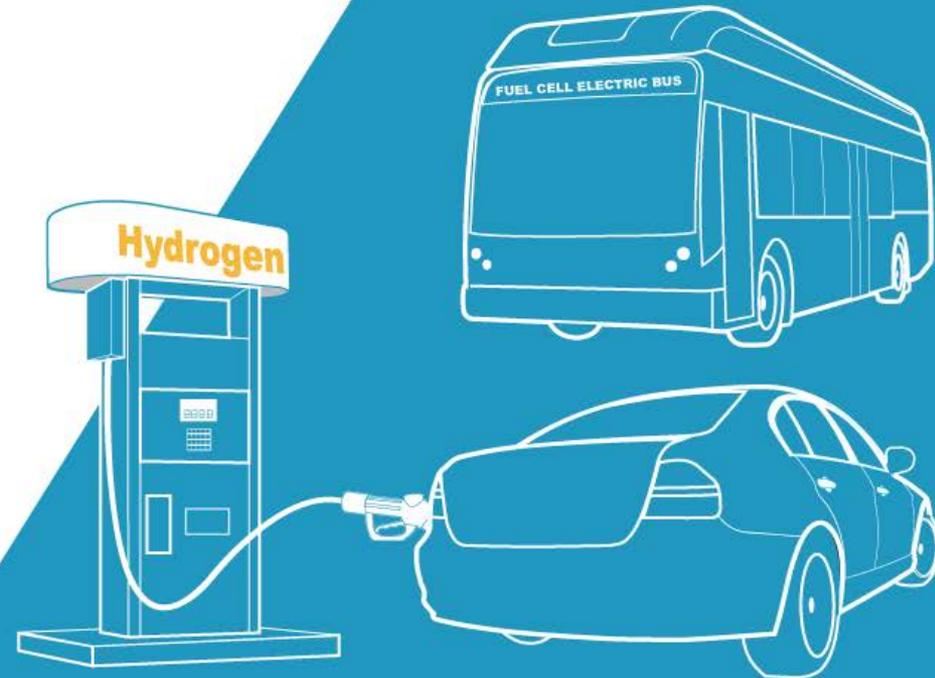


Hydrogen Stations

Chris White

Communications Director





1,500 cars and counting...

Hydrogen Fuel Cell Electric Vehicles sold in the U.S. (March 2017): **143**
 Hydrogen Fuel Cell Electric Vehicle Take-Rate: **0.01%**

U.S. Hydrogen Fuel Cell Electric Vehicle sales for March 2017

Mfgr	Model	3-17 Sales	vs. 2-17	vs. 3-16	CY 2017	CY 17 vs 16	CY 2016	Current Month US Share
Toyota	Mirai	118	↑ 7.3%	↑ 187.8%	311	220.6%	97	82.52%
Honda	Clarity	23	↑ 85.2%	N/A	92	N/A	-	16.08%
Hyundai	Tucson	2	↑ 40.0%	↓ -75.0%	9	0.0%	9	1.40%
	Total Fuel Cell	143	↓ -99.3%	↑ 191.8%	412	↑ 288.7%	106	

