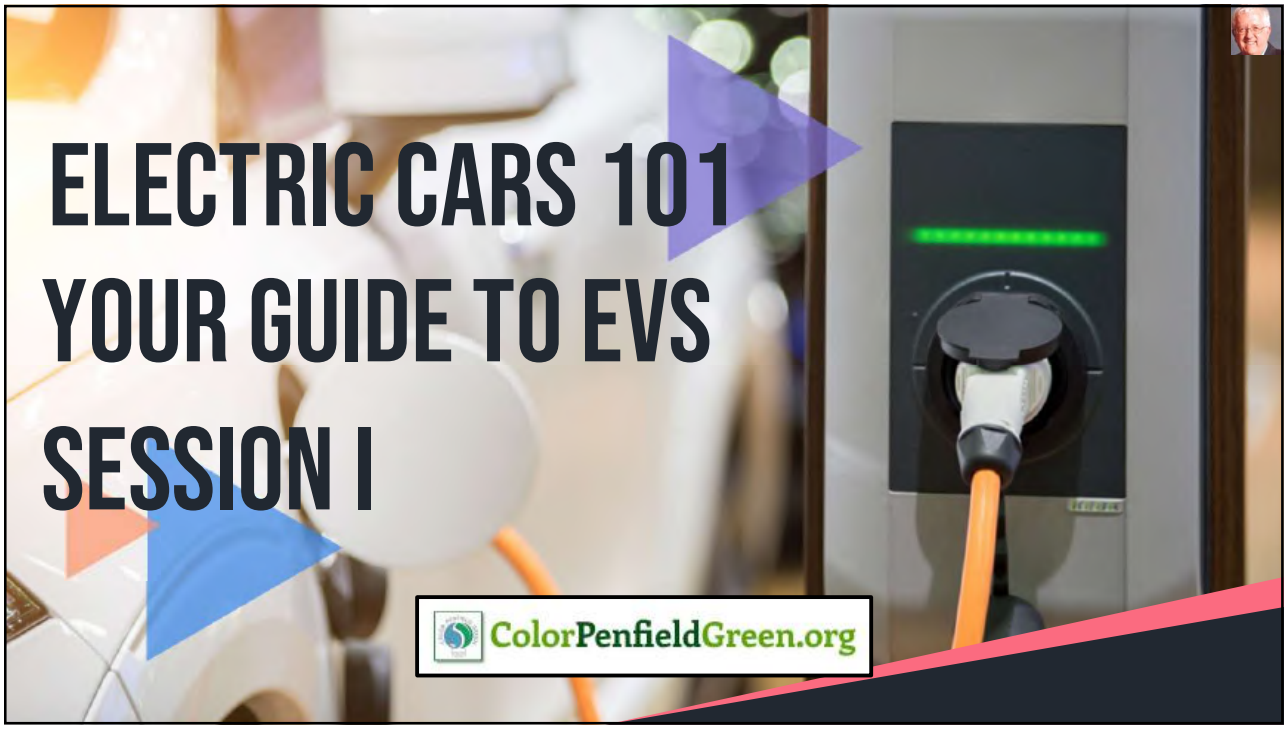
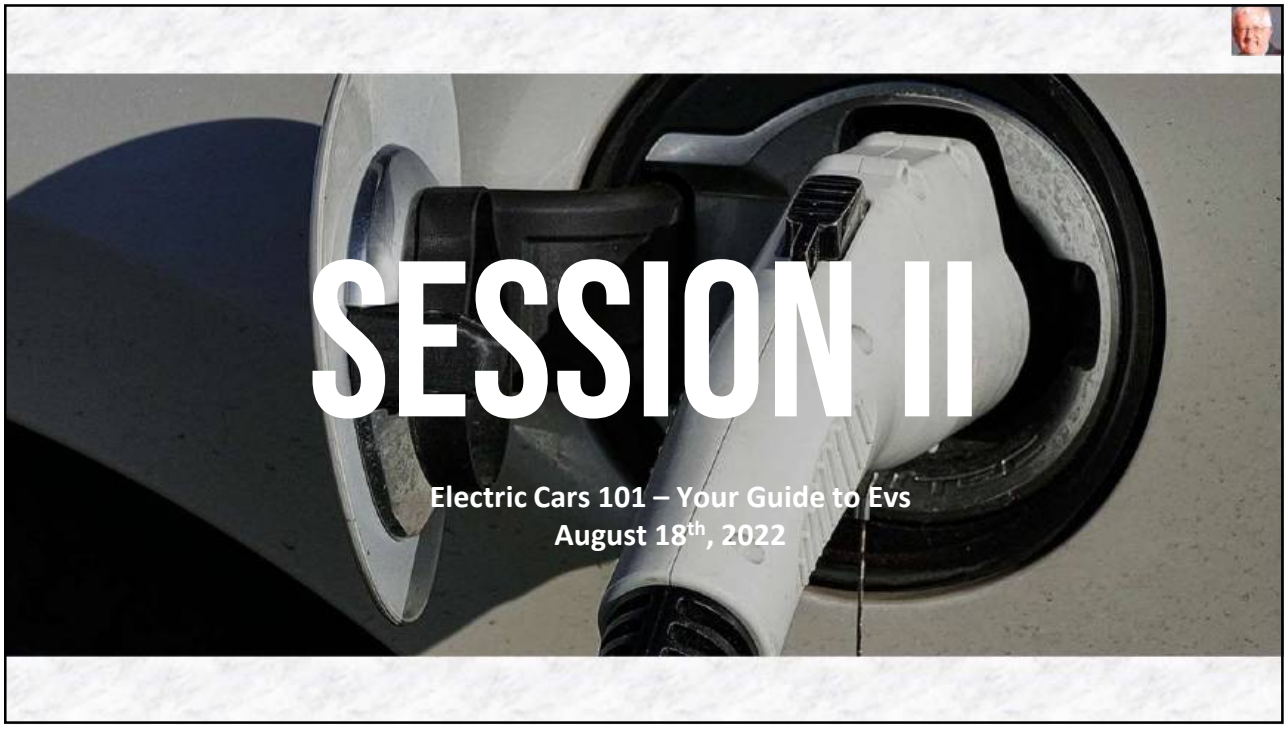

ELECTRIC CARS 101
YOUR GUIDE TO EVS
SESSION I
ColorPenfieldGreen.org

1


SESSION II
Electric Cars 101 – Your Guide to Evs
August 18th, 2022

2

3

PRE CLASS SURVEY (JAN 2022)

HOW ARE WE DOING SO FAR?

SINGLE MOST IMPORTANT TOPIC YOU WISH TO LEARN ABOUT:

- --Taking long trips – how to charge along the way.
- --Differences between electric & hybrid vehicles.
- --Which model is best for me?
- --Getting used to range restriction of EV cars.
- --EVs on the market and how they perform.
- --Advantages & disadvantages over gas vehicles.
- --Exactly what is an EV vehicle?

ANNOUNCEMENTS

- **We encourage you to ask questions as we go; in chat or raised hands or just come off mute.**
- **A PDF copy of Session II PowerPoint will be emailed to all of you right after this session.**

4

PRE-CLASS SURVEY: KEY EV TOPICS TO COVER – *HOW ARE WE DOING SO FAR?*

ANSWER CHOICES	RESPONSES	
Makes & models of EVs on the market right now.	100.00%	7
Prices of EVs as compared with gasoline powered vehicles.	85.71%	6
Rebates & tax credits available right now to reduce the price of EVs.	71.43%	5
Advantages and disadvantages of EVs over gasoline powered vehicles.	85.71%	6
Costs of maintenance and insurance as compared with gasoline powered vehicles.	85.71%	6
Costs to charge EVs on a regular basis.	85.71%	6
Costs of installing home charging equipment (Level II chargers).	85.71%	6
Taking long trips with EVs - charging them along the way.	71.43%	5
Personal experiences with EVs as told by Penfield residents who currently own them.	71.43%	5
Seeing some EVs "up close and personal" during the course and being able to ask questions of the owners.	28.57%	2
How EVs perform at different times of the year, especially during winter.	85.71%	6
The differences between Plug-In Hybrid (PHEV) and 100% Battery Electric (BEV) EVs.	85.71%	6
Other (please specify) **Other: Battery replacement: How long do they last and what do they cost?** Responses	14.29%	1
Total Respondents: 7		

5

DID YOU KNOW?

EV TRIVIA – FUN FACTS

Intriguing Facts About Electric Cars:

- The first-ever electric car was built in 1884 in the UK.
- There are 10 million electric cars in use worldwide.
- There's a difference between hybrid and electric cars.
- Tesla is the most popular electric vehicle manufacturer.
- Electric cars are 10 to 25% heavier than conventional ones.
- Hybrids produce 90% fewer pollutants than gasoline cars.
- The UK has more electric charging stations than gas stations.

20+ Statistics and Facts About Electric Cars in 2022 (review42.com)

https://review42.com/uk/resources/facts-about-electric-cars/

The first successful electric car made it's debut in the US in 1890. By 1900 they had become so polular that there was a fleet of electric taxis in NYC. They accounted for a third of all vehicles on the road at that time.

6

ADVANCED TOPICS:
WINTER DRIVING

- **Plan for winter range to be reduced by 20-30%.**
- **Get heated seats, side mirrors, steering wheel and heat pump if available.**
- **Heated windshield is also highly recommended.**
- **Preheat the car before leaving while still plugged in.**

- Get snow tires! EVs have amazing weight distribution (close to perfect 50/50) and tracking in snow on proper tires. Even RWD-only models do not suffer the usual penalty ICE cars do since the weight is still in the middle of the car.
- Cabin heating is big: with no waste heat from engine, battery energy has to be used to generate heat instead. Most effective is to use seat and steering wheel heaters and minimize cabin heat.

7

ADVANCED TOPICS:
STUCK IN WINTER TRAFFIC JAM

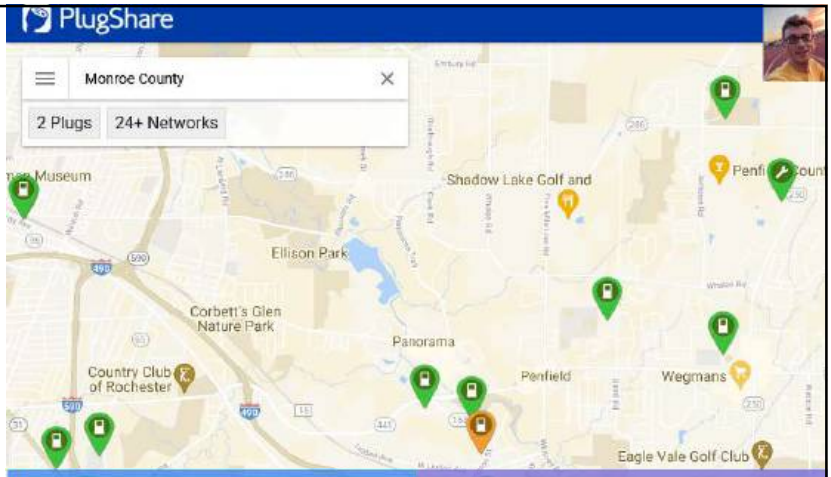
EV	ICE car
Usually fully charged in the morning	Rarely starts the day with full tank
Does not produce any exhaust. No snow clearing necessary	Produces toxic exhaust. If not moving, toxic gases may enter the cabin. Must keep snow from blocking the pipe.
Can selectively use battery power to only heat cabin (1-3kW) /seats (15W/40W) or steering wheel (50W). Typical battery packs contain 40-60kWh, enough for multi- day operation.	Must run engine to generate heat or even to just use heated seats/steering wheel. Average car uses 0.5g/h to idle. With a 12g tank, that's 24 hours.
Easy recharge at home	Huge lines at gas stations

8

ADVANCED TOPICS:
ROUTE PLANNING

Belt and suspenders approach:

- **Get and test apps and payment methods for charger networks before leaving**
- **Some networks have roaming agreement allowing one app to initiate charge across them**
- **If available, request RFID cards from them as well. It may help if there is no cell service on the road or if a credit card reader is broken.**



➢ Use Plugshare to map out chargers and backup chargers.

