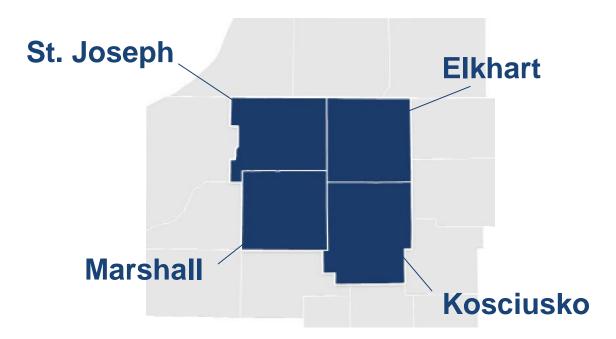
MACOG NDEW VIRTUAL EV EXPERIENCE



Event Partners







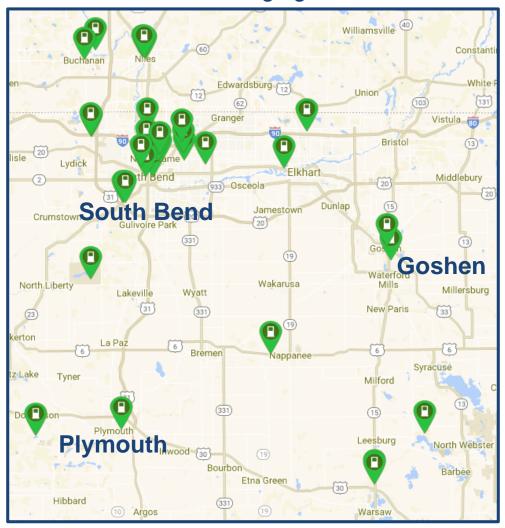


Local EV Drivers

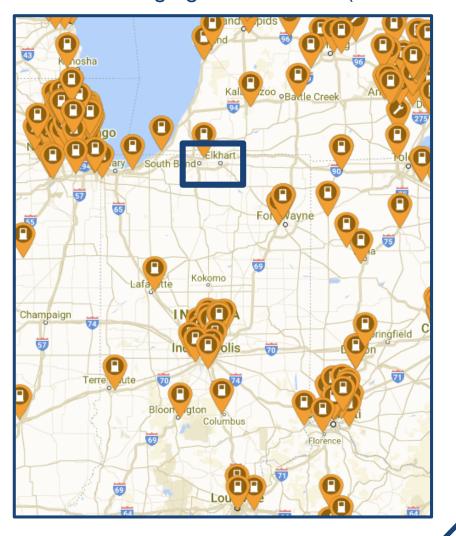
- Leah Thill 1 all-electric vehicle
- Sheila McCarthy 2 all-electric vehicles
- Rachel Novick Plug-in hybrid minivan
- City of Goshen All-electric vehicle & Hybrid Police vehicles
- Adam Thada Plug-in hybrid and plug-in fleet vehicles at work.
- Tim Peters Plug-in hybrid

Local Charging Stations

Level 2 "Destination" Charging in Northern Indiana



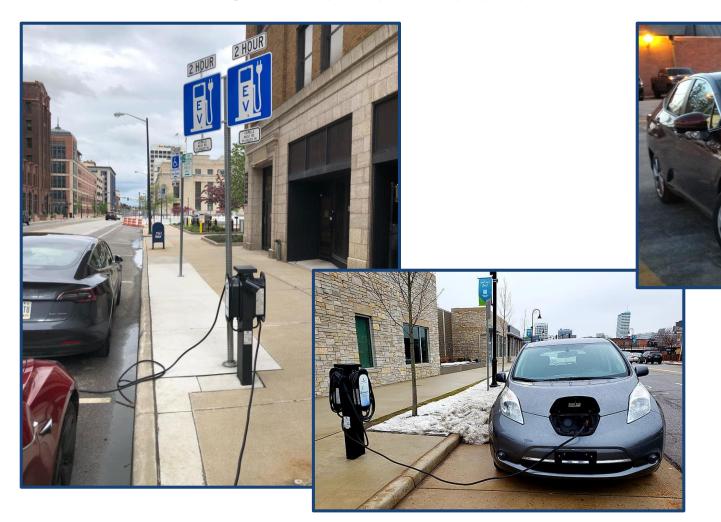
Level 3 Fast Charging near Indiana (Non-Tesla)



