



# Wireless Integrated Rapid Energy Link Electric Shuttle Service-WIRELESS



FY24 Communities
Taking Charge
Accelerator







# STRATEGIC PLAN

**Goal 7:** Enhance and sustain El Paso's infrastructure network



## Overview

- **FY24 Communities TCA Program**
- Project Scope of work
- Project Budget
- City Impacts
- **Grant Timeline**
- Council action





#### FY24 Communities Taking Charge Accelerator (TCA)

Bipartisan Infrastructure Law (BIL)

#### **Estimated Funding**

- \$46,000,000 allocated to 14-41 awards
- \$250,000 \$4,000,000 award range

#### **Invitation to Apply**

- Concept Paper submitted May 20 by ASPIRE
- DOE sent a Letter of Encouragement to Apply on June 11











Topic 1 – Solving for No-Home Charging: Expanding Charging Access for Privately Owned E-Mobility



Topic 2 – Expanding E-Mobility Solutions through Electrified Micro, Light and Medium-Duty Fleets



**Topic 3 – Managed Charging for Clean Reliable Energy** 

### **Learn More**

Communities Taking
Charge · Joint Office of
Energy and Transportation
(driveelectric.gov)



## Project Scope of Work

### **Project Tasks (planning):**

- 1. Developing resilient infrastructure strategies for the EPIA shuttle service using EVI-InMotion Tool
- 2. Assessing dynamic wireless charging (DWPT) design criteria and opportunities to integrate solar energy generation
- 3. Developing a Community Benefits Plan

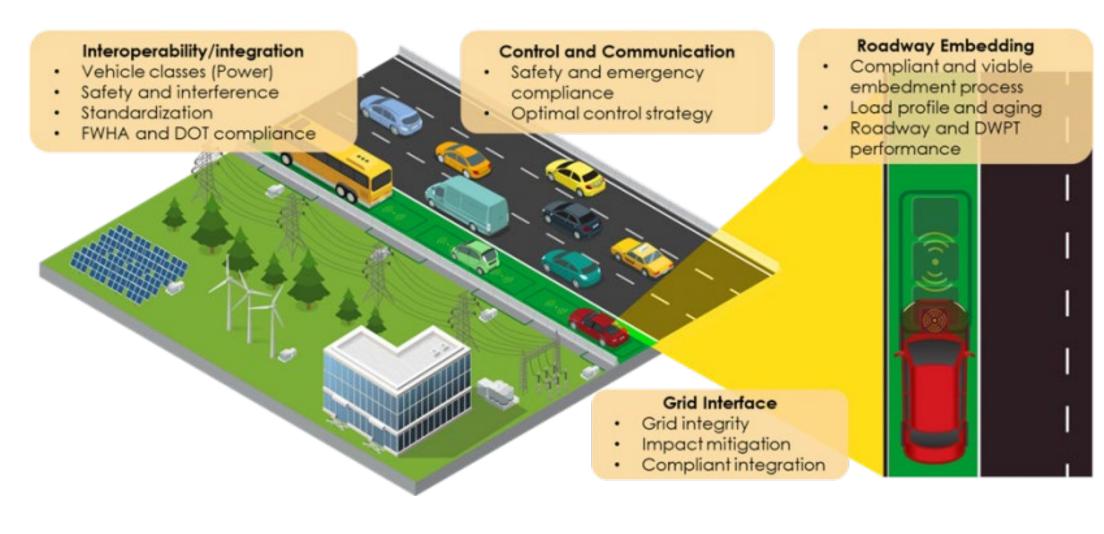
### **Project Partners:**

- Utah State University (Lead applicant)
- UTEP (Co-Applicant)
- ASPIRE Research Center
- City of El Paso + El Paso International Airport (EPIA)
- National Renewable Energy Lab (NREL)
- University at Buffalo





### **Dynamic Wireless Charging (DWPT)**



Electric Vehicles at Scale Consortium Dynamic Wireless Power Transfer | Department of Energy

### **DWPT along ELP Shuttle Service Routes**



El Paso International Airport



## Project Budget

Project Components	Grant
In-Motion Wireless Charging Strategies	
DWPT Integration Assessment	\$1,500,000
Community Benefits Plan	
Indirect	\$500,000
Total	\$2,000,000

