DRAFT 2024-2025 Workplan

Electric Vehicle Infrastructure Coordinating Council (EVICC)

August 7, 2024 Meeting

Agenda

- **Background**
- **Second Assessment Objectives**
- **New Technical Analysis**
- **New Qualitative Work**
  - Including creation of new “committees”
- **Overview of Draft Assessment Outline**
- **Second Assessment Work Schedule**
- **Additional EVICC Work**
- **Meeting Schedule**

Background

- **An Act Driving Clean Energy and Offshore Wind (Act)**
  - Signed into law in August 2022
- **Electric Vehicle Infrastructure Coordinating Council (EVICC)**
  - Established by Section 81 of the Act
  - Tasked with developing strategies to enable an equitable, interconnected, accessible, and reliable electric vehicle (EV) charging network in Massachusetts
  - Strategies developed and provided to the Legislature as part of a formal assessment (Assessment) every two years, starting in August 2023

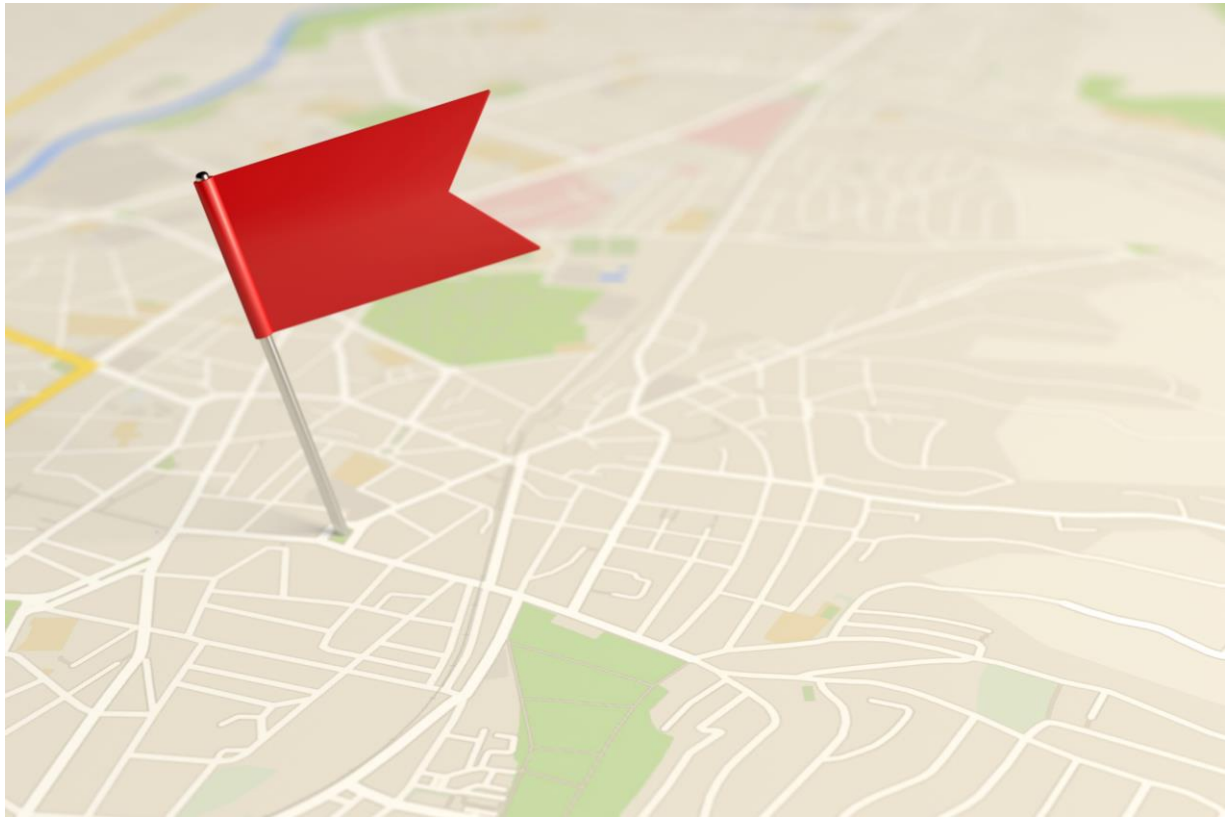
Background (cont.)

- **The Act requires the Assessment to contain, among other topics:**
  - The present condition of vehicle electrification;
  - The number and type of EV charging stations in public locations;
  - Suggestions for optimal locations for EV charging stations;
  - Strategies to maintain EV charging stations in working order; and,
  - Recommendations for policies, laws, and regulatory actions that may facilitate the provision of EV charging stations and related infrastructure.