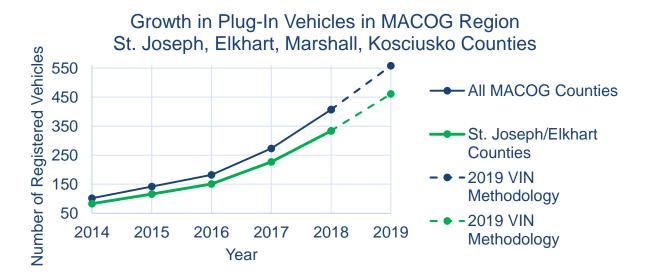
Free Public Charging Stations

Downtown South Bend & Howard Park

Downtown Goshen – City Hall

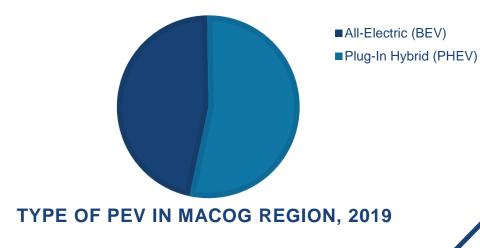


Adoption of Electric Vehicles





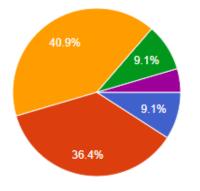




Local EV Drivers Survey

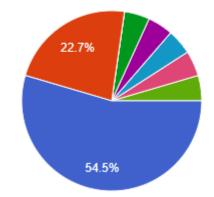


How long have you been driving a plug-in vehicle? 22 responses



Most of the time, how do you charge your vehicle?





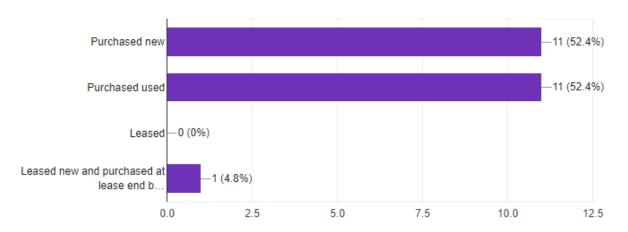
- Less than 1 year
- 1 year 2 years
- 3 5 years
- More than 5 years
- I do not yet have a plug-in vehicle but am seriously considering it.

- At home, Level 2
- At home, Level 1 (regular 110 V outlet)
- I do not have access to charge at home
 I rely on public or other stations (i.e....
- 50/50 split between home and public stations
- At home: Tesla Wall Connector
- When I get a PHEV, will use at home...
- Work, Home, Gym, Public Chargestati...
- work level 2 home level 1



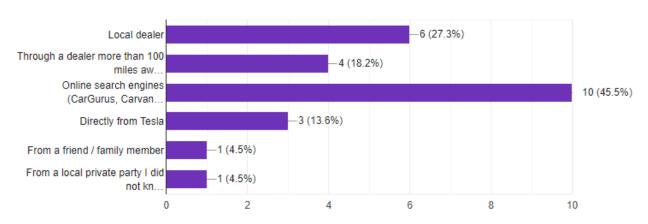
How did you acquire the plug-in vehicle(s)? (select all that apply)

21 responses



How did you find the vehicle(s) you ultimately acquired?

