



# Electric Vehicles and Charging

North Carolina Joint Legislative Commission on Energy Policy

November 8, 2017





# TESLA'S MISSION

---

To accelerate the world's transition to sustainable energy.

# TESLA PRODUCTS



Vehicles



Storage



Solar

## SECRET MASTER PLAN



# Model S

- Up to 335 miles of range
- 0-60 mph in as little as 2.5 seconds
- All-wheel drive
- 75 kWh and 100 kWh battery options
- Autopilot equipped
- Seats up to 7
- Highest safety rating in America



# Model X



- Up to 295 miles of range
- 0-60 mph in as little as 2.9 seconds
- All-wheel drive
- 75 kWh and 100 kWh battery options
- Autopilot equipped
- Seats up to 7
- Safest SUV ever tested



# Model 3

- Started production in July
- 0-60 mph in as little as 5.1 seconds
- 220 – 310 miles of range
- Autopilot equipped
- Starts at 35,000



## TESLA CHARGING



Supercharging



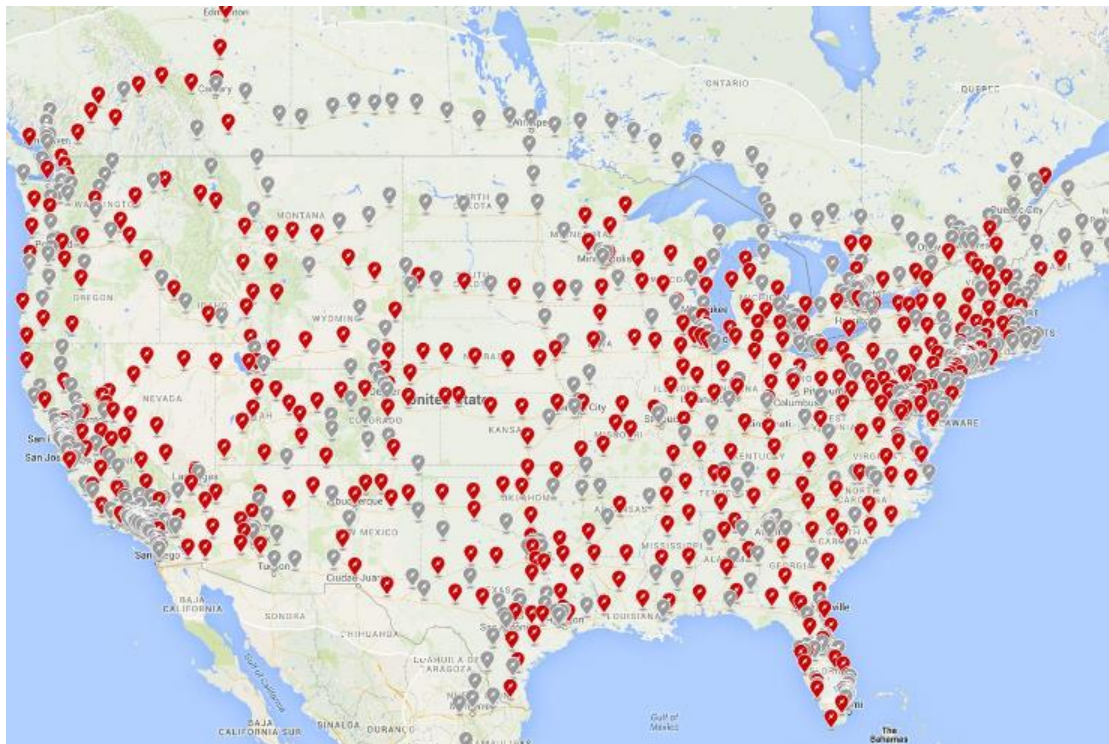
Destination Charging



Home Charging

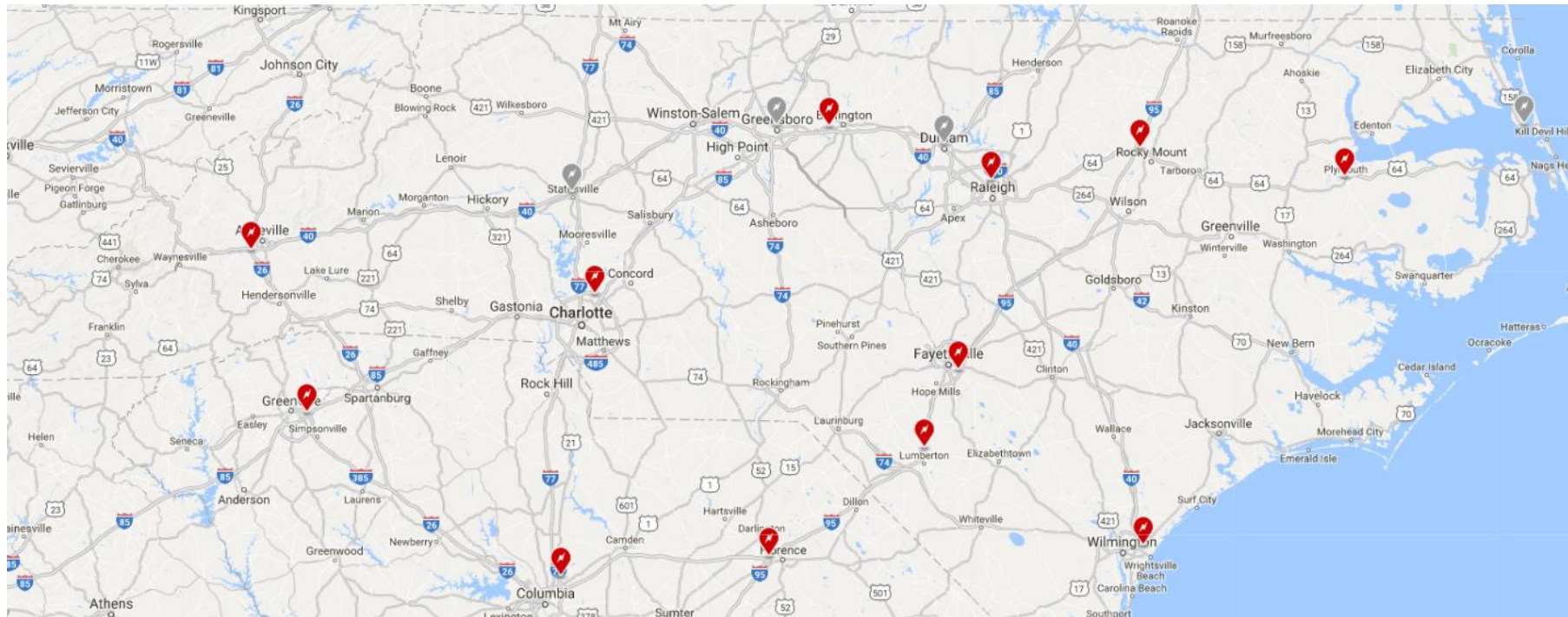


# Supercharging



1,008 Supercharger Stations with 7,032 Superchargers

# Supercharging in North Carolina



# Supercharging



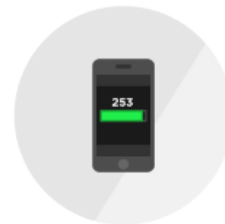
