

Midwest Electric Vehicle Opportunities: Learning, eVents, Experience

- Chicago Area Clean Cities
- Clean Fuels Ohio
- Earth Day Coalition
- 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



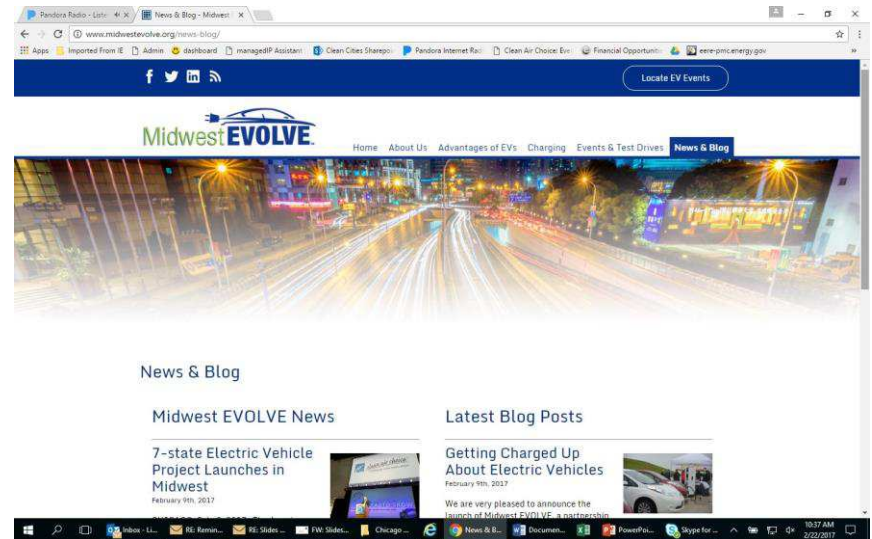
Project Period:
10/1/2016 – 9/30/2019



Events & Driving Opportunities

25 Large Showcases:

- 2017 Ohio Earthfest
- 2017 Taste of Chicago
- 2017 Milwaukee Summerfest
- 2017 National Drive Electric Week
- 2018 Twin Cities Auto Show
- 2018 Chicago Auto Show
- 2018 North American International Auto Show



53 Smaller Showcases

16 EV Dealership Training Events

52 Workplace Charging Events + *34 Extended Test Drives*

39 EV Forum Events/Meetings

www.MidwestEVOLVE.org

[#MidwestEVOLVE](https://twitter.com/MidwestEVOLVE)

Key Stakeholders – 50+

Workplace Charging Locations

- Anderson Corporation
- Aveda
- Book Factory
- Cincinnati Zoo
- City of Cincinnati
- City of Cleveland, Office of Sustainability
- Grove City
- Health Partners
- IBEW/NECA Technical Institute
- Rife Autobody
- Tennant

Utilities

- ComEd
- Great River Energy
- First Energy
- Madison Gas and Electric Company
- Xcel Energy

OEMs and Dealerships

- Nissan
- Germain Nissan
- Mike Bass Ford
- McCluskey Chevy
- Perillo BMW

Let's add your company to this list!

Key Stakeholders - Continued

Additional Partners

- Carbon Day
- Clipper Creek
- ChargePoint
- NRG EVgo
- Element Financial Corporation
- E-RIVE
- Great Lakes Renewable Energy Association
- Lake Michigan Clean Cities Consortium
- Minnesota Plug-in Electric Vehicle Owners Circle
- Drive Electric Minnesota
- Fresh Energy
- Minnesota Pollution Control Agency
- Jo Miller & Associates
- Electric Auto Association of Northwest Ohio
- Green Energy Ohio
- Ohio EV Solutions
- Upgrade Athens County
- Marshall Auto Body



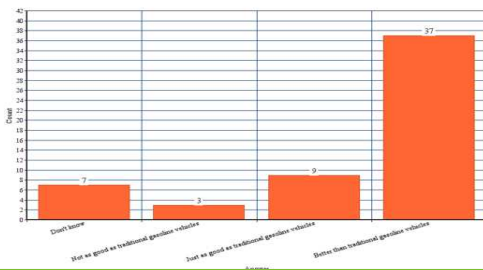
Tools & Resources

- www.MidwestEVOLVE.org
 - Event listing
 - Blogs
 - Vehicles
 - Tools
- EVolution Tool: <https://evolution.es.anl.gov/>
- Midwest Factsheets & Concept papers
- Surveys & Perceptions