22 responses

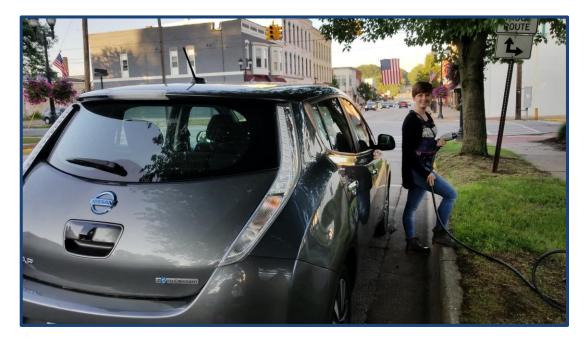






Leah Thill Electric vehicle driver for ~4 years Resident of South Bend Works at MACOG

Previous Vehicle - Nissan LEAF: All-electric vehicle, older model (2016) Range < 100 miles.



Current Vehicle – Chevy Bolt: Range 259 miles!



Almost all my charging happens at home, unless I'm out of town.



Fun Fact: We're now a big EV family!

My 85 year old grandparents are my inspiration! They have been driving Nissan LEAFs since 2013.

My parents live in rural southern Indiana with their new Chevy Bolt, despite lack of public charging.





Youngest sister's first car: used Ford C-MAX plug-in.



Local EV Driver – Video Feature

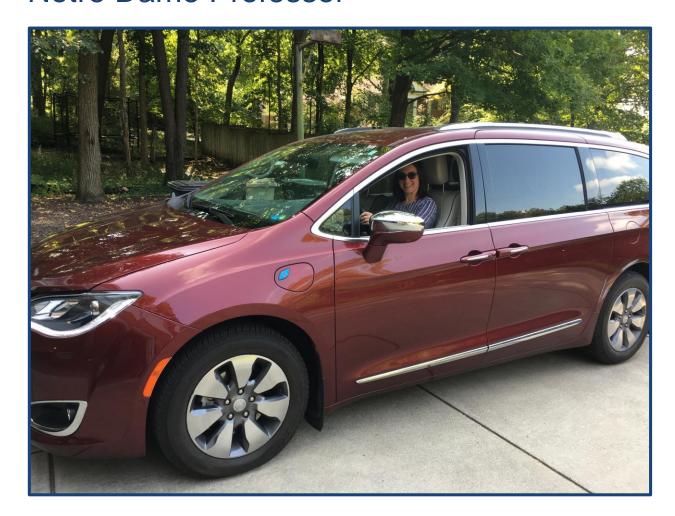
Sheila McCarthy
EV Driver < 1 year
South Bend Resident
Notre Dame Professor

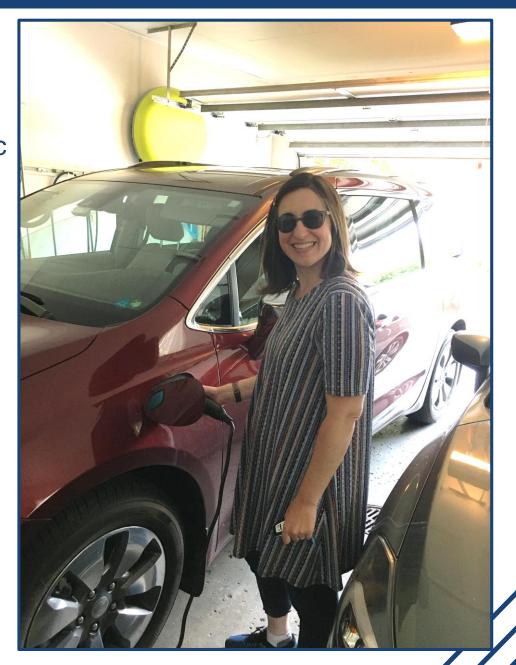
Nissan LEAF Chevy Bolt



Rachel Novick EV Driver 1+ year South Bend Notre Dame Professor

About My EV: 2017 Chrysler Pacifica Plug-In Hybrid 33 mile range on all-electric

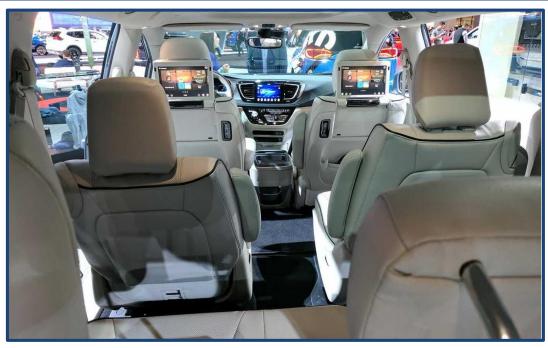




What we love about our vehicle:

