MA Fleet Advisory Services Program 2021 Annual Report

National Grid

May 13, 2022

Table of Contents

List of Tables

List of Figures

Section 1: Executive Summary

The transportation sector has overtaken electric generation as the United States' largest source of greenhouse gas ("GHG") emissions, and the electrification of fleets represents a major opportunity to address the challenge of reducing GHG emissions in the Commonwealth. Fleets are uniquely poised to electrify their vehicles; however, they face numerous economic and operational challenges. The capital costs to convert an internal combustion engine ("ICE") vehicle to an electric vehicle ("EV") as well as costs associated with electric vehicle supply equipment ("EVSE") are a challenge for fleets looking to electrify. Some of the operational challenges include varying duty cycles, operations and maintenance changes, site layout concerns, the potential for variable electricity costs, and varying fleet makeup from light-, medium-, and heavy-duty vehicles to on- and non-road vehicles.

The MA Fleet Advisory Services Program ("MA FASP") was proposed by Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid ("Company") to help customers by providing them with the analysis, knowledge, and long-term technical assistance needed to overcome the challenges they face on their fleet electrification journey. MA FASP was approved by the Massachusetts Department of Public Utilities ("DPU") on September 30, 2019, to conduct a total of 100 fleet engagements with 30 in environmental justice communities, for Massachusetts public fleets at no cost to the customer. Public fleets in Massachusetts are divided into five eligible categories: municipal (city/town), state, federal, transit and public universities & colleges. The Company has contracted with ICF Incorporated, L.L.C. ("ICF") to administer MA FASP through August 31, 2024.

MA FASP launched in September 2020. MA FASP was designed with an initial, soft launch period. This soft launch phase included ten fleets that went through the advisory process including recruitment, scoping for eligibility, program intake, fleet customer data collection, analysis and fleet assessment report drafting, and report delivery. To deliver a more efficient MA FASP, findings and lessons learned from this initial, soft launch were then incorporated into the broader program launch through a formal expansion strategy process.

The DPU directed the Company to report on the progress of MA FASP annually and to coordinate with stakeholders on the information to include in the report. As MA FASP had only launched in September 2020, the Company included a high-level update in its 2020 cost recovery filing D.P.U. 21-67, Exhibit NG-MM-1 Moy Testimony (Final). The Company engaged with stakeholders in preparing and drafting of the National Grid MA Fleet Advisory Services Program 2021 Report during a meeting on April 8, 2022.

The key findings from this report are as follows:

Finding #1: MA FASP has engaged with a total of 117 customers, of which 22 have received an initial report and an additional 15 have fleet assessments in process. 89% of MA FASP participants are within designated EJCs, which is above the 30% target set in the original filing.

Finding #2: MA FASP was able to identify commercially available EV options for more than 60% of the vehicles included in the studies. 53% of the vehicles with EV options available were recommended for conversion.

Finding #3: For the on-road capable vehicles assessed, 95% have commercially available EV options of which 49% were recommended for conversion where the TCO for the EV was lower than the equivalent ICE vehicle.

Finding #4: If all recommended EVs are deployed that would result in an estimated $89M in lifetime TCO savings, and an estimated 300,000 metric tonnes in lifetime CO_2 emission reductions.

Finding #5: Continual stakeholder engagement is needed as each eligible fleet category has different needs for outreach and communications.

Finding #6: Many MA FASP participants were surprised at the high percentage of the vehicles assessed that have commercially available EV options.

Finding #7: MA FASP participants were surprised with recommendations for conversion of medium- and heavy-duty vehicles.

This MA FASP 2021 Annual Report summarizes in greater detail the MA FASP process, program activity, and findings from the fleet assessments in 2021.

Section 2: The MA FASP Process

The Company in collaboration with stakeholders and ICF has implemented a comprehensive process to assist our customers in identifying and converting their fleets to electric. The steps in this process include customer engagement, customer data intake, fleet data analysis, and ongoing assistance. Each of these steps are summarized in the following sections.

Section 2.1: Customer Engagement

The first step in the fleet assessment process is identifying and prioritizing prospective customers for MA FASP. MA FASP is presented to a prospective customer via multiple channels, through direct and indirect outreach. Indirect outreach includes customers hearing about FASP by visiting the Company's webpage https://fleetadvisoryma.nationalgrid.com/, through word-of-mouth from existing participants, conferences, meetings, and outreach through external stakeholders listed in Table 1 below.

Direct outreach involves leveraging existing relationships with customers through either the Company's sales representatives or ICF. ICF and the Company's Program Manager ("MA FASP Team") periodically prioritize customers based on criteria including, but not limited to:

- Characteristics of the Fleet
    - Fleet location, including EJ communities and regional diversity
    - Fleet type (municipal, transit, state, federal)
    - Fleet size
- Customer Engagement
    - Propensity for electrification, based on prior commitments to EVs and broader sustainability initiatives
    - Interest in the Program

The MA FASP Team then actively engages with customers using the materials developed in the launch phase of the Program, including a slide deck, brochure, webpage content, and email, to introduce MA FASP to these potential MA FASP participants.

