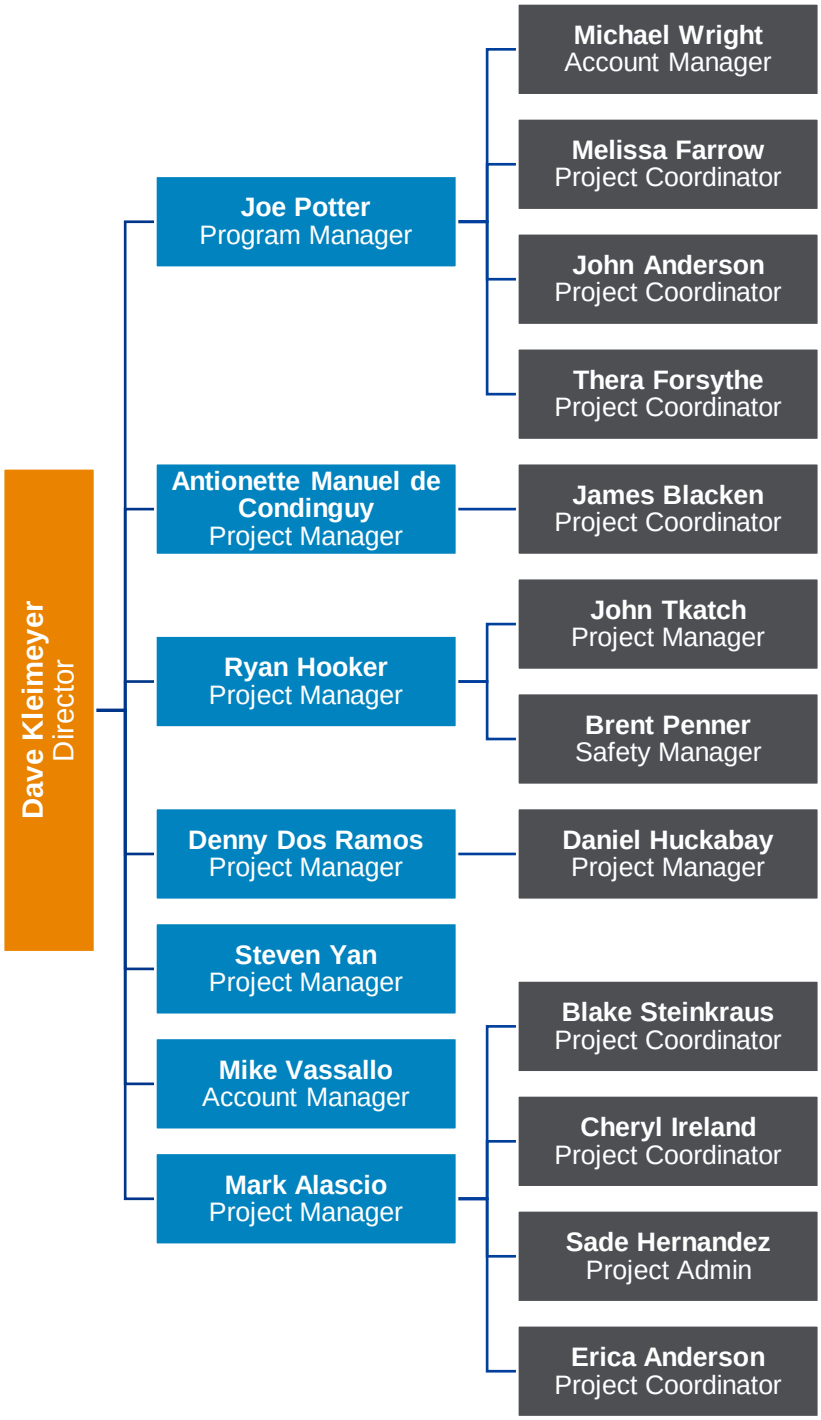
- **Engineering and Estimating**



- **Service**


Chris Malm
Manager, EV Service
Russell Winslow
Service Manager, East
Kristopher Shaw
Service Manager, West
EV Technicians
East
Krystle Lee
Service Coordinator, East
Brandy Roberts
PM Service Coordinator
EV Technicians
West
Charity Lee
Service Coordinator, West
Brandy Roberts
PM Service Coordinator

