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The State of Tesla Electric Vehicles

Presented to the APCUG 8/21/2021
by Michael Young



History of Tesla

- Founded in 2003, Elon Musk became CEO in 2004
- Produced their first production electric car, the Roadster, in 2008.
- Produced their first production electric sedan, Model S, in 2012
- Produced their first electric SUV, Model X, in 2016
- Produced their first electric mass production electric car, Model 3, in 2017

Lineup

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Future of Tesla Vehicles

- 2022 - Semi-truck, 500+ mile range with 80k lbs
- 2022 - Roadster 2 - Fastest production car ever, 600+ mile range
- 2022 - CyberTruck, 500+ mile range, 14k lbs towing, bullet-proof
- 2023 - Model 2, 300 mile range, \$25k

Coming soon...



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What makes Tesla unique?

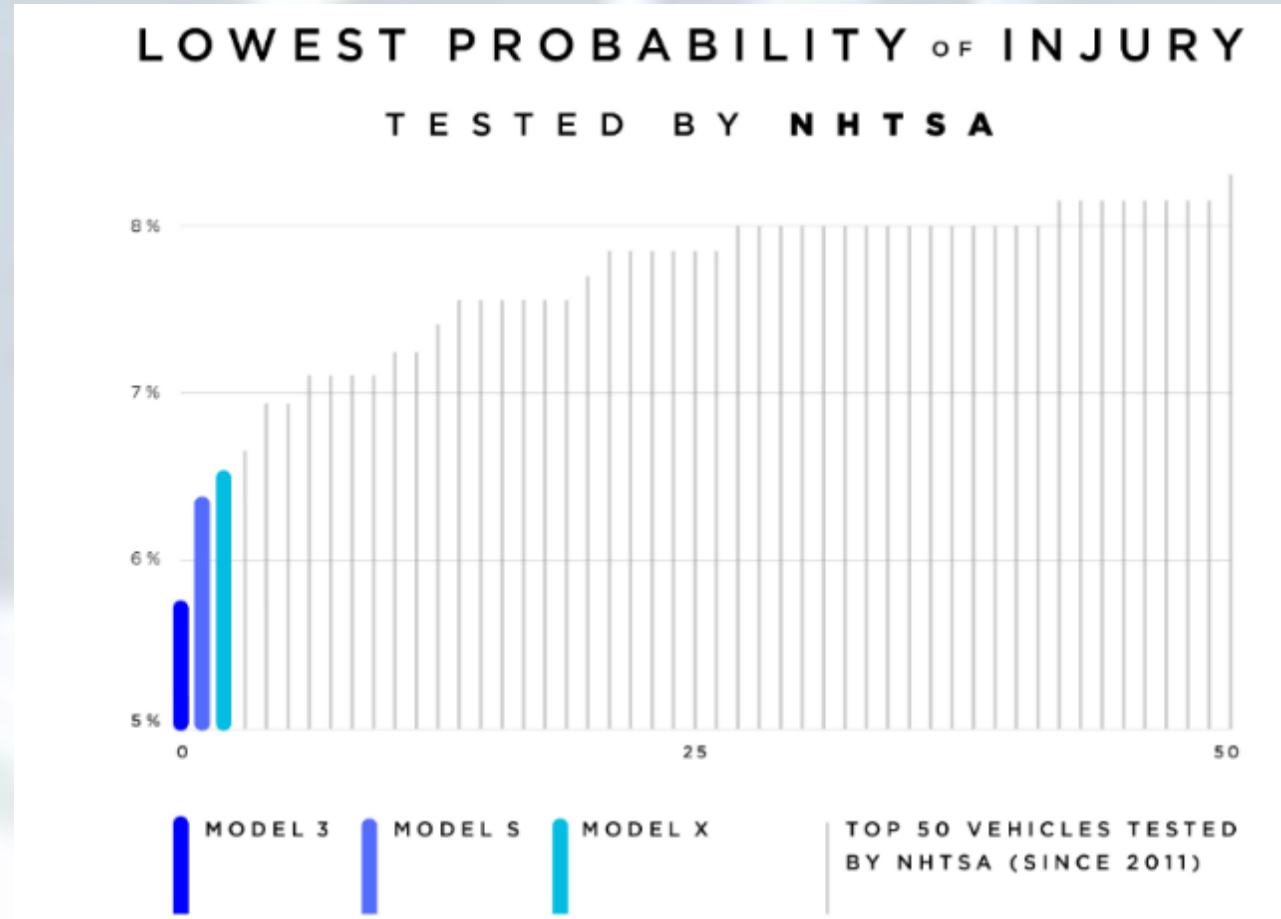
- Committed to electric powered cars. Only produce electric cars.
- Not compliance cars
- Not slow cars
- Safest car EVER made
- SuperCharger network
- Disrupting the auto industry
- Over The Air updates. The car gets better over time.
- Autonomous driving
- FUN!

