



The Growing Opportunity of EV Tourism

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Agenda

Part 1: Quick EV 101

- EV Q&A

Part 2: EV Growth

Part 3: EV Drivers

Part 4: EV Tourism

Part 5: Q&A

Part 1: EV 101 – The Vehicles



HEV

hybrid
electric vehicle

internal combustion engine
no ability to plug in
high MPG efficiency



Toyota Prius



PHEV

plug-in hybrid
electric vehicle

fossil fuel and electric
ability to plug in
extended range over BEV



**Mitsubishi Outlander,
Chevrolet Volt**



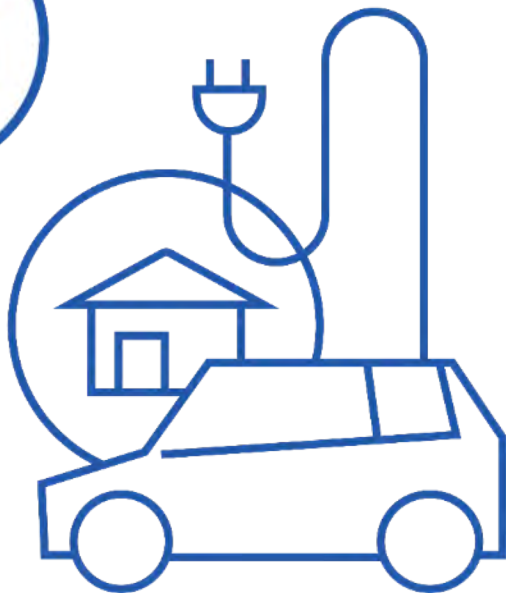
BEV

plug-in battery
electric vehicle

no internal combustion engine
battery only
lowest cost per km driven
zero emissions



**Chevrolet Bolt, Nissan Leaf,
Tesla**



Level 1

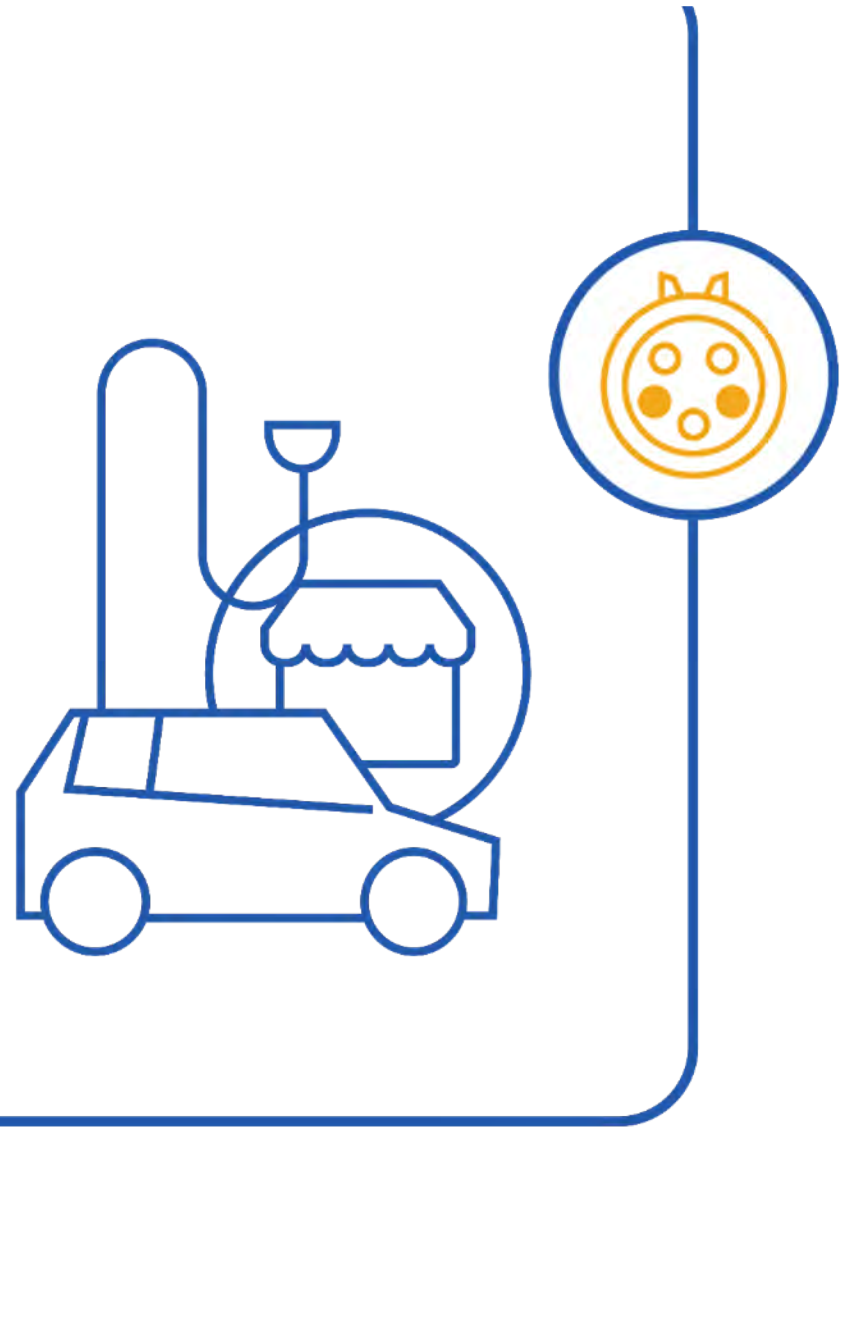
STOP N' SLEEP.
EASY AND AT HOME.
TRICKLE TOP UP

