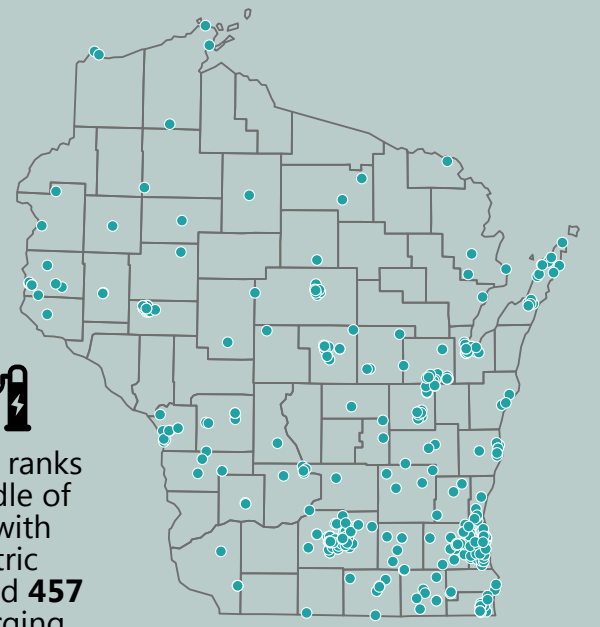


Range Anxiety:

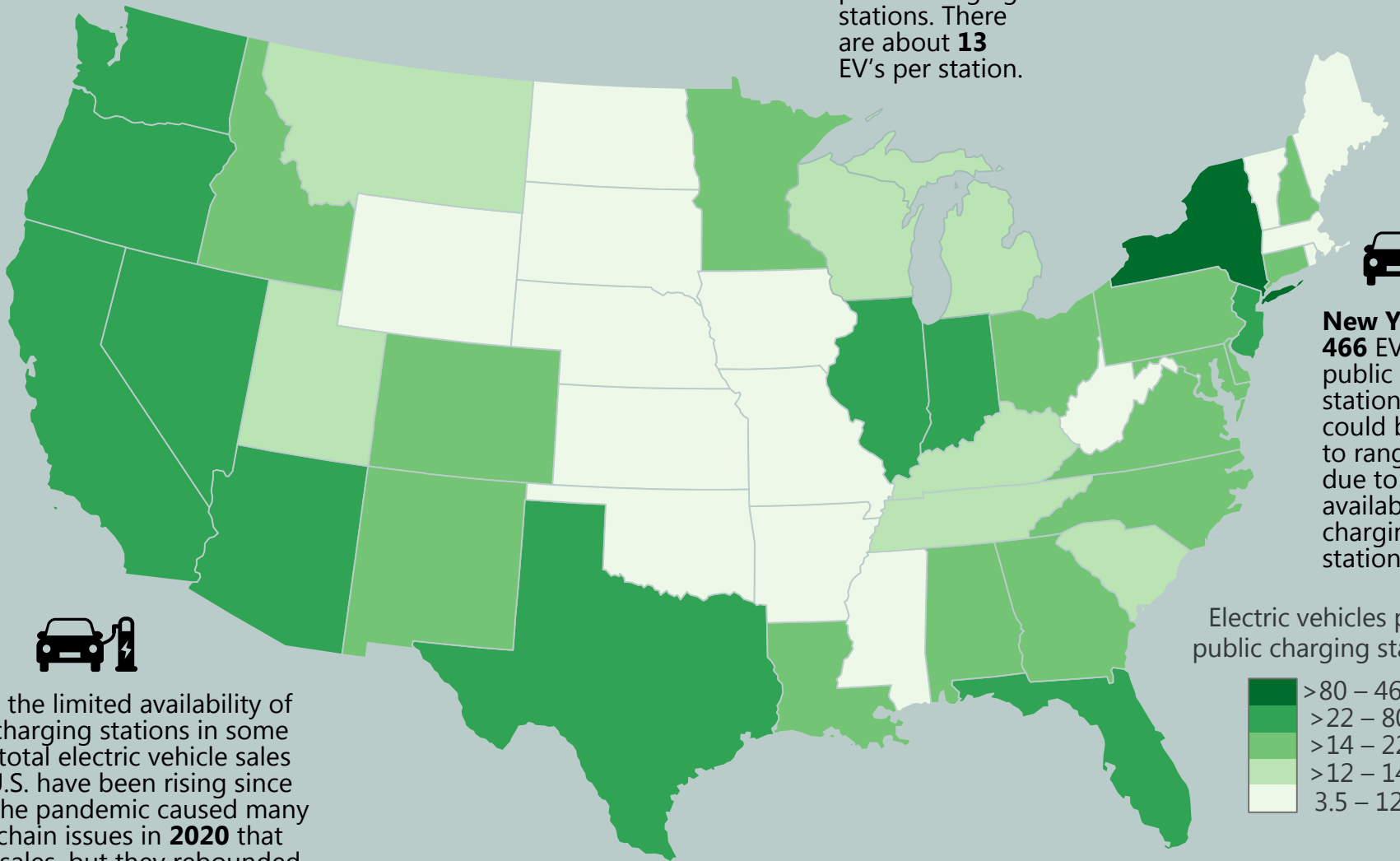
will availability of charging stations limit the potential of electric vehicles?