- Space and comfort for 4 kids
- Great safety features, including self-braking
- 360 degree cameras
- Entertainment system includes 2 screens
- Lots of trunk space
- Fuel efficient in hybrid mode too





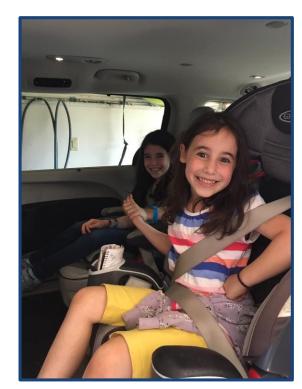


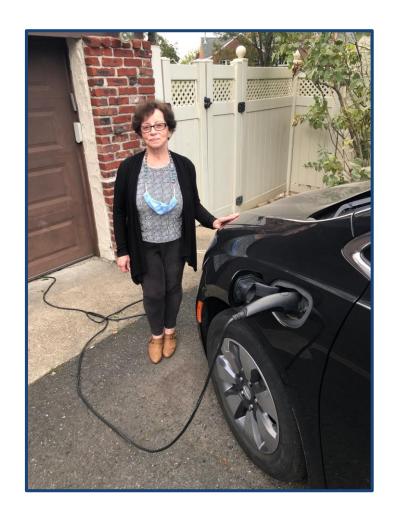
Family Inspirations:

My in-laws in New Jersey bought the same vehicle - love using it to take grandkids on outings.

Our kids were the inspiration for our EV purchase. They used to protest every time we stopped at a gas station. Now we only fill the gas tank a few times a year for extended road trips.