All EVs plug into a standard wall outlet. However, with just 120V, this is the slowest form of charging, but is a convenient solution and may be sufficient for overnight charging for most people's day-to-day driving, or for a PHEV with a smaller battery.

Level 2

STOP N' SHOP.
SLOW AND STEADY.
EXPLORE THE AREA.

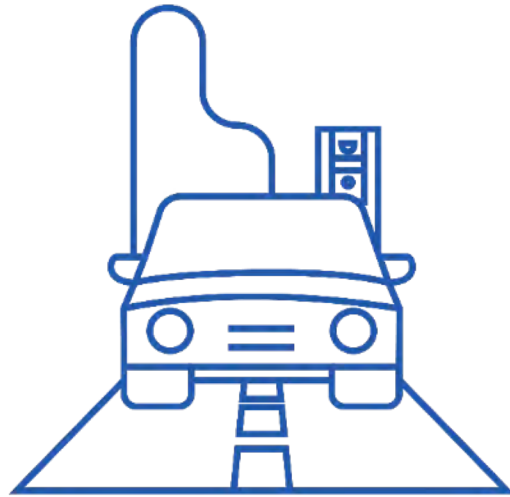
All EVs plug into Level 2 chargers. They are the most common public charger and would be the type of charger you'd install at home. They require 240V, similar to your dryer, and deliver a full charge in 4-8 hours.



Level 3/DCFC

STOP N' GO.
QUICK AND POWERFUL.
GET ON YOUR WAY.

The fastest form of charging, delivering a full charge in 30-60 minutes. DCFC are found along major travel routes and are pay-per-use. They have one or both of the following types of plugs:



CCS System

KIA, Chevrolet, BMW,
Volkswagen



CHAdemo System

Nissan, Hyundai,
Mitsubishi, Tesla with
adapter



The Benefits of EVs



COLD WEATHER PERFORMANCE

- Lower centre of gravity, electric traction and braking combine for more stable performance.
- Instant heat for cabin occupants. No need to wait for the motor to warm up.
- While cold weather can reduce range by up to 40%, they still perform well within the 60% available.

TOTAL COST OF OWNERSHIP

- Maintenance costs are lower. EVs don't have spark plugs, a transmission, motor oil, a gas tank or pistons.
- EVs have around 30 moving parts. Internal Combustion Vehicles (ICE) have more than 150. EVs have less things to go wrong with them.
- In Alberta, fuel costs of electricity compared to gasoline translates to roughly an 80% cost savings. EVs cost less to operate.



Transportation Electrification

- CleanBC – all new cars will be electric by 2040
- Transportation emissions in BC driving government action
- Cost of batteries decreased 70% between 2010 and 2016 – vehicle options growing
- Cost of EVs going down whereas ICE going up

