Commonwealth of Massachusetts

Executive Office of
Energy and Environmental Affairs

Electric Vehicle Infrastructure Coordinating Council (EVICC) Meeting

December 11, 2025

Agenda

Opening

- Roll call, meeting agenda and objectives, and vote on meeting minutes
- Administrative Updates

Educational Presentation

- EVICC Assessment Technical Consultant Overview
- Section 103 Charging Hub Framework

Public Comment

Meeting Objectives

- Discuss the potential 2027 EVICC Assessment Technical Analysis
- Inform development of Charging Hub Site Selection Framework under development as part of the Section 103 process

Disclaimer: *The EVICC team invites presenters to speak about topics of interest to EVICC members and to the development of the second assessment to the Legislature. The Commonwealth does not endorse any particular company or organization.*

Vote on November Minutes

Administrative Updates

- Update on MassEVIP application form procedure
- The next EVICC Public Meeting will be held **virtually** starting at 1pm on **Monday, January 12th**

Rules for Presentations / Public Comment

Presentations

- Presenters should keep to the assigned time
- The EVICC Chair will allow questions from EVICC members first and then the public if time remains

Public Comments

- Use the “raise hand” function to indicate your desire to speak at the appropriate time
- Identify yourself and affiliation prior to commenting
- Limit comments and questions to 3 minutes
- Please engage in constructive and respectful dialogue
- Be able to substantiate assertions or claims in support of comments

Public Comments

2027 EVICC Technical Analysis

Early / Tentative Timeline

Objectives

- Complete analysis early enough to enable additional stakeholder engagement

Tent. Timeline

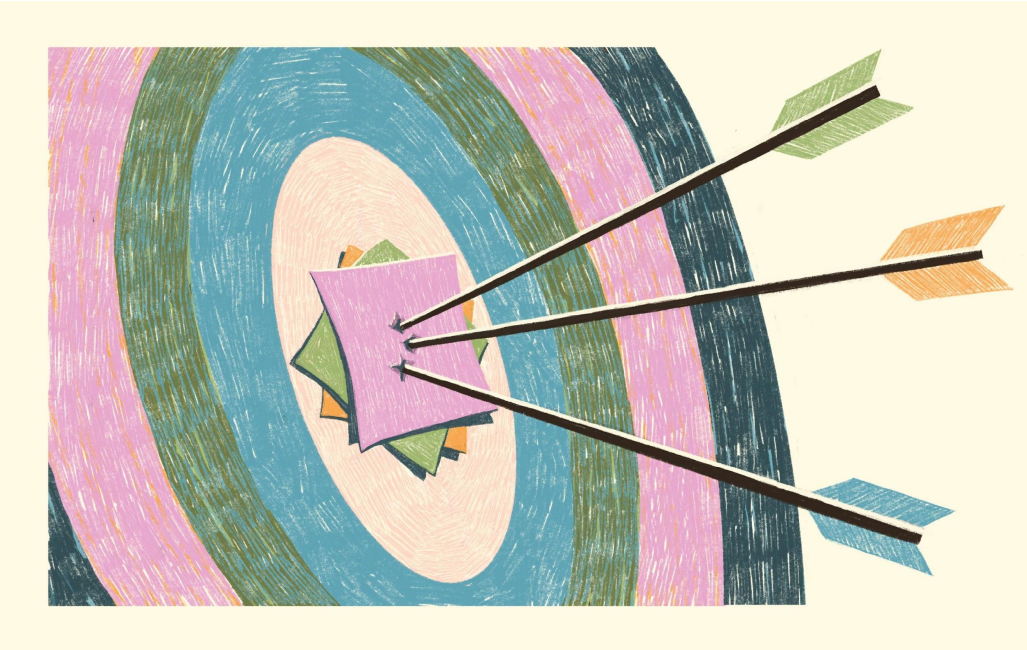
- **Early 2026:** Share draft scope of work for the technical analysis for the 2027 EVICC Assessment
- **First Quarter 2026:** Issue RFQ for technical consultant for the 2027 EVICC Assessment
- **Late 2026:** Share early technical analysis
- **First Quarter 2027:** Share initial recommendations based on technical analysis and 2025-2026 EV and EV charging trends
- **August 2027:** Third EVICC Assessment due to the Legislature

EVICC Assessment Objectives

- The Assessment will provide **a clear roadmap** for ***how*** Massachusetts will enable the deployment of EV charging infrastructure in support of the state's transportation electrification goals and other policy objectives.