What is range anxiety?

Range anxiety is a perceived fear associated with electric vehicles (EV) and their battery life. This type of anxiety refers to people being concerned that their vehicle will run out of charge on their trip. The fear is being exacerbated by the current extent of battery technology and the availability of public electric vehicle charging stations for people to use on their trips.



Wisconsin ranks in the middle of the states with **6,310** electric vehicles and **457** public charging stations. There are about **13** EV's per station.



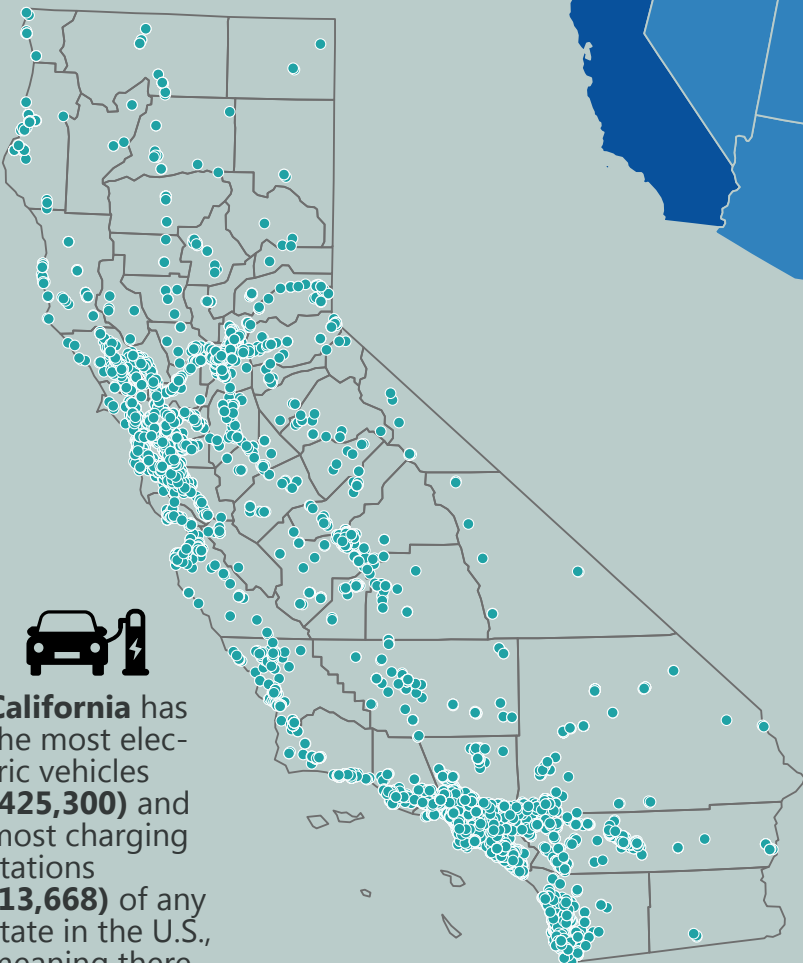
New York has **466** EV's per public charging station. Drivers could be subject to range anxiety due to the low availability of charging stations.