- **Program Management**



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.**

    ABM Response: We anticipate single unit installations with adequate power availability and easily obtained permits could take ninety days from start to finish. More complex DCFC sites featuring multiple units may take longer than ninety days. Upon award of contract and commencement of partnership, we would be able to assess the projects in more detail and provide clear implementation plans through frequent and transparent communication and reporting to ensure we maintain agreed upon timelines and meet expectations. We can adjust for expected or unexpected supply chain challenges, mitigated by our advantageous supplier partnerships. Installation can be slowed with laborious permitting requirements, utility upgrade, site upgrades, and material lead times.

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.**

    ABM Response: ABM can meet these standards and we have recently requested updates from all of our equipment suppliers to ensure standards are met.

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.**

    ABM Response: We are familiar with current supply constraints within the EVSE/DCFC world, as well as supply and cost issues with components supplied by your utilities. We take steps select and collaborate with multiple suppliers to mitigate this issue for all applicable components. Additionally, we can provide O&M services to stock parts for maintenance of these assets. We will scope a support model that would be of the most benefit to meeting FDOT's goals.

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?**

    ABM Response: ABMs' eMobility Team is the equipment supplier/installer for the ABM Federal Team, installing and maintaining EVSE on military and high security applications, and we require our suppliers to meet NIST cybersecurity standards.

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.**

    ABM Response: We are experienced with time/energy/power-based fee structures, along with others. Having installed over 28,000 ports to-date and with over 4,500 current projects, ABM's relationship with software providers, backup power sources, electricity marketing, and carbon credits ensure lower operational costs for FDOT. Additionally, ABM has worked on complex systems integrations that incorporate critical systems associated with the driver experience and/or customer requirements.

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.**

ABM Response: ABM follows the charger manufacturers maintenance schedules. These range from preventive maintenance to quarterly recommended maintenance procedures on most DCFC units. Additionally, we do not offer any product without OEM provided training for our ABM local and regional service team. We are informing our maintenance processes through a continuous improvement program and are working to develop industry leading predictive analytics.

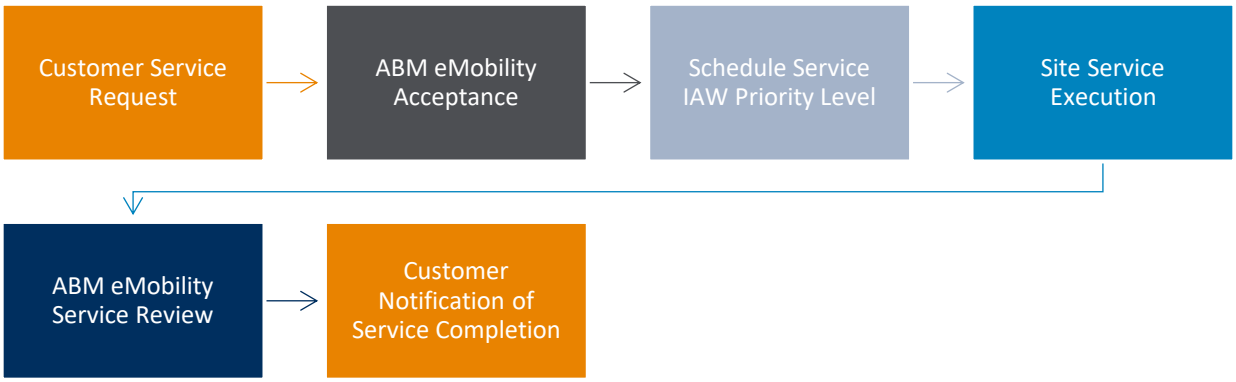
17. **How would your EVSE share data to a FDOT sponsored central data repository? What type(s) of data can you provide?**

ABM Response: ABM provides service to many public, private, and military entities using cloud-based data storage featuring multiple security levels. We share as much or as little of FDOT-owned data as your managers would like. Typical data requests include charger uptime, charger usage, charge load profiles, cost of charging, retail sale of charging, and incident reports. ABM proposes to customize a program for FDOT.