Safest Cars Ever Built

- Model 3 achieves the lowest probability of injury of any vehicle ever tested by NHTSA
- Based on the advanced architecture of Model S and Model X, which were previously found by the National Highway Traffic Safety Administration (NHTSA) to have the lowest and second lowest probabilities of injury of all cars ever tested, we engineered Model 3 to be the safest car ever built. Now, not only has Model 3 achieved a perfect 5-star safety rating in every category and sub-category, but NHTSA's tests also show that it has the lowest probability of injury of all cars the safety agency has ever tested.

Safest Cars Ever Built (cont.)

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SuperChargers

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Charging your car at home

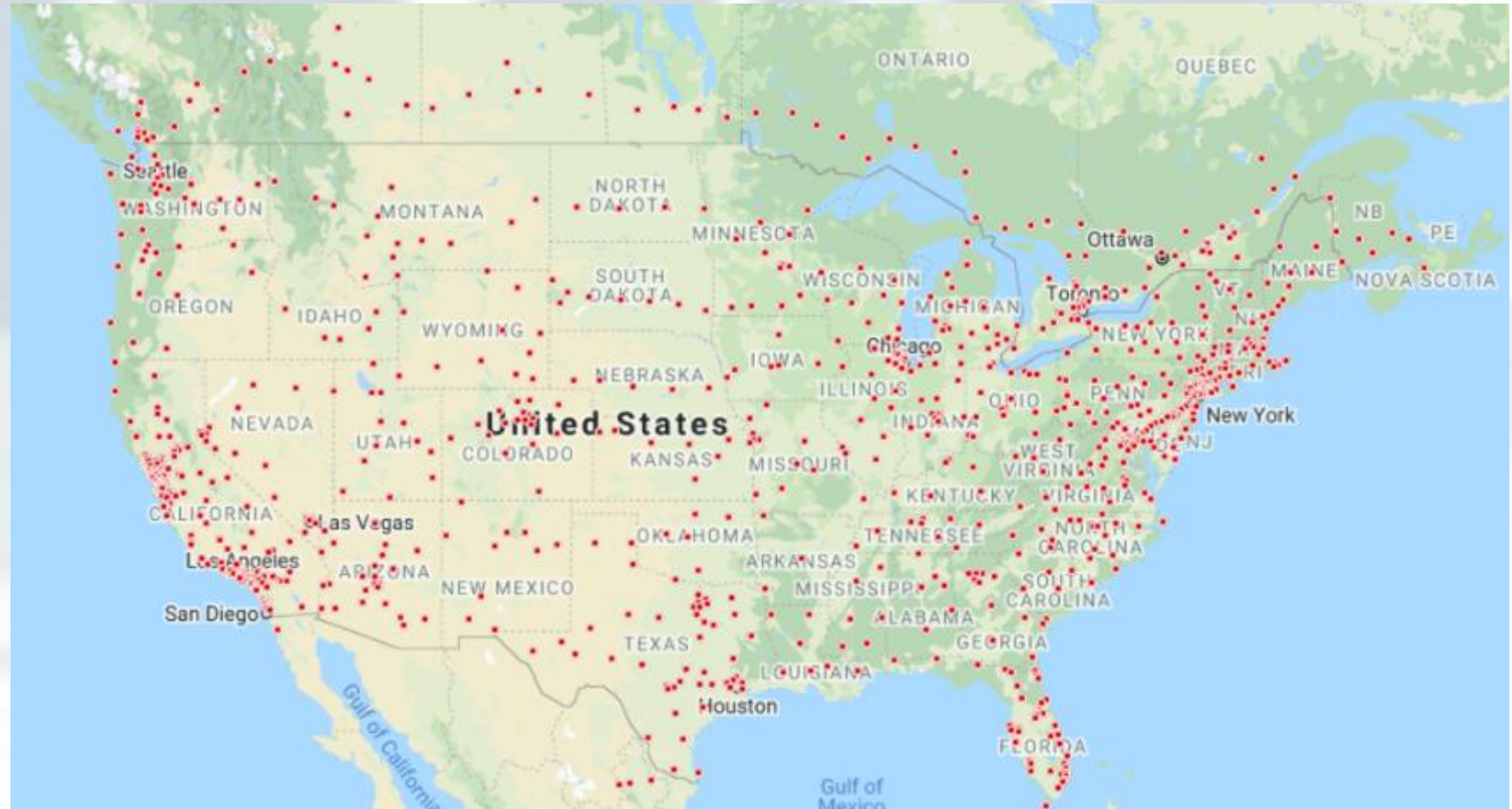
- Most of the time you will charge your car at home.
- There are many options to install home chargers.