Electric vehicles per public charging station

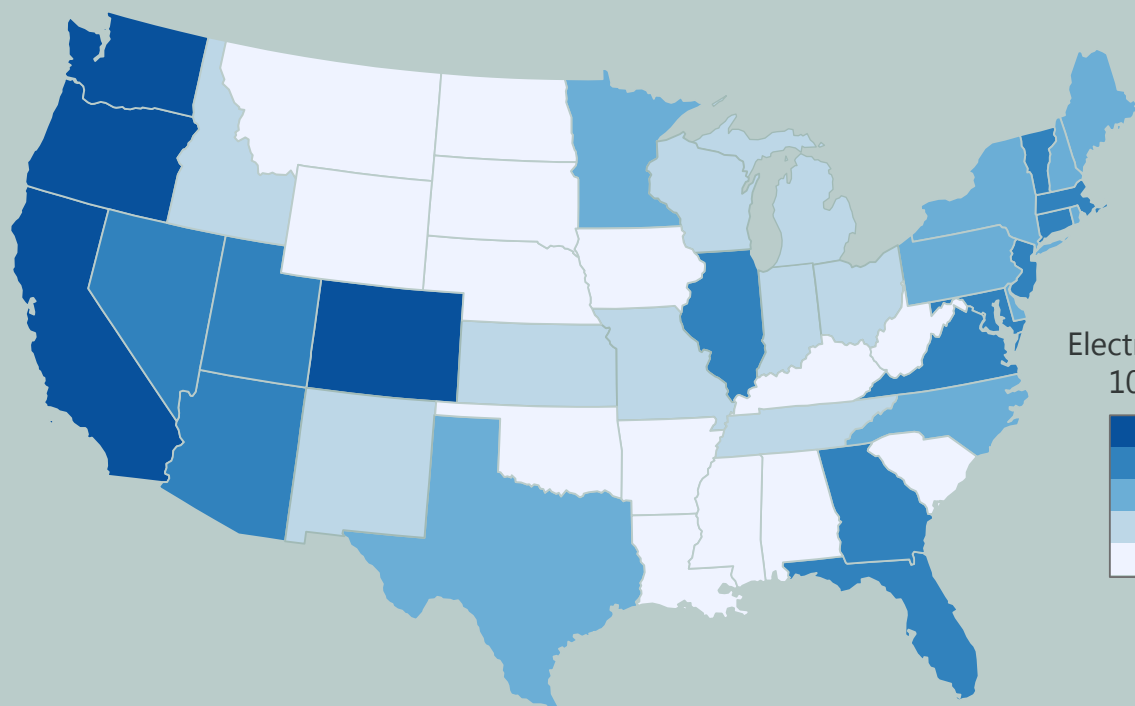
- >80 – 466
- >22 – 80
- >14 – 22
- >12 – 14
- 3.5 – 12



Despite the limited availability of public charging stations in some places, total electric vehicle sales in the U.S. have been rising since **2011**. The pandemic caused many supply chain issues in **2020** that limited sales, but they rebounded in **2021**. In the next 5 years, EV sales are expected to be **20%** of total car sales. More EV's will continue to strain the current charging infrastructure and could increase range anxiety if charging does not become more available across the country.



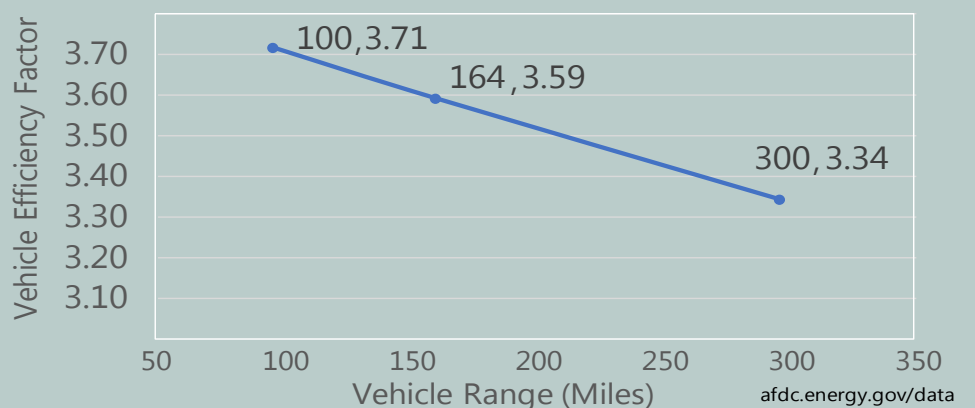
California has the most electric vehicles (**425,300**) and most charging stations (**13,668**) of any state in the U.S., meaning there is about **31** EV's per station.



Electric vehicles per 10,000 people

- >42 – 108
- >20 – 42
- >13 – 20
- >10 – 13
- 2.5 – 10

Average Range and Efficiency of U.S. Electric Vehicles



The average range of EV's is 164 miles which corresponds to 3.59 times the efficiency of a non-electric counterpart.