➢ Use A Better Route Planner to determine how much range the route will actually take after taking into account hills.

9

ADVANCED TOPICS:
TESLA SUPERCHARGERS

Tesla Built its Own High Speed Charging Network:

- **Level 3 DCFC, up to 350kw.**
- **Currently only Tesla's can use them, adapter and network may be available to others in future.**
- **Huge advantage over the rest of the EV choices if traveling a lot.**
- **https://supercharge.info/map**

➢ Eastview Mall Supercharger Array (Shown Above).

➢ 1109 Locations in the USA currently, most with 8+ Plugs.

10

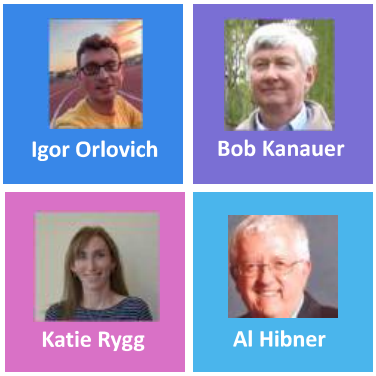
ADVANCED TOPICS: WHAT ABOUT ELECTRIC LAWN MOWERS?

- Once you have your EV, avoid trips to gas station by updating lawn equipment to electric as well.
- Gas powered mowers, leaf blowers and trimmers are noisy, polluting, pain to deal with and ancient. They have no emission controls, mix oil and gas and emit almost third of it unburned.
- EPA data shows: 800 million gallons of gas is used annually on mowing. 17 million of that is spilled. One mower in an hour produces more pollution than 11 cars driven for an hour. And all that pollution hangs around your yard!
- Alternatives are now plentiful, cheap and even good enough for commercial use.
- You can now find battery powered chainsaws, trimmers, blowers, mowers, riding mowers and even multistage snow blowers. They require minimal or no maintenance, cost close to nothing to run and start every time. They have no fluids, spark plugs, old gas. Most big names in the industry (Cub Cadet, Toro, Stihl, make them as well as a few dedicated electric only names like EGO, DeWalt, Greenworks, Kobalt, Makita, Ryobi, Skil, Sun Joe. You can even get a robotic mower to free you up from the chore all together.

New 2022: Senate Bill S7453 is in the works. Rebates are coming!

11

EV OWNER STORIES - TIPS, TRICKS, SECRETS AND SOME LESSONS LEARNED OWNING & DRIVING OUR EVS



Igor Orlovich
Owner of a 2018
(Now a 2022)
Nissan Leaf - BEV

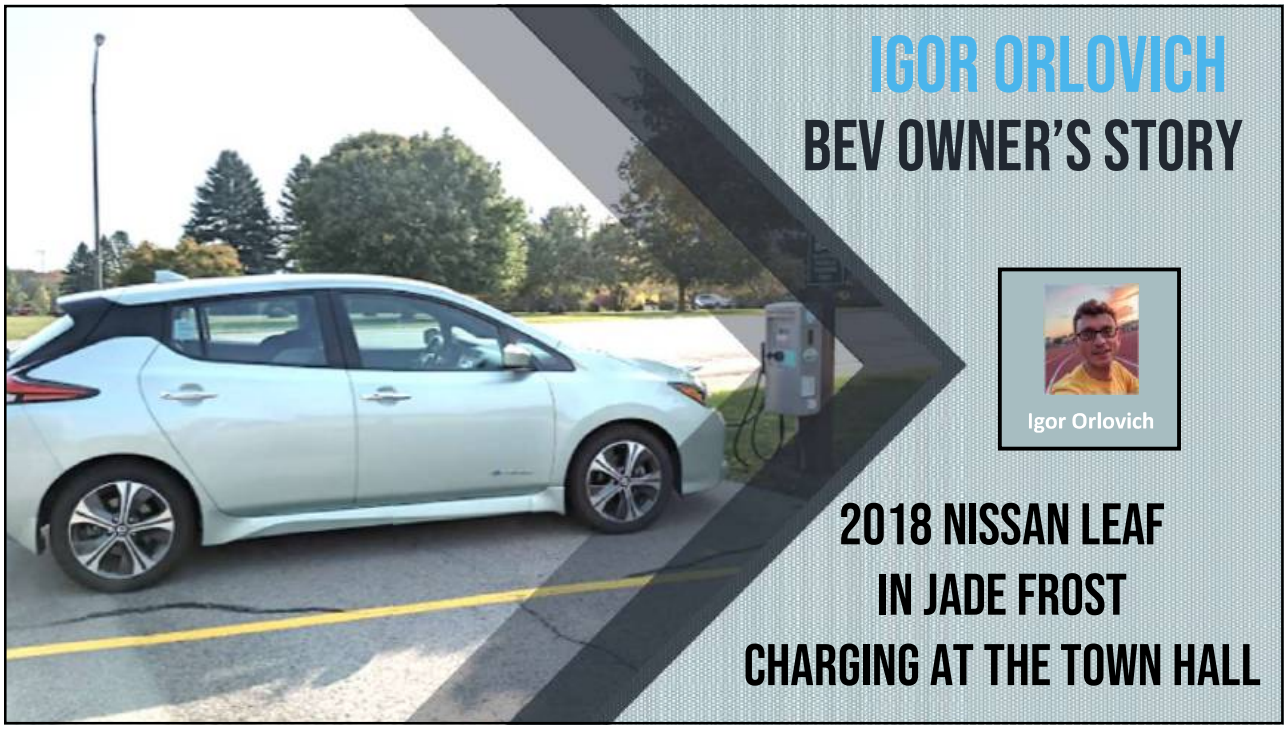
Bob Kanauer
Family Owns (2)
Chevy Volts - PHEVs

Katie Rygg
Owner of a 2020
Tesla Model 3 - BEV

Al Hibner
Owner of a 2020
Chevy Bolt Premier - BEV

January 27th, 2022 12

12



13

GETTING THERE

2007 -our first **HEV**, **Honda Civic Hybrid**. Wasn't working very well, had issues. Relied on gas engine too much and made me wish I had a real hybrid.

2012 - first real **HEV**, **Toyota Prius**. The car is still in family and is brilliant in its efficiency. I loved pulling into garage in EV mode and how fast it's heated and ready to go. But it still burns gas.

2018 - **Nissan Leaf**. Our first **BEV**

14

2018 NISSAN LEAF COST DETAILS

Trim: 2018 Nissan Leaf SV Jade Frost w/tech and all weather

Dealer: Dorschel Nissan, June 2018

Vehicle price

MSRP: $37250

- Sale price $33570 (-$3k dealer discount)
- Total with tax **$36255**

Rebates and discounts:

- Nissan rebates -$3000
- NYSERDA rebate -$2000
- Federal tax credit -$7500

PAID: $23700 on a 0% 5-year loan

Insurance:

$380 every six months, about the same as other new cars I had

Charger:

Car came with L1/L2 charger (Keeping as backup)
$300 to run wire to garage during renovations
$600 Chargepoint Home WiFi , using NEMA14-50 outlet.

Cost to fill up:

40kwh @ 14c/kwh about $6 for 150 miles
RG&E: About 250kwh a month (1k miles) costs $35-$40

15

2018 NISSAN LEAF SELECTION

Test drove pretty much everything available at the time

Selected based on:

- **Price ($23k after incentives for fully loaded SV trim).**
- **Range (150 miles summer, 120 winter).**
- **Commute is under 30 miles a day.**
- **Advanced tech- Propilot assist, automatic braking, Android auto.**
- **Space for car seat and reasonable cargo area.**
- **Winter weather package.**
- **Looks/color/wheels size/tire costs etc.**

16

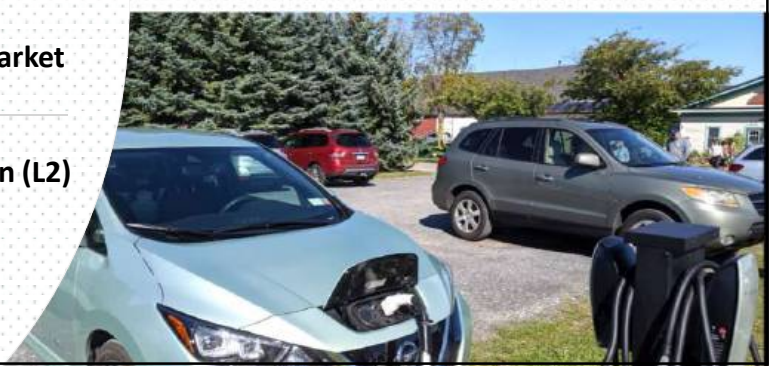
2018 NISSAN LEAF CHARGING

- 95% at home on ChargePoint Level 2 30A charger.
- I usually plug in when car gets to 40% or lower. Timer starts charging at night and is done by the morning commute.
- Working from home I mostly leave it around half full and charge for free at Fairport market or Penfield parks.
- Charger port in front is very handy.

17

2018 NISSAN LEAF CHARGING FOR FREE

- Level 2, 7.2 kW max (25 or so miles per hour charge).
- Fairport public chargers at the market and canal.
- Penfield parks.
- At the farm with Tesla destination (L2) chargers and Tesla Tap adapter.



18

2018 NISSAN LEAF CHARGING @ DCFC

- Fairport Evolve NY DCFC = DC Fast Charge.
- 50kW max - about 40 minutes for full charge.
- Uses CHADEMO port on the car.
- $0.3 /kWh.

19

2018 NISSAN LEAF SUMMER

Climate Control:

- AC is very quick and works well.
- Car can be remotely cooled from phone app for up to 15 minutes at a time when on battery. Handy when you have groceries or people in it.

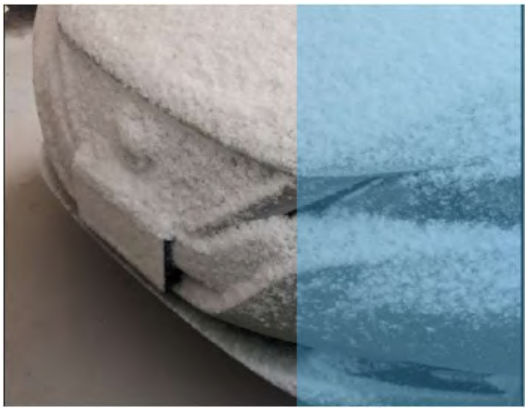
Summer Travel:

- Longest trip we made was around 50 miles each way (with some reserve for hills).
- Lack of DCFC stations and lower popularity of CHADEMO style connectors is a problem.
- Car is used as a commuter/regional until more fast chargers come online.
- Perfectly adequate for day-to-day use, but we use Prius for longer trips. A shame since Propilot is awesome for longer drives.