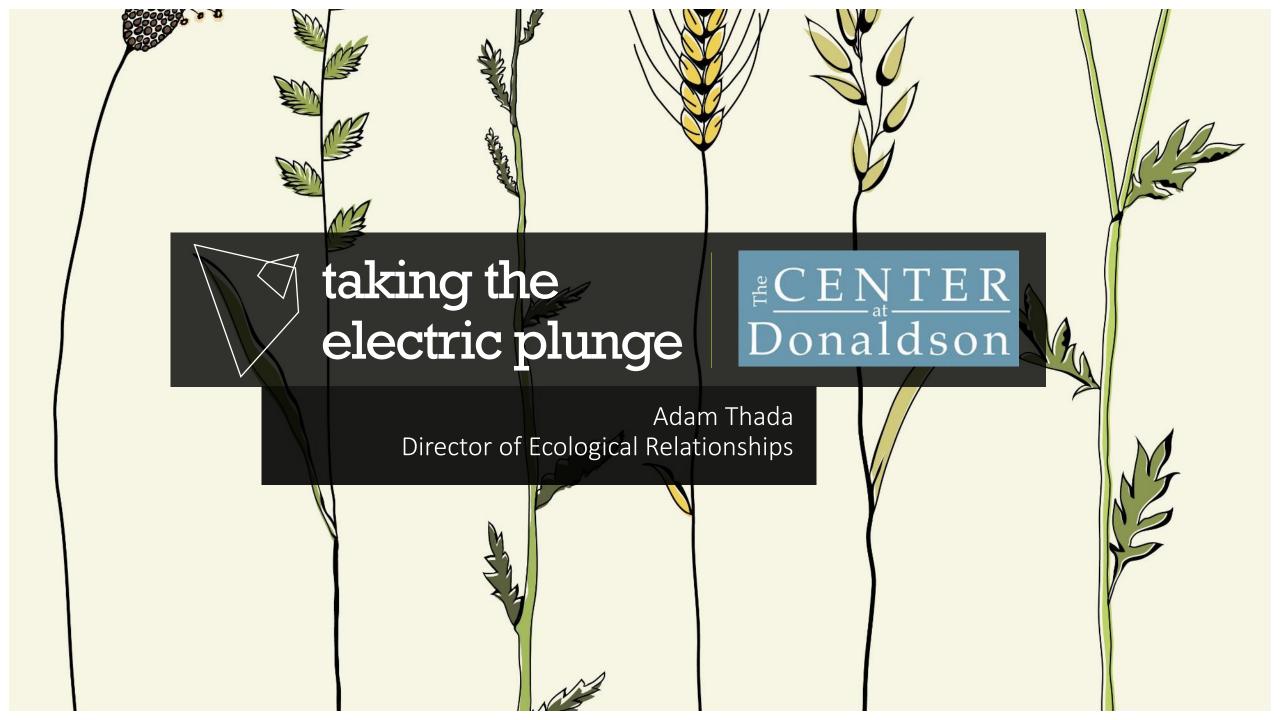






City of Goshen – Video Feature

Aaron Sawatsky-Kingsley Department of Environmental Resilience City of Goshen



EV For Fleet Usage

Reduce emissions

Control costs

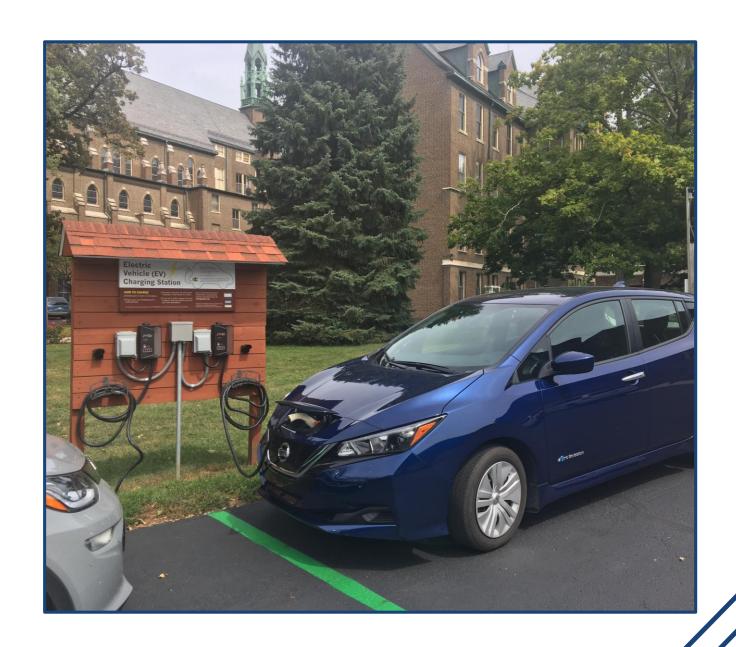
 Be a change agent (education)



2019 Nissan LEAF

+/- 150 mi range with50 kW fast-charging

 Battery-electric only (simplicity)