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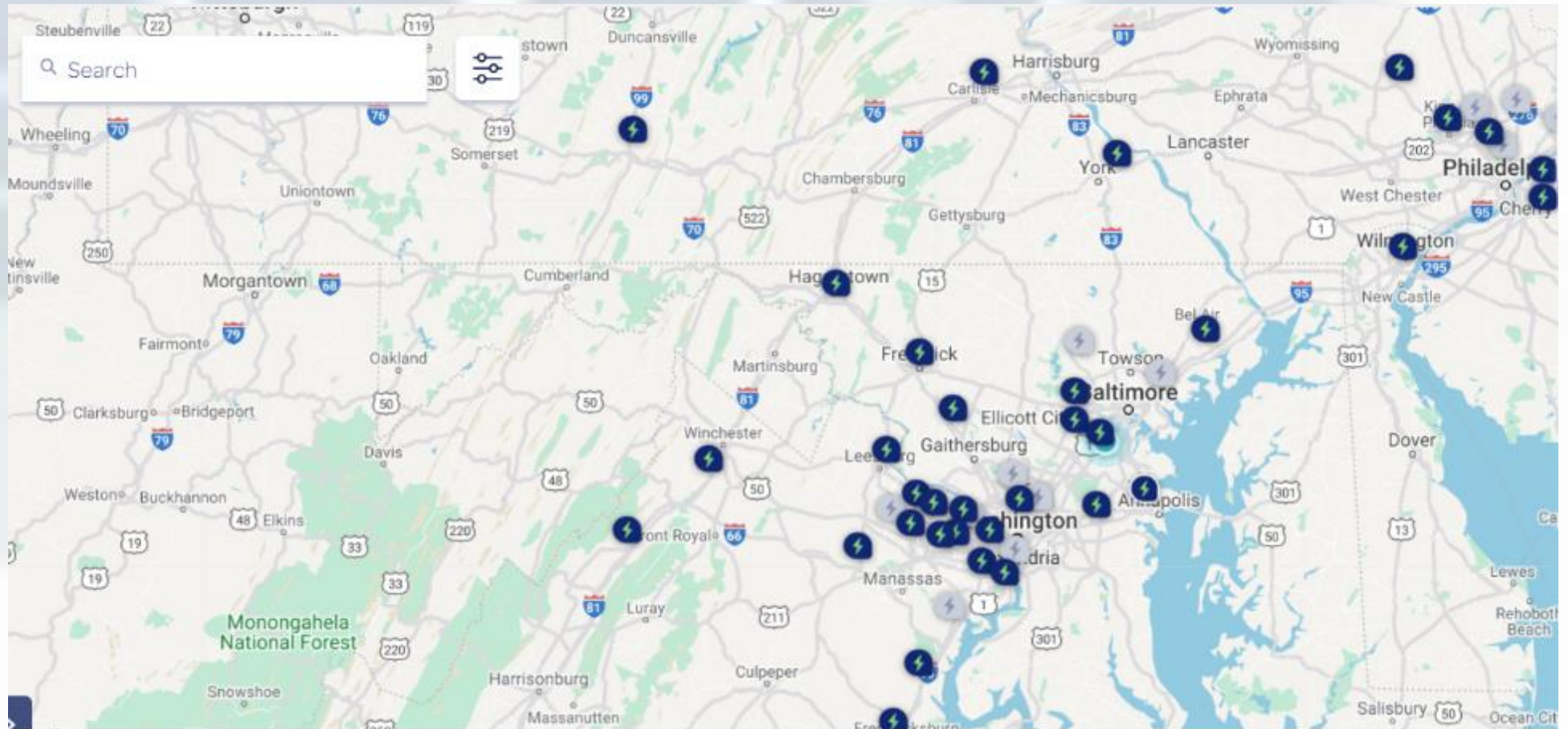
SuperCharger Network

