NOACA REGIONAL ELECTRIC VEHICLE CHARGING STATIONS PROGRAM - COST INCREASE

Finance and Audit Committee February 11, 2022



INTRODUCTION

- Regional EV Charging Station Program
 - Implements 2019 EV Charging Stations Siting Plan
 - \$3 million CMAQ funding in the 2021-2024 TIP
- Current Program :
 - 40 agencies / 47 sites
 - 60 chargers / 100+ total ports
- Increase need to support program implementation based on final estimate
 - Planning and construction administration activities
 - Better known site conditions site prep and electrical upgrades
 - Materials demand and costs, COVID
 - Balance of number of units





ACTION REQUESTED

Recommend this item to the Executive Committee for placement on the March 2022 Board of Directors' agenda:

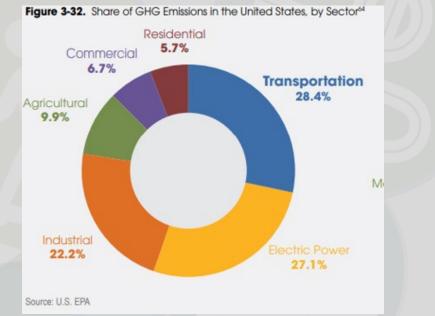
 Increase of budget for the Regional Electric Vehicle Charging Stations Program in the amount of \$1,140,000, from \$3,000,000 to \$4,140,000.

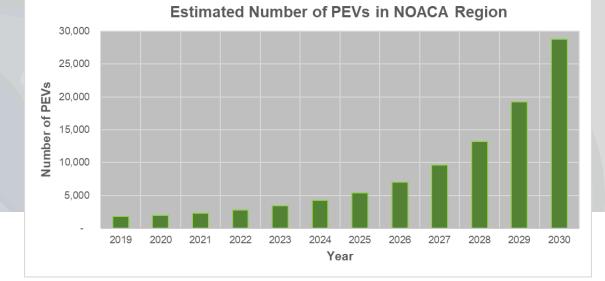
PREVIOUS ACTION

Resolution 2020-014 approving the Electric Vehicle Charging Station Program in the 2021-2024 TIP

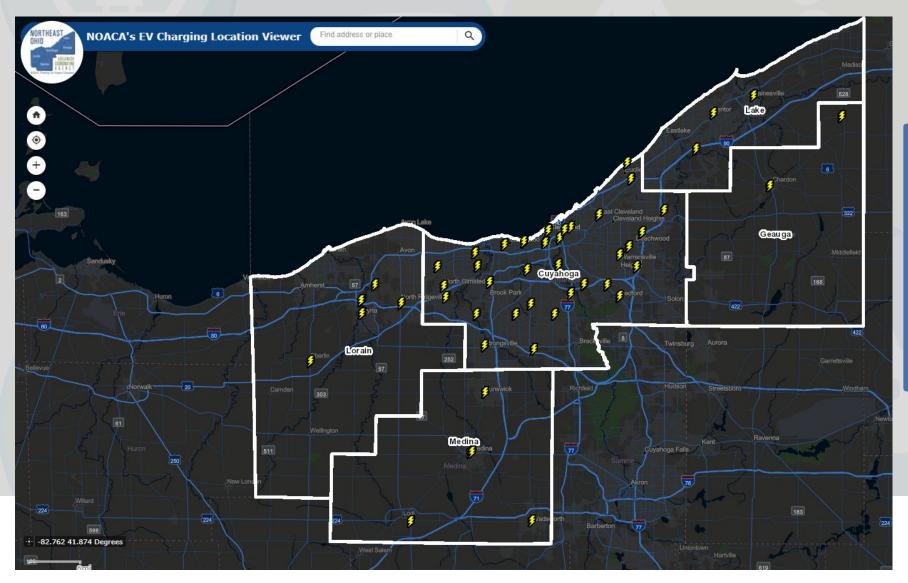


- March 6, 2020 the Board approved the 2021-2024 Transportation Improvement Program (TIP)
 - \$3,000,000 for a Regional Electric Vehicle Charging Station Program
 - Congestion Mitigation and Air Quality (CMAQ) program
 - Air quality improvements





Current Program:



- **5** Counties
- 40 Communities / Agencies
- 47 Sites
- 100+ EV ports



- Estimate was based on research for the installation of:
 - 60 charging station units at an average cost of \$50,000 each
 - Both Level 2 and Level 3 Direct Current Fast Charge (DCFC) units
- Only recognized costs associated with typical unit purchase, installation and activation





- Original planning estimate did not fully consider the following factors:
 - Planning phase activities, including the technical evaluation of each site, required more engagement by NOACA
 - Uniqueness of project and limited capacity of partner communities
 - Ensure consistency across multiple partners and sites
 - Extent of site preparation and electrical upgrades including utility force account





- Original planning estimate did not fully consider the following factors (continued):
 - Networked cloud-based plans and warranties to ensure functionality
 - Balance of number of units per location
 - based on evaluation with partners
 less units per site and allowing for more locations.
 - Costs have increased across the industry based on the availability and demand of materials post COVID





- In consideration of the these factors, the estimated average cost per unit has increased:
 - \$50,000 to \$69,000 on average per unit (\$19,000)
 - Developed by NOACA's planning phase consultant

TIP Estimate (2019)			Current Estimate (2022)			Difference (TIP vs. Current)	
Units	Average Cost*	Total Cost	Units	Average Cost*	Total Cost	Average Cost*	Total
60	\$50,000	\$3,000,000	60	\$69,000	\$4,140,000	\$19,000	\$1,140,000

* Average costs include all costs associated with planning, design, and construction phases



FINANCIAL IMPACTS

- Would increase the CMAQ funding commitment by \$1,140,000, from \$3,000,000 to \$4,140,000
- Proposed budget summary by phase activity:

Phase Activity		Budget
Planning / Specifications		\$200,000
Construction		\$3,640,000
Construction Administration		\$300,000
	TOTAL	\$4,140,000



FINANCIAL IMPACTS

 Proposed to be funded with additional dollars made available from reprogramming the Signal Timing and Optimization Program (STOP) for SFY's 2024-2027

- Revise from an annual program to a biannual program
 - \$575,000 each for two SFYs totaling \$1,150,000
- Reflects the 18-24 months needed for completion of each corridor and for the selection and contracting for new corridors
- Any unused funds be returned to the CMAQ program
- No impacts to existing TIP or OWP projects



NEXT STEPS

- The TIP will be amended to reflect the final estimate for construction phase activities
- Request for Bids (RFB) will be announced in March 2022
 - Finance and Audit Committee May 2022
 - Board of Directors June 2022.



ACTION

Recommend this item to the Executive Committee for placement on the March 2022 Board of Directors' agenda:

 Increase of budget for the Regional Electric Vehicle Charging Stations Program in the amount of \$1,140,000, from \$3,000,000 to \$4,140,000





NOACA will **STRENGTHEN** regional cohesion, **PRESERVE** existing infrastructure, and **BUILD** a sustainable multimodal transportation system to **SUPPORT** economic development and **ENHANCE** quality of life in Northeast Ohio.