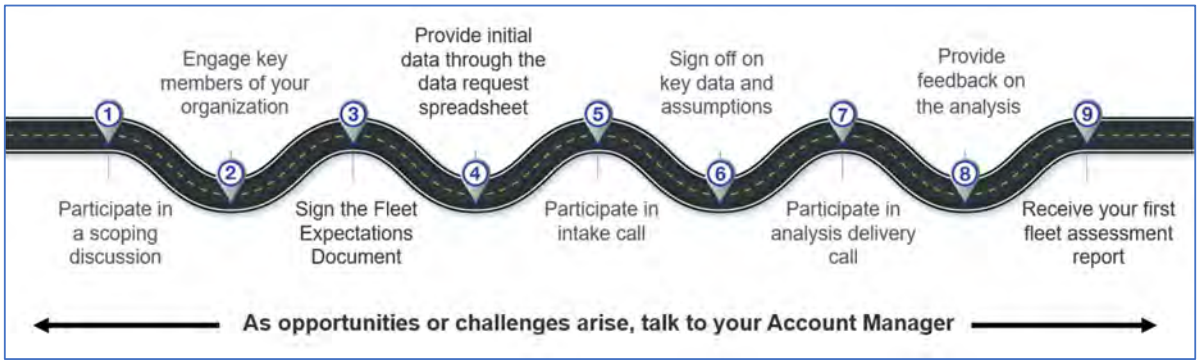
Table 1: Stakeholder Outreach

Stakeholder	Outreach	Timing
Mass Clean Energy Center (MassCEC)	Calls – to share lessons learned from MA FASP and the MassCEC Mass Fleet Advisor Program	Monthly to start then Bi-Weekly
MA Dept. of Energy Resources (DOER) Leading by Example (LBE)	Calls – LBE provided information and introductions to MA state fleets and public universities & colleges Webinar planned for Q1 2022	As Needed
MA Dept. of Energy Resources (DOER) Green Communities	Webinar – *Green Communities: Tackling Municipal Vehicle Fuel Use* Newsletter – including MA FASP information	March 31, 2021 May 27, 2021
MA Dept. of Transportation (MassDOT)	Calls – MassDOT provided information on MA regional transit authority (RTA) fleet electrification analysis and planning. See Section 3 for more details.	As Needed
Metropolitan Area Planning Council (MAPC)	Newsletter – including MA FASP information	May 19, 2021
MA Dept. of Environmental Protection (DEP)	E-Mail Blast	June 9, 2021
Office of Vehicle Management (OVM)	Calls – OVM provided information and introductions on MA Executive Branch fleets. See Section 3 for more details.	As Needed
National Renewable Energy Labs (NREL)	Calls – NREL provided information on federal fleets. See Section 3 for more details.	As Needed

Section 2.2: Customer Intake & Participation

Once a public fleet customer expresses interest in MA FASP, they are guided through the intake process by ICF's Account Manager. These Account Managers are the designated point of contact for that prospective customer and assigned from initial contact with the customer. Based on lessons learned from the soft launch period, the MA FASP process roadmap was expanded to nine steps as described in Figure 1 below.

Figure 1: MA FASP Process Roadmap



To provide an accurate and useful assessment, MA FASP encourages customers to engage key internal stakeholders early. The scoping discussion phase also includes a clear communication of the MA FASP objectives and benefits, time commitment required of the fleet manager and others in the customer's organization, anticipated timelines, and data and other input necessary for the analysis. MA FASP asks customers to sign a Fleet Expectations Document, see Appendix A, to ensure that the customer recognizes and agrees to the responsibilities associated with participating in the program.

After a customer signs the Fleet Expectations Document and becomes an active participant of MA FASP, they share fleet data and participate in an intake call. During the intake call, the account manager and technical analyst identify missing data and assumptions for that missing data, as well as any previous challenges with EVs, procurement preferences, and plans to install EVSE. Based on lessons learned from the soft launch period, MA FASP has emphasized the need for fleet data to include vehicle use, i.e., snow plowing, police pursuit vehicle. Once the participant agrees to the assumptions or provides the missing data, the fleet analysis is finalized and an analysis delivery call is scheduled. Participants are asked to provide feedback on the analysis delivery presentation to provide a more accurate and actionable fleet assessment report.

Section 2.3: Fleet Data Analysis

The vehicle analysis is conducted via a proprietary fleet assessment model ("Model") developed by ICF. MA FASP participants provide existing fleet data only for vehicles garaged within the Company's electric service territory. This data is inputted into the Model which matches the existing participant fleet vehicles to EV equivalents (based on a 500-vehicle model library) that meet their vehicle type and mileage range requirements. The Model conducts a total cost of ownership ("TCO") comparison between existing ICE vehicles and their EV equivalents, which includes:

- Vehicle capital costs
- Annual fuel costs and bill impacts
- Annual maintenance costs
- Charging infrastructure hardware and installation costs
- Potential EV or EV charging grants, other incentives, and utility programs.

The Model can be further refined to include:

- Recommendation Threshold: By default, the Model only recommends the EVs with a TCO less than the existing ICE vehicle TCO. This threshold can be expanded to recommend EVs ranging from a specified percentage of the ICE vehicle TCO threshold to electrifying 100% of the fleet, regardless of the EV TCO cost.
- Vehicle-to-EVSE Ratio: The Model's default "1-to-1" vehicle-to-EVSE ratio but can be adjusted.
- Vehicle Procurement: The Model can reflect the MA FASP participant's vehicle procurement requirements regarding vehicle purchases or leases.

The Model is continually updated to reflect market-place changes in both the availability of EVs and third-party funding.

Through the soft launch period MA FASP learned that many participants use Massachusetts' statewide contracts provided by the Commonwealth's Operational Services Division ("OSD") to procure fleet vehicles. Currently, there are a limited number of EVs available for procurement via these statewide contracts which limits the recommendations for conversion. Based on this lesson learned, MA FASP offers participants three choices for their fleet analysis:

1. Include all commercially available EVs
2. Limit to EVs available through the statewide contracts
3. Comprehensive analysis including options #1 and #2

If a participant selects option 3, MA FASP asks the participant to prioritize option 1 or option 2 and provides the analysis for the prioritized option in the full fleet assessment report. The non-prioritized option TCO analysis is presented as an Appendix to the report.

Section 2.4: Ongoing Assistance

Participants are provided with access to the online participant portal after signing the Fleet Expectations Document. The participant portal provides secure access to their fleet assessment report, report refreshes, EV and EVSE information, trainings, information on commonly recommended EVs, grants, incentives, and EV and EVSE news and events. Participants receive quarterly newsletters via email, see Appendix B. Account managers conduct bi-annual check-ins with participants to discuss opportunities for fleet electrification and a fleet assessment report refresh; but are always available for assistance if needed. Figure 2 notes the road map to fleet electrification once the participant receives their fleet assessment report.

