North Central Texas Council of Governments

Dallas-Fort Worth CLEAN CITIES

Electric Vehicles North Texas

Overview and Resources for EV Infrastructure Development

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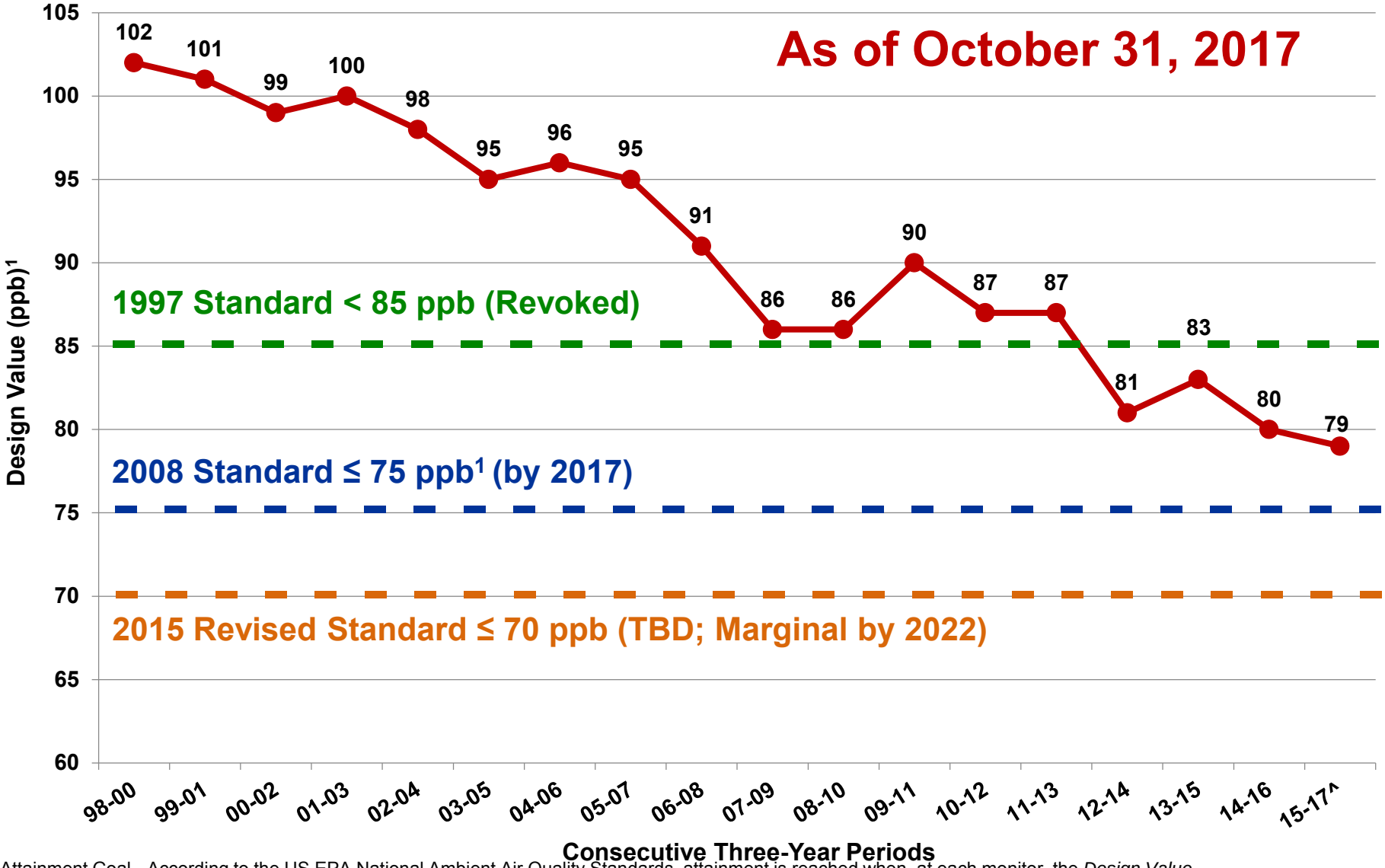
Electric Vehicle Infrastructure Workshop