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.**

ABM Response: ABM has the experience as a leading supplier and installer of EVSE with many different situations, including emergency power support. As mentioned earlier, we recommend either battery or generator powered resiliency on your public charging installations and solar powered backup battery options to lower total operating costs. We hope to work with FDOT on providing EVSE on your evacuation routes from your coastal areas to safer inland areas. ABM Industries offers a robust O&M solution with contractual commitments to ensure station uptime:

Technical Escalation Path



GUARANTEED RESPONSE TIME OFFERINGS

WO Priority	Included WO Types	Scheduled	Completed	Closed	Available
Emergency	Corrective Maintenance (CM)	1 hour	4 hours	1 day after resolution	24/7/365

Critical	Corrective Maintenance (CM)	4 hours	48 hours	1 day after resolution	24/7/365
High	All work types	4 hours	5 days	1 day after resolution	24/7/365
Normal	All work types	24 hours	10 days	1 day after resolution	24/7/365
Low	Corrective, Preventive, Campaign	48 hours, exclusive of weekends and holidays	60 days or next tech onsite, whichever comes first	1 day after resolution	Business Hours

STRATAGIES 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?

ABM Response: ABM currently works with over three hundred school districts nationally, many in remote, rural, and/or low-income communities. As FDOT is aware, priorities are being given in the NEVI program to these areas. ABM proposes to partner with FDOT and our grant mining partners to establish and cooperatively provide incentives related to electric transportation for these communities. We currently assist many such areas in implementing electric school bus programs. We also provide mobile charging solutions that could be moved in cases of low/no utilization. Grant funding can be leveraged in addition to NEVI funding to incorporate DER's such as battery storage and solar into rural installations when the DER integration does not exceed the investment for capacity upgrades on the utility circuit (up to $15million.) These grants could mitigate the risk of low utilization with high capital outlays.

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

ABM Response: ABM and our partners have experience providing EV charging and have employed EV incentive programs to increase usage in remote areas. We work with FDOT and the State of Florida to assist in equitably developing EV DCFC infrastructure throughout the state.

Specific Information Requested

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

ABM Response: We have deployed many different designs nationwide which include 8+ DCFC OEM's. Key clients are referenced below. In certain instances, ABM Industries will co-locate L2 with DCFC installations to reduce capital and ongoing charging costs for fleets. We partner with large customers for programmatic deployments that incorporate a mix of EVSE's and site designs. Our engineers can design DCFC installations based on site or vehicle requirements.

DCFC OEM's supplied to market include ABB, Blink, BTC, Chargepoint, Delta, Enel, FLO, and Tritium.