EVICC Assessment Objectives (cont.)

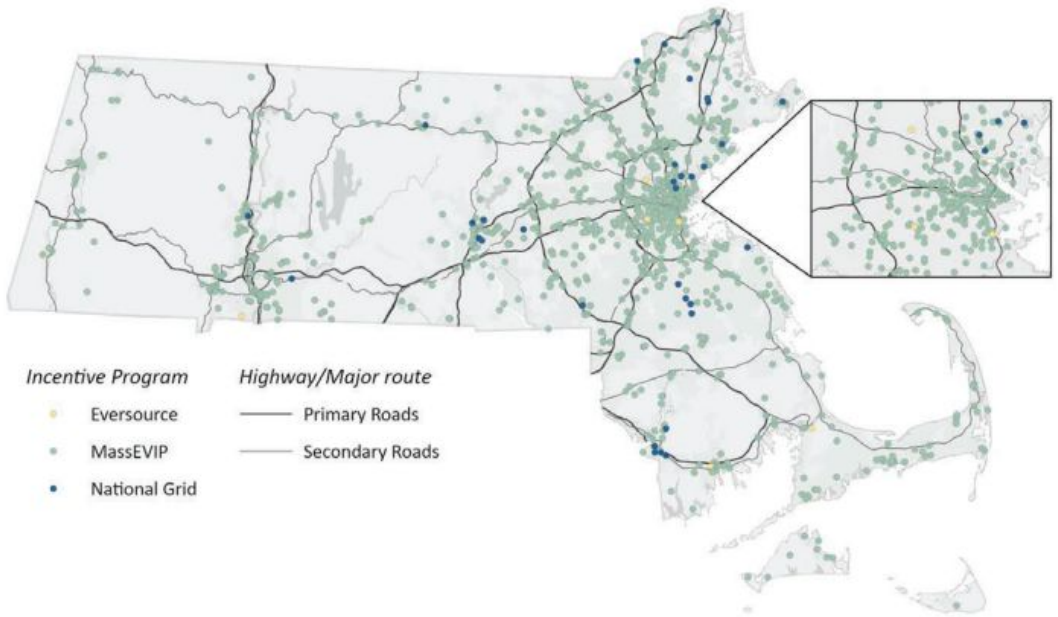
- **EVICC Assessments provides this roadmap by clearly laying out:**
  - The *current state* of EV charging in Massachusetts;
  - The desired *endpoint* that best meets the Commonwealth's policy goals; and,
  - *EVICC's recommendations on how* to get from here to the desired endpoint.



- **Each recommendations should identify:**
  - Which *state agency* or *agencies* will support / lead implementation; and,
  - The role of *local/regional governments*, *private companies*, and *electric utilities*.
- **The Assessment will also highlight:**
  - The interrelation with the 2035 Clean Energy and Climate Plan (CECP); and,
  - The role of EVICC in coordinating recommendation implementation.

Analysis Discussed for Second EVICC Assessment

Figure 4.4 State-funded workplace and fleet charging stations in Massachusetts



- The Second Assessment set out to include, as ***time, resources,*** and ***data availability*** allowed:
  - ✓ Analysis of statewide public, multi-family, workplace, and fleet EV charger deployment;
  - A granular evaluation of the type and location of EV chargers needed, focused on multi-family dwellings w/o off-street parking and EJ and rural communities;
  - Identification of geographies that require greater deployment and/or pace of deployment; and,
  - ✓ Identification of electric distribution feeders that likely require upgrades to accommodate electrification regardless of managed charging strategies.

Analysis Discussed for Second EVICC Assessment (cont.)

- EVICC also discussed including the following in the Second Assessment:
  - ✓ Locations of existing public and fleet Level 2 chargers and DCFCs;
  - ▬ Additional analysis on the necessary locations of Level 2 chargers in residential areas in EJ communities w/o off-street parking, in rural communities, and where transportation network company drivers live;
  - ✓ Visual notation of alternative fuel corridors and other major thoroughfares that may not be prioritized for federal funding opportunities;
  - ✗ Aggregated / anonymized utilization rates for DCFCs by geographies;
  - ▬ Locations of existing fossil fuel medium- and heavy-duty (MHD) fleets already identified for electrification, including state and Massachusetts Bay Transportation Authority (MBTA) fleets;
  - ▬ Locations of potential Level 2 and DCFC chargers at National Electric Vehicle Infrastructure (NEVI) sites and Massachusetts Department of Transportation (DOT) Service Plazas;
  - ✗ MBTA electrification requirements across all forms of transit;
  - ✓ Detailed managed charging analysis and discussion of managed charging best practices; and,
  - ✓ Information on the locations and loading of the Unitil and municipal light plant distribution grids.

