



30 April 2019

Regional Hydrogen Infrastructure Panel: The California Experience

Department of Energy
Annual Merit Review 2019

Bill Elrick
California Fuel Cell Partnership

California Fuel Cell Partnership



20 years of collaboration



Numbers as of April 1, 2019	Total
Fuel cell cars sold and leased	6,315
Fuel cell buses in operation in California	30
Retail hydrogen stations open in California	39
Fuel cell buses & shuttles in development in California	22
Fuel cell trucks in development in California	35+
Retail hydrogen stations in development in California	25



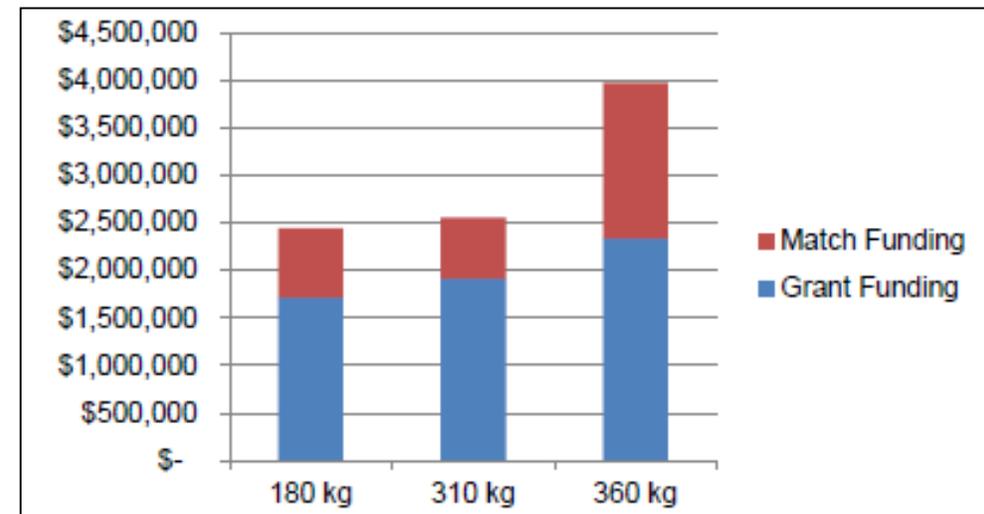
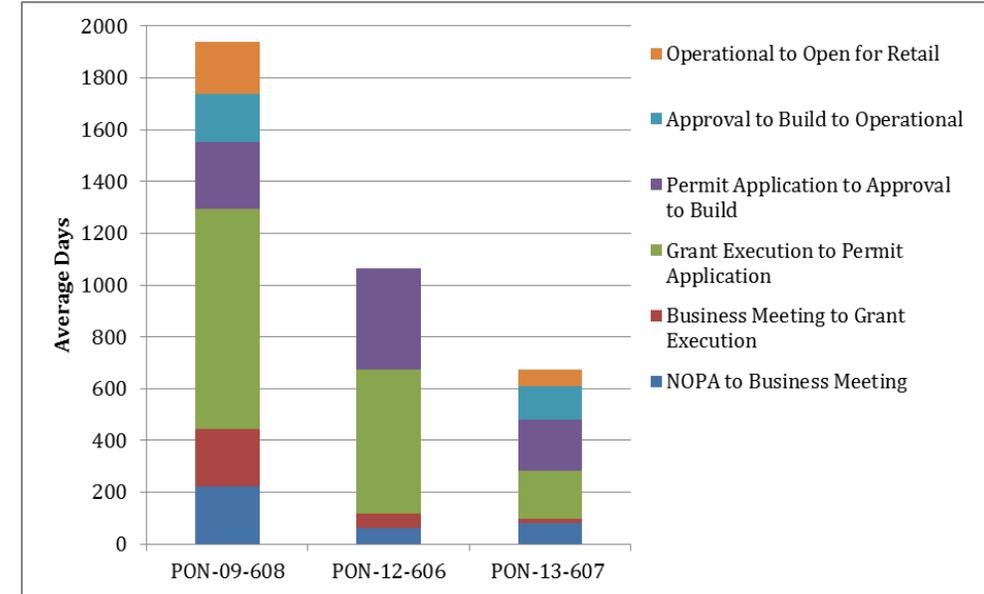
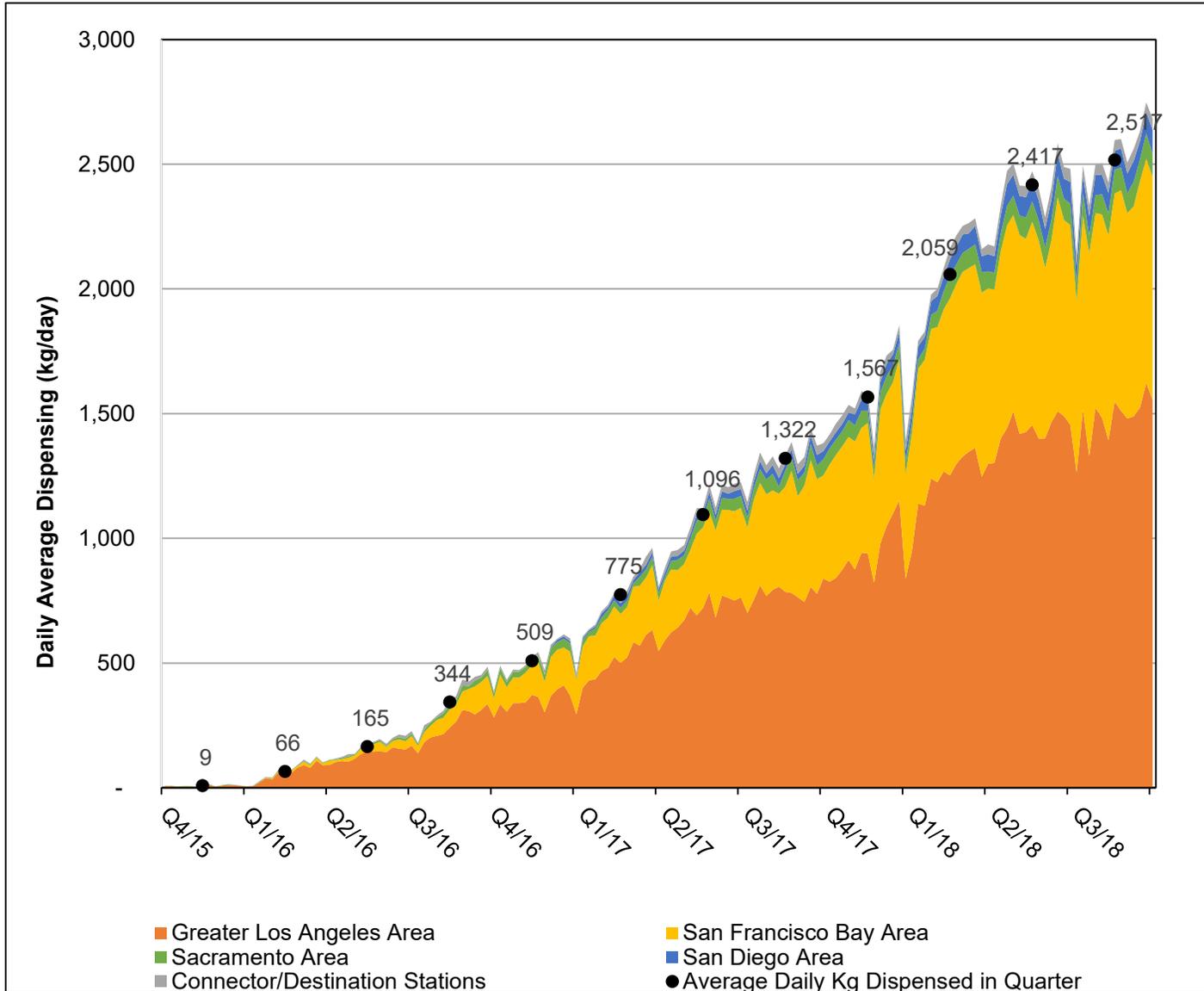
https://cafc.org/by_the_numbers