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Electrify America

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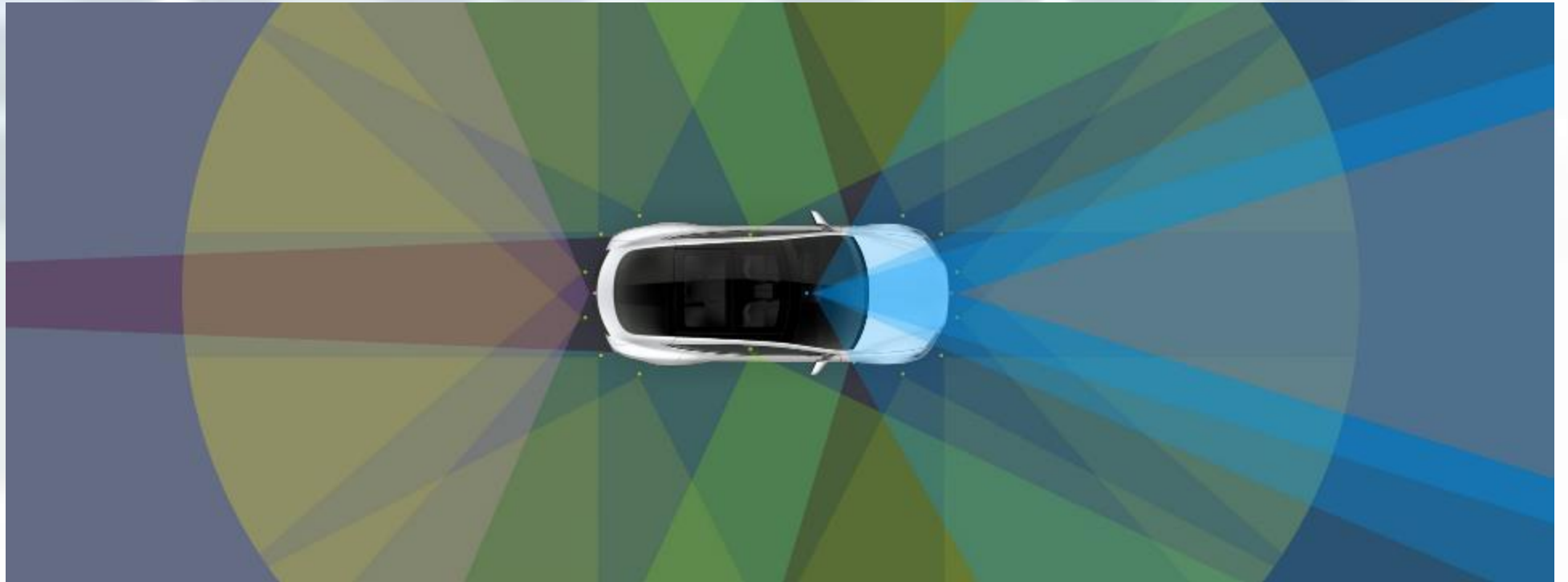


Software Updates

- Our cars regularly receive over-the-air software updates that add new features and enhance existing ones over Wi-Fi.
- When updates become available, you'll receive a notification on your center touchscreen display, with the option to install the update immediately or schedule for later. To ensure the fastest and most reliable delivery of software updates, connect your car to Wi-Fi.