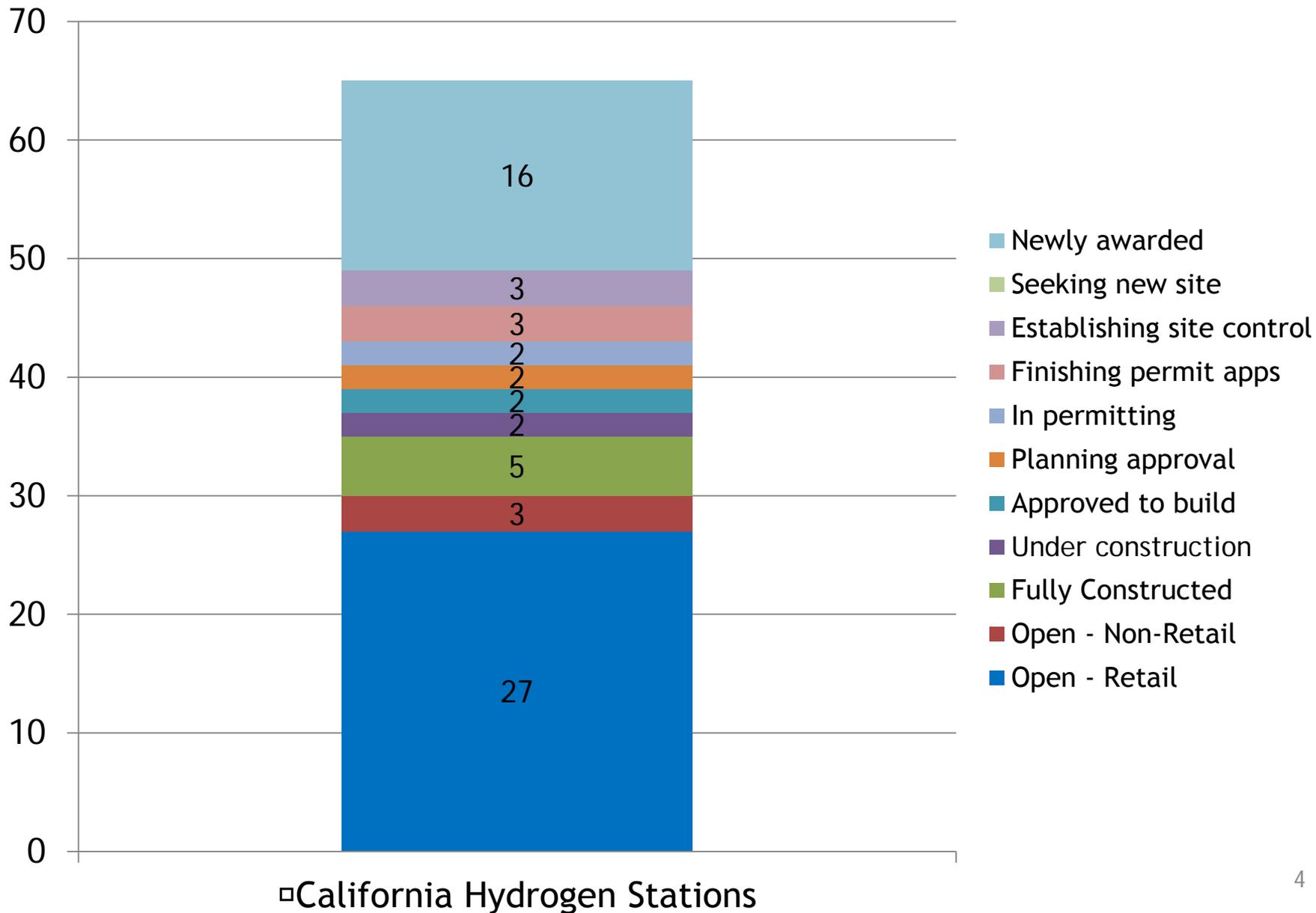
Source: HybridCars.com

1,074 IN 2016 + 412 IN 2017 = SO CLOSE TO 1,500!