November 2, 2017

Lori Clark, Program Manager, NCTCOG

Eight-Hour Ozone Trend for North Texas



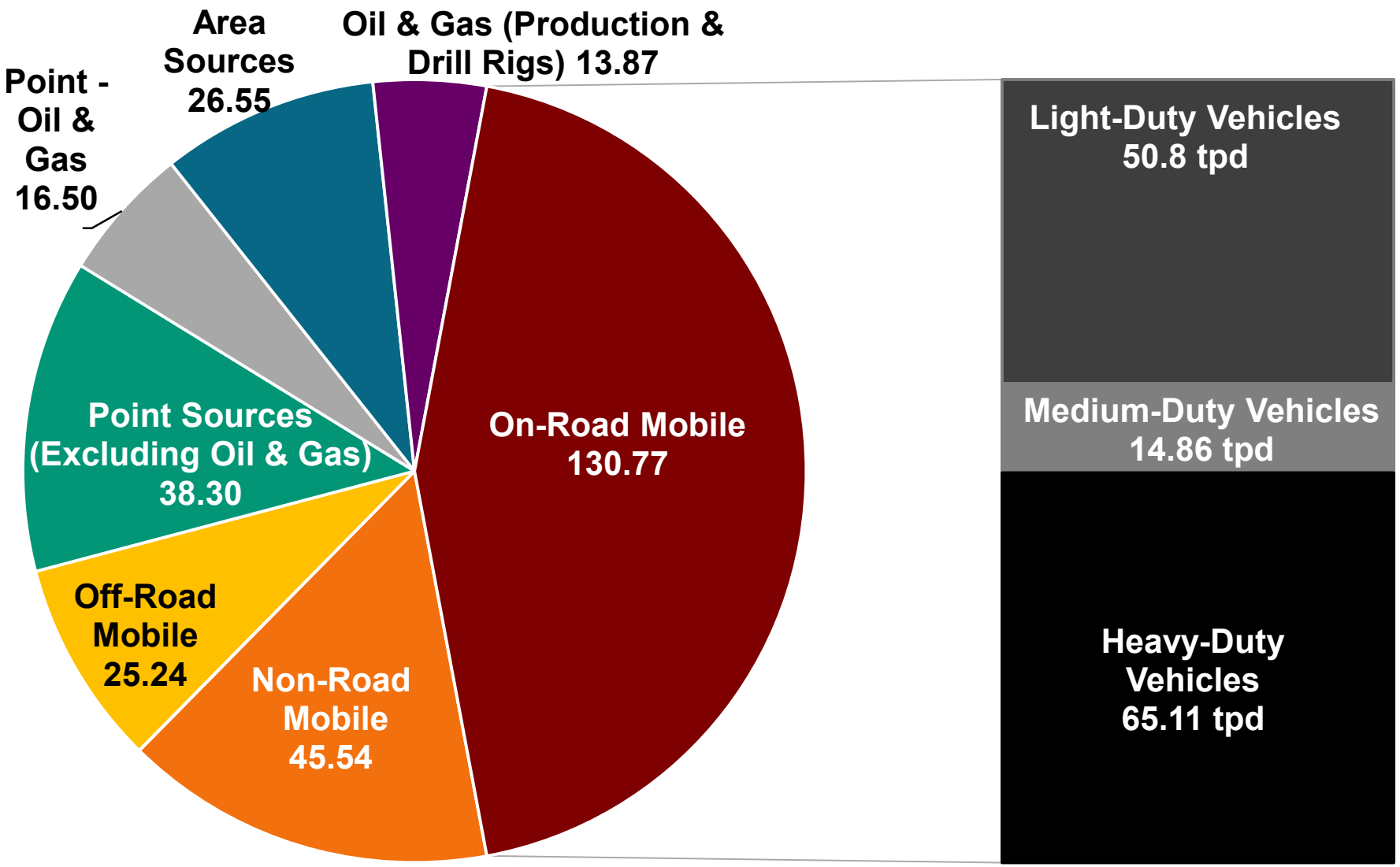
[1]Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the *Design Value* (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 parts per billion (ppb).