20

2018 NISSAN LEAF WINTER

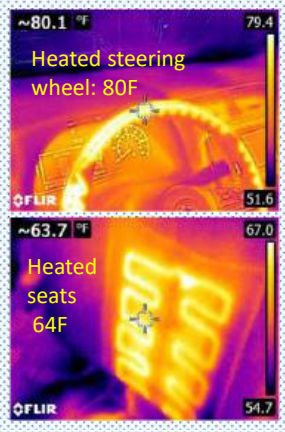
- Winter package: heat pump, heated seats, mirrors and steering wheel proved very handy. Heat pump uses less energy than pure electric heat.
- Cabin heat is instant.
- Lack of waste heat under hood though means snow stays on it. Also get ice on wipers as they dip in that bath. So heated windshield would be handy.
- Driving in snow is awesome with winter tires. Car is stable with good traction.
- Car feels snappy and ready to go even on cold winter mornings. I also sometimes preheat it on timer while plugged in so it's nice and toasty inside. All with garage closed.



21

2018 NISSAN LEAF WINTER

Snow and ice accumulation after commute in snow storm.



22

2018 NISSAN LEAF EXPERIENCE

After 20k miles and 3.5 years:

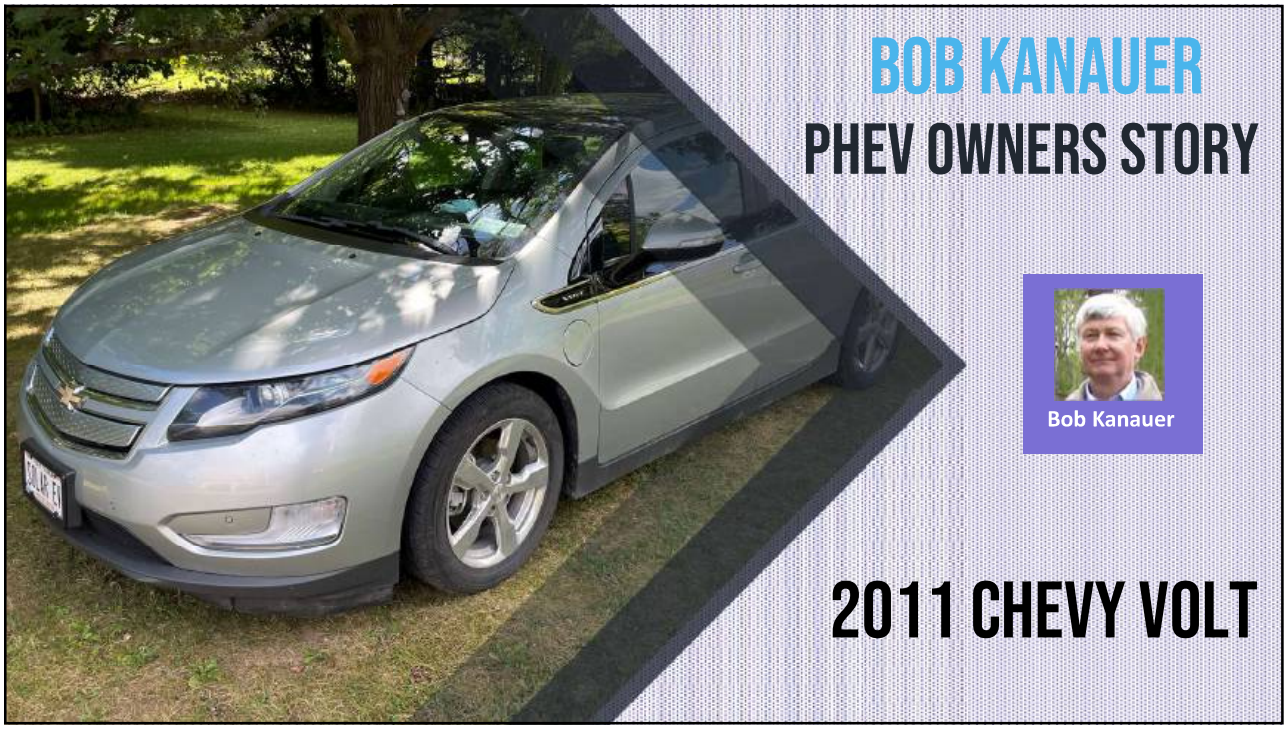
- Car is an early build (March 2018) and had some early glitches with simple things like wheel axle nuts but got better over time.
- Had early battery cell manufacturing issue. Replaced under warranty.
- Phone app is slow to connect but works.
- Battery is at 91%, though the drop is slowing down. Car still showing all 12 battery bars. Warranty guarantees at least 7 after 8 years/100k.
- Maintenance: air filter, washer fluid, windshield wipers. NYS inspection

23

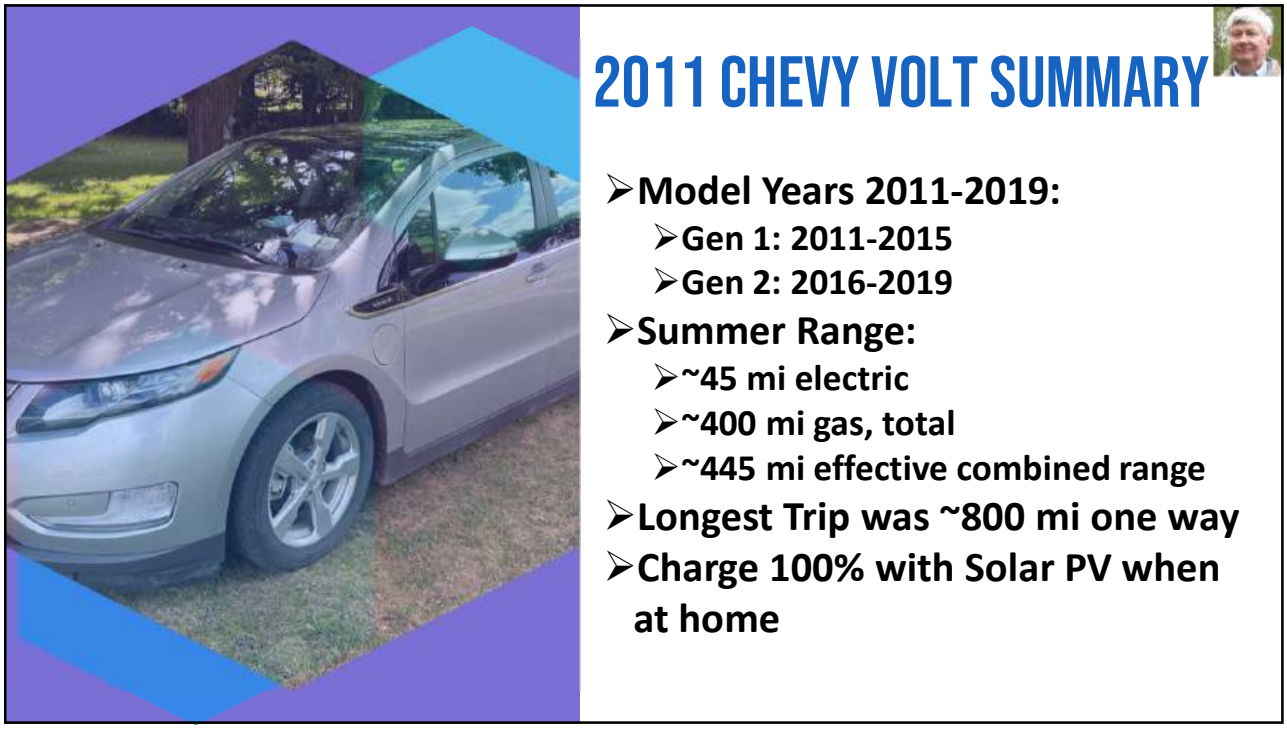
2018 NISSAN LEAF SUMMARY

- Good second/commuter car.
  - Lots of fun to drive.
  - Comfortable, quiet and fast.
  - Charges at night and has a full "tank" by commute time.
  - Winter package was well worth the money.
  - Very low cost operate- under 4c/mile
- Sophisticated safety and driver assist features:
  - ProPilot assist is handy in stop and go traffic and as a spare set of eyes when tired.
  - Automatic emergency braking with pedestrian and bicyclist detection.
- Battery size (40 kWh) and range (150 miles max) are somewhat limiting.
- PHEV or a longer-range EV recommended if longer travel is needed frequently.
- Faster DCFC charging and more popular CCS charge port would be better.

24


BOB KANAUER
PHEV OWNERS STORY
Bob Kanauer
2011 CHEVY VOLT

25

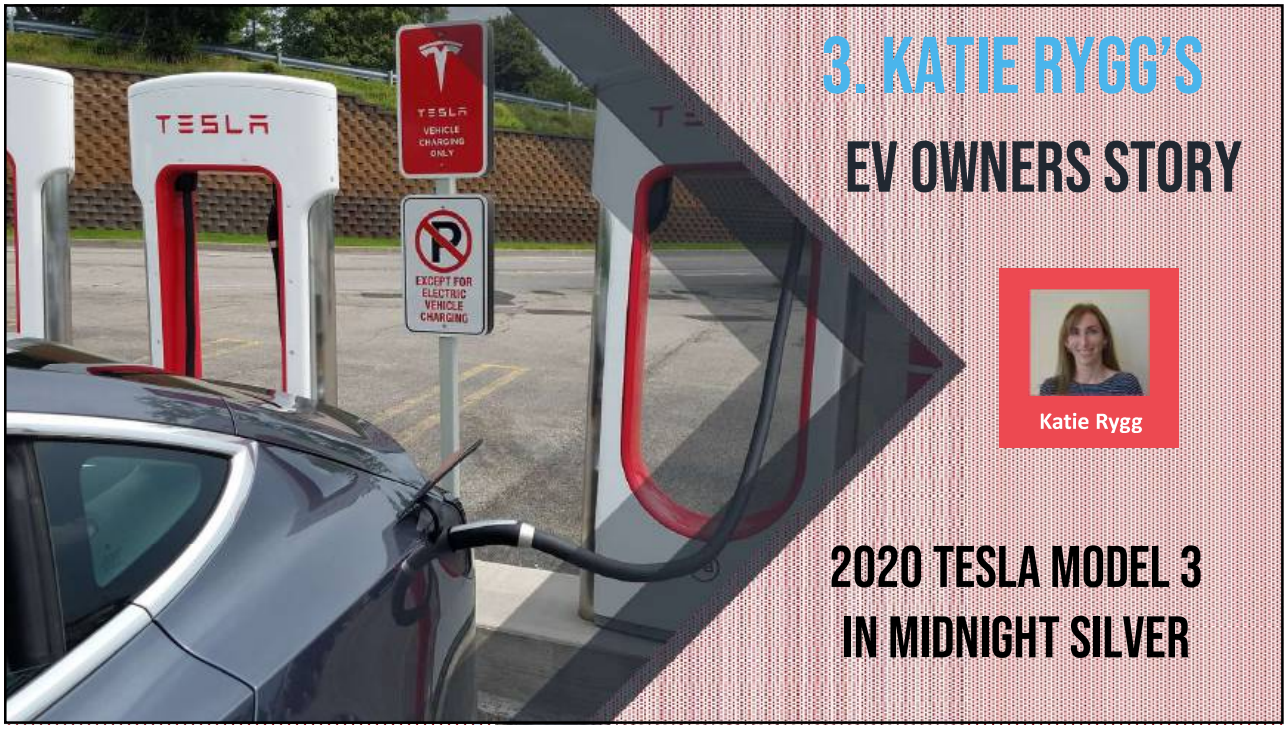

2011 CHEVY VOLT SUMMARY
Model Years 2011-2019:
Gen 1: 2011-2015
Gen 2: 2016-2019
Summer Range:
~45 mi electric
~400 mi gas, total
~445 mi effective combined range
Longest Trip was ~800 mi one way
Charge 100% with Solar PV when at home