- **The First Assessment was provided to the legislature on August 11, 2023.**

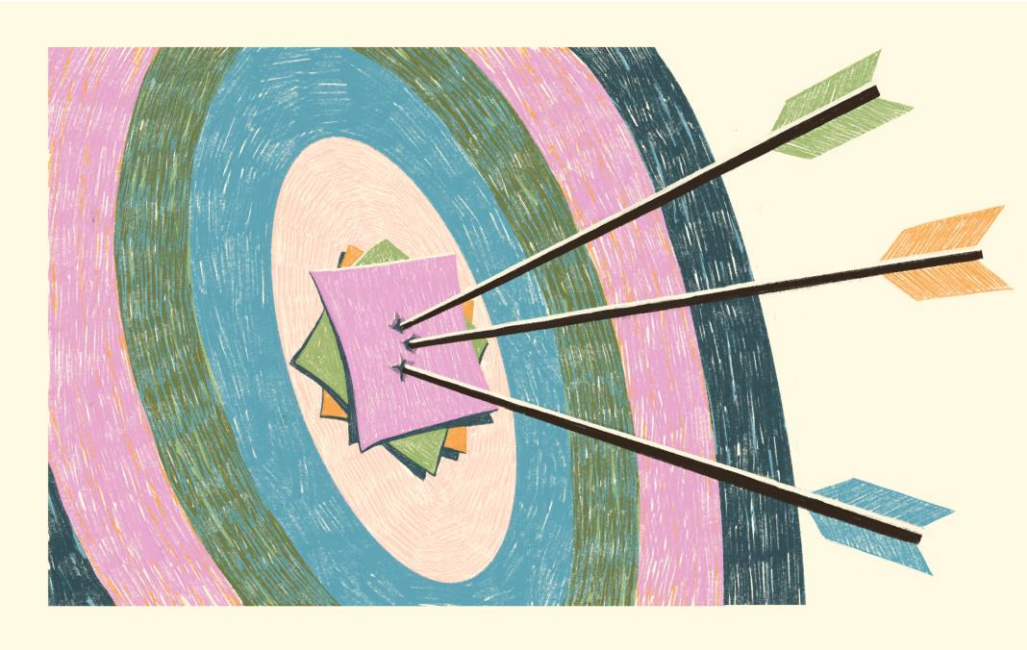
Second Assessment Objectives

- The Assessment will provide **a clear roadmap** for ***how*** Massachusetts plans to deploy the necessary EV charging infrastructure to meet the state's climate goals and other policy objectives.



Second Assessment Objectives (cont.)

- **The Assessment will provide this roadmap by clearly laying out:**
  - The *current state* of EV charging in Massachusetts;
  - The likely *endpoint* to meet the Commonwealth's policy goals; and,
  - *EVICC's recommendations on how* to get from here to the desired endpoint.



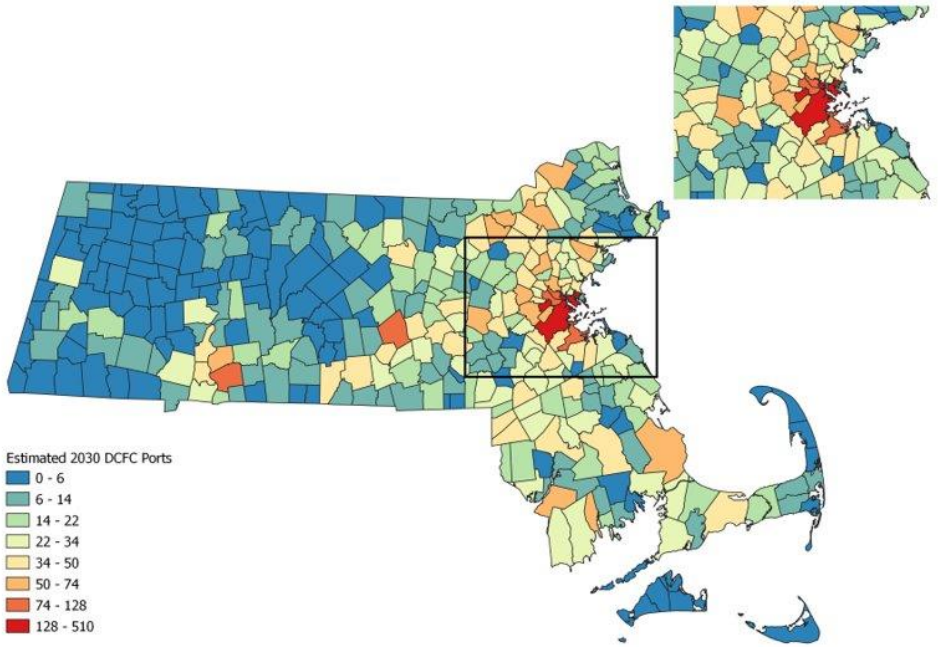
- **Each recommendations will identify:**
  - Which *state agency* or *agencies* will support / lead implementation; and,
  - The role of *local/regional governments*, *private companies*, and *electric utilities*.