Opinion of PHEVs

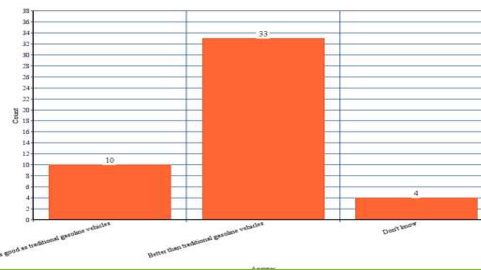
Pre-Drive

Of the vehicle options that are available today, what is your opinion of plug-in hybrid electric vehicles?

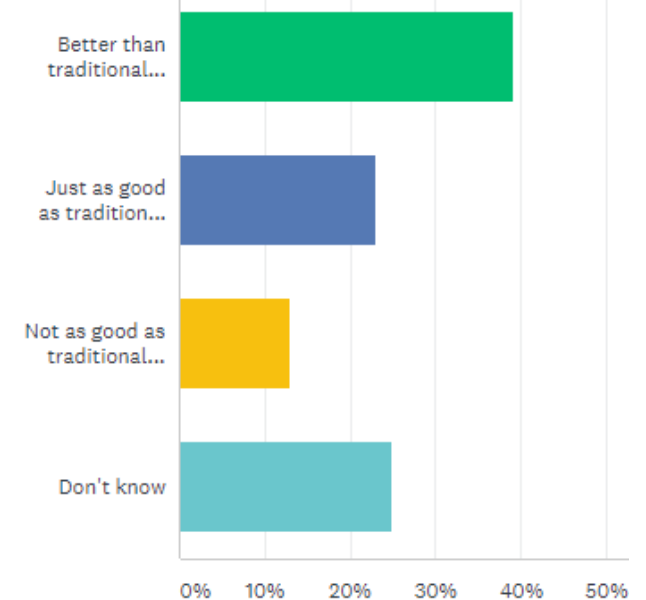


Post-Drive

Of the vehicle options that are available today, what is your opinion of plug-in hybrid electric vehicles?



What is your opinion of BEV?



EVOLUTION
CHOICES FOR A
SMARTER PURCHASE

EVolution Tool

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



Is an electric vehicle a smart consumer choice? Absolutely! But first you need the facts about EVs and how they relate to your driving needs. The EVolution consumer choice tool is here to help.

So, what are the benefits of owning an electric vehicle?



Better Energy Efficiency



Better for your Wallet



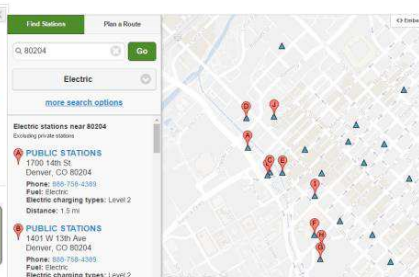
Better for the Environment

[Click here to learn more](#)

Electric Vehicles: What You Need to Know!

Goal: Attract & Connect

2017 Chevrolet Bolt EV	2017 Chevrolet Volt	2017 Nissan Leaf	2017 Tesla Model S AWD - P90D
			
Electric Vehicle	Plug-in Hybrid Vehicle Gasoline-Electricity	Electric Vehicle	Electric Vehicle
Automatic (A1)	1.5 L, 4 cyl, Automatic (variable gear ratios)	Automatic (A1)	Automatic (A1)
MSRP: \$36,620 - \$40,905	MSRP: \$33,220 - \$37,570 Plug-in Hybrid Calculator	MSRP: \$30,680 - \$36,790	MSRP: \$87,500
Electricity 119 MPGE combined city/highway 28 kWh/100 mi	Electricity 106 MPGE combined city/highway 31 kWh/100 mi Reg. Gas 42 MPG combined city/highway 2.4 gal/100mi	Electricity 112 MPGE combined city/highway 30 kWh/100 mi	Electricity 95 MPGE combined city/highway 35 kWh/100 mi
Electricity 238 miles Total Range	Electricity 53 miles Total Range Gasoline City 420 miles Total Range	Electricity 107 miles Total Range	Electricity 270 miles Total Range