## Navigate

Enter your final destination and Trip Planner automatically routes you through convenient Superchargers along the way.



## Plug In

Plug in for about 30 minutes and grab a cup of coffee or a quick bite to eat while your vehicle charges.



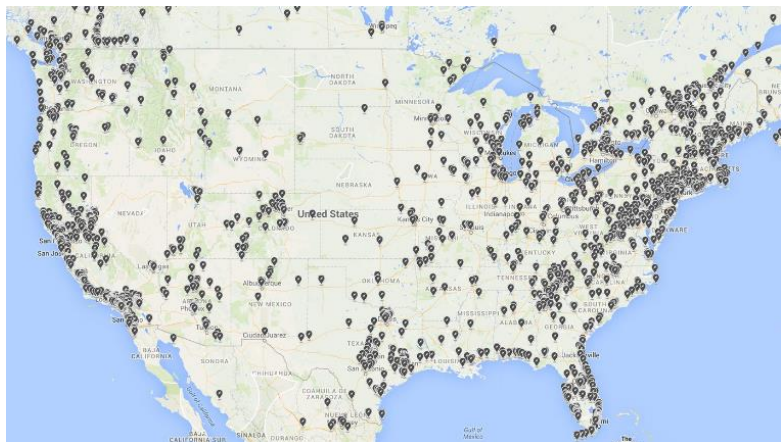
## Journey On

Your Tesla app will notify you when your vehicle is done charging.



# Destination Charging

Convenient charging at hotels, restaurants and shopping centers.



# Home Charging



Wall Connector circuit breaker options	Mobile Connector outlet adapters	Max power (kW) at 240 volts	Estimated recharging speed, miles per hour Model X / Model S
100 amps	N/A	19.2 kW *	45 / 52**
90 amps	N/A	17.3 kW *	45 / 52
80 amps	N/A	15.4 kW *	40 / 46
70 amps	N/A	13.4 kW *	35 / 40
60 amps	N/A	11.5 kW	30 / 34
50 amps	NEMA 14-50	9.6 kW	25 / 29
45 amps	N/A	8.6 kW	23 / 26
40 amps	N/A	7.7 kW	20 / 23
35 amps	N/A	6.7 kW	17 / 20
30 amps	NEMA 14-30	5.7 kW	14 / 17
25 amps	N/A	4.8 kW	11 / 14
20 amps	N/A	3.8 kW	8 / 11
15 amps	N/A	2.8 kW	5 / 7

# Multi-Unit Dwelling (Home/Workplace) Charging



- 80%+ of charging done at home/work
- Parking Lot Electrical Capacity and Connectivity upgrades
- EV 'make ready' infrastructure