Figure 2: Roadmap to Fleet Electrification

A MA FASP participant receives a fleet assessment report "refresh" twice per year that may contain updated information on:

- EV market conditions, including vehicle availability, automobile manufacturers releasing new EV models for sale or lease in Massachusetts, and changes in technology and pricing;
- Feedback from participant about the previous fleet assessment report, including data provided for previous fleet assessment report and changes in decision makers;
- Availability of incentive and/or grant funding, including incentive and/or grant programs that may become available at the state, regional and/or federal level for which a customer may be eligible; and
- Customer budget conditions, including availability in capital budget for EV acquisition.

In addition to the fleet assessment report, MA FASP provides technical assistance to participants through 2024. Examples of technical assistance include:

- Presentations to the municipal energy advisory committee and the mayor's chief of staff.
- Recommendations around how to future-proof a new fleet garage.
- Assistance in applying for third-party funding.
- Analysis of the site capacity in relation to the necessary power to charge recommended EVs as the participant begins deploying EVs.
- Connecting fleets to original equipment manufacturers for further details on available EVs.

Section 3: 2021 MA FASP Customer Enrollment

From the initial launch in September 2020 through December 2021, MA FASP has engaged with a total of 117 customers, of which 37 have either received an initial report or are currently participating in the program.

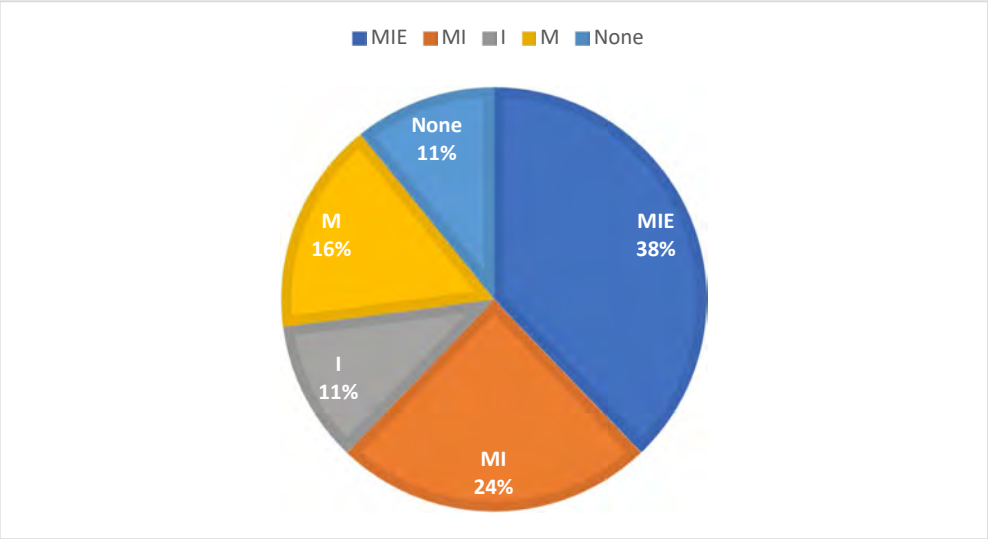
Table 2 shows the breakdown of participants by public fleet categories with 73% of studies involving municipal fleets. As shown in Figure 3, 89% of MA FASP participants are within designated EJCs, which is above the 30% target set in the original filing. Appendix C provides more information on

the program participants, EJC eligibility criteria, and the status of the studies (e.g. report delivery date or report status).

Table 2: MA FASP Participants by Type of Fleet

Category	Number of Participants
Federal	1
Municipal (City/Town)	27
Public University & College	3
State	2
Transit	4
TOTAL	**37**

Figure 3: Participants within EJCs by EJC Criteria



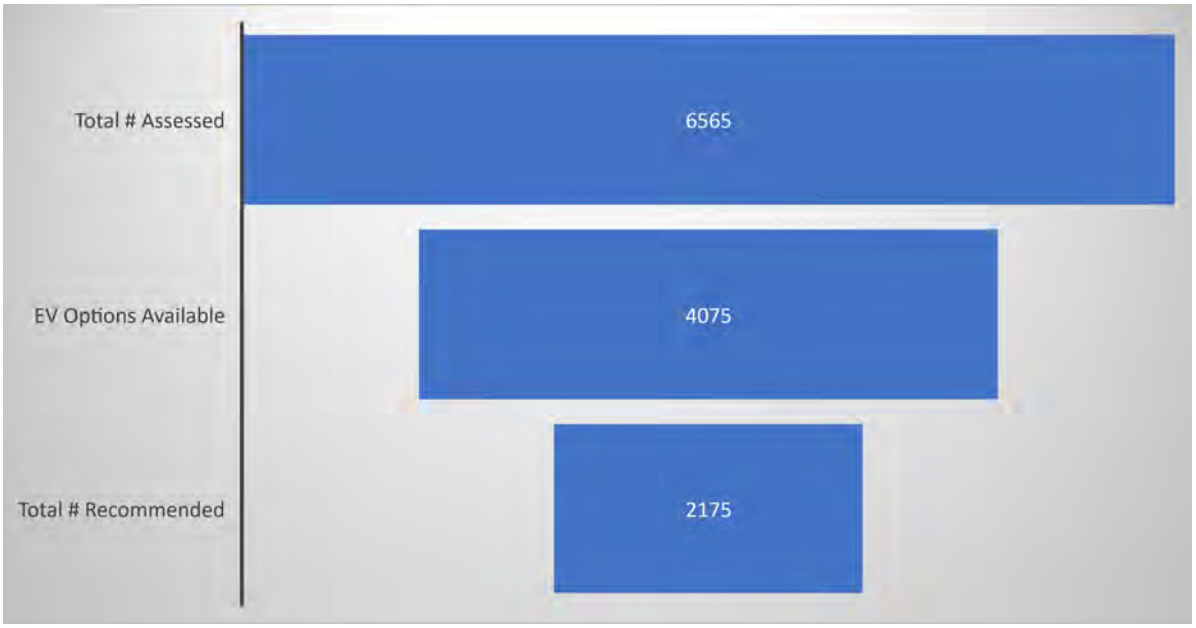
M=Minority, I=Income, E-English Isolation

Section 4: Aggregated Fleet Data Analysis & Recommendations

As of December 31, 2021, twenty-two of the 37 participants received their initial fleet assessment reports. A summary of the completed 22 fleet assessment reports and findings are presented below.