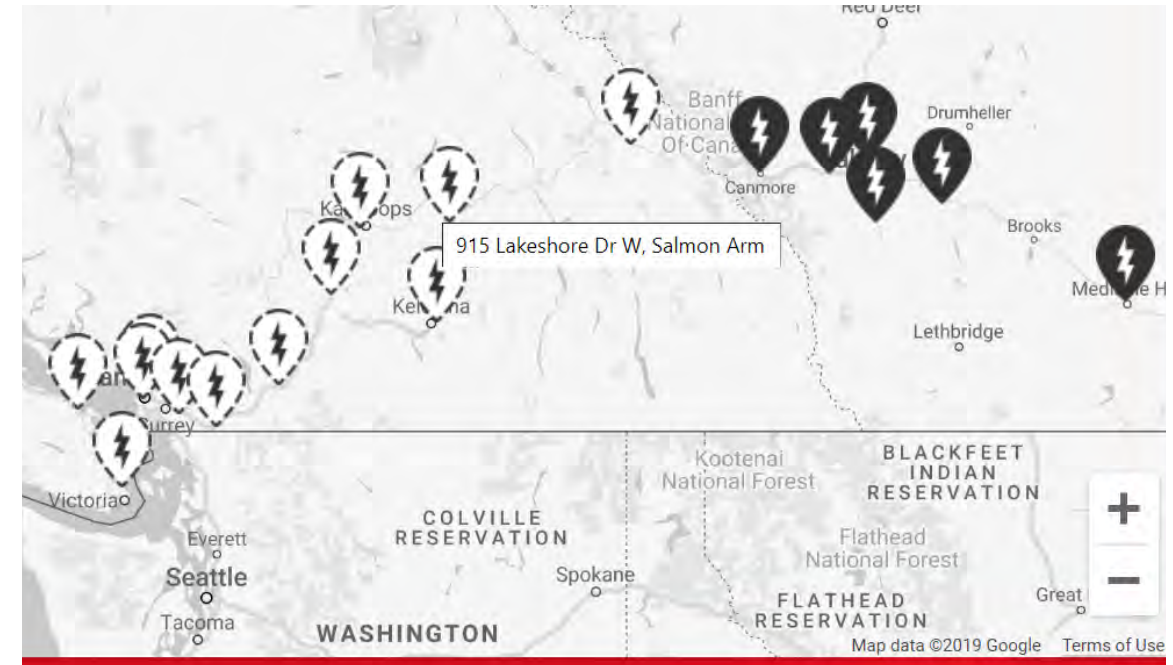
Taiga Motors launches new electric snowmobiles with impressive specs

Fred Lambert - Jun. 11th 2019 12:42 pm ET [@FredericLambert](#)