Driver's Log: First 6 months

		J^											
1	A	В	С	D	E	F	G	Н	I	J	K	L	M
1	date	charge	end	%	range	range	range	odometer	odometer	miles	destination	driver	passenger
2		percentage	percentage	used	start	end	used	start	end	driven			
3													
4	Friday, January 11, 2019	100			150	67	83		driven from Warsaw distance of 30.7 miles				
5	Wednesday, January 16, 2019	100	76	24	137	108	29	284	309	25	Plymouth	Jim	Barb Borskie
6	1/17/2019 car parked outside overnight. When Andy decided to plug it in it was totally dead												
7	Friday, January 18, 2019	100	85	15	140	122	18	309	328	19	Plymouth	Stewart	Sr. Coletta
8	Monday, January 21, 2019	84	63	21	132	88	44	328	348	20	Plymouth	Jim	errands
9	Monday, January 28, 2019	97	69	28	135	85	50	348	370	22	Plymouth	Jim	Sr. Coletta
10	Monday, February 4, 2019	99	82	17	123	106	17	370	388	18	St. Michael's	Stewart	Sr. Rosemary
11	Tuesday, February 5, 2019			0			0			0			
12	Wednesday, February 6, 2019	126	84	42	154	136	18	388	410	22	Culver	Adam T.	none
13	Thursday, February 7, 2019	100	20	80	164	34	130	411	520	109	Merr / Hobart	Tom N.	
14	Monday, February 18, 2019			0	Tom				heater by Adam - used seat heater, steering			heater and defrost/fan	
15	Tuesday, February 19, 2019	100	40	60	164	68	96	520	597	77	Anc. Ply SB Ply Anc.	Adam T.	
16	Wednesday, February 20, 2019			0			0			0			
17	Thursday, February 21, 2019	100	63	37	142	92	50	597	637	40	Ply 2x	Jim	Srs. Eileen & Rosem
18	Friday, February 22, 2019	98	18	80	141	29	112	637	731	94	Hobart	Adam T.	Matthew
19	Tuesday, February 26, 2019	100	17	83	134	17	117	731	819	88	Michigan City	Adam T.	none
20	Wednesday, February 27, 2019			0			0			0			
21	Thursday, February 28, 2019	100	85	15	144	117	27	819	833	14	Plymouth	Stewart	Srs. Kate & Sharon
		~7	7.4	4.0	440	~ 4	25	222	246	40	B1 11	٠	<u> </u>

Usage

- 8,000 mi/year
- Mostly local day trips, some regional trips
- ~20 unique drivers... "butts in seats"



Impact

More utilization =More impact

Education

Next steps

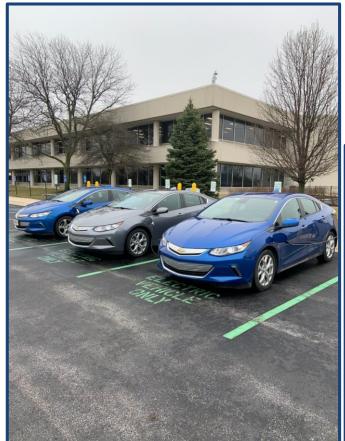
Relationships

out ecology in the Heartland



ng down for dinner, the car was back up to 97%, so we hit the interstate without delay.

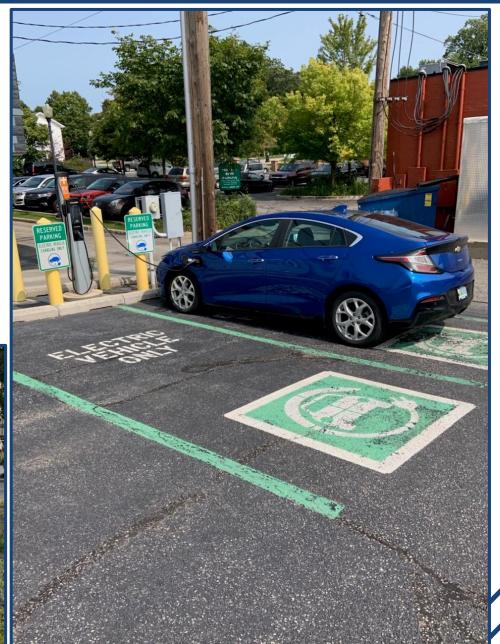
Timothy Peters, M.D. Plymouth Resident



About My EV:

2017 Chevrolet Volt
Plug-In Hybrid
~ 50 mile range on all-electric





Connect with our speakers!

Leah Thill MACOG

Senior Environmental Planner

Experience with Nissan LEAF, Chevy Bolt Connect you with other local EV drivers lthill@macog.com

Aaron Sawatsky-Kingsley
City of Goshen
Director of Environmental Resilience
aaronkingsley@goshencity.com

Adam Thada
The Center at Donaldson
Director of Ecological Relationships
athada@poorhandmaids.org

Type Your Questions in the Chat Box!