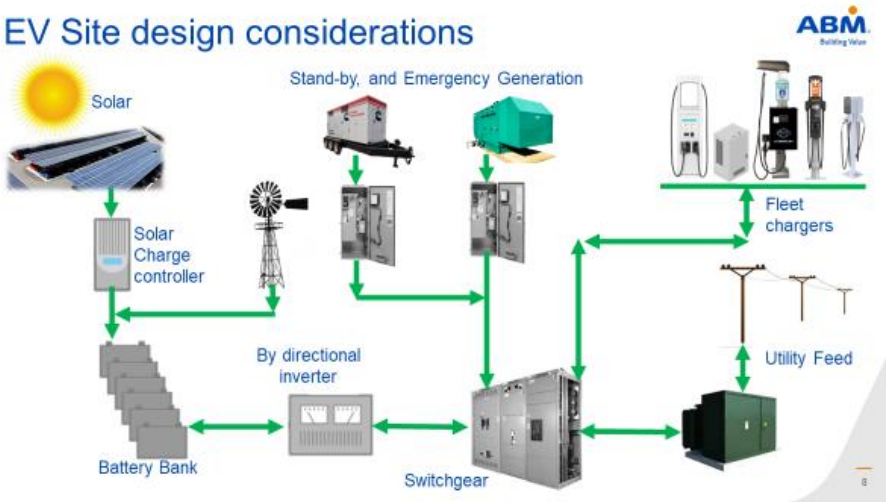
NETA Accreditation

ABM is an International Electrical Testing Association (NETA) accredited company with more than $90 Million in annual revenues in the Electrical Power Division. ABM Electrical Power Solutions was a founding member of the International Electrical Testing Association (NETA).

NETA was established in 1972 to ensure the integrity of third-party electrical testing and certification. NETA is the standards developing organization for the American National Standards Institute (ANSI) and publishes Acceptance and Maintenance Testing Specifications. NETA certifies member companies and their technicians, and it is the highest accreditation possible in the industry.

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.

ABM Response: The system design is dependent upon requirements for each site. For example, some sites may not require a site controller or dedicated pad mount transformer, others may if they're incorporating other technologies like battery storage or solar. A high-level overview including some of the considerations that we incorporate into site designs is enclosed below:



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

   ABM Response: Please go to the following link to access data sheets and technical specifications for the DCFC hardware that ABM Industries has deployed: https://www.dropbox.com/sh/v4j41yjnyts8q98/AACas9vQc0oxEQpqkr_qsGOVa?dl=0

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

   ABM Response: The amount of software customization and integration via API calls for largescale deployments is dependent upon customer requirements. We intend to propose an OCPP-based system, which is cloud based. The componentry of the DCFC assets that we provide will communicate with this cloud-based system either via cellular modem or fiber connection. Depending on requirements, we can provide multiple options for the software associated with this deployment.

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

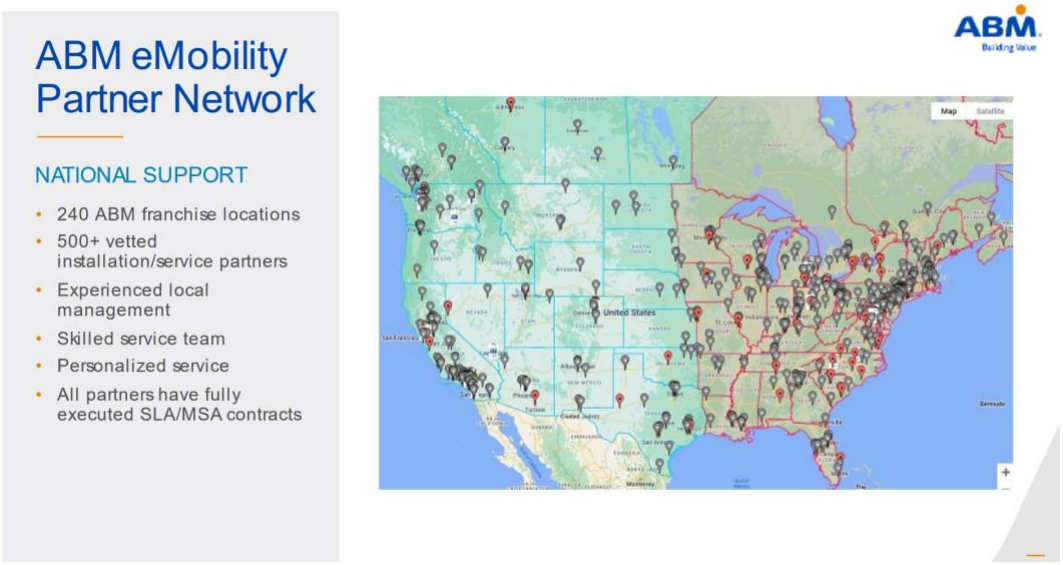
   ABM Response: ABM provides turnkey maintenance services that include SLA's in a performance contract. Our services are based upon the required schedules provided by the manufacturer of the

equipment that we provide. A variety of factors can affect the maintenance plan including the OEM supplier being deployed and the KW output and componentry of the chargers. Below is a list of the maintenance services that we can offer for DCFC infrastructure. Pricing is customized based on the asset base and desired service level:

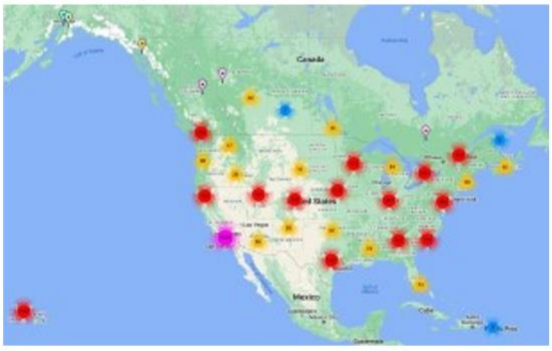
Maintenance Service Component Outline:

Service Component	Description
Dispatch Management	Receive dispatch requests with the scope and required parts; coordinate service resources & provisioning to be on-site within SLA.
Routine Maintenance (DCFC)	Coordinate corrective maintenance logistics with qualified personnel.
Routine Maintenance (L2)	Coordinate corrective maintenance logistics with qualified personnel.
Preventative Maintenance (DCFC)	Ensure preventative maintenance activities are completed at recommended intervals.
Preventative Maintenance (L2)	Ensure preventative maintenance activities are completed at recommended intervals.
Emergency Maintenance (DCFC)	Support campaigns to update charging HW and/or SW.
Emergency Maintenance (L2)	Support campaigns to update charging HW and/or SW.
In-house Spares Management	Provide inventory locations and provisioning for service parts.
Site Maintenance	Landscaping, paving, striping, lighting, signage, snow removal, etc.

ABM Maintenance Service Capabilities:

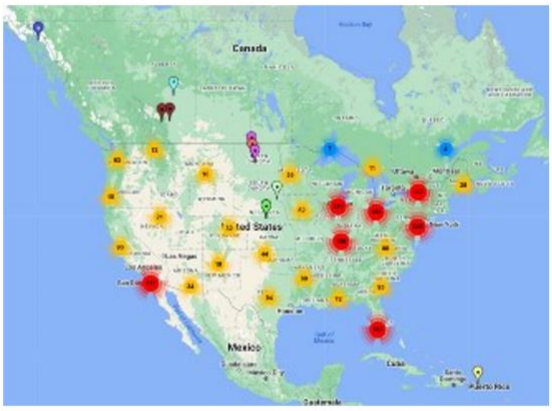


Repair Service Location History



- 5,116 repair service requests performed
  - ChargePoint
  - Electrify Canada
  - Tritium
  - ABB
  - Blink Charging
  - IES-Synergy
  - BTC Power
  - Wabasto
  - Bosche
  - EvConnect
  - ADS-TECH
- EV charger type serviced
  - Level 1 AC
  - Level 2 DC
  - Level 2 DCFC
  - Level 3 HFDC

Maintenance and Service Program Locations



- 2,145 EV charging locations currently being performed
- 1,450 approved maintenance contracts to commence on installation/validation completion
- Lawa – 2,500 EV charging stations maintained and monitored daily
- Ny power authority –3bus depot locations providing service and maintenance on pantograph EV bus charging systems

gm Audi PORSCHE HARLEY-DAVIDSON electrify canada LiveWire New York Power Authority LAWA

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

ABM Response: A high-level overview of our process to manage deployments is included below. Our project approach is based upon the requirements set forth by our customers. Because we have installed tens of thousands of EVSEs throughout North America, we understand the nuance of each project and work to mitigate risks for each deployment.

