MAR 2023 EV/EVSE NEWSLETTER

US Army Corps of Engineers

USACE awaits FY23 funding to implement electric vehicle (EV) and EV supply equipment (EVSE) planning. HQUSACE is relying on MSCs for accurate data collection and verification. Recent data calls, guidance memorandums, and briefings have been delivered to provide personnel with the information necessary to prepare for FY23 planning. Read more below:

BUILDING STRONG®

ZEV VS. ICE: BREAKING DOWN THE BENEFITS

Transitions are always challenging and often costly. However, zero-emission vehicles (ZEVs) offer an opportunity for USACE to meet Federal requirements and reduce greenhouse gas (GHG) emissions. See below to understand how ZEVs measure up against traditional internal combustion engine (ICE) vehicles:

Vehicle	ZEVs	ICEs
Definition	Vehicles powered by electricity resulting in zero emissions when charged on a clean grid. ZEVs include battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).	Vehicles powered by heat engines that convert energy from gasoline combustion into mechanical work.
Cost via GSA Lease	- Incremental cost & monthly rate is HIGHER ✓ Mileage rate is LOWER	✓ Incremental cost & monthly rate is LOWER - Mileage rate is HIGHER

Cost comparisons of example ZEVs:

Vehicle Type	Sample Model	Monthly Rate	Mileage Rate	Incremental Cost
Sedan	Nissan Leaf	$265.00	$0.03	$7,965.87
SUV, Compact	Ford Escape	$294.00	$0.11	$8,202.21
Pickup (4X4)	F150 Lightning	$213.00	$0.10	$4,193.52

Cost comparisons of example ICE vehicles:

Vehicle Type	Sample Model	Monthly Rate	Mileage Rate
Sedan	Nissan Sentra	$228.00	$0.12
SUV, Compact	Escape	$263.00	$0.15
Pickup (4X4)	F150	$211.00	$0.23

So, with higher upfront costs AND monthly rates, ZEVs are more expensive than ICE vehicles. How can Districts afford this?

During vehicle acquisition, GSA allows agencies to recover incremental costs so that not one vehicle is overpriced. **Incremental cost** is the price difference between alternative fuel vehicles (AFVs), such as ZEVs, and comparable ICE vehicles. Agencies have actually been paying incremental costs since the FAST Act of 2015 first required non-petroleum AFVs in the government fleet, so this is not new! Since then, GSA has recovered costs by adjusting vehicle ***monthly lease rates*** to help agencies lower the overall cost of fleet conversion. For FY23, see how GSA is leveling out costs to support Districts afford ZEVs over ICE vehicles.

FY23 GSA FLEET COSTS TO DISTRICTS

Incremental cost of single ZEVs will be allocated across the ***entire*** fleet and **actually cost**:

Type	Sample Model	FY23 Monthly Rate	FY23 Mileage Rate
Sedan	Nissan Leaf	$325.00	$0.03
SUV	Ford Escape PHEV	$354.00	$0.11
Pickup	F150 Lightning	$273.00	$0.10

ICE vehicles will be surcharged at ***$60/vehicle/month*** and **actually cost**:

Type	Sample Model	FY23 Monthly Rate	FY23 Mileage Rate
Sedan	Nissan Sentra	$288.00	$0.12
SUV	Ford Escape	$323.00	$0.15
Pickup	F150	$271.00	$0.23

Service Life	5-7 years	3 years or 36,000 miles

Bottom Line Up Front: While ICE vehicles cost less upfront, ZEVs offer lower lifecycle costs, require less maintenance, and are ultimately incentivized by GSA. HQUSACE recognizes that navigating this transition is difficult but will continue to relay cost savings to Districts as information becomes available.

TAKEAWAYS FROM 9 MARCH OPS CHIEFS BRIEFING

On 9 March 2023, HQUSACE updated the MSC Ops Chiefs on EV/EVSE efforts and answered questions. See text below to learn about key topics covered during the briefing.

What should be included in MSC Strategic Plans, per the new EVSE guidance memo?

MSC Strategic Plans must roll up facility-specific implementation plans and include # of vehicles per site, estimated # of EVSE to support vehicles, facility-specific prioritization strategies, information on in-house capabilities, and a general MSC-wide execution plan. Currently, there is no required template, as these plans will likely be updated, nor do they need to identify funding sources at this time. Plans covering O&M-funded facilities are due **2 May 2023** and plans covering all other facilities are due **15 August 2023.**

What factors should MSCs consider when prioritizing sites for EVSE installation?

Sites that have already received or are expecting ZEVs in FY23 should be prioritized, as should sites with accessible parking lot-level data. Beyond that, MSCs should be aware that different sites may need different funding strategies based on vehicle count and vehicle-use frequency. For information on how to fund "smaller" vs "larger" sites, see the question below. For other factors MSCs should consider, see here:

- Cost, especially for design and construction
- Distance from power source (the further away the power source, the higher the construction cost)
- Underground vs. overhead power lines
- Pre-existing relationships with the utility
- Available lot space
- Capability of EVSE serving multiple lots
- Applicable safety regulations

How can smaller facilities most efficiently fund EVSE installation?

Currently, HQUSACE recommends smaller sites use the GSA Blank Purchase Agreement (BPA), which can cover site assessments, installation services, and EVSE purchase. The BPA allows Districts to engage with GSA subject matter experts during planning, reducing the in-house burden. It also allows sites to purchase only what they need. In particular, most smaller sites will not need design services, which are the costliest component of other EVSE financing methods. Small sites that *may* require design services should first conduct site assessments through the BPA to verify if major infrastructure upgrades or more advanced design services are necessary. For larger sites, HQUSACE recommends using the Facilities Repair and Renewal (FRR) Multiple Award Task Order Contract (MATOC), featured in past newsletters.

Is using a 1:1 ratio of ZEVs to EVSE required for all planning and installation?

HQUSACE recognizes that due to site-level and mission-specific factors, such as where vehicles are parked, how often they are driven, climate conditions, a 1:1 ratio may not always be required. However, the EVSE guidance memo establishes the 1:1 ratio as an initial agency-wide baseline. MSCs should coordinate with HQUSACE to deviate from setting targets and planning, if justified by site-level data. Ongoing data collection and verification via the current data call will help HQUSACE refine this ratio and other baseline assumptions. Any updates will be reflected in the EVSE Leading Metric, once final.

If you have any questions on EVs, EVSEs, or related subject areas, please reach to one of the names listed below. For questions related to CW sites, contact Mr. Brian Wilson. For questions related to RF sites, contact Ms. Marti Sedgwick.

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