26

2011 CHEVY VOLT SUMMARY (CONT.)

- For the 10+ years that I have owned the car:
  - Total miles to date 74,000 mi, ~88% from electric
  - Compared to the first-year electric range, after 10+ years I have seen a range decrease of ~6%
- In the last 10 years of ownership, the following maintenance has been done with an average cost of $95 per year:
  - Oil Changes (5x)
  - New Tires (1x)
  - Flush and Fill coolant loops (1x)
  - New wiper blades (1x)

27



3. KATIE RYGG'S EV OWNERS STORY

Katie Rygg

2020 TESLA MODEL 3 IN MIDNIGHT SILVER

28

2020 Tesla Model 3

Facts and Stats

	Standard Range+	Long Range	Performance
	Model 3		
0-60 MPH	5.3 s	4.4 s	3.2 s
Top Speed	140 mph	145 mph	162 mph
Range	250 mi	322 mi	299 mi
Power	201 hp	346 hp	450 hp
$ MSRP	$37,990	$46,990	$54,990
	Battery: 75 kWh	Charging: 250 kW	Seats: 5	Cargo Space: 44 cu ft

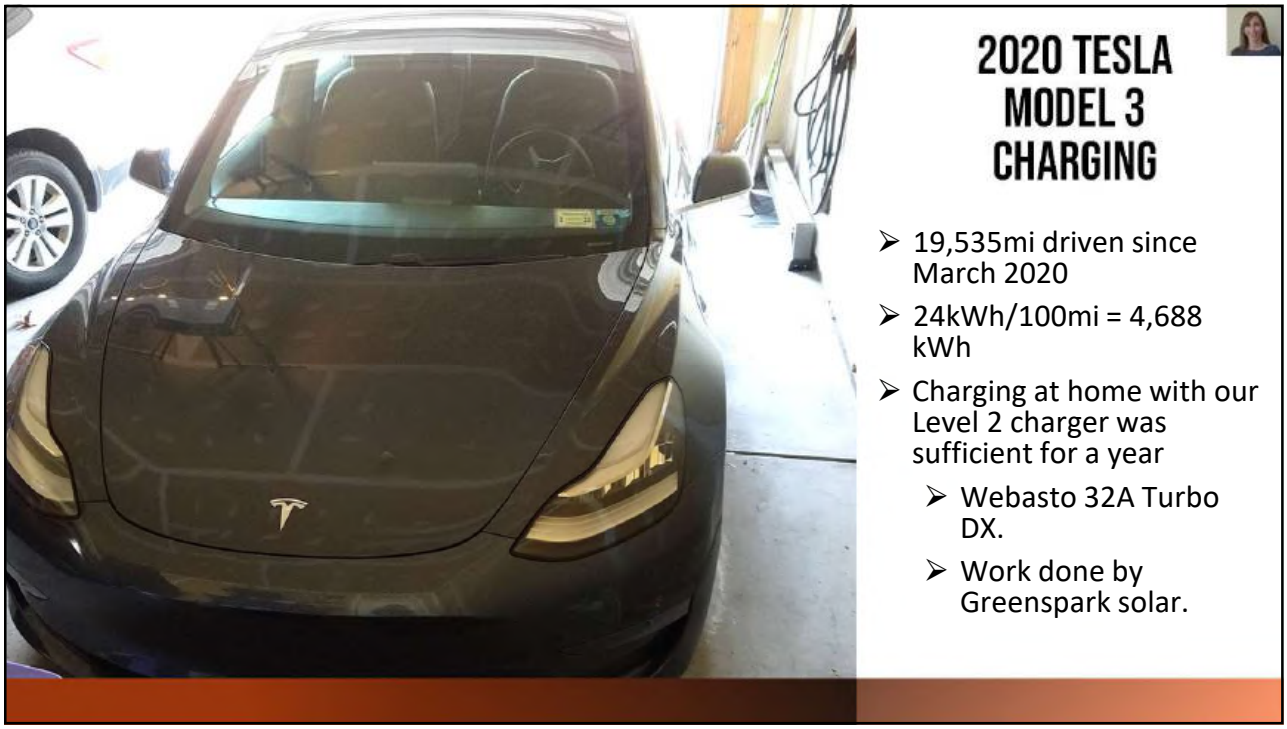
EVBite.com

29

Go to Tesla.com
NEW OPTION:
- Custom Order or
- Existing Inventory

- Choose the model: S, 3, X, Y
- Click “Custom Order”
- Choose rear-wheel/standard mileage, all-wheel drive/long range,* or all-wheel drive/performance**
- Choose color: white, midnight silver, blue*, black**, or red***
- Choose interior: All Black or Black/White*
- Add on Enhanced Autopilot $6K
- Add on Full Self-Driving Capability $12K
- Charging: Wall Connector, Mobile Connector
- PURCHASE, Estimated delivery: Oct-Nov ‘22

30


2020 TESLA
MODEL 3
CHARGING
➢ 19,535mi driven since March 2020
➢ 24kWh/100mi = 4,688 kWh
➢ Charging at home with our Level 2 charger was sufficient for a year
➢ Webasto 32A Turbo DX.
➢ Work done by Greenspark solar.

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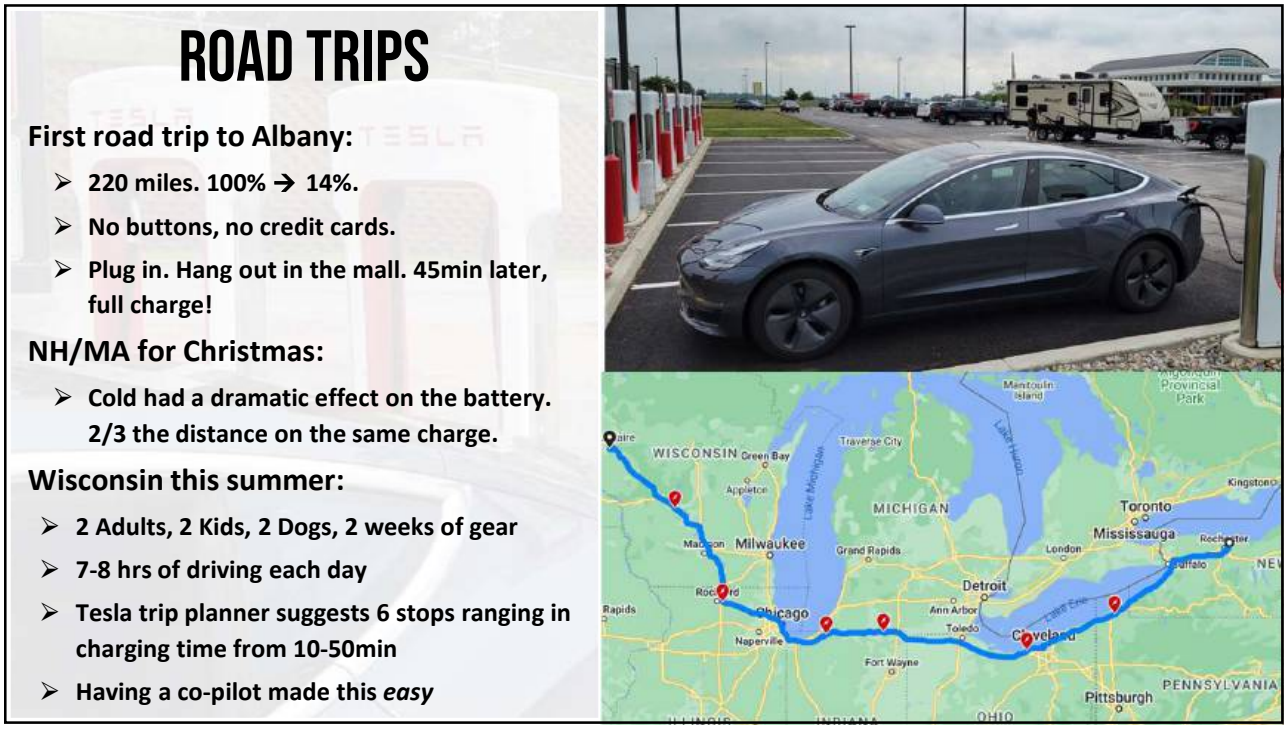
ROAD TRIPS
First road trip to Albany:
➢ 220 miles. 100% → 14%.
➢ No buttons, no credit cards.
➢ Plug in. Hang out in the mall. 45min later, full charge!
NH/MA for Christmas:
➢ Cold had a dramatic effect on the battery. 2/3 the distance on the same charge.
Wisconsin this summer:
➢ 2 Adults, 2 Kids, 2 Dogs, 2 weeks of gear
➢ 7-8 hrs of driving each day
➢ Tesla trip planner suggests 6 stops ranging in charging time from 10-50min
➢ Having a co-pilot made this *easy*
WISCONSIN
MICHIGAN
Milwaukee
Chicago
Detroit
Cleveland
Toronto
Mississauga
Pittsburgh
PENNSYLVANIA

32

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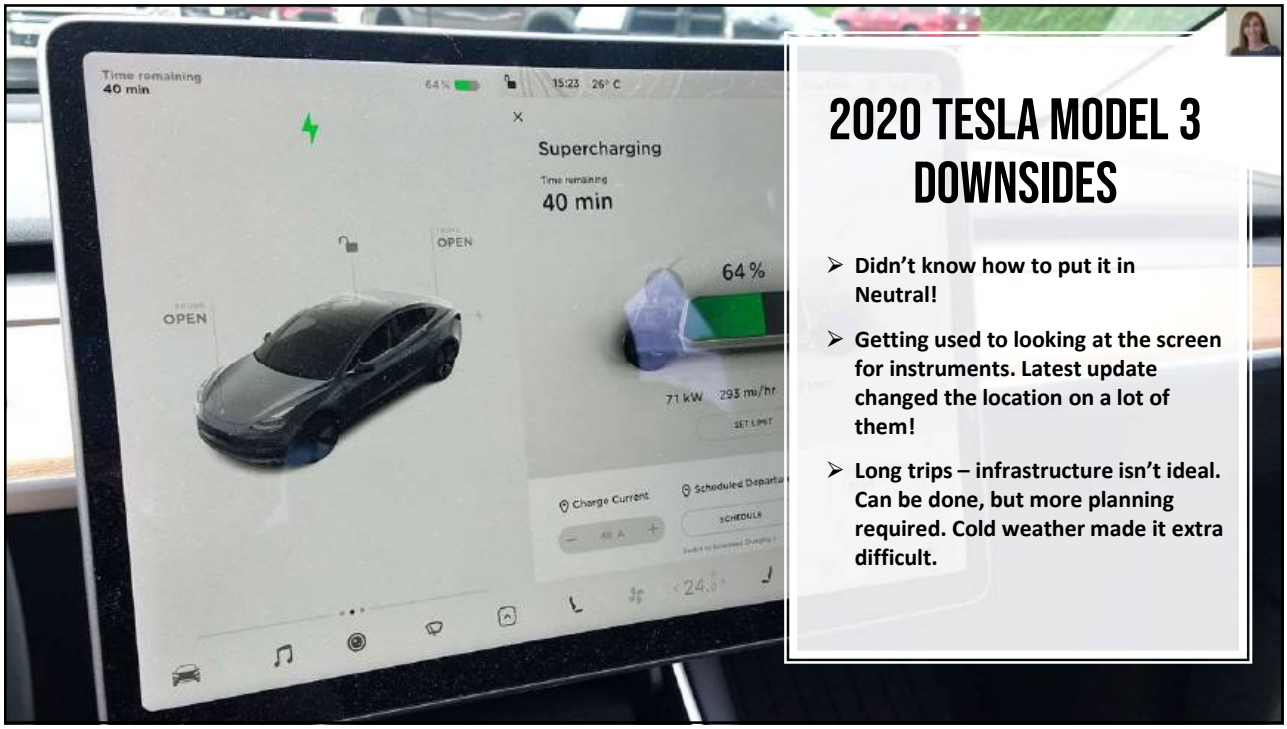
2020 TESLA MODEL 3 UPSIDES

- It is So. Fun. To. Drive!
- Maintenance: mechanism for routine maintenance is to have someone come out.
- Software updates include modest improvements. Recent recall of backup camera
- Really smart cruise control (even without the autopilot upgrade).
- Toybox features (whoopie cushion, games), Dog mode.

