



WORKPLACE CHARGING
Forget the Pyramid

1 Million ZEVs by 2020

- How do we get there?
- When can the State stop subsidizing the vehicles and their infrastructure?
- and Where should the State focus its limited Resources?

Looking for a Car?



or maybe...



When Buying a Car

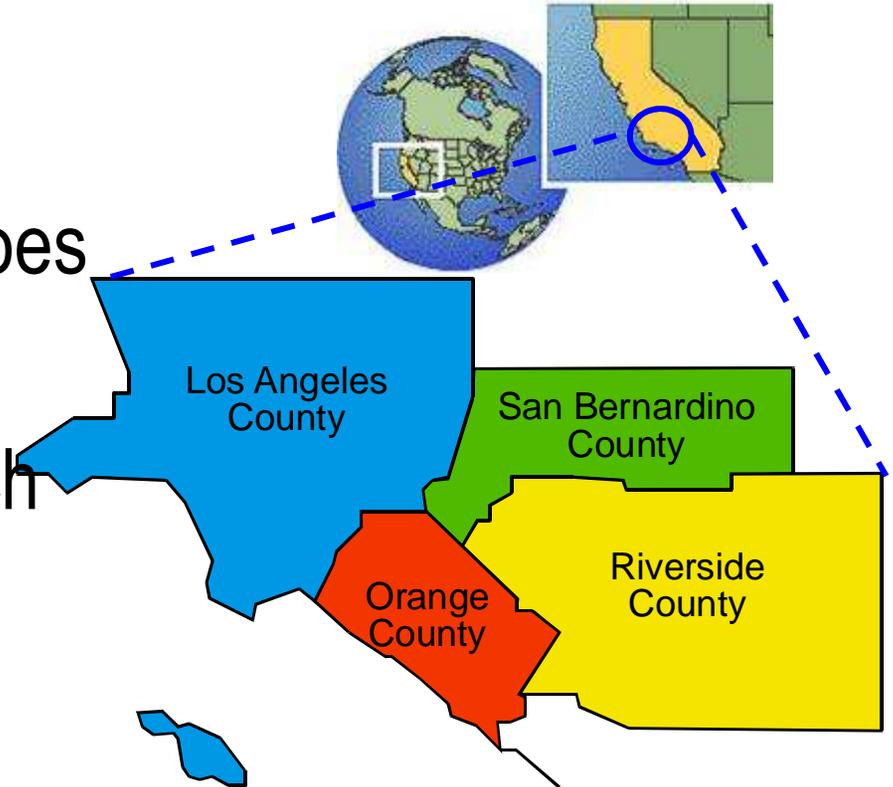
- Must get you TO and FROM work.
- If a car won't/can't get you to work and back, you scratch it off the list and get one that will.
- Workplace charging is NOT optional

Which is Why in L.A.