MA FASP was able to identify commercially available EV options for more than 60% (4075/6565) of the vehicles included in the studies, as shown in Figure 4.

Figure 4: Aggregated Vehicles Assessed in 2021



As shown in Figure 4, 53% (2175/4075) of the vehicles with EV options available were recommended for conversion. There are two reasons why vehicles with EV equivalents were not recommended for conversion:

- The TCO for an ICE vehicle being lower than any of the EV options' TCO; or
- Existing fleet vehicle's mileage/duty cycle requirements are not met by available EV options.

Of the 4075 vehicles with EV options available, 121 vehicles were not recommended due to the existing fleet vehicle's mileage/duty cycle requirements not being met by available EV options. The remaining 1,779 vehicles TCO was higher than the equivalent ICE vehicle. As more EV model options become available and EV production increases, costs for these vehicles should decline which may present opportunities for these to be converted which will be included in future report refreshes.

Participant fleet vehicles are categorized into 19 categories of which 17 are on-road vehicles. The "Non-Road Equipment" category contains vehicles that are no on-road capable such as backhoes, front-end loaders, lawn mowers, utility terrain vehicles (UTVs), etc. The "Other" category contains vehicles that are already EVs in the participants' fleet, as well as vehicles for which there are currently no EV options available (e.g., fire trucks, ambulances, heavy-duty plow trucks). For the on-road capable vehicles assessed, 95% have commercially available EV options of which 49% were recommended for conversion where the TCO for the EV was lower than the equivalent ICE vehicle, as shown in Figure 5.

Figure 5: On-Road Vehicles Assessed in 2021

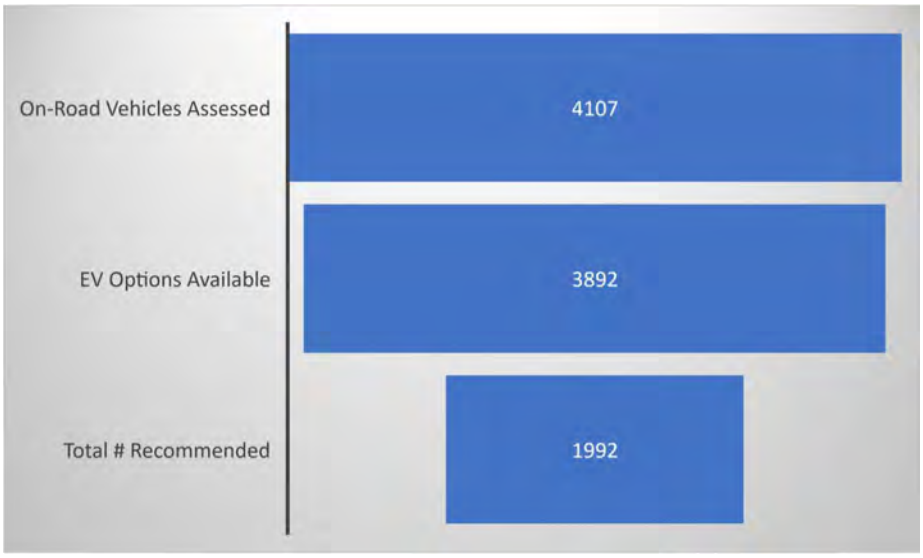
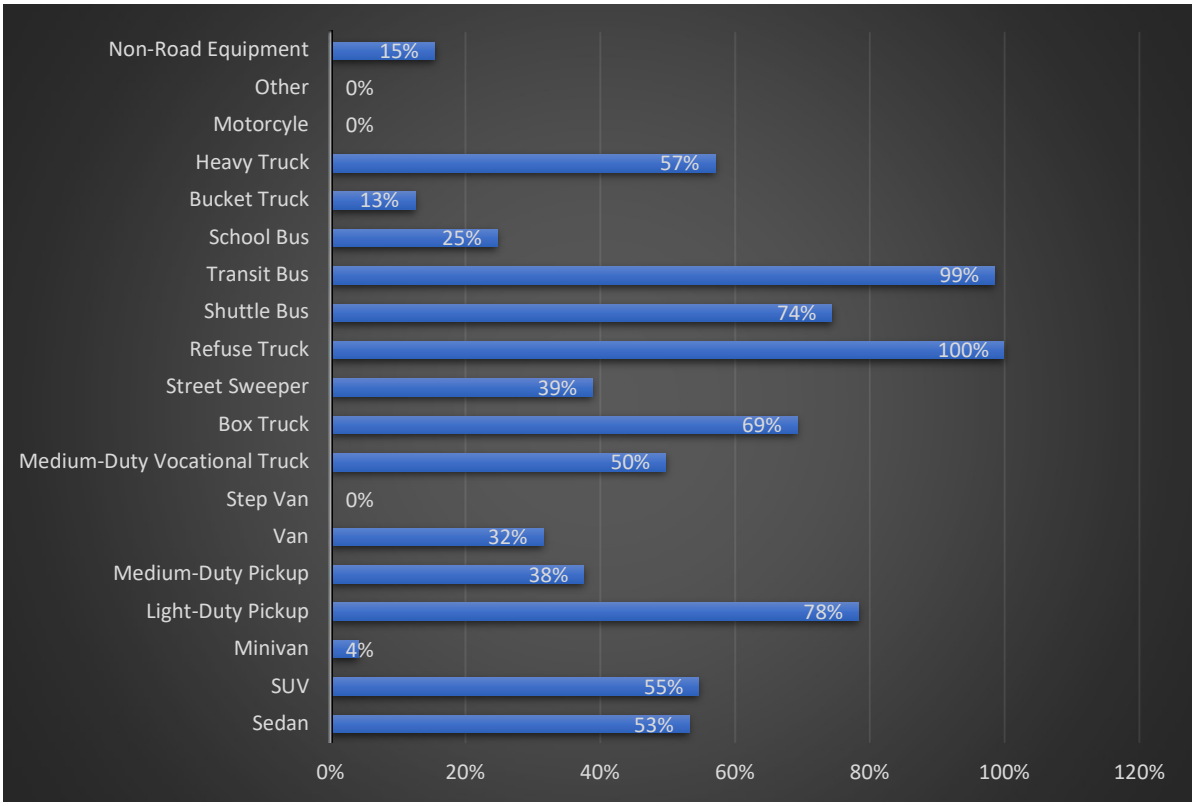


Figure 6 shows the percentage of vehicles recommended for conversion by vehicle category. 100% of refuse trucks and 99% of transit buses assessed were recommended for conversion to electric where the TCO for the EV was lower than the equivalent ICE vehicle.