- **The Assessment will also highlight:**
  - The interrelation with the state's Clean Energy and Climate Plan (CECP) for 2025 and 2030; and,
  - The role of EVICC in coordinating recommendation implementation.

New Technical Analysis

- As EVICC moves from its First Assessment, the technical analysis must, necessarily, become more granular.
  - EVICC will retain a consultant to conduct technical analysis.
  - EVICC will develop strategies to address deficiencies the analysis shows in the Second Assessment.

- The Second Assessment will include, as ***time, resources,*** and ***data availability*** allow:
  - Analysis of statewide public, multi-family, workplace, and fleet EV charger deployment and pace of deployment compared against the Commonwealth's goals;
  - 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.



New Technical Analysis (Proposed GIS Data Layers)

- Ideally, the spatial analysis in the Second Assessment will include, as ***time, resources,*** and ***data availability*** allow:
  - 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; and,
  - Information on the locations and loading of the Unitil and municipal light plant distribution grids.

New Technical Analysis (Market Segment Saturation)

- Ideally, the Second Assessment will also include, as ***time, resources,*** and ***data availability*** allow:
  - Total number of dwellings with off-street parking;
  - Percentage of dwellings with off-street parking;
  - Total number of EV chargers at dwellings with off-street parking;
  - Total number of dwellings with off-street parking with one EV charger;
  - Total number of dwellings with off-street parking with more than one EV charger;
  - Percentage of dwellings with off-street parking with at least one EV charger;
  - (Multi-unit dwellings only) Ratio of EV chargers to the number of residents with off-street parking ;
  - Total number of publicly accessible Level 2 and DCFC EV chargers within ½ mile of dwellings without off-street parking;
  - Percentage of publicly accessible Level 2 and DCFC EV chargers within ½ mile of dwellings without off-street parking; and,
  - (Multi-unit dwellings only) Ratio of publicly accessible Level 2 and DCFC EV chargers within ½ mile of dwellings without off-street parking.

Additional Qualitative Work (No Committee)

- The Second Assessment will also require additional work and qualitative analysis, including:
  - **State Program Summaries.** The Executive Office of Energy and Environmental Affairs (EEA) will create one-page summaries of the different program types (e.g., one for charger incentive programs, one for managed charging programs, one for vehicle incentives, etc.).
  - **Managed Charging Research.** EEA, the Massachusetts Department of Energy Resources (DOER), and the Massachusetts Department of Public Utilities (DPU) have a strong interest in understanding managed charging best practices to ensure necessary distribution grid upgrades are minimized. EEA, DOER, and DPU will work together to draft the managed charging section of the Second Assessment, engaging key stakeholders as necessary and appropriate.

Additional Qualitative Work (Committee)

- The Second Assessment will also require qualitative analysis that necessitates the creation of EEA-led committees (i.e., subgroups / working groups), which will report out at the EVICC meetings:
  - **EJ Community Siting "Guide" Committee.** EEA staff will work to create and vet with EVICC a "guide" for municipalities, EV charging companies, and Environmental Justice (EJ) community residents for use when contemplating or actively siting EV charging in EJ communities, including what to consider when selecting a site and how to engage the community in the selection and development process.
  - **Technical Committee.** Several topics require careful consideration, development, and implementation, which necessitate substantive discussions between EVICC members and stakeholders. As such, EEA plans to create a "Technical Committee" to develop draft resources, legislation, regulations, and/or program rules on the following topics:
    - EV Charger Uptime and Reliability Standards
    - EV Charger Registration and Data Sharing Requirements
    - Consumer Disclosure and Payment Method Standards
    - EV Charger Business Model Innovation

Overview of Draft Assessment Outline

- **Executive Summary:** Clearly conveys the state's plan and EVICC's recommendations; can standalone

- **EV Charger Deployment**
  - Current state of deployment in terms of types and geographic dispersion
  - Overview of state incentive programs, state fleets, and state work on federal programs (e.g., National Electric Vehicle Infrastructure Program)
    - Charger deployment data by state and federal program
  - Analysis of the necessary types and geographic dispersion to meet climate goals, including relevant information from the CECP
  - Discussion of key access considerations (e.g., focus on multi-family dwellings without off-street parking, environmental justice populations, rural communities, etc.)
  - Identification of areas for improvement in deployments, including discussion of the effectiveness of the current incentive programs
  - Recommended strategies to address identified areas of improvement

Overview of Draft Assessment Outline (cont.)