33

2020 TESLA MODEL 3 DOWNSIDES

- Didn't know how to put it in Neutral!
- Getting used to looking at the screen for instruments. Latest update changed the location on a lot of them!
- Long trips – infrastructure isn't ideal. Can be done, but more planning required. Cold weather made it extra difficult.



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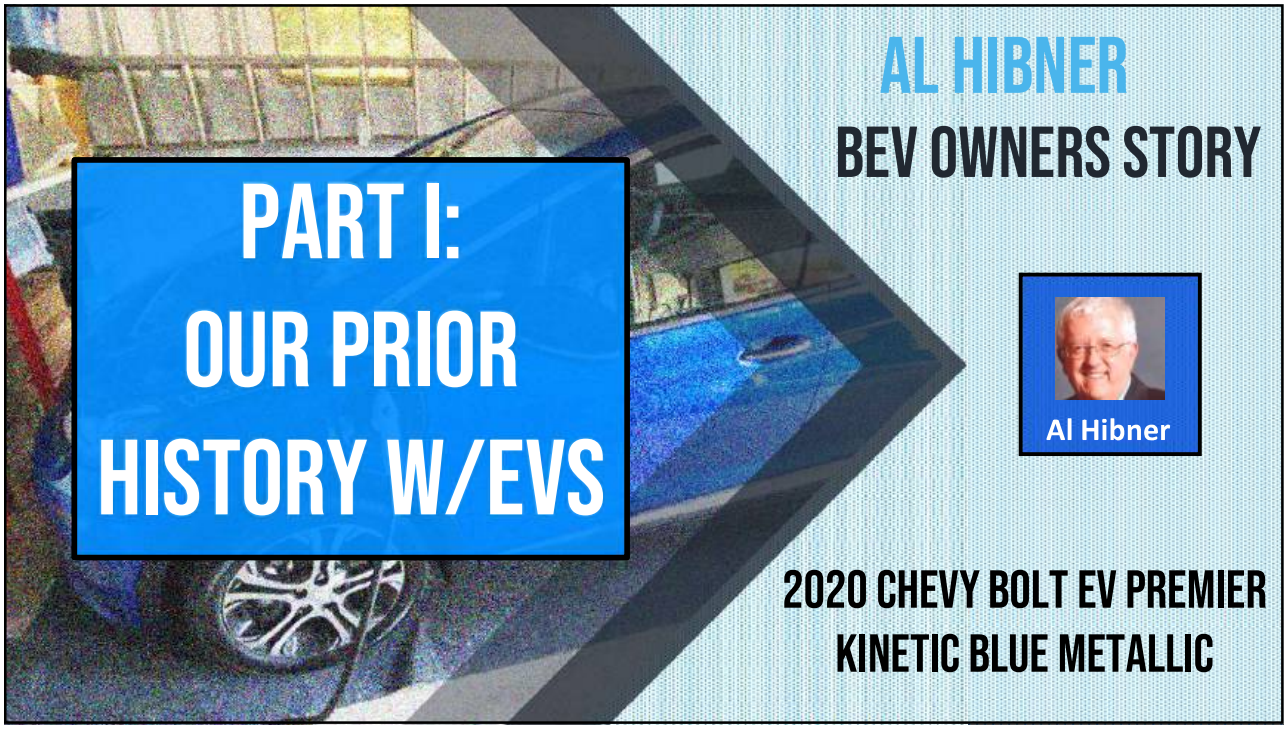
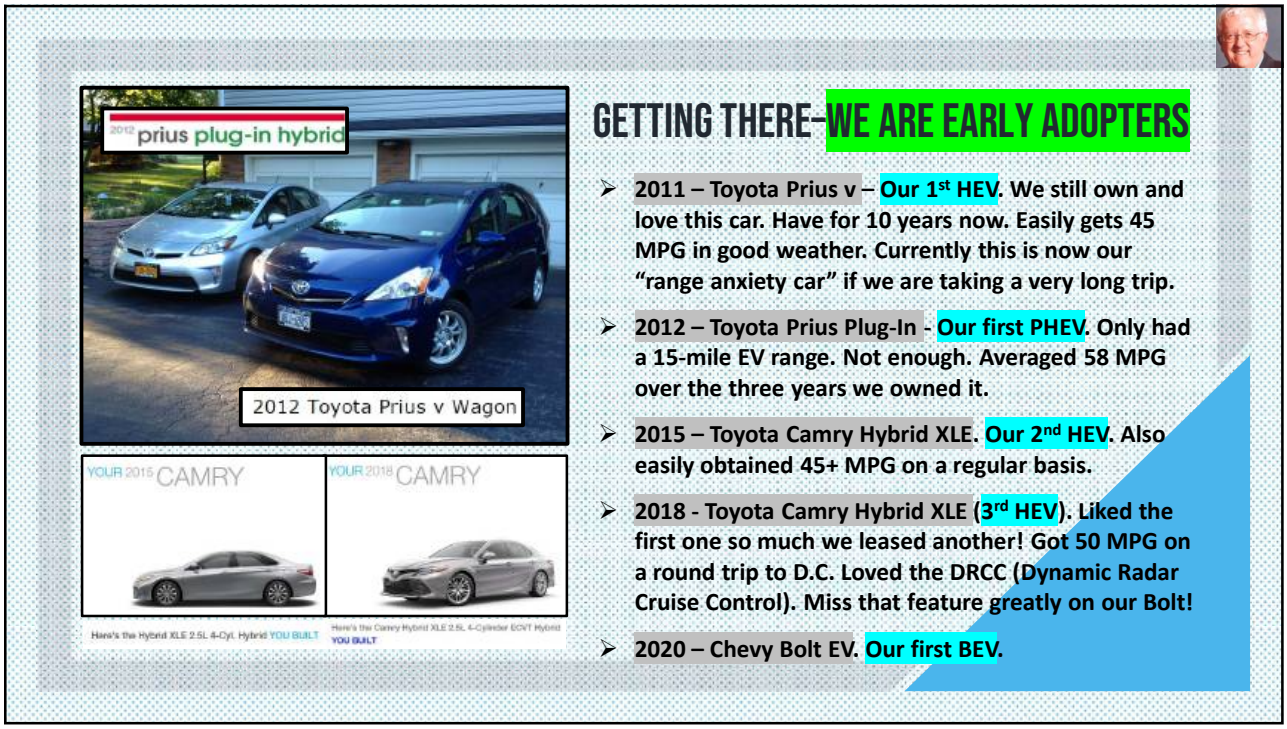
AL HIBNER
BEV OWNERS STORY
Al Hibner
2020 CHEVY BOLT EV PREMIER
KINETIC BLUE METALLIC
PURCHASED – JUNE 2020

35


AL HIBNER
BEV OWNERS STORY
PART I:
OUR PRIOR
HISTORY W/EVS
Al Hibner
2020 CHEVY BOLT EV PREMIER
KINETIC BLUE METALLIC

36


2012 prius plug-in hybrid
2012 Toyota Prius v Wagon
YOUR 2015 CAMRY
YOUR 2018 CAMRY
GETTING THERE–WE ARE EARLY ADOPTERS
2011 – Toyota Prius v – Our 1st HEV. We still own and love this car. Have for 10 years now. Easily gets 45 MPG in good weather. Currently this is now our "range anxiety car" if we are taking a very long trip.
2012 – Toyota Prius Plug-In - Our first PHEV. Only had a 15-mile EV range. Not enough. Averaged 58 MPG over the three years we owned it.
2015 – Toyota Camry Hybrid XLE. Our 2nd HEV. Also easily obtained 45+ MPG on a regular basis.
2018 - Toyota Camry Hybrid XLE (3rd HEV). Liked the first one so much we leased another! Got 50 MPG on a round trip to D.C. Loved the DRCC (Dynamic Radar Cruise Control). Miss that feature greatly on our Bolt!
2020 – Chevy Bolt EV. Our first BEV.

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AL HIBNER
BEV OWNERS STORY
PART II:
DETAILS OF OUR
PURCHASE
Al Hibner
2020 CHEVY BOLT EV PREMIER
KINETIC BLUE METALLIC

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2020 CHEVY BOLT EV PURCHASE DETAILS

CHEVROLET Hoselton Auto Mall

2020 BOLT EV PREMIER

EXTERIOR: KINETIC BLUE METALLIC
INTERIOR: DARK GALVANIZED GRAY
ELECTRIC DRIVE UNIT

AL HIBNER'S BOLT

ACTUAL WINDOW STICKER

Vehicle Price:

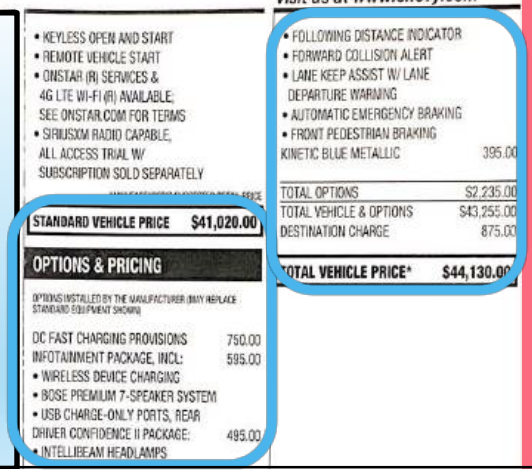
- Bolt EV Premier Model Standard Vehicle Price (MSRP) = $41,020
- Options Added = $2,235
- Destination Charge = $875
- Total Vehicle Price = $44,130
- Gross Capitalized Cost (with ALL taxes & fees) = **$46,013**

Capitalized Cost Reductions:

- GM Cash Allowance = $8,500
- Hoselton Lease Loyalty Discount = $1,500
- Other Capitalized Cost Reductions *(Included 1st Month Lease Payment)* = $2,951
- FINAL Capitalized Cost (includes ALL taxes & fees) = **$33,062**
- (35) Monthly Lease Payments of **$298.62**

Annual Auto Insurance Premium Amount-NO Change:

- 2020 Bolt EV – now paying $427/year.
- Had been paying $425/year for the 2018 Toyota Camry Hybrid we traded.