Stations by the numbers



Most recent stations



Mill Valley



Hollywood



Anaheim



Riverside

CaFCP's Station Map

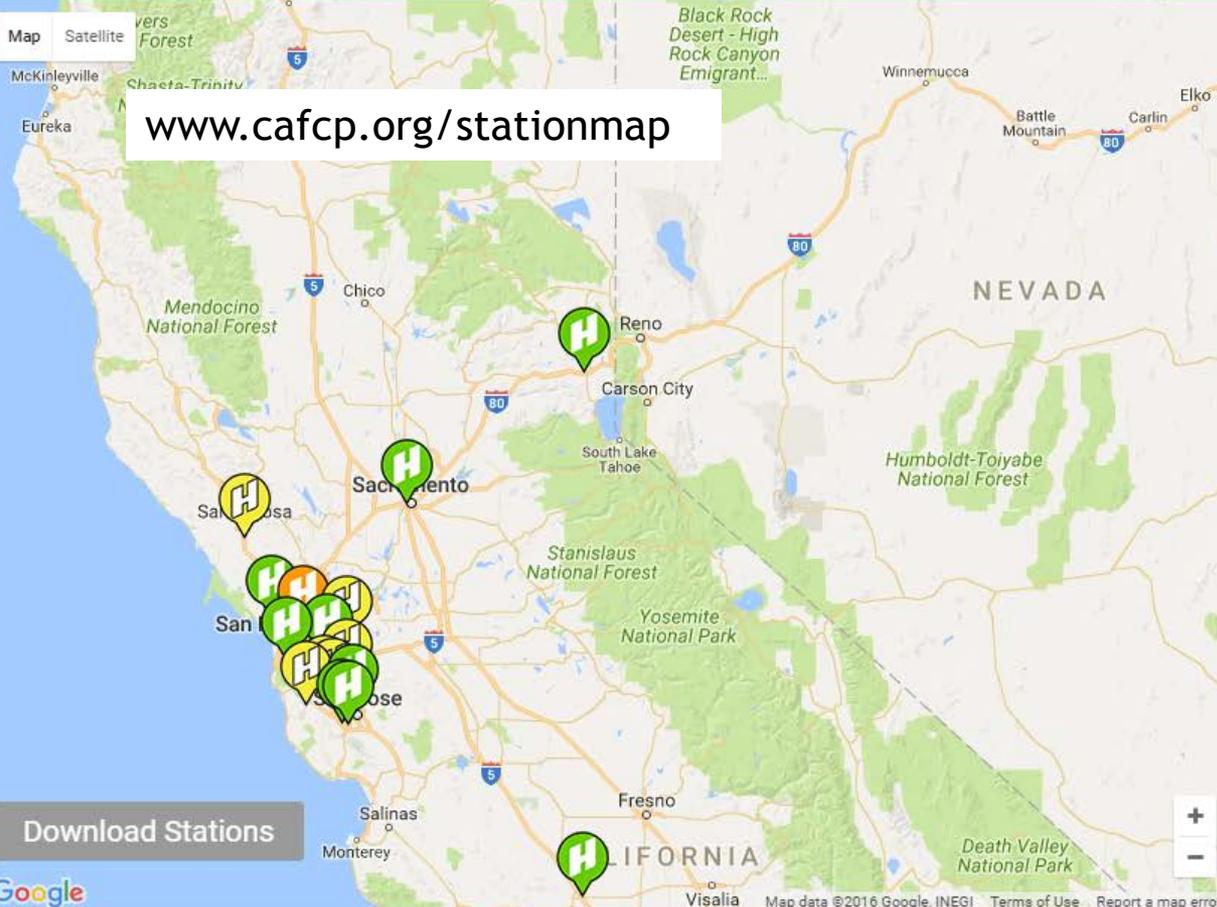
Search by Zip Code or Address

GO

Filter By

Station Types

www.cafcpc.org/stationmap



Download Stations

RETAIL: OPEN

Lake Tahoe-Truckee
 Open - Retail
 12105 Donner Pass Road
 Truckee, CA 96161
 Details »



RETAIL: OPEN

West Sacramento
 Open - Retail
 1515 South River Road
 West Sacramento, CA 95691
 Details »



RETAIL: IN DEVELOPMENT

San Ramon
 Under Construction
 2451 Bishop Drive
 San Ramon, CA 94583
 Details »