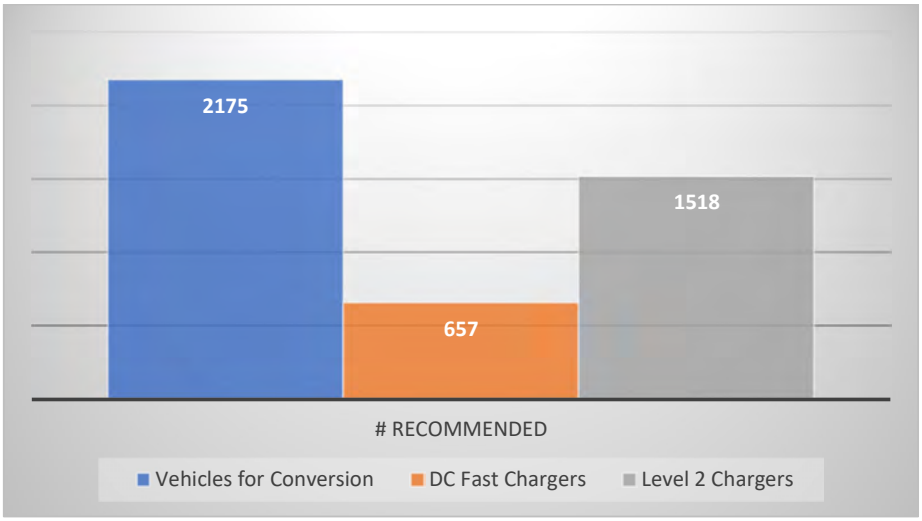
Figure 6: Vehicles Recommended for Conversion Based on TCO by Vehicle Category



In total, converting all 2,175 ICE fuel-powered vehicles to electric vehicles would result in an estimated $89M in lifetime TCO savings, and an estimated 300,000 metric tonnes in lifetime CO2 emission reductions.

To support the charging of 2,175 recommended EVs, MA FASP recommends 657 direct current fast charging (DCFC) and 1,518 Level 2 EVSEs, see Figure 6. MA FASP conservatively assumes a one-to-one EVSE-to-vehicle ratio and does not account for any existing EVSEs at participant fleet facilities. The determination of EVSE type (Level 2 versus DCFC) is based on battery size, range, mileage, number of shifts per day, and time charge between shifts and at night. Through ongoing technical assistance MA FASP and the Company continues to work with participants to efficiently size the EV charging infrastructure for a particular location.

Figure 7: EVSE Recommendations



Section 5: Participant Outreach Approach Changes

Based on engagement with external stakeholders, see Section 2.1, MA FASP developed specific outreach and communication approaches for the Federal, State and RTA fleet categories. This section describes the specific outreach approaches.

To facilitate the conversation with state Executive Branch fleet managers, MA FASP connected with OVM within the Commonwealth's OSD. OVM is responsible for the acquisition, leasing, registration, maintenance, and repair of the Executive Branch fleet vehicles. OVM personnel noted that state agencies would need a way to procure this fleet assessment service. On November 18, 2020, OVM released a Due Diligence Posting of Notice of Intent to "Accept a Best Value Offer" and "Participate in Free Fleet Analysis Services to Determine Battery Electric Vehicle (BEV) and Charging Infrastructure Adoption." The Company responded to the notice and was awarded the project on December 8, 2020. MA FASP continues communication and outreach with OVM to garner Executive Branch state fleet participation in MA FASP. MA FASP is also working separately to recruit non-Executive Branch fleets.

After conversations with staff at NREL, federal fleet outreach was paused in early quarter 4 of 2021. NREL began fleet electrification assessments for all federal agency fleets in the summer of 2021.

NREL and MA FASP discussed the respective fleet assessments and determined that MA FASP would be duplicative of the overarching NREL federal fleet assessments.

Similarly, MassDOT began fleet electrification planning with the MA RTAs. MA FASP and MassDOT discussed the separate assessments and determined that the two programs could work together to ensure RTA fleets understand that the assessments were complementary. Fleets who participate in MA FASP will be able to identify which vehicles are beneficial to convert to electric on a total cost of ownership (TCO) basis. In addition, the MA FASP report will include a recommended electric bus (or non-revenue generating vehicle) for purchase. These results can be combined with the MassDOT results showing which routes can be completed with a commercially available electric bus. This way, RTAs can make a final decision about which vehicle/route combinations are appropriate for electrification

Section 6: Participant Response

As expected with the nascent nature of the EV market, many MA FASP participants were surprised at the high percentage of the vehicles assessed that have commercially available EV options, see Figure 4. Similarly, MA FASP participants were pleasantly surprised with recommendations for conversion of medium- and heavy-duty vehicles, see Figure 6. Many were not expecting the TCO for an electrified medium- and heavy-duty vehicle to be lower than the ICE equivalent vehicle.

Many MA FASP participants noted that MA FASP has provided an opportunity to acquire the fleet assessments, technical assistance and financial information needed to electrify their fleets and that they would not, otherwise, have been able to assemble this information due to their own resource constraints. MA FASP participants also indicated that they have not seen their respective fleet data analyzed and reported out to them in a single, comprehensive report. This summary provided an electrification roadmap that enabled MA FASP participants to take specific steps towards electrifying their fleet, as listed in Table 3 below.