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INFOTAINMENT PACKAGE, INCL: 595.00
- WIRELESS DEVICE CHARGING
- BOSE PREMIUM 7-SPEAKER SYSTEM
- USB CHARGE-ONLY PORTS, REAR

DRIVER CONFIDENCE II PACKAGE: 495.00
- INTELLIBEAM HEADLAMPS
- FOLLOWING DISTANCE INDICATOR
- FORWARD COLLISION ALERT
- LANE KEEP ASSIST W/ LANE DEPARTURE WARNING
- AUTOMATIC EMERGENCY BRAKING
- FRONT PEDESTRIAN BRAKING

KINETIC BLUE METALLIC 395.00

TOTAL OPTIONS $2,235.00
TOTAL VEHICLE & OPTIONS $43,255.00
DESTINATION CHARGE 875.00
TOTAL VEHICLE PRICE* $44,130.00

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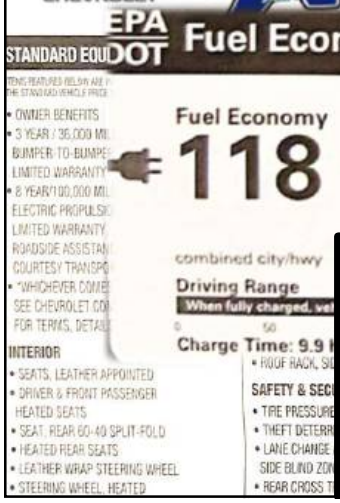
2020 CHEVY BOLT EV OBSERVED PERFORMANCE

CHEVROLET Hoselton Auto Mall

2020 BOLT EV PREMIER

AL HIBNER'S BOLT ACTUAL V



EPA DOT Fuel Economy and Environmen

STANDARD EQU

Fuel Economy
118 MPGe
Small station wagons range from 2 119 MPGe. The best vehicle rates MPGe
127 108 29
combined city/hwy
Driving Range
When fully charged, ve
Charge Time: 9.9 h

INTERIOR
- SEATS, LEATHER APPOINTED
- DRIVER & FRONT PASSENGER HEATED SEATS
- SEAT, REAR 60-40 SPLIT-FOLD
- HEATED REAR SEATS
- LEATHER WRAP STEERING WHEEL
- STEERING WHEEL, HEATED

SAFETY & SEC
- TIRE PRESSURE
- THEFT DETERR
- LANE CHANGE SIDE BLIND ZON
- REAR CROSS T
- ROOF RACK, SI

EPA Range = 259 Miles

Battery Pack Has 66 kWh

259/66 = *3.9 Mi/kWh*

MY NEW - KEY EV METRIC!

Wintertime w/Cabin Heater ON (70 Degrees) – 2.8-3.0 Mi/kWh

(3 Mi/kWh X 66 kWh = 198 Mile Range Expected = 25% Range Reduction)

Summertime w / A/C OFF = 4.5-4.8 Mi/kWh

(4.8 Mi/kWh X 66 kWh = 317 Mile Range Expected = 23% Range Increase)

Summertime w / A/C ON (70 Degrees) = 3.9-4.0 Mi/kWh

(4.0 Mi/kWh X 66 kWh = 264 Mile Range Expected – Good Weather Offsets A/C Usage)

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2020 CHEVY BOLT EV OBSERVED PERFORMANCE

2020 Chevy Bolt EV Efficiency Example – May 30th, 2022

- 199.8 Miles Driven – Using 41.6 kWh – Technique is Critical!
- 24 Hour Average Daily Temperatures Ranged Between 55 to 75 Degrees
- MINIMAL Air Conditioning Used (See Climate Settings in Image Above)
- *Averaged 4.8 Miles/kWh In This Example (317 Mi. Range)*

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MOST EFFICIENT EVS (ENERGY USE PER 100 MILES)

1. 2022 Tesla Model 3 RWD: 25 kWh (4 Mi./kWh)
2. 2022 Lucid Air Grand Touring w/19 inch wheels: 26 kWh
3. 2022 Chevrolet Bolt EV: 28 kWh (3.6 Mi./kWh)
4. 2022 Hyundai Kona EV: 28 kWh
5. 2022 Tesla Model S: 28 kWh
6. 2022 Tesla Model Y Long Range: 28 kWh
7. 2022 Chevrolet Bolt EUV: 29 kWh
8. 2022 Kia EV6 RWD: 29 kWh
9. 2022 Hyundai Ioniq 5 RWD: 30 kWh
10. 2022 Kia Niro EV: 30 kWh

https://www.cars.com/articles/top-10-most-efficient-electric-cars-447501/

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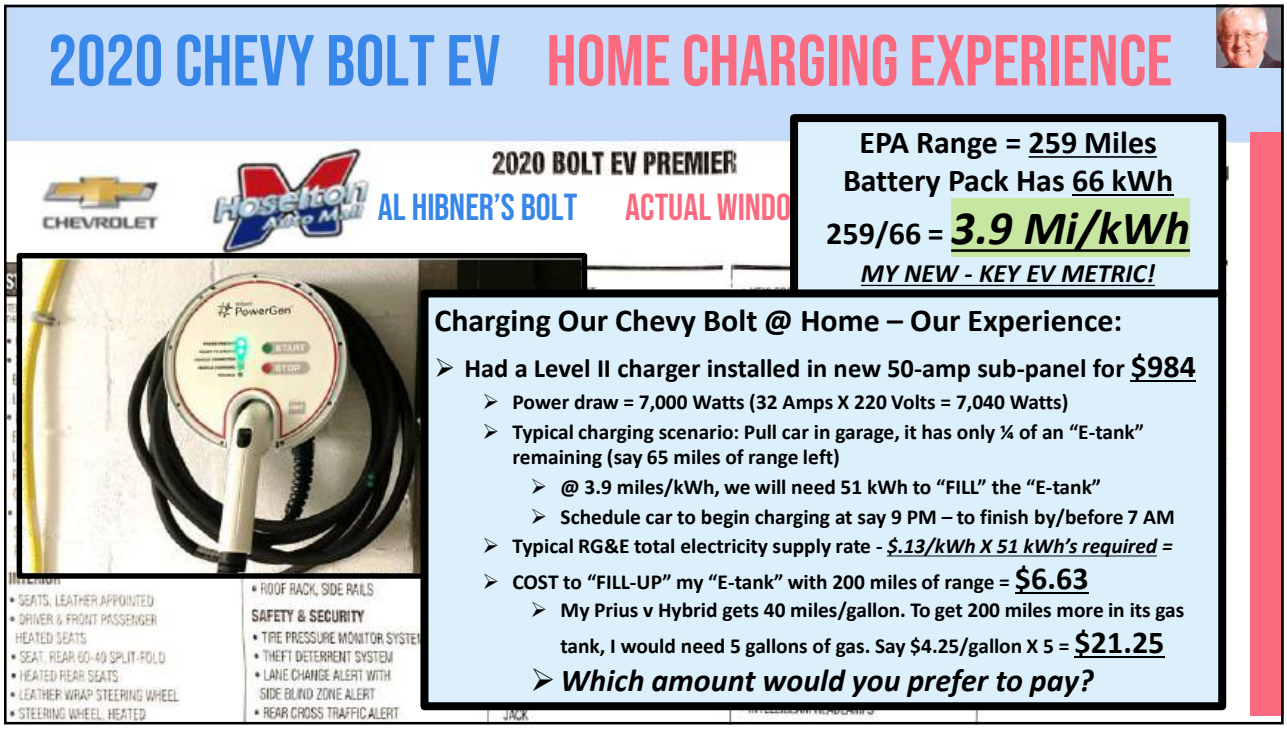
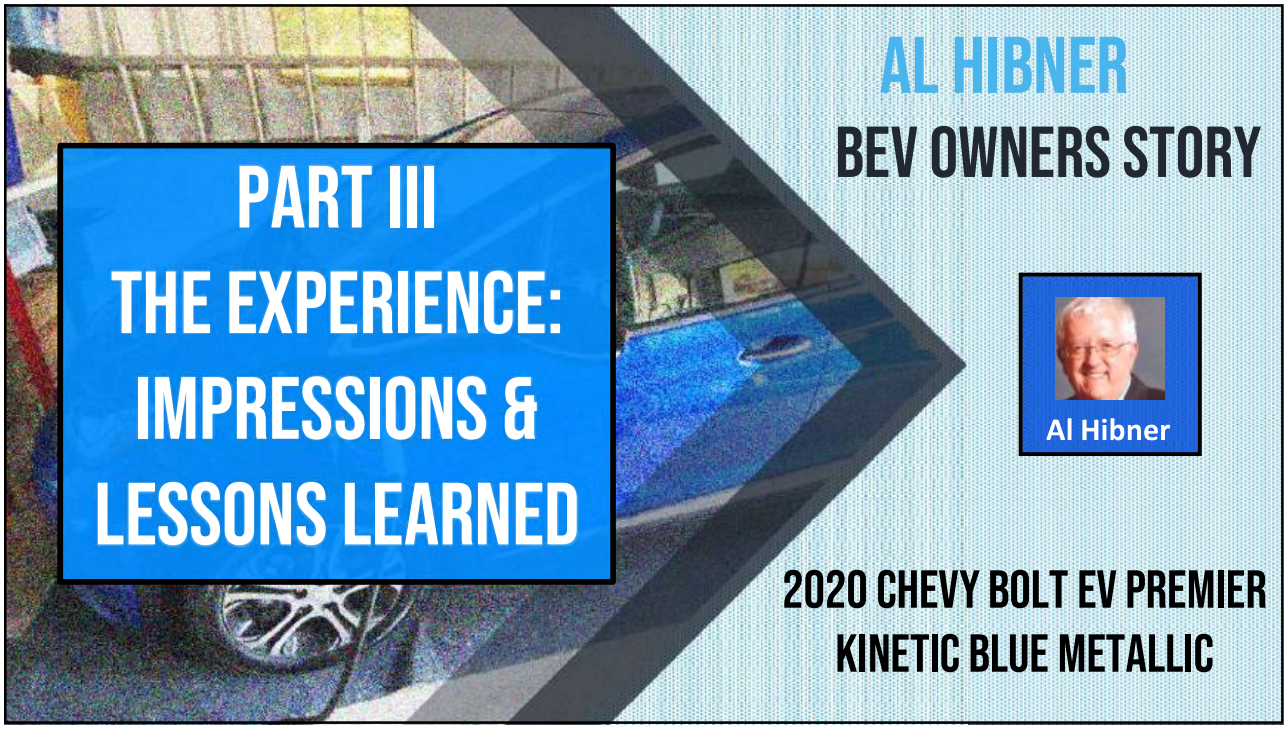
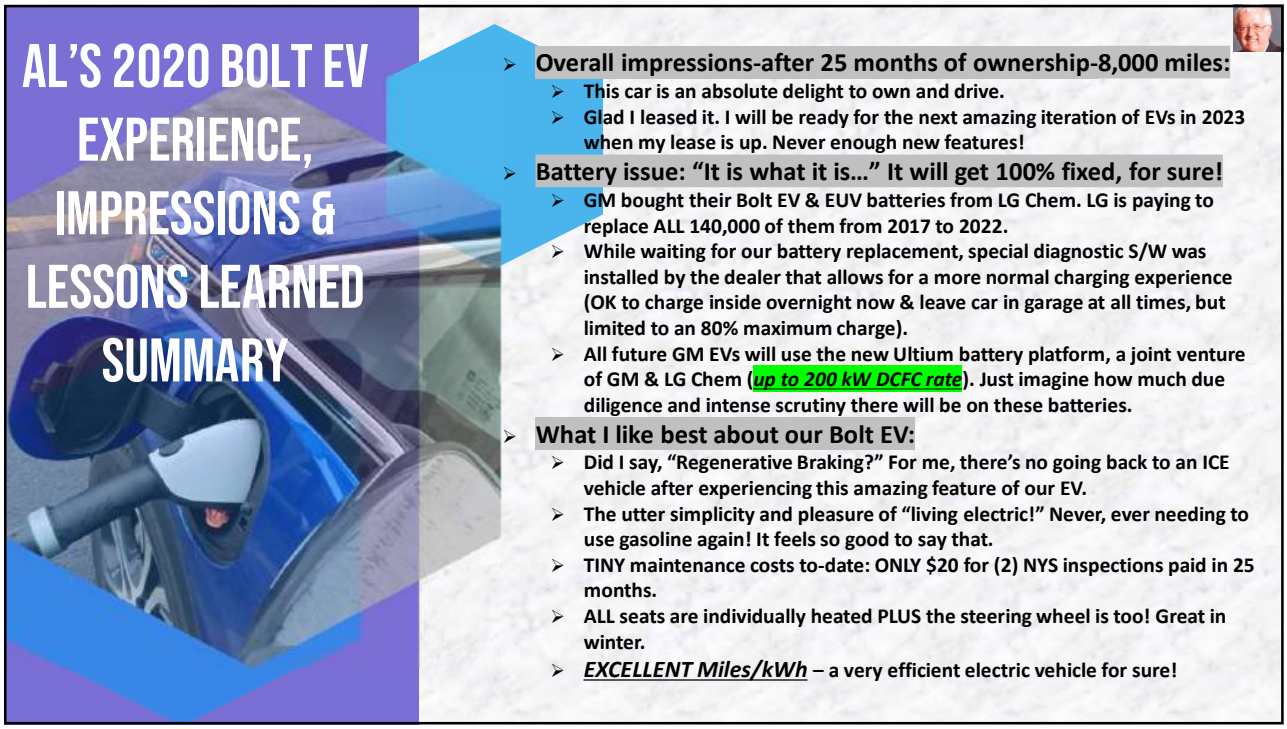