Discussion Questions – 2027 Technical Analysis

- **What additional analysis should be considered?** Potential options are listed below – what are we missing?
  - More detailed / granular analysis on gaps in charging infrastructure at the municipal level and/or in areas with multi-family dwellings w/o off-street parking and EJ and rural communities
    - For example, what are the current and ideal ratios of EV chargers to the number of residents with off-street parking and the current and ideal ratios of EV chargers within ½ mile of residents without off-street parking
  - Fast charging capacities, utilization, and pay back periods,
  - Identify locations that could serve the most high-value EV charging use cases
  - Grid resilience and infrastructure needs for EVs before, during, and after emergency events
  - Analysis of slower pace of Level 2 deployment compared with fast chargers and any incentive program changes necessary to better match the state's projected charging needs
  - MassDOT and MBTA electrification requirements across all forms of transit

- **Considering how the state, local officials, and private industry would use the information, what additional analysis would provide the most value?**

Discussion Questions – 2027 Technical Analysis (cont.)

- **Considering how the state, local officials, and private industry use the information, what analysis from the Second EVICC Assessment can/should be deprioritized? Why?**

- **Are there ways that the EVICC Assessment analysis could be more impactful and/or more useful for municipal/local officials and private industry?**
  - For example, town-level EV charging forecasts were released on the EVICC website with the Second Assessment. Could/should that data be put into a more helpful form (e.g., GIS layers on a publicly available website) and/or promoted in a more helpful way?

- **What additional work could / should the development of the EVICC Assessment be used to support** (in partnership with relevant stakeholders)**?** Potential options include:
  - Long-term EV managed charging plans
  - Novel approaches to providing customer price signals re: the timing of EV charging, e.g., discussion of overnight EV rates, pilots to test price signals at public charging, etc.
  - Improvements to customer communication and experience with existing EV programs
  - Development of resources to support municipalities deploying EV charging
  - Enhancements to the state's educational efforts on EV charging
  - Improvements to siting and permitting and interconnection for EV charging

Section 103

EVICC Kick-off

December 11th, 2025

Energy+Environmental Economics

Chelsea Petrenko, Associate Director
Caitlin McMahon, Senior Consultant
Anna Clark, Consultant

Agenda

- **Setting the Stage**
  - Team Introductions
  - Section 103 Overview
  - Project Scope & Timeline
  - EVICC Involvement
- **Site Selection Framework**
  - Framework Introduction
  - Secondary Corridor Hubs vs Fleet/Mixed-use Hubs frameworks
  - Defining Secondary Corridors
  - Site Selection Criteria and Prioritization

Setting the Stage

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Team Introductions

- **E3** and **Cambridge Systematics** are supporting Executive Office of Energy and Environmental Affairs (**EOEEA**) and the Electric Vehicle Infrastructure Coordinating Council (**EVICC**) in carrying out the objectives of **Section 103 of the 2024 Climate Act**

Energy+Environmental Economics

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Section 103 Overview

- **Section 103 of the 2024 Climate Act established a new grid planning process for EV charging.**
- **Specifically, Section 103 requires:**
  1. EVICC to produce a 10-year EV charging forecast and identify potential electric distribution grid constraints.
  2. The EDCs to identify necessary grid upgrades based on a 10-year EV forecast and file them with DPU within one year of the release of the EVICC Assessment.
  3. **EVICC to work with stakeholders, state agencies, and the EDCs to identify charging hubs along transportation corridors and for medium- and heavy-duty vehicles, prioritizing areas that can serve multiple use cases.**
     - EVICC to retain a consultant to help identify these hubs via technical analysis and engagement with EVICC members, stakeholders, and the EDCs.