Table 3: Steps Taken by MA FASP Participants Towards Fleet Electrification

Steps Taken	Number of Participants
Incentive/Grant Funding Applications Submitted	4
Incentive/Grant Funding Awarded	2
Included EV & EVSE in Capital Improvement Plan Budgets	2
Ordered EV	2
Plans to future proof new garage facility	1
Provided EV information to procurement entity	1
Installing EVSEs	2
Publicized partnership with MA FASP[1]	1
Included EV & EVSE in Master Plans	1

[1] The Veterans Administration (VA) Boston Medical Center partnership with MA FASP mentioned in the White House press release dated 12/8/2021 "FACT SHEET: President Biden Signs Executive Order Catalyzing America's Clean Energy Economy Through Federal Sustainability," (https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/08/fact-sheet-president-biden-signs-executive-order-catalyzing-americas-clean-energy-economy-through-federal-sustainability/)

The positive feedback from fleet customers and actions taken towards EV acquisition and EVSE installation are a testament to MA FASP's success.

Section 6: Conclusion and 2022 Plans

In 2022, MA FASP continues to engage with more customers with public fleets, add more participants, conduct ongoing fleet analyses, and provide technical assistance. In 2022, the first set of report refreshes have been requested and will be delivered. MA FASP has coordinated with Mass DOER to focus outreach and engage more with public university and college fleets, currently representing approximately 10% of the current MA FASP participants. MA FASP also aims to provide more geographic diversity across the state, focusing on recruiting customers in the central and western parts. MA FASP is preparing case studies based on participant experiences with fleet electrification. The case studies will provide other fleets with an understanding of the challenges faced and the results of the solutions developed and implemented by MA FASP Participants. Even though MA FASP was launched and introduced to customers during the COVID-19 pandemic, the program has been successful through 2021 in assisting the Company's public customers overcome the challenges they are encountering on their electrification journeys.

APPENDIX A – Fleet Expectations Document

National Grid MA Fleet Advisory Services Program
Fleet Expectations

National Grid and ICF are pleased to partner with [FLEET NAME] to provide data, analysis, technical support, and other resources to transition your fleet from internal combustion vehicles to electric vehicles (EVs). Services will be provided through the National Grid MA Fleet Advisory Services Program (Program).

ICF will provide a customized fleet assessment report that will include the cost and emissions analysis and other information necessary to help inform [FLEET NAME]'s decision-making process. The work required to complete this report is primarily conducted by ICF and is 100% funded by National Grid. However, [FLEET NAME]'s commitment and time are necessary to provide the quality of report needed to support your fleet's transition to EVs. Therefore, please review the Participant Requirements and sign below.

Participant Requirements

1. **Project Timeline**: Review and commit to the project timeline below:

	[Month]		[Month]		[Month]		[Month]		Through August 2024
Intake Call									
Data Collection									
Analysis									
Analysis Presentation									
Final Report Delivery									
Program Feedback Survey									
Report Refreshes									As needed*
Technical Assistance									Ongoing

* A participant may request up to two report refreshes per year. The first report refresh will be at least six months after the initial report, unless procurement schedules or changes to vehicle model availability warrant a refresh sooner.

2. **Staff Time**: A commitment of your staff time of up to 10 hours for Program activities in the first 3 months and 2-4 hours annually thereafter, through August 2024. Participant staff will be responsible for providing fleet data, responding to data questions from the ICF team, providing feedback on the initial analysis, and responding to bi-annual check-ins from the Program.
3. **Project Lead**: Identify a project lead to serve as ICF's point of contact and respond to inquiries in a timely manner. If the project lead leaves the organization before August 2024, it is [FLEET NAME]'s responsibility to identify new contact and notify ICF. While the project lead will serve as the primary point person for ICF, [FLEET NAME] should

estimated charging costs and total cost of ownership impacts.

b. Access to a **fleet portal**, where a participant can view their report and access additional resources, including Program news and updates, training materials, RFP language, and a calendar of events.
c. Up to twice per year a **fleet assessment report refresh** to align with the fleet procurement cycle or new EV model releases.
d. **Quarterly newsletters** featuring information on incentives or vehicles, success stories, and other educational information.
e. **Technical assistance**, as needed, to overcome potential challenges to EV deployment, including procurement, charger installation, and driver and maintenance staff training. ICF anticipates no more than 10 hours of technical assistance per participant per year; additional assistance is at the discretion of ICF and National Grid. In addition, when you have made your vehicle choice, National Grid can provide a location-specific EV charging station site assessment for infrastructure and costs.

4. **Communication with National Grid**: ICF will keep National Grid staff apprised of project status and address questions or issues promptly.
5. **Project Timeline**: ICF will update the project timeline above and share it with National Grid and the participant, as necessary.
6. **Data Privacy:** Fleet data will be kept private between ICF and National Grid. It will be used internally only to conduct analysis and track Program impacts. It will not be shared or sold with any outside parties. As discussed above, the fleet assessment reports developed by the Program can, however, be shared publicly.

Signature	Title	E-Mail
Name of Project Lead	Phone	Date

APPENDIX B – MA FASP 2021 Newsletters

[redacted]

From: Fleet Advisory MA
Sent: Tuesday, July 27, 2021 3:47 PM
To: [redacted]
Subject: [Test] Get the latest on electric fleets!

nationalgrid | MA Fleet Advisory Services Program

Accelerate to an Electric Fleet

News and updates to help your fleet transition to electric vehicles (EVs)

We Make It Simple

It's a great time to join the movement of fleet electrification across Massachusetts! Our team of experts is ready to help your fleet every step of the way. Request your free, customized fleet analysis today.

Fleets Are Meeting Their Goals Through the MA Fleet Advisory Services Program

More than 10 public fleets in Massachusetts have already received their first MA Fleet Advisory Services report and are beginning to take action on electrification. Specifically:

- Nearly 80% of the 2,240 Massachusetts public fleet vehicles analyzed have a current EV option available.
- Public fleets in Massachusetts analyzed as part of the program can save an average of $4 million over the life of their fleet vehicles if they transition to electric.
- More than half of the fleets involved with the program are planning to acquire EVs in the next year.
- One fleet already purchased an EV for their emergency services department, and is future-proofing their municipal parking garage to allow for fleet charging.