Growth of Charging Options

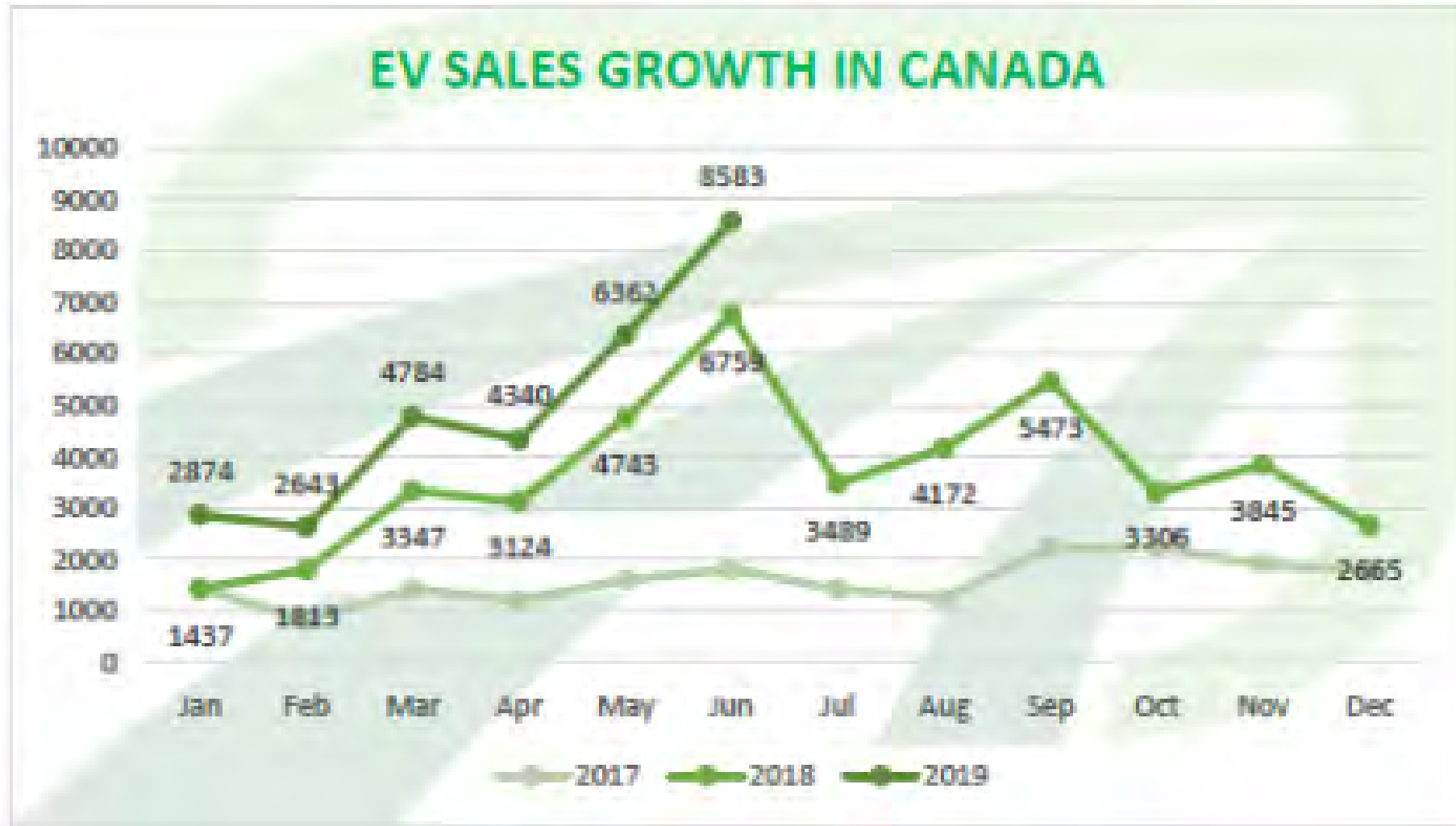
- Accelerate Kootenays
- BC Hydro
- FortisBC
- Petro Canada Electric Highway
- VW Electrify Canada
- VW Electrify America



