Midwest Electric Vehicle Opportunities: Learning, eVents, Experience

- Chicago Area Clean Cities
- Clean Fuels Ohio
- Greater Lansing Area Clean Cities
- North Dakota Clean Cities
- South Shore Clean Cities
- Twin Cities Clean Cities Coalition
- Wisconsin Clean Cities
- Argonne National Laboratory
- Make Ideas Reality
- PlugInConnect
Overview

Timeline
- Start: October 1, 2016
- End: September 30, 2019

Budget
- Total project funding $1,960,156
  - DOE share: $949,977
  - Contractor share: $1,010,179

Barriers
- Availability of EVs in Midwestern states.
- Charging infrastructure; perceptions and realities of lack of infrastructure in Midwest.
- Consumer and fleet reluctance to purchase new technologies

60+ stakeholders
- Workplace Charging Locations
  - Anderson Corporation
  - Aveda
  - Book Factory
  - Cincinnati Zoo
  - City of Cincinnati
  - City of Cleveland
  - Grove City
  - Health Partners
  - Tennant
- Utilities
  - ComEd
  - Great River Energy
  - First Energy
  - Madison Gas & Electric Company
  - Xcel Energy
- OEM & Dealerships
- Additional Partners
  - Non-profits
  - EVSE Manufacturers
  - EV Owner Groups
Project Approach

Outreach & Test Drives
- Large (Macro) events
- Small (micro) events
- Workplace Charging Events
- Survey & Data Collection

Communications
- Create & implement key messaging and templates
- Create & execute communications plan
- Develop & maintain website, social media, blog & more

Education
- Dealership Training
- EV Owner Forums
- Utilities & EV connection
- Best Practices & Concept Papers
- EVolution Consumer Tool
What has changed since 2016

Vehicles available
- 1 page document to 2 pages
- State EV Brochure data

Funding opportunities
- Leveraging funds

Data
- Rural vs Metro
- Large auto show vs community event

Events
- Over 200 wrap-around/complimentary events
Event Highlights: Auto Shows
CLOCKWISE:
Indiana
North Dakota
Ohio
Minnesota
Other Activities and Progress

Public Relations, Communications, Education

- Website: MidwestEVOLVE.org
- Social Media
- Strategic Communications Plan
- Key Messages
- Resources: Case Studies
- Data: 6,000 surveys completed
- Tools: EVolution

Interactive Process in 6 steps

**Vehicle Selection**
- Type, size, seats, price range
- Comparison across powertrains, maker and models
- Allows for 2 alternative powertrains compared to ICE

**Location Details (Specific to zip code)**
- Timely fuel price (gasoline, electricity)
- Average travel time, speed
- Links to Workplace/Public charging locations
- Links to local incentives

**Travel and Charging**
- Workday travel and other travel (speed, duration, etc.)
- Home, workplace and other charging (duration, charger type)
- Other information (financial, ownership, etc.)

**Educational Information about PEVs**
- Types of charging vs. Charging time
- Weather Effects on performance and range
- Energy saving depends on travel pattern, charging rate/time

**Outputs**
- Savings in $ and gallons
- Total Cost of Ownership
- Savings as a function of average speed

Consumer Vehicle Purchase Guidance Tool:
EVolution-informing your choice for a smart purchase

https://evolution.es.anl.gov/
Project Accomplishments and Progress

**Test Drives**
- 100,000 people attended events
- 3,000+ test drives completed

**Surveys**
- Pre, Post & Follow surveys completed
- 6,000 surveys collected

15% of attendees have never experienced an electric vehicle before Midwest EVOLVE test drive events

Over 70% of attendees take a further step to learn more

21% of attendees have purchased or leased an EV

Change in Opinion of PHEVs

Change in Opinion of Pure Electric Vehicles
Lessons Learned

Types of events
• Public
• Stand alone
• Audience

Collecting Data
• Logistics
• Challenges (time & privacy)

Funding
• Leveraging $
• Building partnership
Twitter: @MidwestEVOLVE
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