2020 CHEVY BOLT EV HOME CHARGING EXPERIENCE
2020 BOLT EV PREMIER
AL HIBNER'S BOLT
ACTUAL WINDO
EPA Range = 259 Miles
Battery Pack Has 66 kWh
259/66 = 3.9 Mi/kWh
MY NEW - KEY EV METRIC!
Charging Our Chevy Bolt @ Home – Our Experience:
Had a Level II charger installed in new 50-amp sub-panel for $984
Power draw = 7,000 Watts (32 Amps X 220 Volts = 7,040 Watts)
Typical charging scenario: Pull car in garage, it has only ¼ of an "E-tank" remaining (say 65 miles of range left)
@ 3.9 miles/kWh, we will need 51 kWh to "FILL" the "E-tank"
Schedule car to begin charging at say 9 PM – to finish by/before 7 AM
Typical RG&E total electricity supply rate - $.13/kWh X 51 kWh's required =
COST to "FILL-UP" my "E-tank" with 200 miles of range = $6.63
My Prius v Hybrid gets 40 miles/gallon. To get 200 miles more in its gas tank, I would need 5 gallons of gas. Say $4.25/gallon X 5 = $21.25
Which amount would you prefer to pay?

43


AL HIBNER
BEV OWNERS STORY
PART III
THE EXPERIENCE:
IMPRESSIONS &
LESSONS LEARNED
Al Hibner
2020 CHEVY BOLT EV PREMIER
KINETIC BLUE METALLIC

44


AL'S 2020 BOLT EV EXPERIENCE, IMPRESSIONS & LESSONS LEARNED SUMMARY
Overall impressions-after 25 months of ownership-8,000 miles:
This car is an absolute delight to own and drive.
Glad I leased it. I will be ready for the next amazing iteration of EVs in 2023 when my lease is up. Never enough new features!
Battery issue: "It is what it is…" It will get 100% fixed, for sure!
GM bought their Bolt EV & EUV batteries from LG Chem. LG is paying to replace ALL 140,000 of them from 2017 to 2022.
While waiting for our battery replacement, special diagnostic S/W was installed by the dealer that allows for a more normal charging experience (OK to charge inside overnight now & leave car in garage at all times, but limited to an 80% maximum charge).
All future GM EVs will use the new Ultium battery platform, a joint venture of GM & LG Chem (up to 200 kW DCFC rate). Just imagine how much due diligence and intense scrutiny there will be on these batteries.
What I like best about our Bolt EV:
Did I say, "Regenerative Braking?" For me, there's no going back to an ICE vehicle after experiencing this amazing feature of our EV.
The utter simplicity and pleasure of "living electric!" Never, ever needing to use gasoline again! It feels so good to say that.
TINY maintenance costs to-date: ONLY $20 for (2) NYS inspections paid in 25 months.
ALL seats are individually heated PLUS the steering wheel is too! Great in winter.
EXCELLENT Miles/kWh – a very efficient electric vehicle for sure!

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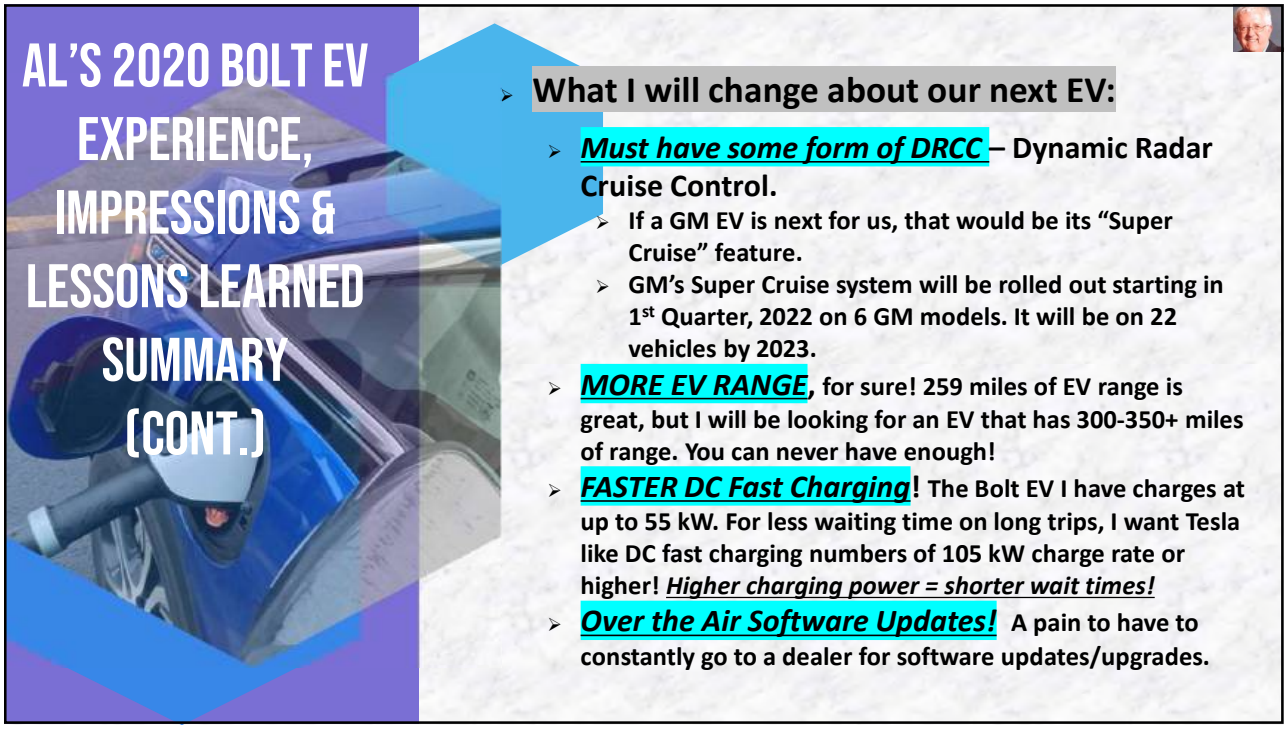
AL'S 2020 BOLT EV EXPERIENCE, IMPRESSIONS & LESSONS LEARNED SUMMARY (CONT.)
What I will change about our next EV:
Must have some form of DRCC – Dynamic Radar Cruise Control.
If a GM EV is next for us, that would be its "Super Cruise" feature.
GM's Super Cruise system will be rolled out starting in 1st Quarter, 2022 on 6 GM models. It will be on 22 vehicles by 2023.
MORE EV RANGE, for sure! 259 miles of EV range is great, but I will be looking for an EV that has 300-350+ miles of range. You can never have enough!
FASTER DC Fast Charging! The Bolt EV I have charges at up to 55 kW. For less waiting time on long trips, I want Tesla like DC fast charging numbers of 105 kW charge rate or higher! Higher charging power = shorter wait times!
Over the Air Software Updates! A pain to have to constantly go to a dealer for software updates/upgrades.