EV Electrification Process

Initiation

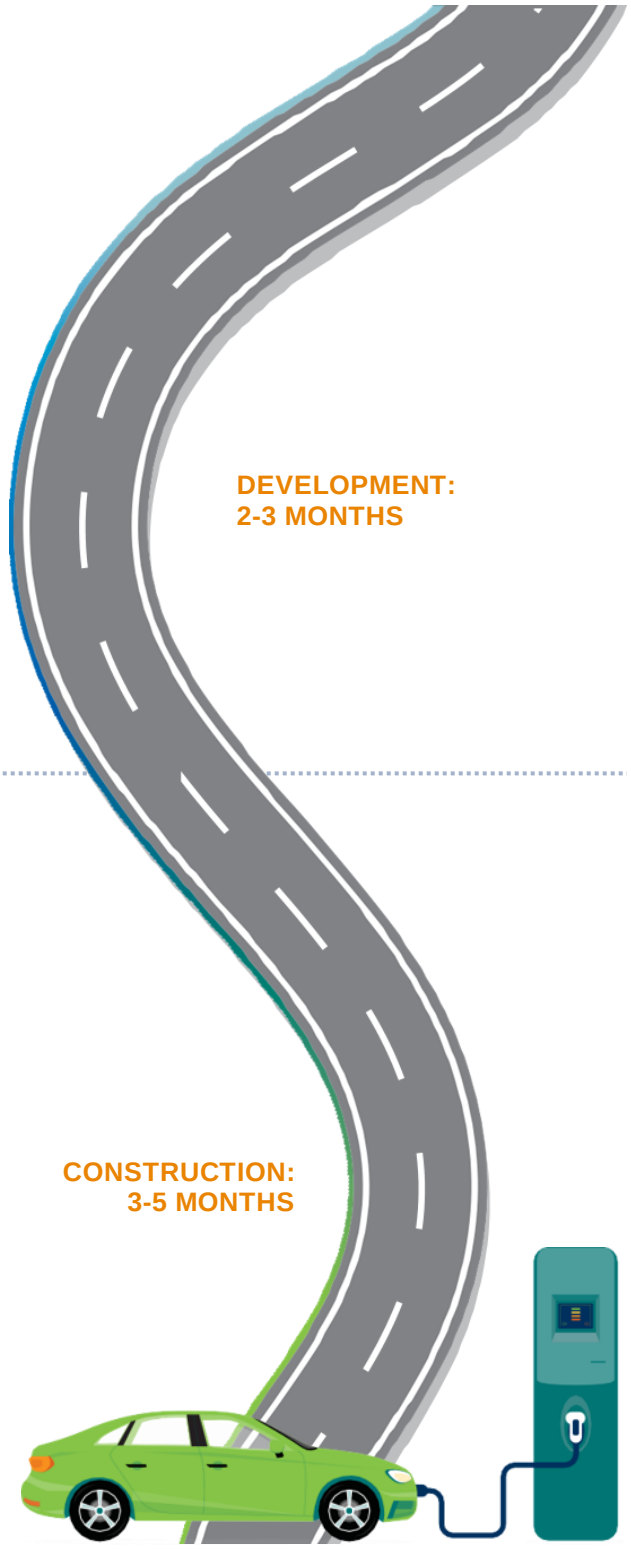
- Notification of project initiation by dealership
- Documentation is requested
- Schedule site / virtual consultation

Site Consultation

- Dealer training and education
- Review the facility layout and EV charging requirements
- Futureproofing & ADA requirements

Proposal

- Documentation & estimate is compiled
- The proposal is provided to the dealer
- Identify current rebates and incentives



Construction

- The signed proposal issued to ABM
- Permits are applied for, purchase orders issued for equipment and install
- Construction is scheduled with a dealership
- Equipment is activated / validated

Close-out and C.A.R.E.

- Contact is made by C.A.R.E. Advocate
- Verification of install is completed
- Invoicing is initiated
- Close-out packet is provided