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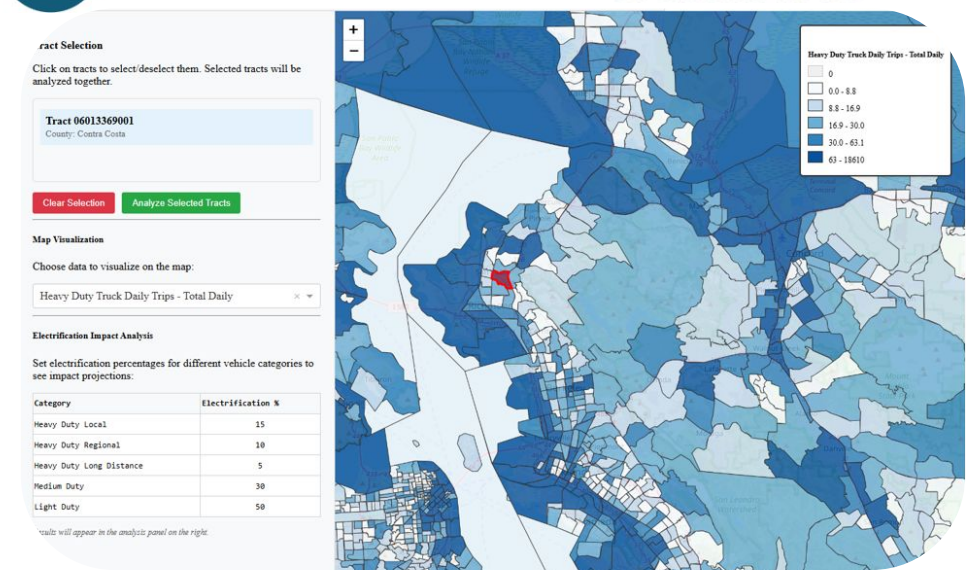
CAMBRIDGE SYSTEMATICS



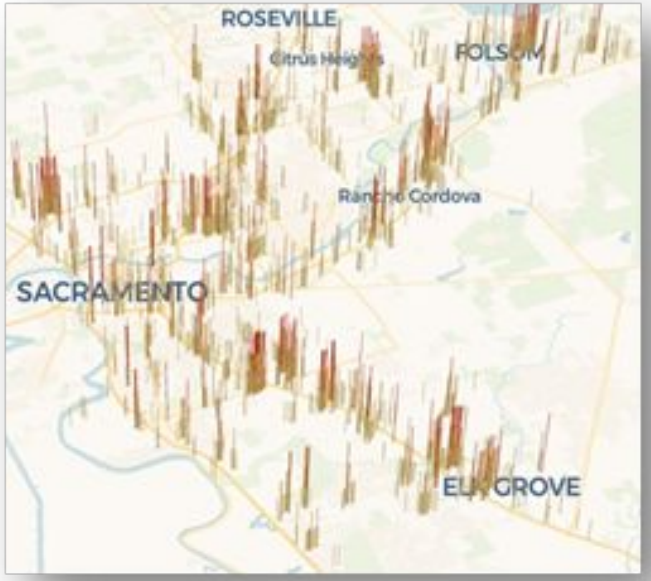
The outputs of this study will be used for:

1. **Identifying optimal locations** for these types of sites which can apply for CEC funding.
2. **Share the site list with the EDCs** to inform their distribution planning along with additional site lists from MassDOT and MBTA.

Project Overview

Project goal: identify optimal charging hub sites across Massachusetts, informed by the Second EVICC Assessment and enhanced with advanced analytical tools

- **Project workstreams:**
  1. **Foundational Data Collection**: Aggregating and organizing critical datasets from utilities, state agencies, and public sources.
  2. **EV Charger Site Framework Development**: Establishing a hierarchical screening framework that reflects accessibility, emissions reduction, equity, and funding priorities.
  3. **Site Selection Tool Development**: Delivering a transparent decision-support tool, drawing on E3's Forecasting Anywhere platform and Cambridge Systematics' Locus Tool.
  4. **Summary of Findings**: Documenting results in a final memo and presentation.
- **Building on the 2nd Assessment, identifying 2 types of charging hubs:**
  1. **Secondary Corridors (LDV-focused, MDV support)**
  2. **Fleet Hubs (MHDV-focused, LDV support)**



E3 and CS Analysis of 2040 DCFC locations in High Public Charging Scenario for Sacramento, California

Project Timeline

- This project is on a fast timeline – the law states that the site list must be submitted by February 12th
- We will be doing three waves of stakeholder engagement with various groups (interagency, EVICC, EDCs) to align with (1) project kick-off, (2) draft framework, and (3) the site list