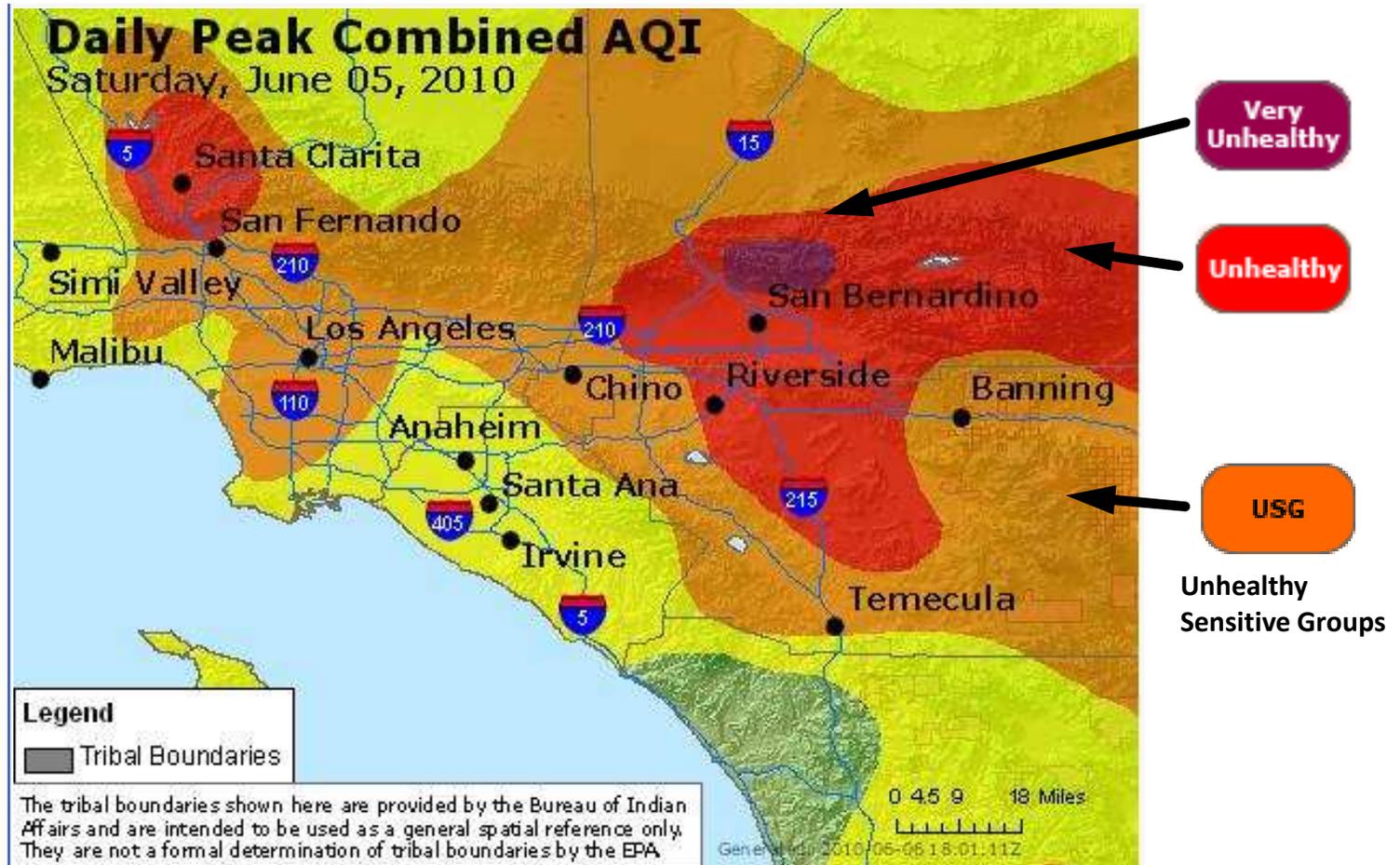


About Southern California

- Over 44% of CA population
- 40% of the nation's cargo goes through the twin Ports of Los Angeles and Long Beach
- 1.5 million medium and heavy-duty vehicles
- 9 million passenger cars

