



State of Connecticut

Best Practices in DC Fast Charging Corridors

EV Roadmap 8 - July 2015



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DC Fast Charger Installations



Interstate 95 Service Plazas

- Darien Southbound - 2 Eaton CHAdeMO
- Madison Northbound (U.C.) – 2 ABB CHAdeMO/CCS Combo

Merritt Parkway (CT-15)

- Greenwich Northbound - 2 Eaton CHAdeMO



Best Practices – Site Location



- Match charging type to facility purpose
- Co-locate chargers with motorist services
- Quick screen sites based 3-phase power
- Consider future needs (space & power)

“3 on the Tree”



Best Practices - Hardware



- Choose equipment manufacturer carefully
- Dual standard capable (CHAdeMO & CCS Combo)
- Charger redundancy (2 or nearby backup)
- Donated equipment agreements
- Site control & ownership
- Prepare equipment for possible future payment processing



CHAdEMO, CCS Combo, Tesla → Beta, VHS, Laserdisc ??

Best Practices – Site Design



- Each charger serves more than one stall (vehicles queue)
- Perpendicular parking stalls
- ADA-capable designs
- Trailblazer signs in parking lot
- Install parking advisory signs
- Use protective bollards
- Don't face controls toward car without room for operator!



Tesla Supercharger signs – Merritt Parkway Sites

Best Practices - Information



- Information Platform for Charger Management
 - Map, location, directions, messaging, feedback
- Recruit “Boots on the Ground”
 - Local EV Enthusiasts, CT DOT & Service Plaza personnel
- Patience
 - First commercial alternative in auto fuels for last 90 years

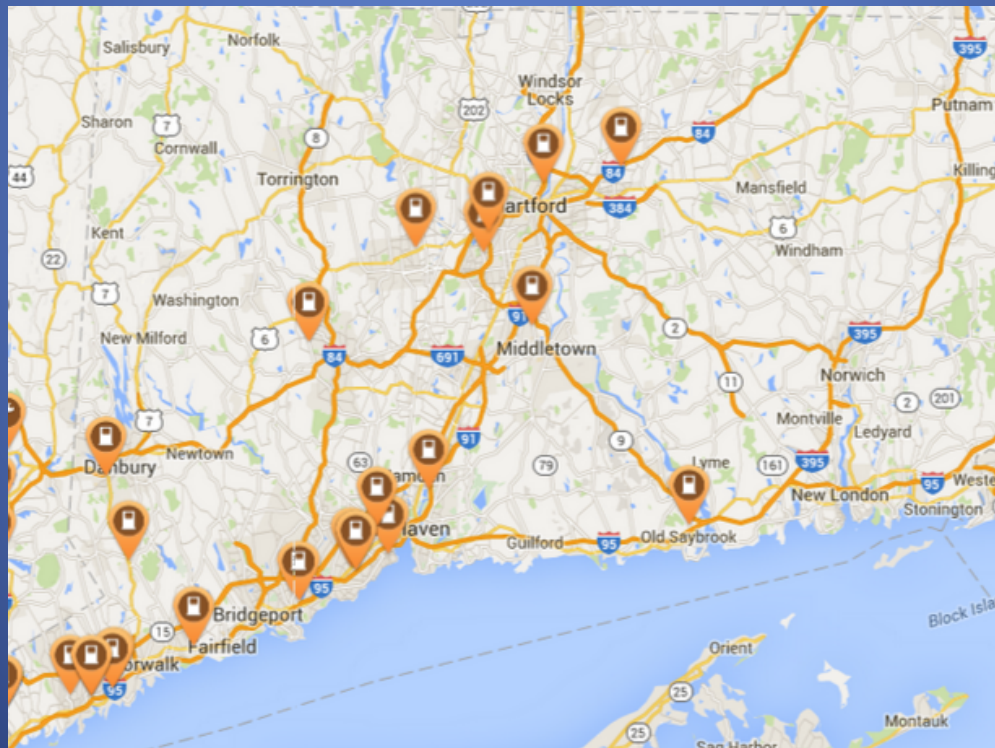
EV Owners are “Energized”



Best Practices - Operations



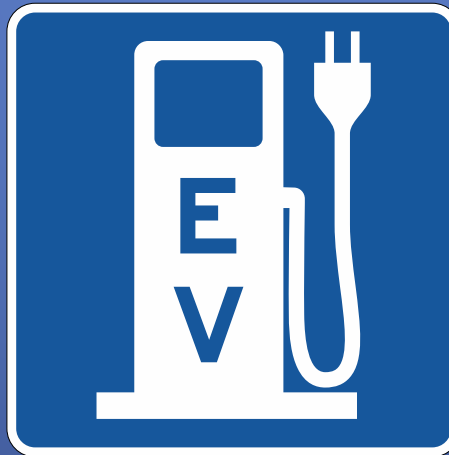
- List contact info on charger
- Facilitate public conversation
- Conduct outreach to dealers, citizens



DC Fast Chargers in Connecticut as of July 24, 2015 (courtesy Plugshare.com)

Observations

- “Free” distorts normal consumer habits & demand
- Utility “demand charges” are significant
- EV charging can be completely “green” in some markets
- Slow starts should not deter forward progress
- Price of gas & cost supports influences adoption rate



“Nothing in life is free (except EV Charging)”

Working with Tesla



- Dedicated EV charging stalls wherever possible
- Provide redundancy
- Charging stalls need not be the closest to building
- Shared cost is good for all (trenching & electrical)
- Trailblazing signs unnecessary with good telematics



De"ICE"d

Working with Tesla



- Use EV charging to differentiate businesses
- Look for partners to form symbiotic relationship
- Communications with users is key – listen to ideas
- Have a business plan and plenty of private funding
- Publish your victories, manage public perceptions



Thank you for your attention.



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"NO GASS"