	Early Nov.	Late Nov.	Early Dec.	Late Dec.	Early Jan.	Late Jan.	Early Feb.	Late Feb.	Early Mar.
Data Collection and Framework Development									
Site Selection Tool									
Initial Site Selections							February 12th		
Report + Final Site Selections									
Stakeholder Meetings		Kick-off			Draft Framework		Site List		

Discussion – Proposed EVICC Involvement

Proposed Involvement:

- **Three EVICC meetings aligning with project stages- framework development, draft framework, and selected site list.**

Timing of Feedback

- **We are seeking live feedback as much as possible! Voice ideas during the meetings and Q&A.**
  - We will investigate QR code enabled live feedback
- **To stay on the project timeline and incorporate feedback as much as possible, we request follow-up feedback on the timelines specified after EVICC meetings.**

Site Selection Framework

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LOCUS Tool

- **Site selection framework will identify charging hubs based on criteria we set in the LOCUS tool**
  - Criteria will be selected based on research, data availability, and stakeholder feedback
- **Cambridge Systematics' LOCUS tool – location-based services data and big data analytics**
  - Datasets will be integrated into the site selection tool
  - The tool will rank geospatial areas by the criteria (binary filter or weighted) for each type of charging hub

#1 Logistics Hub/Intermodal Facility

Overall Score: 85.0/100

Excellent Match

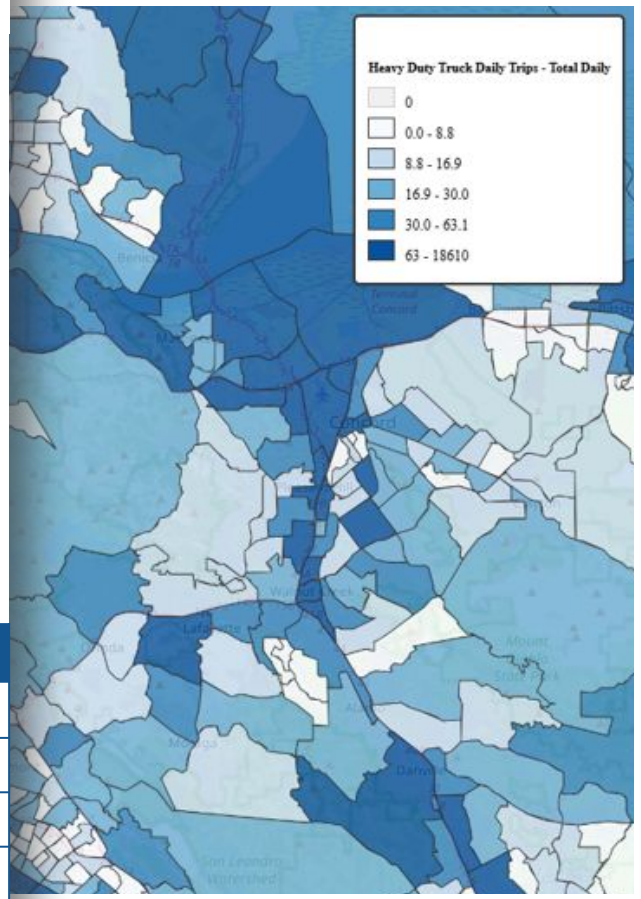
Multi-modal freight transfer and distribution center

Top 5 Performance Metrics

1. **Population Growth Rate: 4.5%** (97th percentile)
2. **Gas Stations Within 5mi: 187 stations** (96th percentile)
3. **Road Network Density: 6.68 mi/sq mi** (95th percentile)
4. **GDP Growth Rate: 22.5** (93rd percentile)
5. **Projected Daily Truck Trips (2035): 2,471 trips/day** (86th percentile)