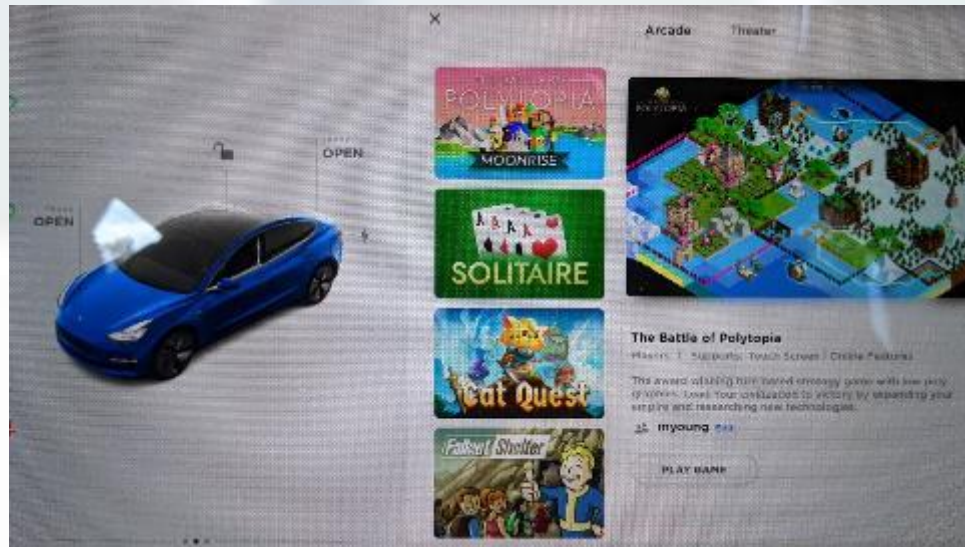
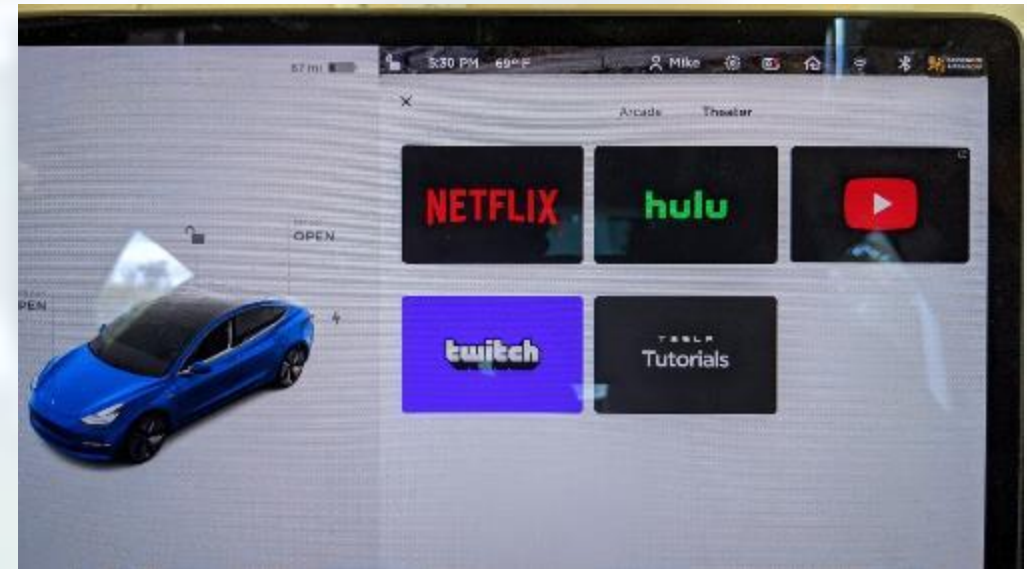
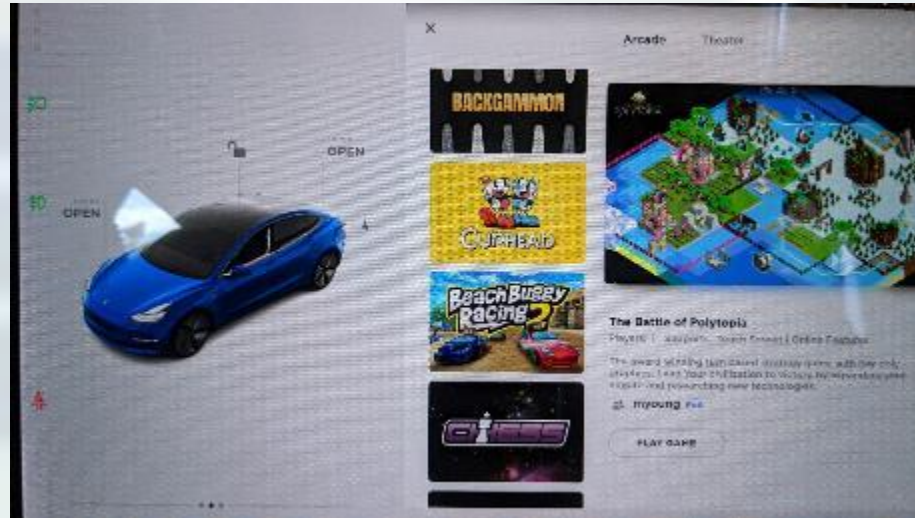
Autonomous driving

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FUN!