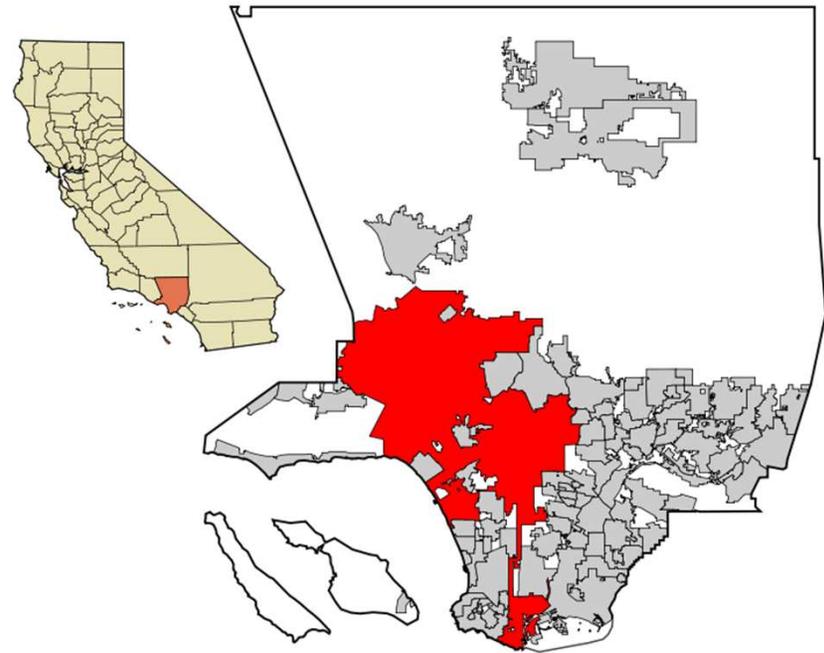


Worst Air Quality in the Nation?



County of Los Angeles

- The County has almost **10.4 million residents** - 28% of State's population. It continues to grow.
- The County has a larger population than all but 9 states.
- **101,000 employees.**