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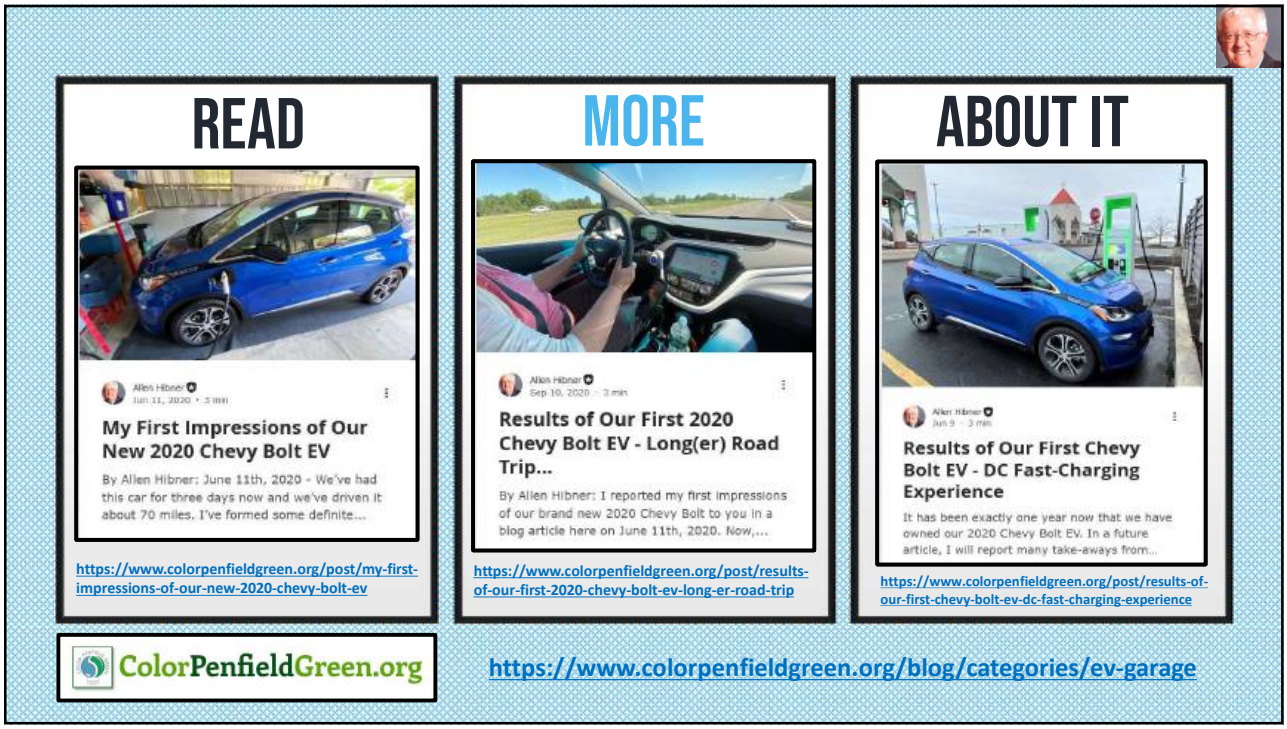
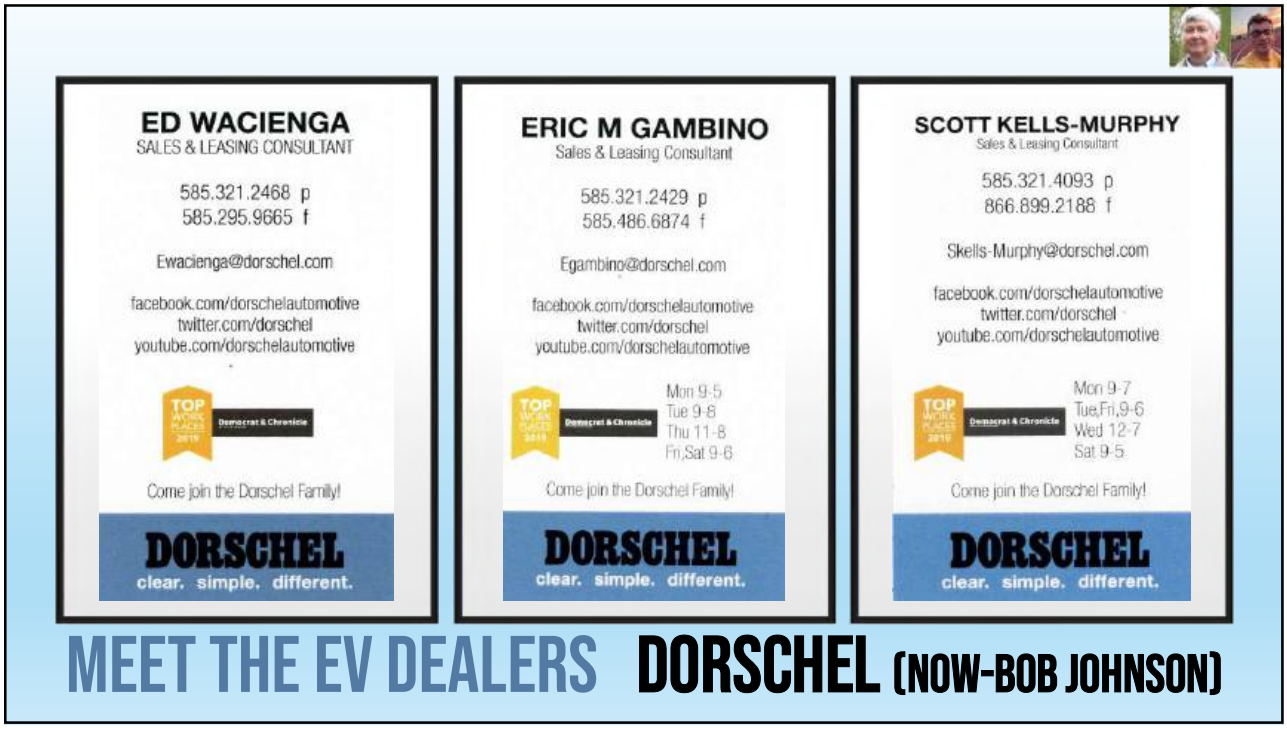

READ
My First Impressions of Our New 2020 Chevy Bolt EV
By Allen Hibner: June 11th, 2020 - We've had this car for three days now and we've driven it about 70 miles. I've formed some definite...
https://www.colorpenfieldgreen.org/post/my-first-impressions-of-our-new-2020-chevy-bolt-ev
MORE
Results of Our First 2020 Chevy Bolt EV - Long(er) Road Trip...
By Allen Hibner: I reported my first impressions of our brand new 2020 Chevy Bolt to you in a blog article here on June 11th, 2020. Now,...
https://www.colorpenfieldgreen.org/post/results-of-our-first-2020-chevy-bolt-ev-long-er-road-trip
ABOUT IT
Results of Our First Chevy Bolt EV - DC Fast-Charging Experience
It has been exactly one year now that we have owned our 2020 Chevy Bolt EV. In a future article, I will report many take-aways from...
https://www.colorpenfieldgreen.org/post/results-of-our-first-chevy-bolt-ev-dc-fast-charging-experience
ColorPenfieldGreen.org
https://www.colorpenfieldgreen.org/blog/categories/ev-garage

47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MEET THE EV DEALERS DORSCHEL (NOW-BOB JOHNSON)

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Sales Consultant, Hoselton Nissan
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Fax 585-385-6831
Email DSchmitt@Hoselton.com
Web hoselton.com
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JOSEPH SPROULE
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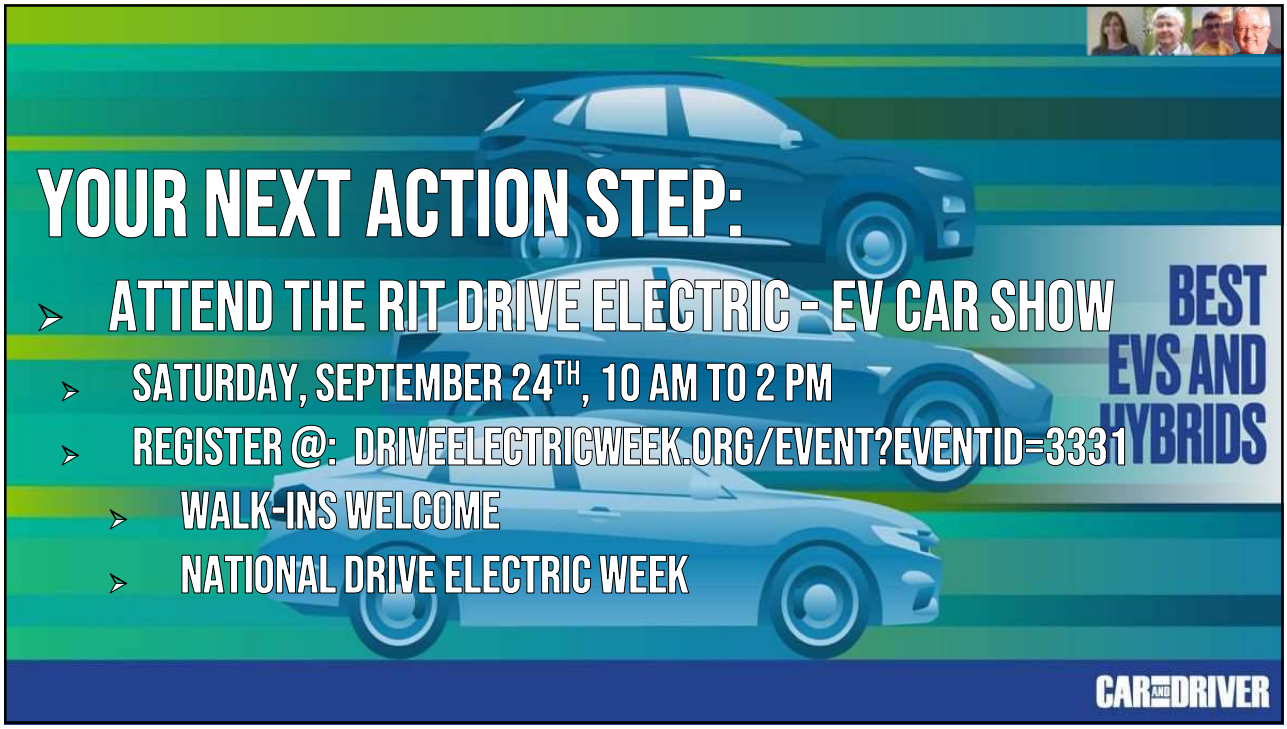
YOUR NEXT ACTION STEP:
ATTEND THE RIT DRIVE ELECTRIC - EV CAR SHOW
SATURDAY, SEPTEMBER 24TH, 10 AM TO 2 PM
REGISTER @: DRIVEELECTRICWEEK.ORG/EVENT?EVENTID=3331
WALK-INS WELCOME
NATIONAL DRIVE ELECTRIC WEEK
BEST EVS AND HYBRIDS
CAR AND DRIVER

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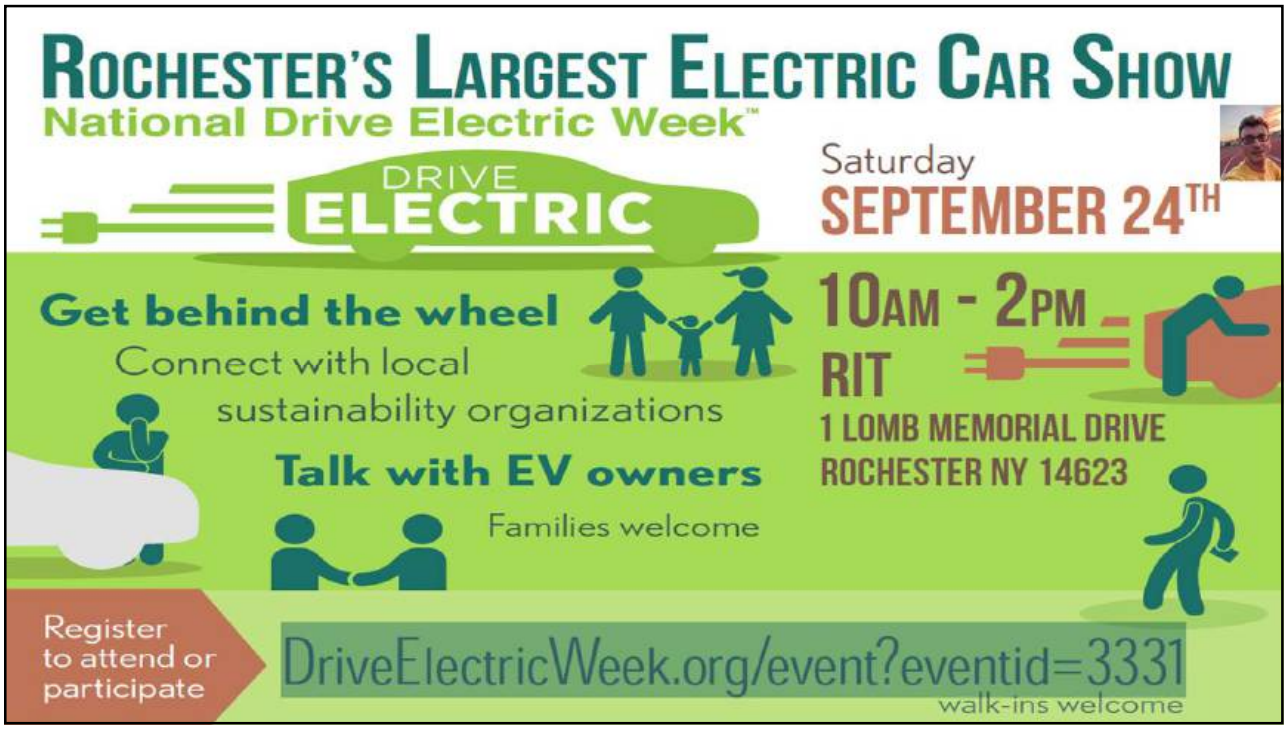
ROCHESTER'S LARGEST ELECTRIC CAR SHOW
National Drive Electric Week™
DRIVE ELECTRIC
Saturday
SEPTEMBER 24TH
Get behind the wheel
Connect with local sustainability organizations
Talk with EV owners
Families welcome
10AM - 2PM
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ROCHESTER NY 14623
Register to attend or participate
DriveElectricWeek.org/event?eventid=3331
walk-ins welcome

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THANK YOU
FOR ATTENDING SESSION II TODAY

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