# 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:

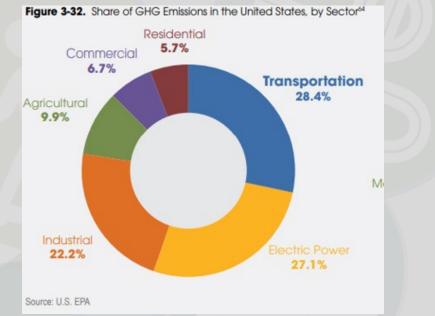
 Increase of budget for the Regional Electric Vehicle Charging Stations Program in the amount of \$1,140,000, from \$3,000,000 to \$4,140,000.

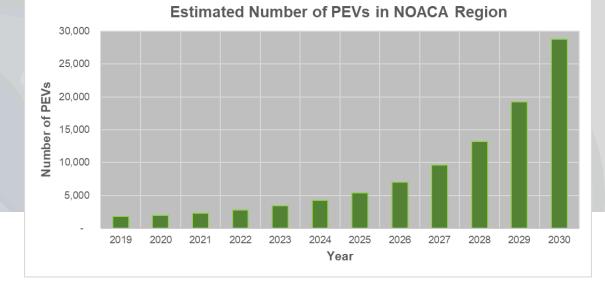
#### **PREVIOUS ACTION**

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

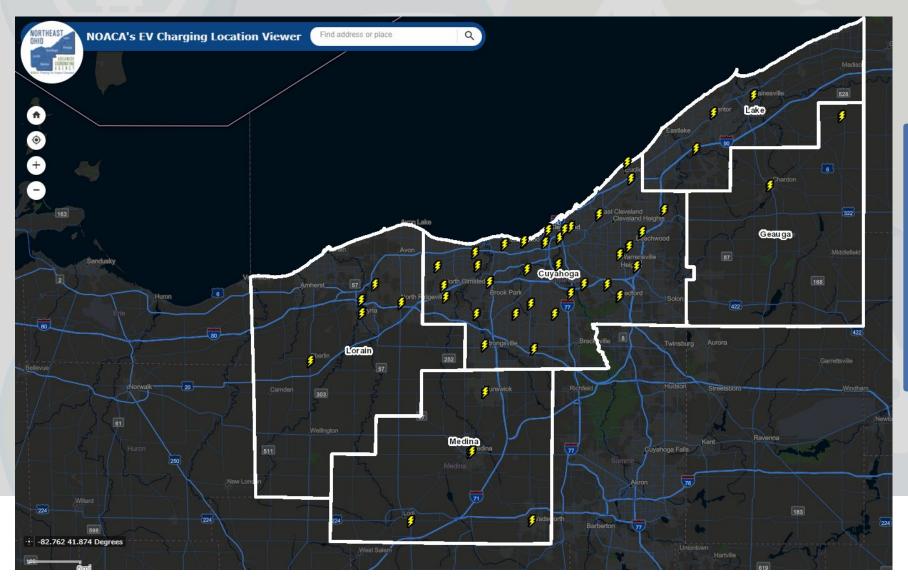


- March 6, 2020 the Board approved the 2021-2024 Transportation Improvement Program (TIP)
  - \$3,000,000 for a Regional Electric Vehicle Charging Station Program
  - Congestion Mitigation and Air Quality (CMAQ) program
    - Air quality improvements

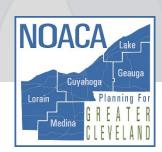




#### **Current Program:**



- **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<br>(TIP vs. Current) |             |
|---------------------|------------------|-------------|-------------------------|------------------|-------------|---------------------------------|-------------|
| Units               | Average<br>Cost* | Total Cost  | Units                   | Average<br>Cost* | Total Cost  | Average<br>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.