Growth of EV Options

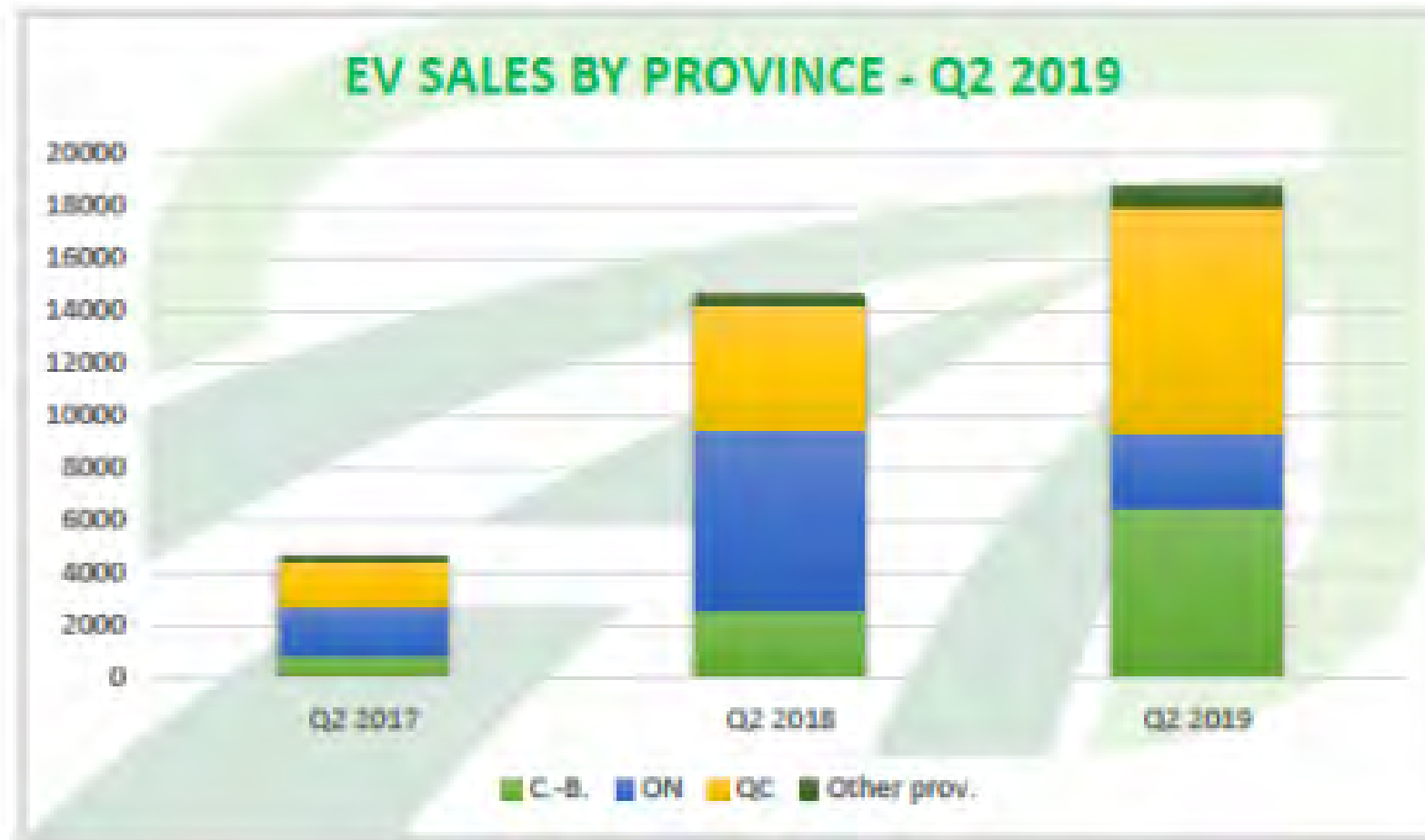
- Ford F150 to market in 2021
- Tesla Truck reveal end of Nov 2019
- Tesla Y 2020
- GM stops R&D into ICE
- VW all electric lineup