View All Site Metrics

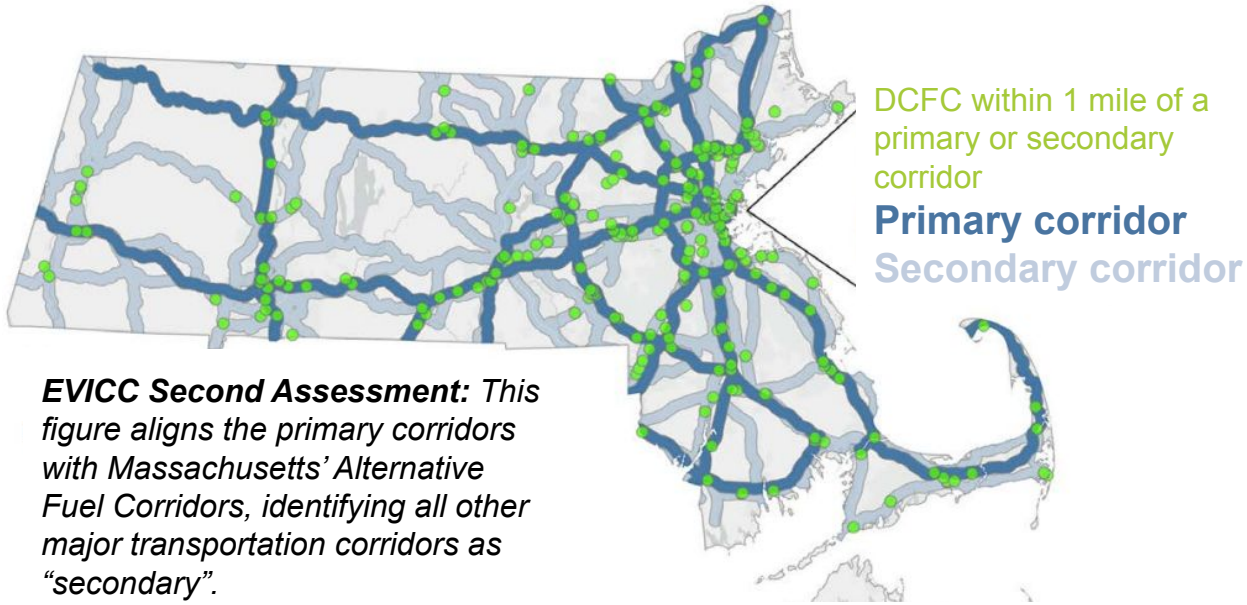
Metric	Value	Percentile
Population Density (people/acre)	0.11	5th
Residential Density (units/acre)	0.03	4th
Employment Density (jobs/acre)	6.67	83rd
Jobs Accessible by Auto (45 min)	169,404	70th
Heavy Vehicles Domiciled	6	71st



Charging Hub Site Selection Framework – Two Tracks

Secondary Corridor Hubs
LDV focused, MHDV support

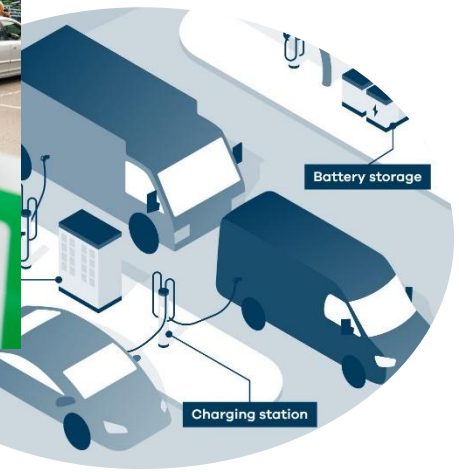
- **Fast chargers along charging deserts on secondary corridors that enable travel along those roads, also accessible for people who live nearby**
- **Secondary corridor definition: State-owned roads that are not AFCs (alternative fuel corridor)**
- **Spatial granularity: segment of a road, consistent with NEVI**



EVICC Second Assessment: *This figure aligns the primary corridors with Massachusetts' Alternative Fuel Corridors, identifying all other major transportation corridors as "secondary".*

Fleets Hubs
MHDV focused, LDV support

- **Fleet charging prioritized near multiple business types, with colocation of overnight residential charging or other multi-use cases**