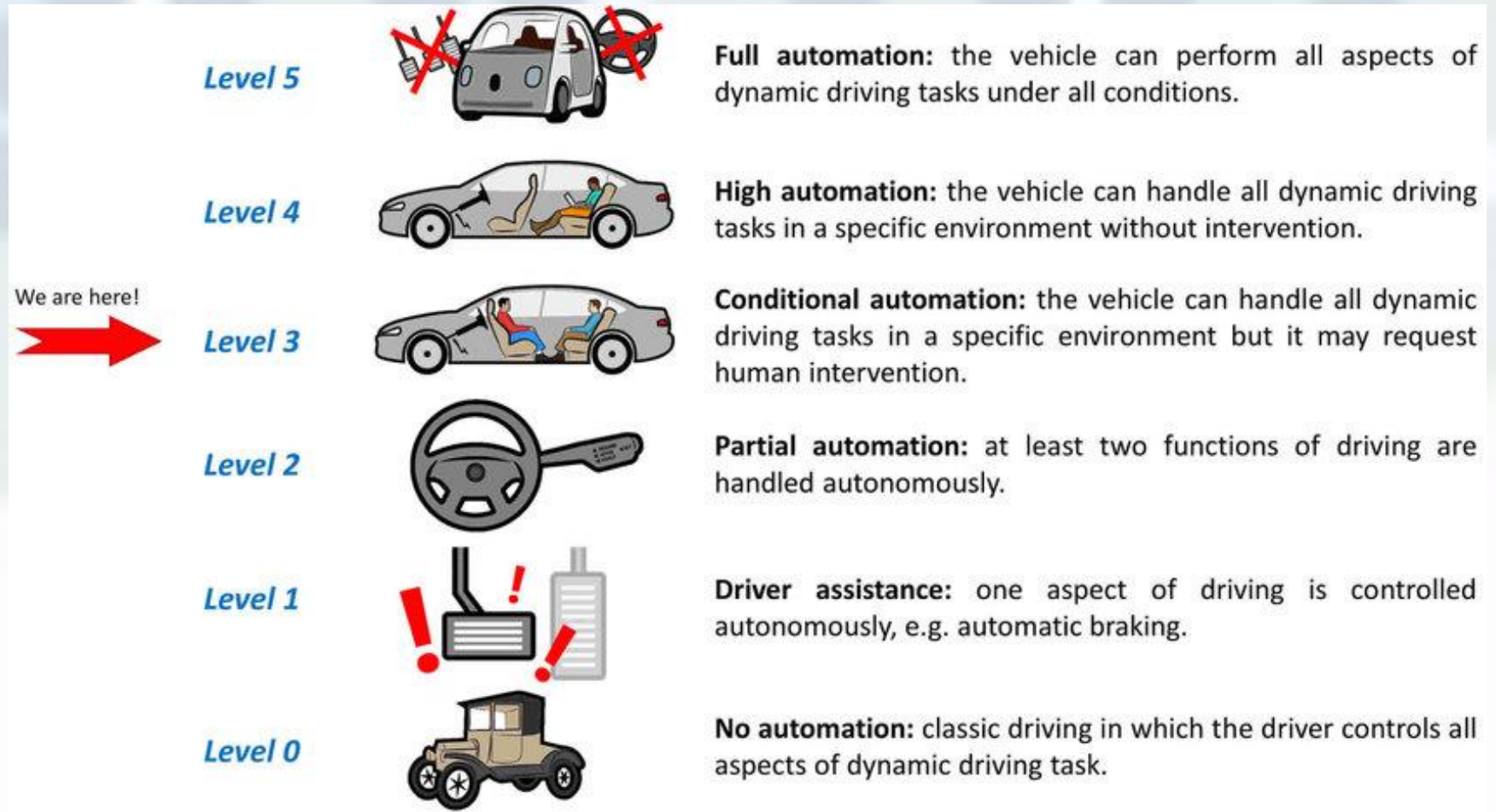
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What's Next?

- Full Autonomous Driving

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Many EVs, Many on the way

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The Electric Vehicle Association of Greater Washington DC