1

- Fleets are tapping into funding available through the National Grid EV Charging Station Program, U.S. EPA School Bus Rebates: DERA, MassDOER Green Communities Grant Program, and MassDEP MassEVIP.

Don't miss your opportunity to participate. Contact us today at **1-617-218-2100** or **FleetAdvisoryMA@icf.com**.

Stay Up to Date

The latest on EVs and fleets:

Governor Baker Signs Executive Order to Reduce Greenhouse Gas Emissions at State Facilities, *Executive Office of Energy and Environmental Affairs*

Ford Introduces All-Electric F-150 Lightning Pro, Built for Work with Next-Generation Technology, *Seamless Overnight Charging, Ford Media Center*

Moving to Full Fleet Electrification: A Look at 3 Districts' Plans, *School Bus Fleet*

Battery-Electric Vehicles Have Lower Scheduled Maintenance Costs than Other Light-Duty Vehicles, *U.S. Department of Energy Vehicle Technologies Office Fact of the Week*

Third of Class 4-8 Vehicles to be Battery-Electric in 10 Years, *Government Fleet*

How Fleets in MA Are Electrifying:

"The program portal is very useful. Having the technical level of detail in the sample RFP language was very useful for helping us begin to electrify our fleet."

—Katherine Moses, Energy Manager, City of Lowell

See how other fleets across the country are benefitting from electrifying their fleets:

- Case Study: University Fleet Electrification - UCLA Case Study, *Sourcewell*
- Case Study: Saving Money with Electric Vehicle Leasing: A Case Study, *Electrification Coalition*


Fleets participating in the MA Fleet Advisory Services Program get access to more resources about transitioning to EVs through our free portal.
Contact us today to enroll in the program and get your login!
Have questions or need expert support?
Contact us today:
1-617-218-2100
FleetAdvisoryMA@icf.com
FleetAdvisoryMA.NationalGrid.com
Fleet advisory services provided by ICF
Unsubscribe | Privacy Statement
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[redacted]

From: National Grid MA Fleet Advisory <FleetAdvisoryMA@icf.com>
Sent: Monday, November 9, 2020 1:50 PM
To: [redacted]
Subject: Considering Electrifying Your Fleet? We Can Help.

nationalgrid | MA Fleet Advisory Services Program

Accelerate to an Electric Fleet

News and updates to help your fleet transition to electric vehicles (EVs)

We Make It Simple

Fleet electrification is gaining momentum in Massachusetts, and our team of experts is ready to help you every step of the way. Get started with a free, customized fleet analysis. Request yours today.

Reduce Your Costs

Electrifying your fleet will generate long-term savings. Plus, there are various financial incentives for EVs and charging infrastructure in Massachusetts that can speed up your payback. Check out these resources:

National Grid EV Charging Station Program
National Grid provides funding for electrical infrastructure for approved vehicle charging projects, as well as rebates for some charging station equipment installations.

Massachusetts Department of Environmental Protection (MassDEP): Electric Vehicle Incentive Program (MassEVIP)
MassEVIP is aimed at making EVs and EV charging stations more common across Massachusetts and provides financial incentives for fleets and other entity types.

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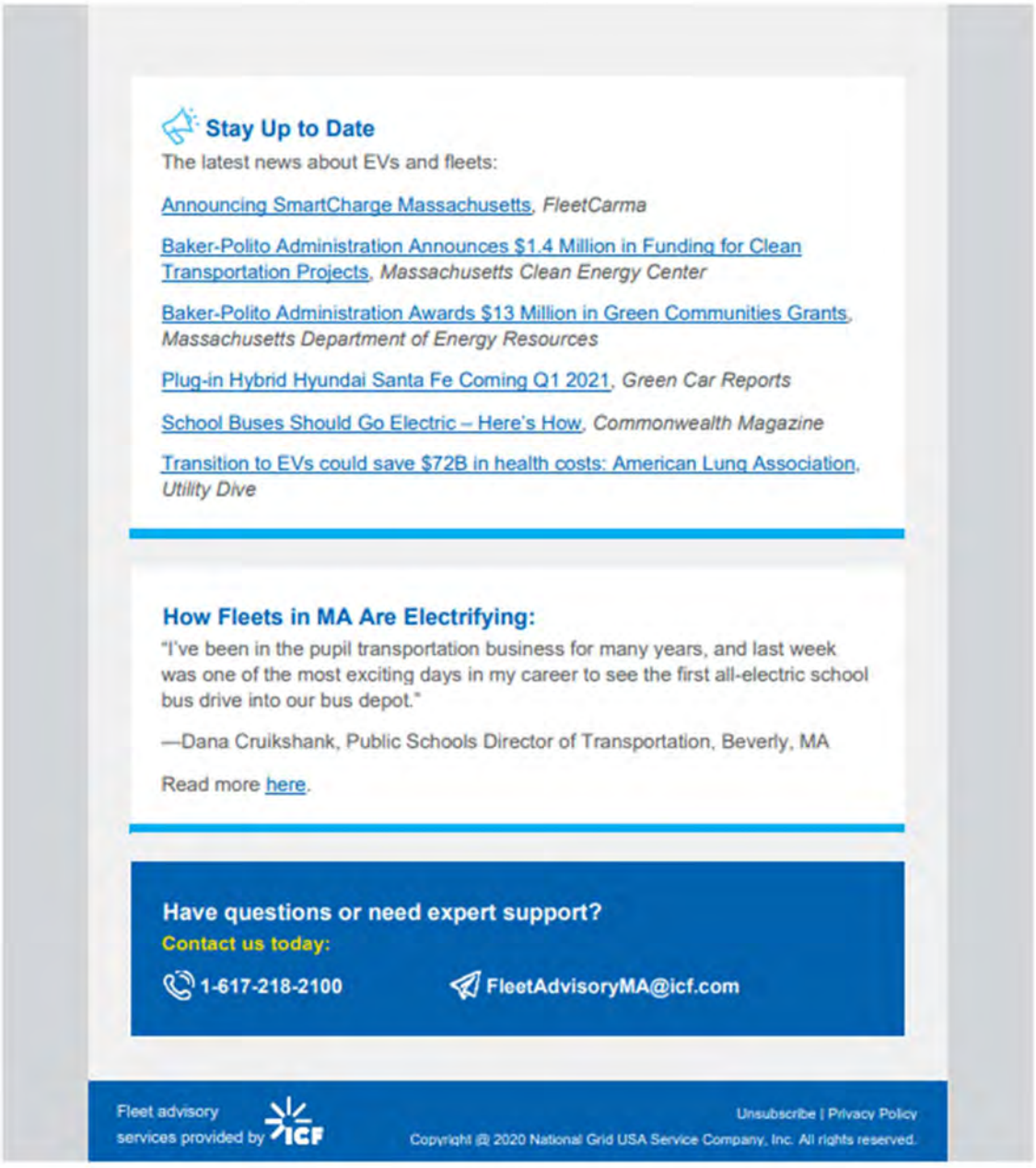