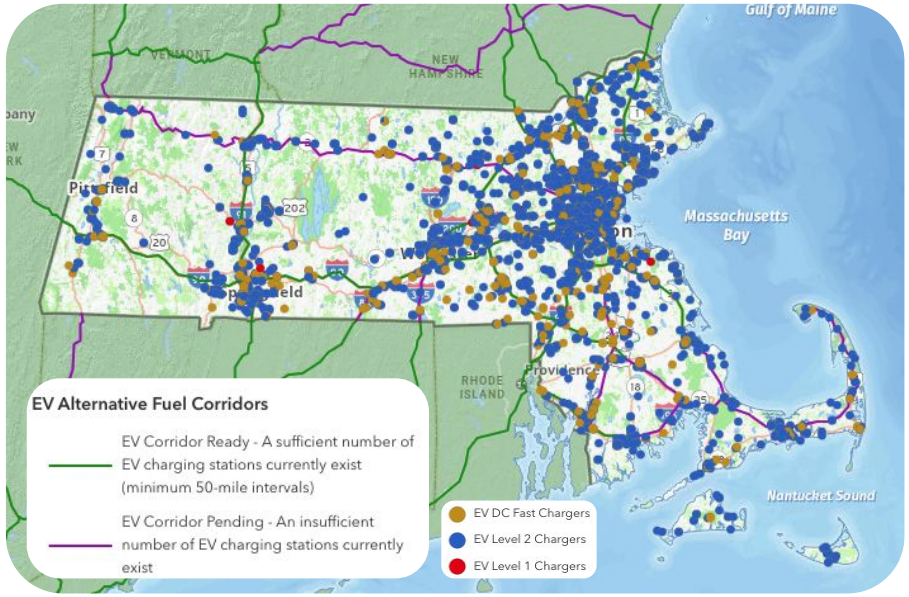


*Other site lists will be passed to the EDCs along with the sites identified through this framework (sites for MassDOT, sites for MBTA, sites identified by EVICC)

Current Utilization

Secondary Corridor Hubs
LDV focused, MHDV support

- **Concentrated in Eastern MA**
- **Primarily L2 chargers, followed by L3**
- **Additional charging hubs needed on:**
  - S2, S3, S24, I84, I195, I395, I495, US



Fleets Hubs
MHDV focused, LDV support

- **Mostly constructed, owned, and operated by private companies with their own fleets**
  - Amazon
  - Walmart
  - FedEx


Reuters

- **Primarily L2 (70-95%); remaining L3**
  - Recent HDV fleets require L3 (Amazon, Pepsi-Co, FedEx)
- **Up to 1:1 charger-to-EV**
- **Small % third-party fleet charging hubs (e.g. evconnect)**

Criteria Suggestions

Discussion:
- Are there criteria not on the list that you see as essential?
- Which criteria are priorities from your perspective?

Criteria	Secondary Corridor Charging Hubs (mixed use)	Fleet Charging Hubs (mixed use)	Notes
Location & Multi-Use			
Location near desired road type	Within 0.5 mi of secondary corridors; weighted by distance	Located near parking areas	
Co-location & RTA cross-collaboration opportunities (retail, rest stops, transit)	Near retail centers, rest stops, transit hubs	Near multiple fleet types (warehouses, business types)	RTAs already expressed interest in cross-collaborations
High traffic & multi-use support	LDV/personal travel ranked first, then MDV	MDV + HDV ranked first, then LDV/personal travel	
Safe for drivers and passengers **	Low accident track record	Low accident track record	
Population and employment	High density of multi-family dwellings ("garage orphans")	High population and employment in the area	Similar weighting to charging stations
Charging stations	Not near existing charging stations	Not near existing charging stations	Similar weighting to population
Land Use & Development Feasibility			
Available space for current and future expansion	Empty surrounding space, parking lot size/street parking; near MBTA parking	Parking lot size/street parking	Feedback of low utilization rates of MBTA lots
Compatible with zoning and land-use policies **	Comply with zoning policies	Comply with zoning policies	
Existing fleet operations knowledge capital *	(third party or self) operators' demonstrated interest	(third party or self) operators' demonstrated interest	feedback that operator type interacts with desirability
Potential for public-private partnerships (host sites, fleets, utilities) * , **	Various business types in the area	Various business types in the area	
Equity, Community & Environmental Impact			
Eligible for federal/state programs (NEVI, make-ready)	Not an AFC	Not needed	
High potential for emissions reductions	Areas where vehicles are idling	Areas where vehicles are idling	
Located to fill charging gaps in underserved areas, but with minimal negative impact to EJ communities *, **	Located near EJ communities (not residential neighborhoods)	Located near EJ communities (not residential neighborhoods)	
Stakeholder/community support *	Stakeholder support	Stakeholder support	

* Potential data access complications
** May be less meaningful at census tract level

Other Discussion Topics and Questions

- **Are there priority areas for charging sites, based on previous discussions or internal knowledge, that we should explore?**

- **How should the state leverage existing transit infrastructure, such as parking lots and train stations?**

- **Are there specific MHD deports or highly trafficked areas that we should included in the hub analysis?**

Next Steps

- **Our next meeting will be <u>early January</u> focused on reviewing the site selection framework (based on the feedback from this meeting)**
  - We will be seeking feedback on the framework

- **The final meeting will be in February to review the draft site list selected through the framework**

Thank You

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HAPPY
HOLIDAYS