evadc.org

Electric Vehicle Information Sheet

	All Electric	Base Price (USD) ¹	Net Price (USD) ²	Range (mi) ³	Batt. (kWh)	Power (kW) ⁴	0-60 (sec)	QC (kW) ⁵	MPG equiv ³	Fuel/ Mo. ⁶
	Chevy Bolt	\$36,620	\$34,745	259	66	150	6.5	50	118	\$46
	Fiat 500e	\$33,460	\$25,960	84	24	83	8.9	N/A	112	\$50
	Harley LiveWire	\$29,799	\$27,299	95*	15.5	78	3.0*	20*	95*	—
	Honda Clarity Elec.	\$36,620	(lease only)	89	25.5	120	—	25*	114	\$50
	Hyundai Ioniq Elec.	\$32,000*	\$24,500*	170	38.3	100	9.5	75	133	\$42
	Hyundai Kona Elec.	\$37,190	\$29,690	258	64	150	6.4	75*	120	\$46
	Kia Niro EV	\$38,500	\$31,000	239	64	150	7.8	77	112	\$50
	Kia Soul EV	\$35,000*	\$27,500*	243	64	201	7.6	77	114	\$50
	MINI Electric	\$29,900	\$22,400	110	32.6	135	6.9	50	—	—
	Nissan LEAF S	\$31,600	\$24,100	150	40	110	7.4	50	112	\$50
	S Plus	\$38,200	\$30,700	226	62	160	6.4	100	108	\$50
	VW e-Golf	\$31,895	\$24,395	123	35.8	100	8.5	50	113	\$50
	Zero SR/F	\$19,495	\$17,545	109*	14.4	82	3.3*	N/A	—	—
	Average U.S. Gasoline Car Price	\$35,000								
	Audi e-tron	\$74,800	\$67,300	204	95	265	5.5	150	74	75
	BMW i3	\$44,450	\$36,950	153	42.2	125	7.2	50	113	\$50
	Ford Mustang Mach-E	\$50,600	\$43,100	230*	76	142	6.1	150	—	—
	Jaguar I-Pace	\$69,850	\$62,350	234	90	294	4.5	50	76	\$71
	Polestar 2	\$63,000	\$55,500	275	78	300	4.7	150	—	—
	Porsche Taycan 4S	\$103,800	\$96,300	170*	79.2	390	3.8	270	70*	—
	Turbo	\$150,900	\$143,400	201	93.4	500	3.0	270	69	\$79
	Rivian R1S 135	\$82,500*	\$75,000*	310*	135	562*	3.0*	160*	—	—
	Rivian R1T 135	\$79,000*	\$71,500*	300*	135	562*	3.0*	160*	—	—
	Tesla Cybertruck Dual	\$49,900	\$49,900	300*	120*	515*	4.5*	250*	—	—
	Tesla Model 3 Std.	\$35,000	\$35,000	220	50	211	5.6	100	131	\$42
	Std. Plus	\$39,990	\$39,990	250	54	211	5.3	100	141	\$38
	Long Range AWD	\$48,990	\$48,990	322	75	335	4.4	250	121	\$46
	Tesla Model Y Long	\$48,000	\$48,000	300*	75*	211*	5.5	—	—	—
	Tesla Model S	\$79,990	\$79,990	373	100	398	3.7	200	111	\$50
	Tesla Model X	\$84,990	\$84,990	328	100	398	4.4	200	96	\$58
	Tesla Roadster	\$200,000	\$200,000	620	200*	—	1.9	350*	—	—
	Volvo XC40 Recharge	\$55,000*	\$47,500*	200*	78*	300	4.7	150	—	—

EVADC meets the 3rd Wednesday of every month. See evadc.org/meeting.

Home Charging

Typically costs 4 ¢ / mile. (3 mi / kWh, 12 ¢ / kWh)

Charge using an ordinary 120V outlet.
Dedicated circuit recommended.

Install a home 240V charging station for faster
charging at home. \$400-\$1000 + installation

240V Home
Charging Station

Public Charging

Cost varies, free - 49 ¢ / kWh

240V Public
Charging Station

1000+ local public charging stations

480V DC
Fast
Charger

Level 1: 120V AC (regular outlet)
Reclaim 5 miles per hour charging

Level 2: 240V AC (J1772 / dryer plug)
Reclaim 15-60 miles per hour charging

Fast Charge: 480V DC
Reclaim 50-200 miles in 30 minutes

EVADC is providing the following for informational purposes only. We do not endorse or recommend any specific vehicle manufacturer or distributor. Information subject to change.
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1. Base price before tax incentives, destination.
2. Net price after federal tax credit. State credits may still apply. Consult tax advisor.
3. EPA combined city/highway, except as noted.
4. Total motor power. 1 kW = 1.34 hp.