Stay Up to Date

The latest news about EVs and fleets:

Announcing SmartCharge Massachusetts, *FleetCarma*

Baker-Polito Administration Announces $1.4 Million in Funding for Clean Transportation Projects, *Massachusetts Clean Energy Center*

Baker-Polito Administration Awards $13 Million in Green Communities Grants, *Massachusetts Department of Energy Resources*

Plug-in Hybrid Hyundai Santa Fe Coming Q1 2021, *Green Car Reports*

School Buses Should Go Electric – Here's How, *Commonwealth Magazine*

Transition to EVs could save $72B in health costs: American Lung Association, *Utility Dive*

How Fleets in MA Are Electrifying:

"I've been in the pupil transportation business for many years, and last week was one of the most exciting days in my career to see the first all-electric school bus drive into our bus depot."

—Dana Cruikshank, Public Schools Director of Transportation, Beverly, MA

Read more here.

Have questions or need expert support?

Contact us today:

1-617-218-2100 **FleetAdvisoryMA@icf.com**

Fleet advisory services provided by ICF

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2

APPENDIX C - MA FASP Participants through December 31, 2021

Participant	Program Year	Category	EJ Status* (2020 Designation)	Fleet Expectations Doc Signed Date	Report Delivery Date
City of Methuen	Soft Launch	Municipality	MIE	10/15/2020	3/17/2021
City of Quincy	Soft Launch	Municipality	MIE	10/19/2020	3/21/2021
City of Newburyport	Soft Launch	Municipality	I	10/20/2020	3/4/2021
Veterans Administration (VA) Boston Medical Center	Soft Launch	Federal	MIE (Brockton)	10/22/2020	2/3/2021
City of Haverhill	Soft Launch	Municipality	MI	10/26/2020	3/31/2021
University of Massachusetts Lowell	Soft Launch	University/College	MIE	10/28/2020	3/9/2021
City of Lowell	Soft Launch	Municipality	MIE	12/2/2020	3/22/2021
City of Northampton	Soft Launch	Municipality	MI	12/2/2020	3/28/2021
Brockton Area Transit Authority	Soft Launch	Transit	MIE (Brockton)	12/3/2020	3/7/2021
Massachusetts Water Resources Authority (MWRA)	Soft Launch	State	MI (Clinton)	1/14/2021	3/25/2021
Massachusetts Department of Conservation & Recreation	2021	State	MIE	4/5/2021	9/3/2021
City of Beverly	2021	Municipality	MI	5/18/2021	9/23/2021
City of Melrose	2021	Municipality	MI	5/25/2021	9/8/2021
City of Worcester	2021	Municipality	MIE	5/28/2021	11/17/2021
Town of Palmer	2021	Municipality	MI	6/16/2021	10/14/2021
Salem State University	2021	University/College	MIE	6/21/2021	9/30/2021
Town of Chelmsford	2021	Municipality	M	6/23/2021	11/2/2021

Participant	Program Year	Category	EJ Status* (2020 Designation)	Fleet Expectations Doc Signed Date	Report Delivery Date
Nantucket Regional Transit Authority	2021	Transit	M	7/2/2021	12/2/2021
Town of Millbury	2021	Municipality	I	7/8/2021	12/30/2021
City of Medford	2021	Municipality	MIE	7/20/2021	11/19/2021
Town of Boxford	2021	Municipality		7/26/2021	11/30/2021
Town of Auburn	2021	Municipality	I	8/9/2021	1/7/2022
Town of Lancaster	2021	Municipality	M	8/12/2021	12/6/2021
Town of North Andover	2021	Municipality	M	8/26/2021	2/17/2022
City of Attleboro	2022	Municipality	MI	9/8/2021	1/18/2022
City of Salem	2022	Municipality	MIE	9/10/2021	2/11/2022
Town of Topsfield	2022	Municipality		9/20/2021	1/6/2022
Lowell Regional Transit Agency	2022	Transit	MIE (Lowell)	9/21/2021	2/28/2022
Merrimack Valley Regional Transit Authority	2022	Transit	MI (Haverhill)	9/28/2021	2/28/2022
City of Fall River	2022	Municipality	MIE	10/14/2021	In Progress
City of North Adams	2022	Municipality	I	10/18/2021	2/28/2022
University of Massachusetts Medical School, Worcester	2022	University/College	MIE (Worcester)	10/28/2021	In Progress
Town of Ayer	2022	Municipality	M	11/1/2021	In Progress
Town of Bolton	2022	Municipality		11/10/2021	3/7/2022
Town of Williamstown	2022	Municipality	MI	11/15/2021	3/8/2022

Participant	Program Year	Category	EJ Status* (2020 Designation)	Fleet Expectations Doc Signed Date	Report Delivery Date
Town of Sturbridge	2022	Municipality		11/22/2021	In Progress
Town of Westford	2022	Municipality	M	12/8/2021	In Progress

*E=English Isolation, I=Income, M=Minority