EV Adoption



Source: <https://emc-mec.ca/wp-content/uploads/Sales-Report-2019-Q2-2.pdf>

Impact of purchase incentives on adoption



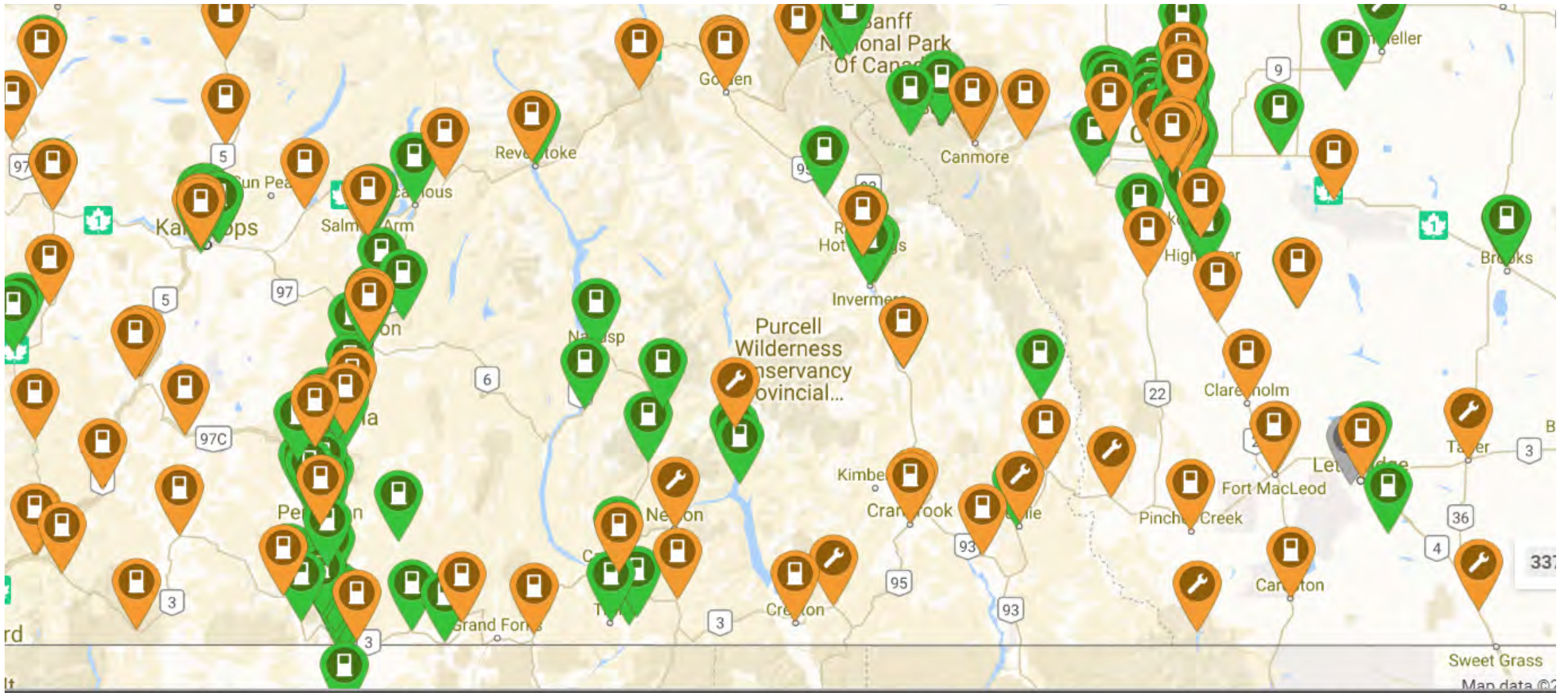
Province/Territory	Q2 2018	Q2 2019	Q2 '18-'19 Change	Approx. EV Total
Alberta	247	455	+84,2%	2,724
BC	2,564	6,419	+150,3%	26,312
Manitoba	52	94	+80,7%	496
NB	20	55	+175%	241
Newfoundland	3	8	+166,6%	56
NWT	0	0	0%	9
Nova Scotia	26	43	+65,3%	283
Nunavut	0	0	0%	1
Ontario	6,866	2,899	-57,7%	38,170
PEI	5	9	+80%	43
Quebec	4,821	8,714	+80,7%	51,265
Saskatchewan	22	46	+109,1%	254
Yukon	0	3		7
Canada	14,626 EVs	18,745 EVs	+28,1%	119,861 EVs