5. DC Quick / Fast Charge max rate.
6. EPA, 15000 miles/year, 12¢ / kWh
Source: Vehicle Manufacturer
* Estimate

EV's of 2021

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Popular EVs of 2021

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Coming in the near future

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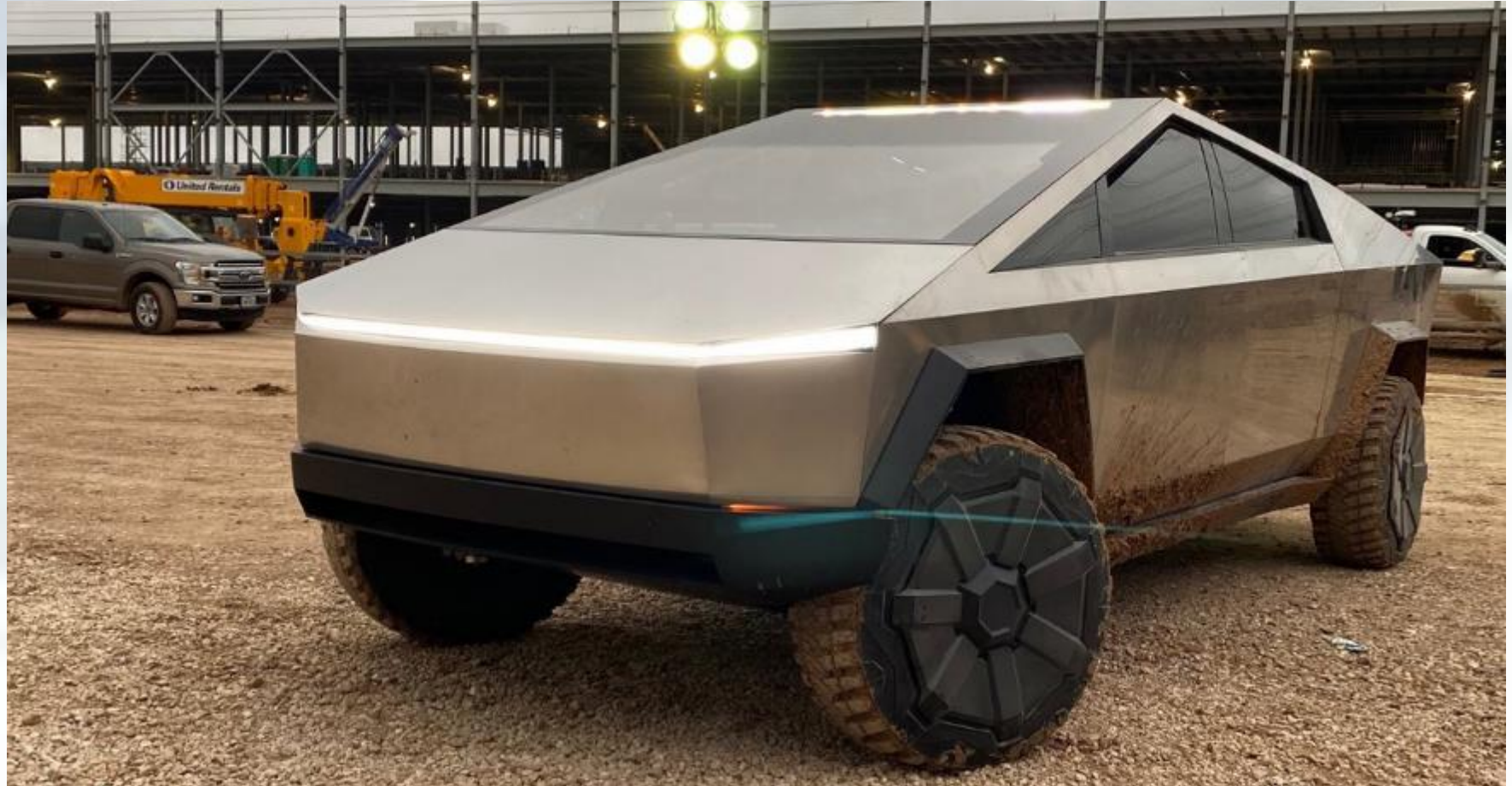


The Tesla Network

- Your car works for you.
- 85%+ of the time your car is parked.
- 100% of the time, you are paying for it.
- Your vehicle could be ‘earning it’s keep’ by taking others to their destination.
- You could request a different type of vehicle if you have the need (truck, SUV, etc.)
- Coming in the next 5 years!

CyberTruck in the wild

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CT in the wild (cont.)

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Questions?

The State of Tesla Electric Vehicles
Chesapeake Area Technology Society
(CATS)

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