#driveH2

#driveH2

California's retail market is working



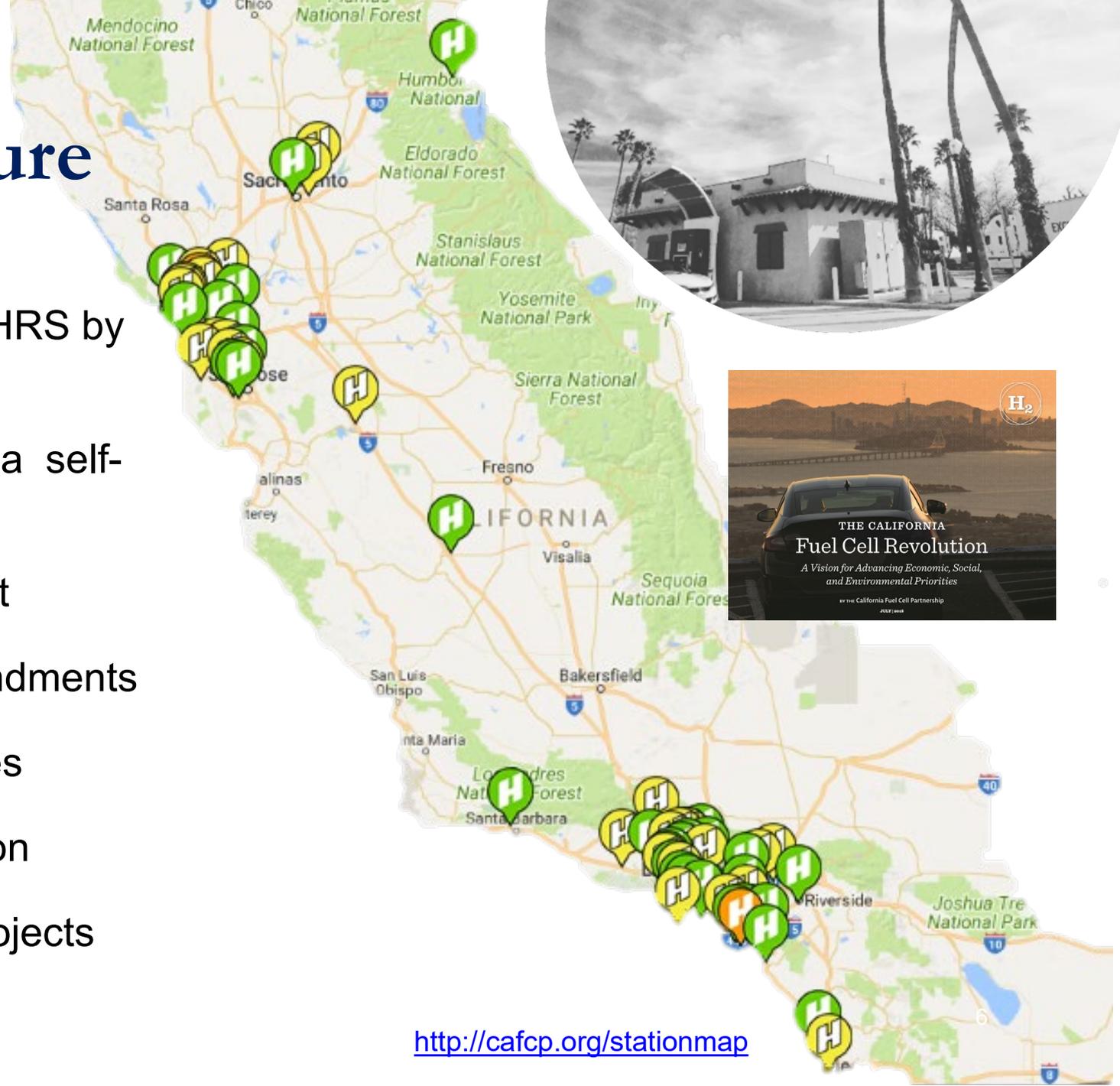
—MISSION—

Accelerate commercialization of
hydrogen and fuel cell vehicles



Preparing for the Future

- Executive Order B-48-18 targets 200 HRS by 2025 and 5MM ZEVs by 2030
- CaFCP publishes new 2030 vision for a self-sustaining California market
 - New ARFVTP solicitation concept
 - Low Carbon Fuel Standard Amendments
 - New hydrogen production facilities
 - Innovative Clean Transit regulation
 - New heavy duty fuel cell truck projects





—California Fuel Cell Revolution—

Enable market conditions to support:

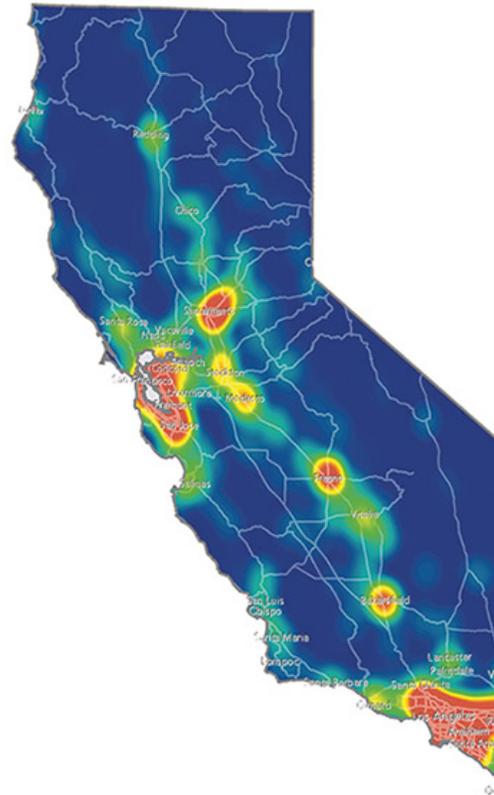
1,000 hydrogen stations

and

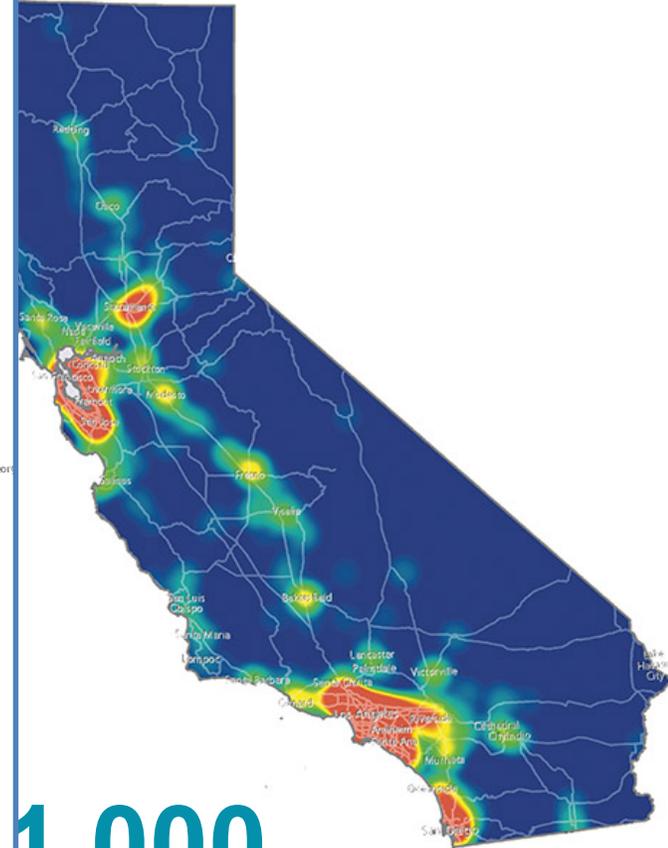
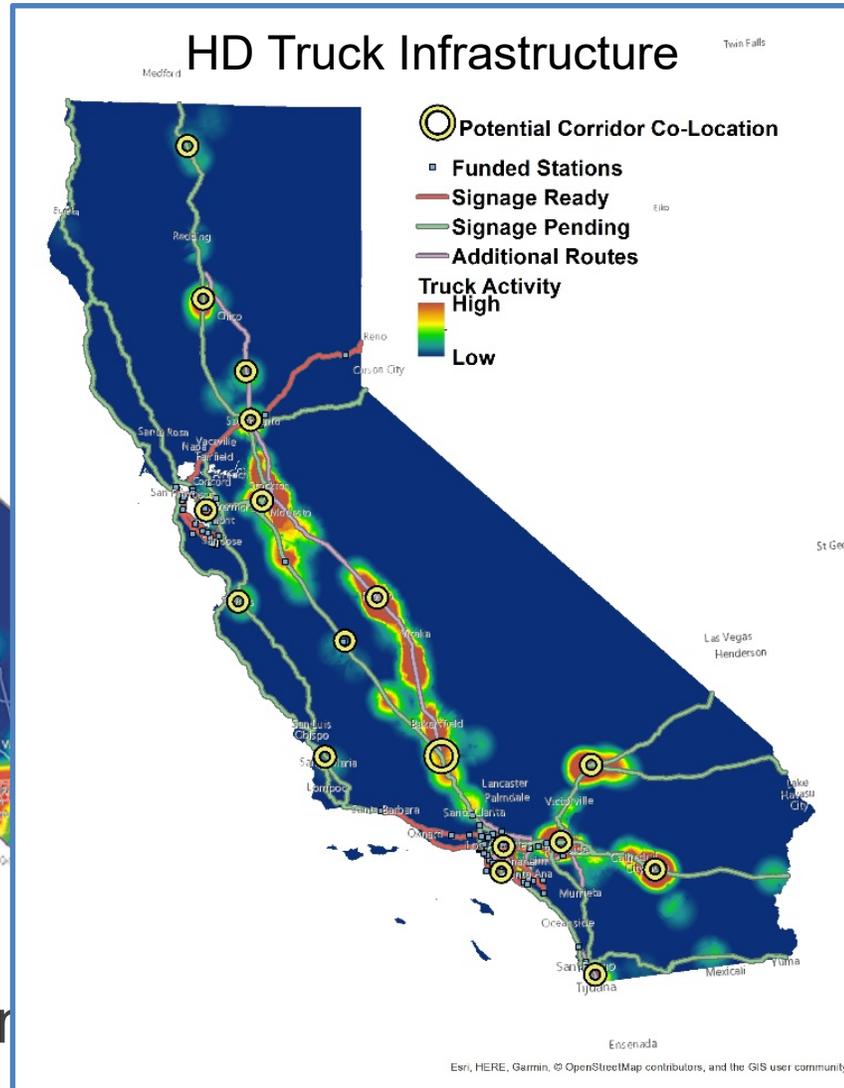
1,000,000 fuel cell vehicles

by **2030**

Image of a Successful Self-Sustaining Market



8,000
retail gas station



1,000
retail H2 stations



Summary

- California retail market open and expanding quickly – *drivers love the cars!*
- *Quickly* transition from market launch to self-sustainability
- 3 essential elements to success:
 - Strong leadership
 - Long term planning
 - Robust commitments
- Public-private partnerships critical to success
- Leverage synergies between HD & LD, as well as the grid and renewables
- Continue convergence of local, regional and global activities

Not a question of “if”, rather “how fast”