Who are EV Drivers?

- Predominantly Male
- Aged 35-55
- Household income of \$100,000+
- Top reason for buying: Environmental, Cost Savings, Fun to Drive
- In 2 car families, preferred option in the EV
- Charging influences travel

How do they Travel?

- Look for charging options first



The Opportunity

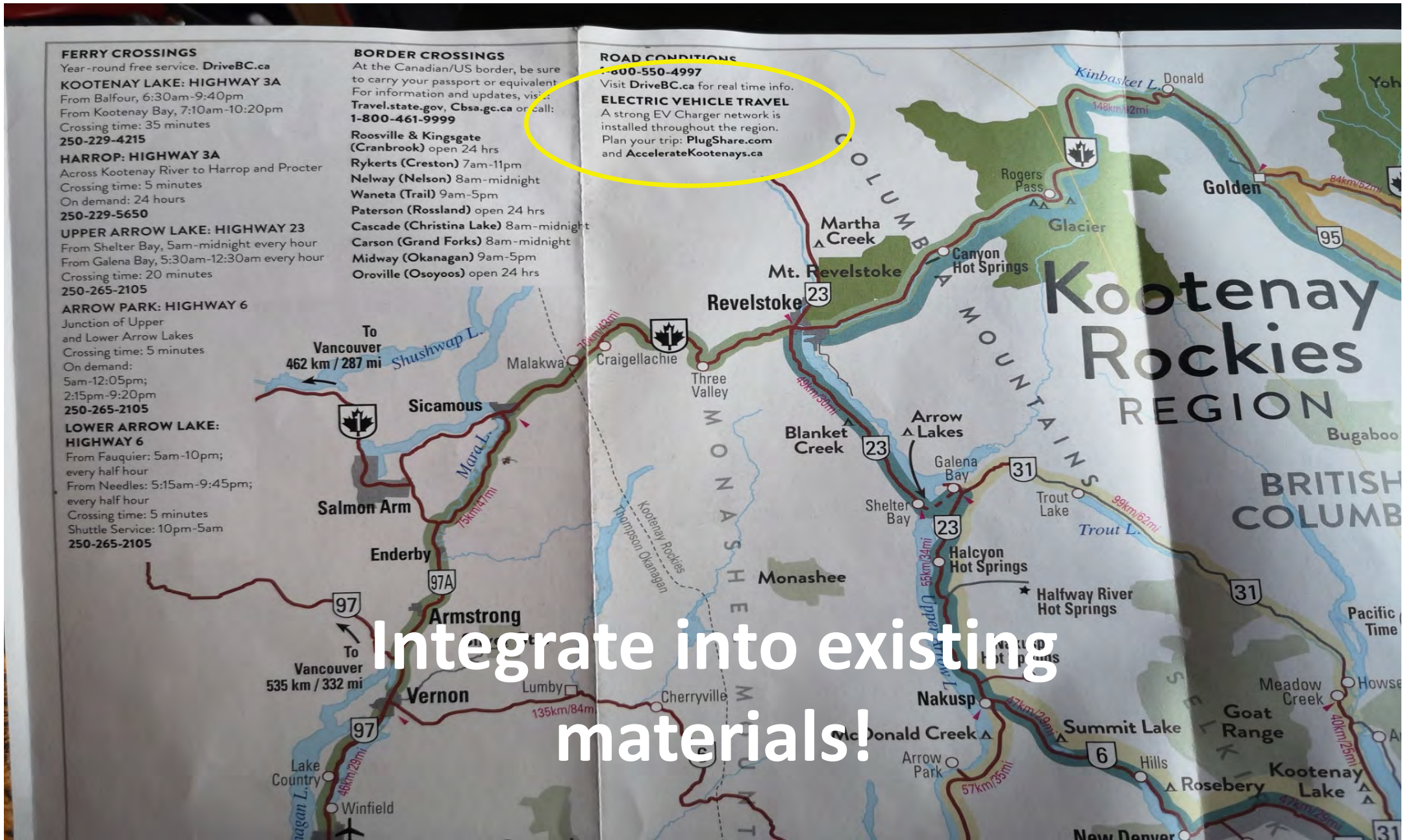
- EV charging is not like a gas station

The Opportunity

“We've been going past Golden BC for 55 years and stopping along the highway for gas and never been into town. This time in our new EV, we came into town to use the CCS at City Hall, booking Country Comfort B&B because it was down the street and then we went to the closeby Corner Restaurant - real diamonds for sure! This town has SO much that you do not see along the highway - come into town to this charger location and it will open up a whole new experience.”



Emerging Best Practices



Emerging Best Practices



Fernie Super 8



Radius Retreat @RadiusRetreat · Oct 20

Thanks! Trying to reduce our environmental impact in any way we can



Columbia Valley CED @CVCEDO · Oct 20

Kudos to @RadiusRetreat for leading the charge with their micro-hydro station that powers their year-round yurt homes & @PolarisORV Racer EV.

The #ColumbiaValleyBC is excited to share this success story with @BC_CEA & @AccelerateKoots at the East Kootenay E-Mobility Visi