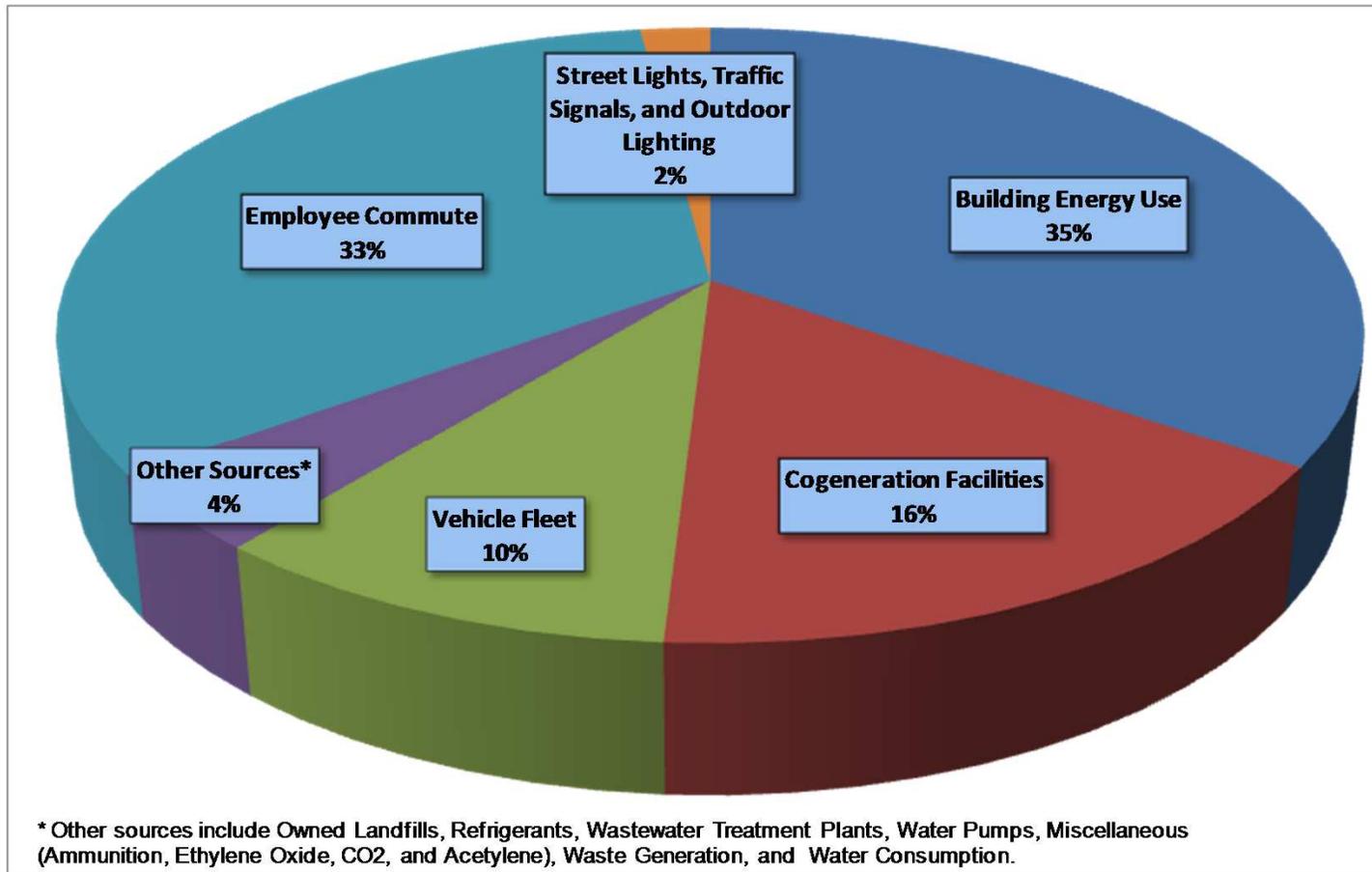


Base Line

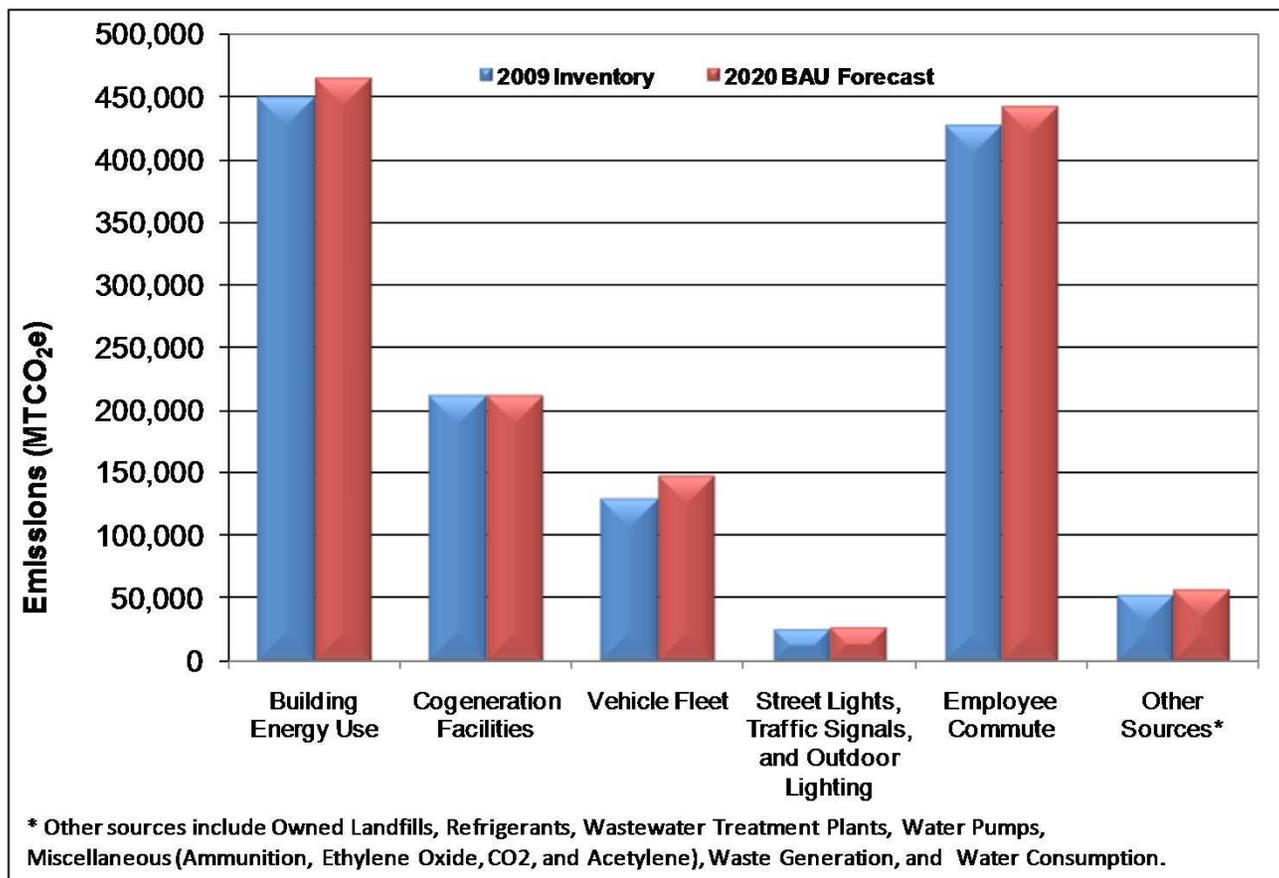
The **County** has:

- More than **2,600 buildings**, **50+ M** sq. feet
- About **12,000 vehicles** & pieces of equipment.
- Uses **14 million gallons** of various fuels.
- **101,000** employees.

Los Angeles County Municipal GHG Inventory



L. A. County 2020 BAU Forecast Municipal GHG Inventory



Not Factored In

Employees on Mileage

or a County Pool Car



Where we should be going



Santa Monica Lot 6 – 360 spaces



All the Right Stuff

Two Blocks from the Beach...

Some Solar...



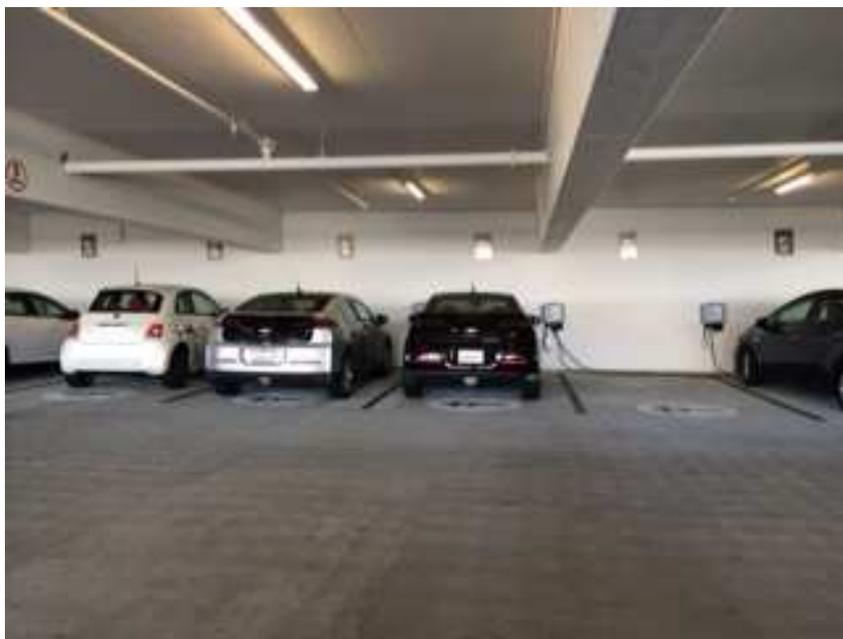
30 Level 2 EVSE on Day One



And Pre-Plumbed for 130 more

- Conduits
- Blanks for additional Panels
- Pads for additional transformers
- So that additional EVSE can be added as demand builds.

Santa Monica Lot 6



Beijing



Unencumbered by Democracy

- Recently announced deployment of 1000 DCFC in Beijing in the coming 12 months
- Now requires 18 percent of all new parking to be prewired for EVSE

The background of the slide is a photograph of a clear blue sky with several wispy white clouds scattered across it. The text is centered in the upper half of the image.