No City match is required



## Impact to City of El Paso

The Project deliverable is a planning document and cost estimate outlining how electrified paving and shuttles can work at the EPIA

- Implementation via DOE and USDOT funding
- Possible future public-private partnerships
- Increased visibility and accessibility at EPIA
- Advance electrification initiatives and transition to electric vehicles

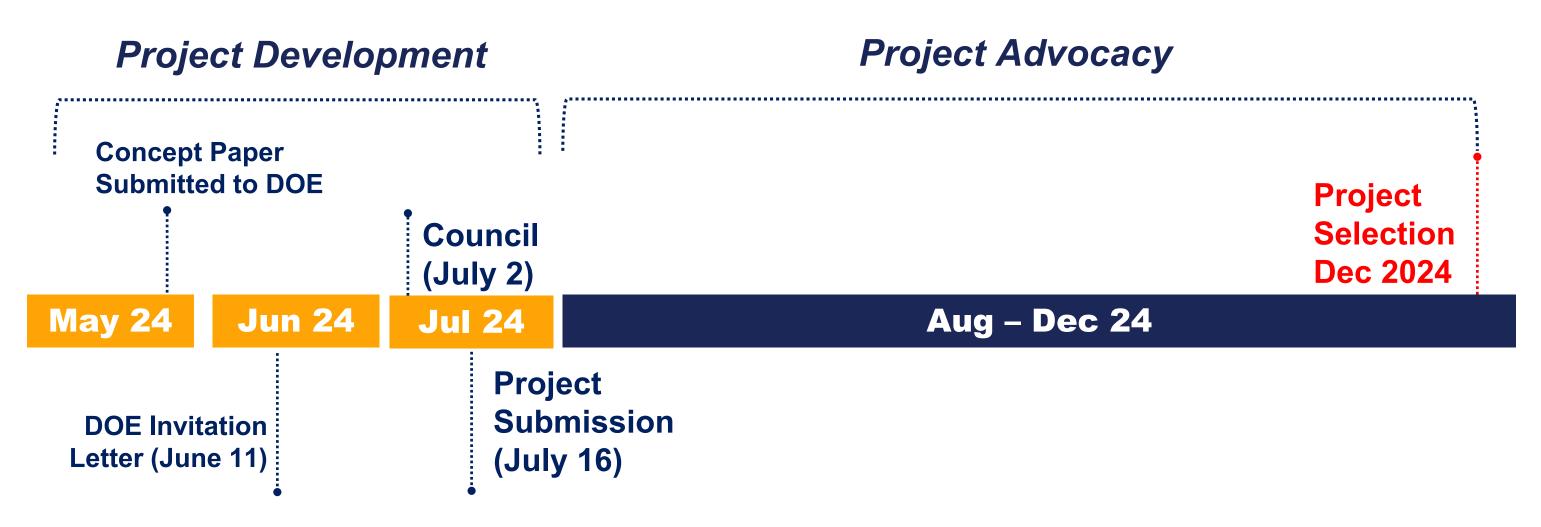
### **Direct Link with Other City Projects:**

- El Paso County EV Charging Station Network (\$15M USDOT grant)
- Sun Metro EV Microtransit Shuttles (\$720K grant)
- El Paso Recompete Network





# Grant Development Timeline





### Council Action

Discussion and action on a Resolution supporting an Application by the Utah State University (USU) and University of Texas at El Paso (UTEP) ASPIRE NSF Engineering Research Center to the U.S. Department of Energy (DOE) Fiscal Year (FY) 2024 Communities Taking Charge Accelerator grant program requesting up to \$2,000,000.00 in funds for the Wireless Integrated Rapid Energy Link Electric Shuttle Service-WIRELESS ("Project") and authorizing participation from City of El Paso staff and use of facilities at the El Paso International Airport (EPIA) in the Project for planning activities, with no match required from the City.





# Mission

Deliver exceptional services to support a high quality of life and place for our community



Integrity, Respect, Excellence, Accountability, People



Develop a vibrant regional economy, safe and beautiful neighborhoods and exceptional recreational, cultural and educational opportunities powered by a high performing government