- **Electric grid upgrades and managed charging opportunities**
  - Summary of transmission and distribution challenges and potential alternatives
  - Overview of relevant transmission and distribution infrastructure upgrade processes, including how possible alternatives are considered
  - Current managed charging and other EV load shifting programs
  - Overview of managed charging best practices (e.g., examples from other states)
  - Identification of areas likely requiring grid upgrades with and without managed charging
  - Recommended strategies to address grid requirements, including recommendations on how to minimize the net costs to ratepayers of providing the necessary grid capacity

- **Charger reliability, data sharing, consumer disclosure and payment, and uptime requirements**
  - Overview of why user experience, charger reliability, and fee disclosure and standardization matter, including a summary of existing customer resources (e.g., charger apps, federal websites, etc.)
  - Summary of any current and/or related state and federal program requirements
  - Overview of best practices on these topics
  - Recommended strategies to address reliability, data sharing, consumer disclosure/payment, and uptime

Overview of Draft Assessment Outline (cont.)

- **EV charging technology and business model innovation**
  - Overview of novel and emerging technologies
  - Overview of current and evolving business models, related concerns, and possible alternatives
  - Overview of ways to address business model concerns
  - Recommended strategies to address business model concerns

- **Potential appendices:**
  - One-page summaries of existing state EV-related programs by program type (e.g., make-ready, vehicle, and charger incentive programs)
  - Charging fee principles, inclusive of common fee structures and level of charges, and other educational materials on EV charging for customers
  - EJ Community Siting Guide
  - Status of recommendations from the First Assessment

Second Assessment Work Schedule

- **September 2024:** EEA posts requests for consultant to conduct (1) additional analysis and (2) EVICC meeting facilitation and Assessment drafting
- **By October 31, 2024:** EEA selects consultant to perform additional analysis and EVICC meeting facilitation and Assessment drafting
- **By December 31, 2024:** Detailed Assessment outline completed, and drafting of select sections begins
- **February / March 2025:** Public hearings are held for Assessment input
- **By April 1, 2025:** Assessment analysis completed
- **By May 15, 2025:** Agencies complete assigned sections
- **By July 11, 2025:** Comments from EVICC members on Assessment
- **August 11, 2025:** Second EVICC Assessment sent to the Legislature
- **August 2025:** Public webinar on Second Assessment held

Additional EVICC Work: Educational Presentations

- EEA plans to use EVICC meetings (or separate webinars) to provide presentations useful to EV charger stakeholders.

- A list of potential educational presentations to be held between September 2024 and August 2025 is below:
  - Curbside / pole attachment charging companies / programs
  - EJ siting considerations;
  - Approaches to mitigating the impact of increased EV load;
  - Approaches to EV charging deployment planning;
  - Uptime / charger reliability standards;
  - Data disclosure/availability requirements and interoperability standards;
  - Charging business models, including innovative approaches (e.g., gas stations adding EV chargers);
  - Rideshare EV policies in other jurisdictions;
  - Consumer experience w/ EVs and EV chargers; and,
  - EV and EV charging data portals in other jurisdictions.

Meeting Schedule

- **EVICC Public Meetings**
  - **Timing:** First Wednesday of every month from 1-3pm
  - **Structure:**
    - Key updates (list of topics included in draft memo)
    - Educational presentations
    - Discussion on presentations and EV charger deployment barriers and potential solutions
  - **Deliverable Deadline:** Second Assessment due August 2025

- **EJ Siting "Guide" Committee**
  - **Timing:** Ad hoc meetings at the discretion of EEA lead
  - **Deliverable Deadline:** Present draft "guide" at EVICC public meeting in Q1 2025

- **Technical Committee**
  - **Timing:** Meet every two weeks
  - **Deliverable Deadline:** Present draft recommendations at EVICC public meeting in Q2 2025

Request for Feedback + Questions

- **Requested feedback:**
  - Any additional GIS data layers we should consider?
  - Any additional educational presentation that should be prioritized for the next 12 months?
  - Any stakeholders interested in participating in the EJ Siting “Guide” committee?
  - Anything else? Provide written feedback by August 14th.

- **Questions?**

Thank You