RETAIL: OPEN

Hayward



H2stationmap.com

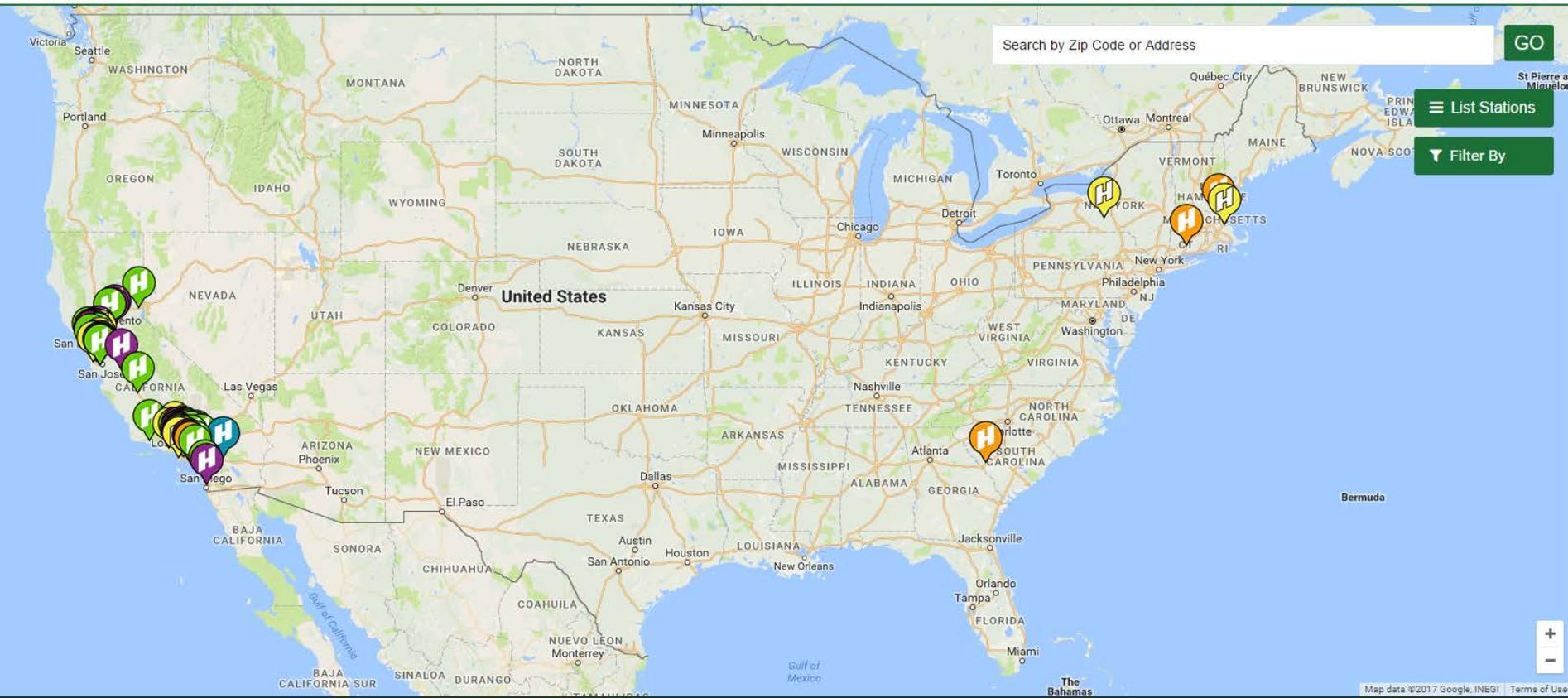


MAP HYDROGEN STATIONS DEPLOYMENT COSTS & FINANCING STATE SUPPORT ABOUT US



Search by Zip Code or Address

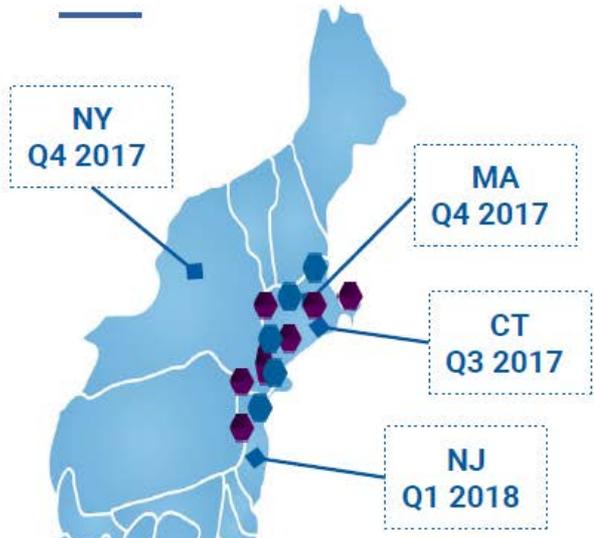
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Map data ©2017 Google, INEGI Terms of Use

Northeast Stations

H2 Stations Covering the Northeast



Network of 12 Stations

Start-up over Q3-Q4 2017 and Q1 2018



Dedicated H₂ supply chain by 

Project in collaboration with 



New York
Bronx
Hempstead
Brooklyn
Site Location TBA



Connecticut
Hartford
Site Location TBA,



Massachusetts
Braintree
Mansfield



New Jersey
Lodi
Site Location TBA



Rhode Island
Site location TBA



Things that made a difference

1. Tracking station development
2. The Hydrogen Station Permitting Guidebook
3. Standardized and certified components
4. Incentives for expedited permitting and construction
5. HySTEP
6. O&M support
7. Using GIS for station locations
8. New stations will have larger capacity and multiple fueling positions



Priorities

- Reduce lead time for equipment, permitting, contracting, and electric upgrades
- Address issues with “location change” stations
- Increase station reliability
- Incorporate more inputs into GIS modeling
- Evaluate need for redundancy
- Share data and information with other states and countries



Opportunities

- Alternatives to grant funding; other mechanisms for incentives
- Consider the role of fleets and M/HD to increase demand
- Address hydrogen as energy storage as a way to reduce cost to fuel
- Equal utility rates for charging cars and making H₂
- Consider new models: temporary, mobile, and small fueling
- Reach into neighboring states

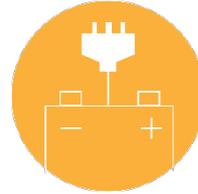


Emerging issue: Noise complaints





Emerging issue: Electricity



Not required

33.3% renewable
required by law



Special rates for charging

Commercial rates



Demand management income

Not allowed for
demand management



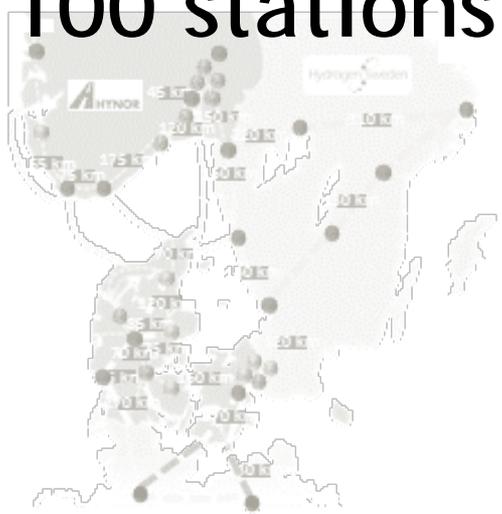
IOU investment (rate payer funded)
VW settlement funding

State funding



Bigger issue: A national vision

“The number of human hours it takes to deploy one station is too great without a vision of how 100 stations are deployed.”



What do we need to pay attention to with respect to hydrogen and fuel cell vehicle commercialization?