Why the Pyramid Is WRONG

A "Novelty" for the wealthy Replaced the Horse

Los Angeles, circa 1900

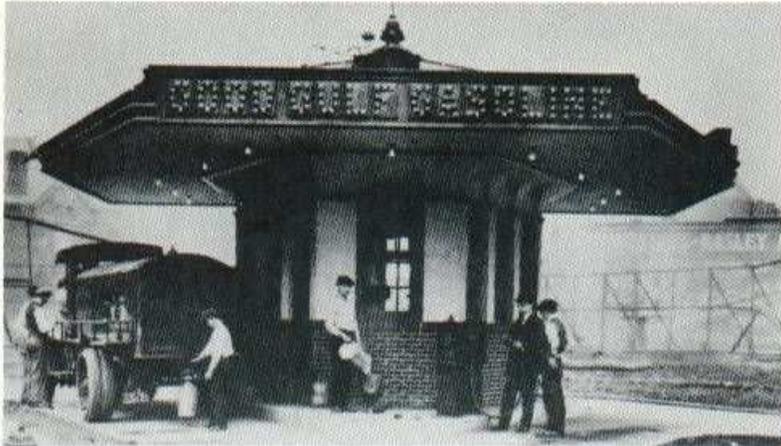


Los Angeles, circa 1930



Fast Charging Stations

World's first gas station 1913



WORLD'S FIRST DRIVE-IN GAS STATION DEC. 1, 1913
EAST END, PITTSBURGH, PA.

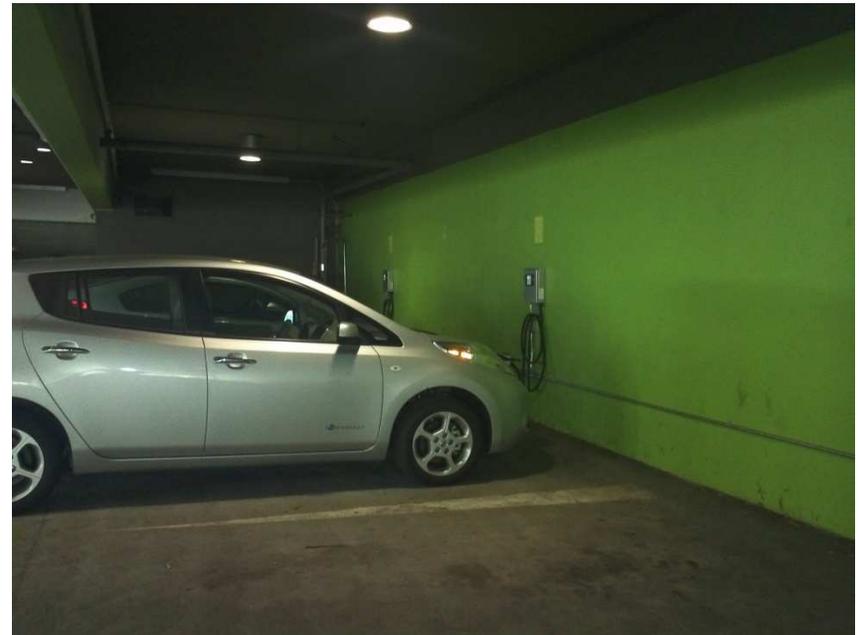
Bellflower (LA) by 1923



Large Employee Worksites ARE also Destinations

- **Colleges & Universities**
- **Hospitals**
- **Courts, etc.**

Natural History Museum



L A County DPW HQ



New Van Nuys Service Center



Barriers/Issues:

- Too little Public and Workplace Infrastructure.
 - Poorly designed
 - Poorly maintained
 - Often too costly
 - ICE-ing

Define “clean air vehicle”



EVSE & DCFC Must be

- **Public**
- **Workplace**
- **Reliable**
- **Easy to use**
- **Affordable**

Competitive with a Gasoline Hybrid



Whether or not we Recycle





County of Los Angeles