Regular grade gasoline prices at retail outlets by region
August 22, 2018



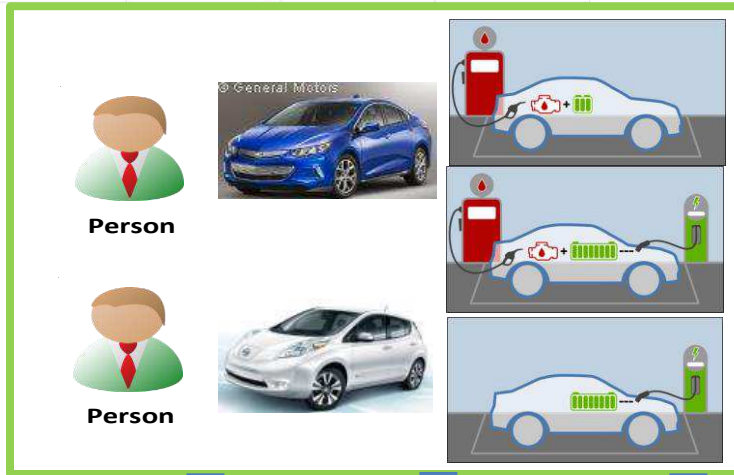
Federal and State Laws and Incentives

Find federal and state laws and incentives for alternative fuels and vehicles, air quality, fuel efficiency, and other transportation-related topics.

Federal
laws and incentives

State
laws and incentives

Massachusetts GO



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***

Federal and State Laws and Incentives

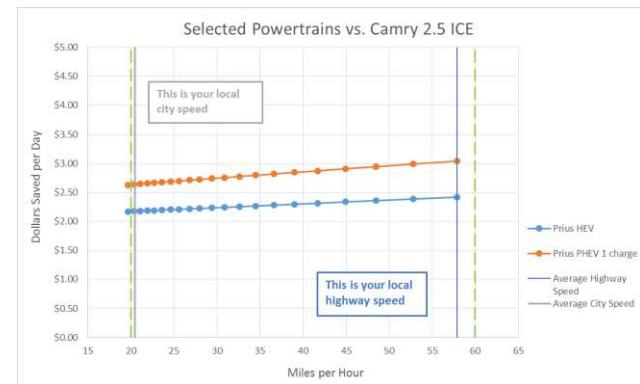
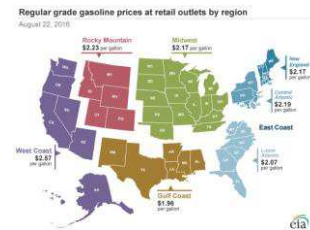
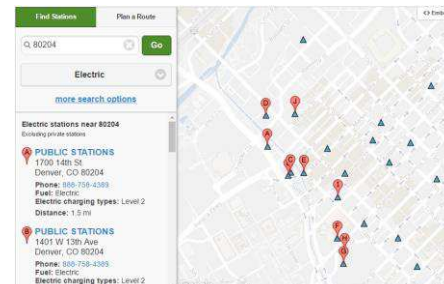
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Evolution vs. Other EV Tools

Tools	Information Provided				Inputs/Defaults						Outputs					
	All LDV models (including all PEV)	Vehicle Prices	EVSE Availability, type	Customized MPG	Usage Pattern	Daily mileage	Long Distance Travel	% Highway travel	Charging Frequency	Gas and Electricity Prices	Energy Consumption	Fuel Cost	Total Ownership Cost	Greenhouse gas emissions	Criteria pollutants	Model Suggestions
My Plugin Hybrid Calculator					x	x	x	x	x	x	x	x				
AFDC Vehicle Cost Calculator	x	x			x	x	x	x	x	x	x	x	x	x		
UC Davis GreenLight EV Explorer	x			x	x	x		x	x	x		x				
Sierra Club		x	x	x	x	x	x	x	x							x
Go Electric Drive		x	x													x
My GreenCar (GPS Tracking)		x		x	x	x		x		x	x	x	x	x	x	x
Nyserda EV Calculator					x	x					x	x	x	x		x
UC Davis Analytic Tool to Support the Implementation of EV Programs		x		x	x	x	x	x	x	x		x	x			
Evolution	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x

[Click for EVolution Tool](https://evolution.es.anl.gov/)

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Twitter: @MidwestEVOLVE

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