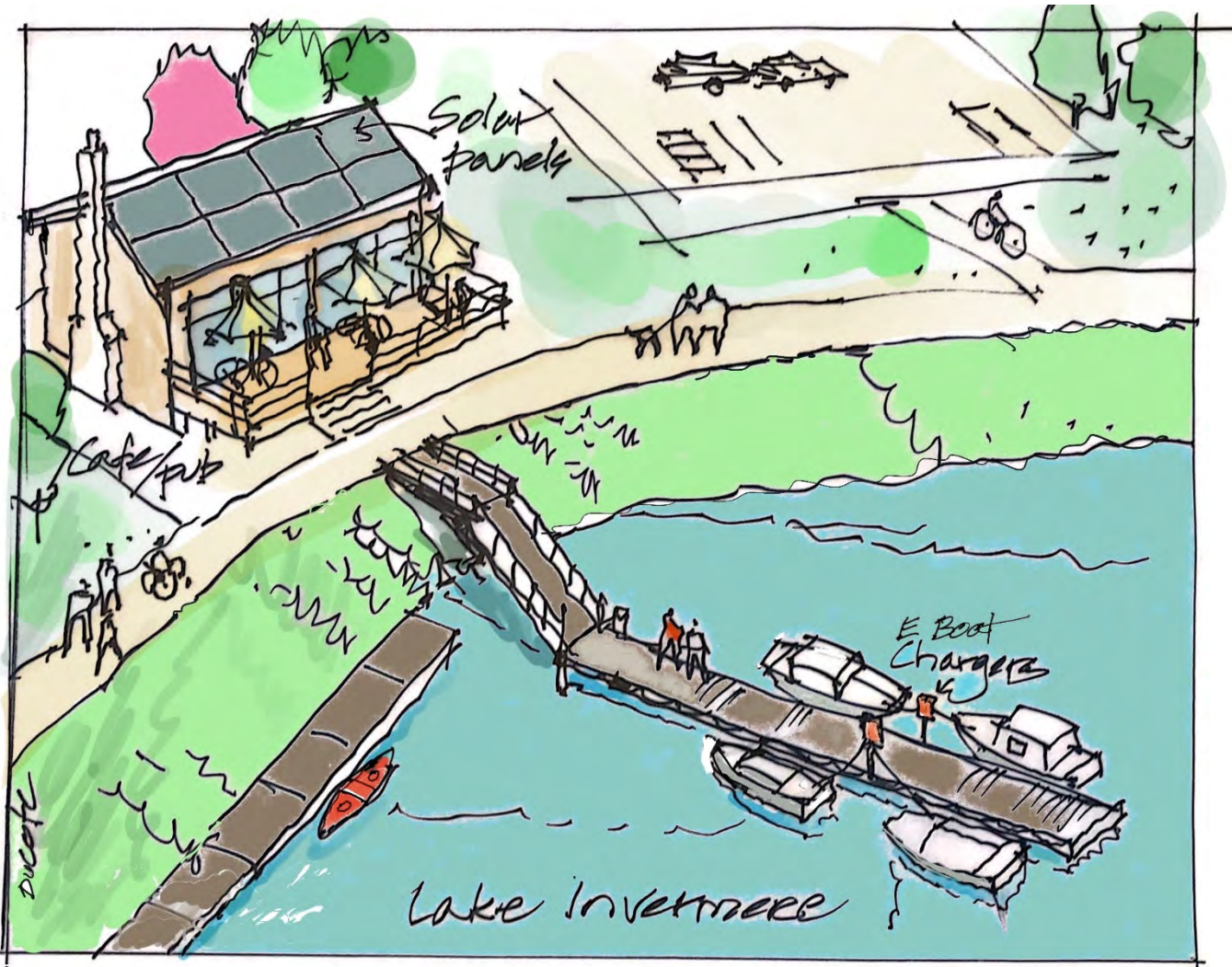
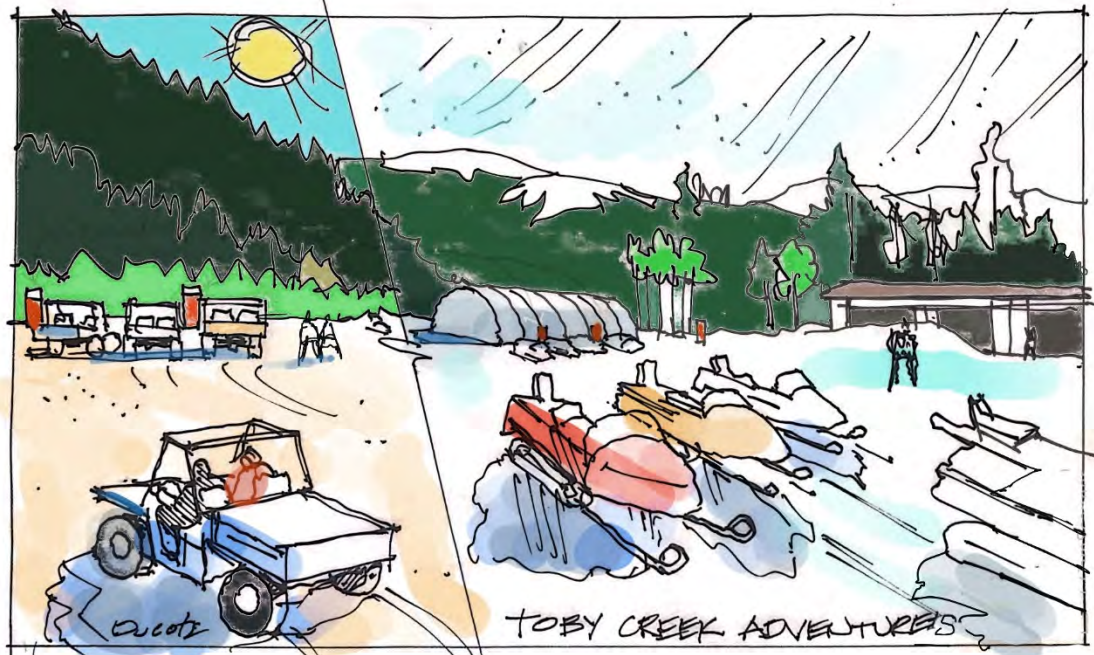
Radius Retreat



Crescent Motel

Best Practices for EV Charging

- Leverage existing work
- Don't combine accessibility parking
- Visible to travelers – free advertising!
- Future-proof
- Promote!





Thank you!

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