^Not a full year of data, current as of 10/29/2017

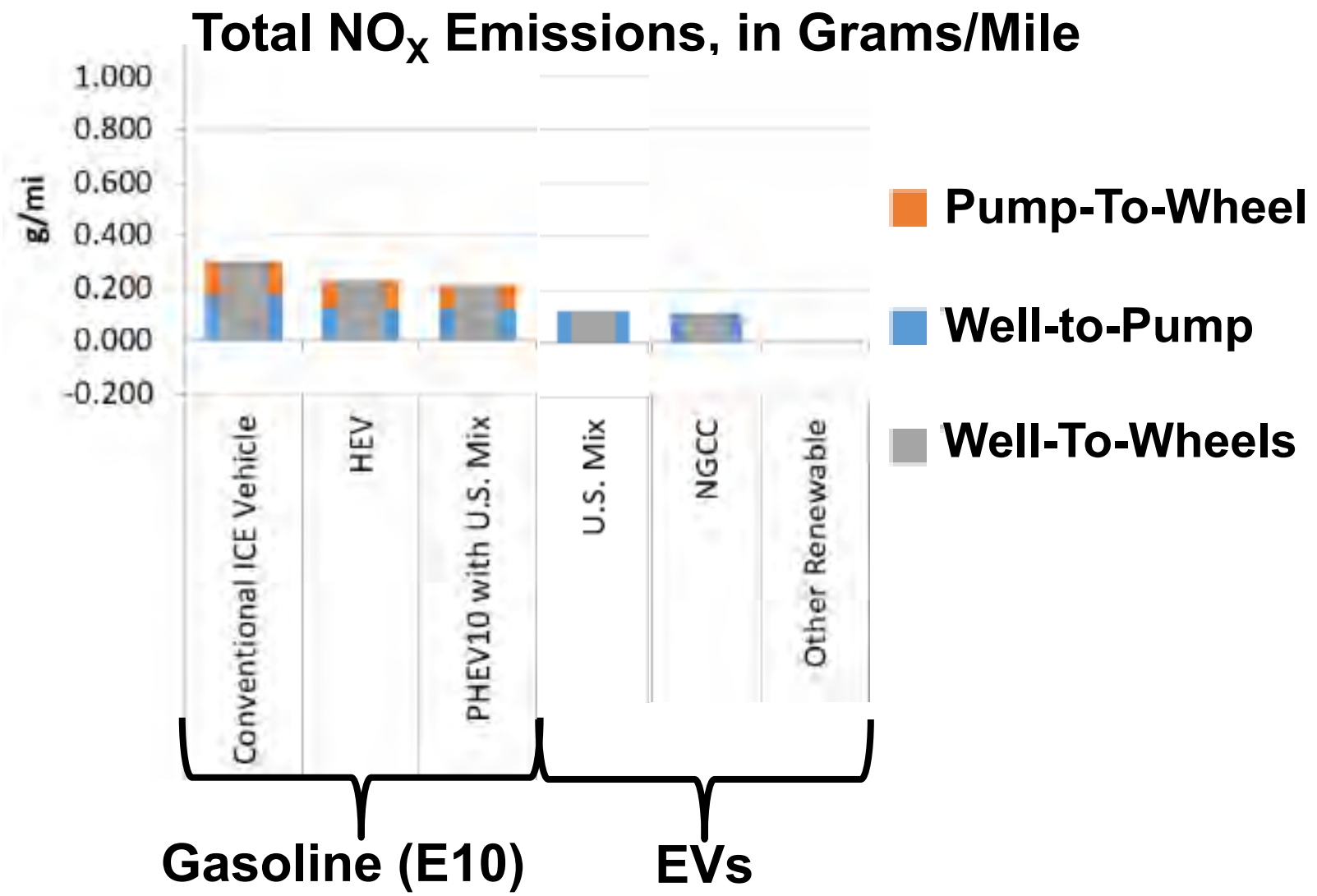
Source: NCTCOG TR Dept

Estimated 2017 Nitrogen Oxides (NO_X) Emissions Inventory

Source Category Estimates = 296.77 tons per day (tpd)



EV Benefits - Emissions



ICE=Internal Combustion Engine; HEV=Hybrid Electric Vehicle; PHEV=Plug-In Hybrid Electric Vehicle; NGCC=Natural Gas Combined Cycle

Source: Argonne National Laboratory Well-to-Wheels Emissions Calculator

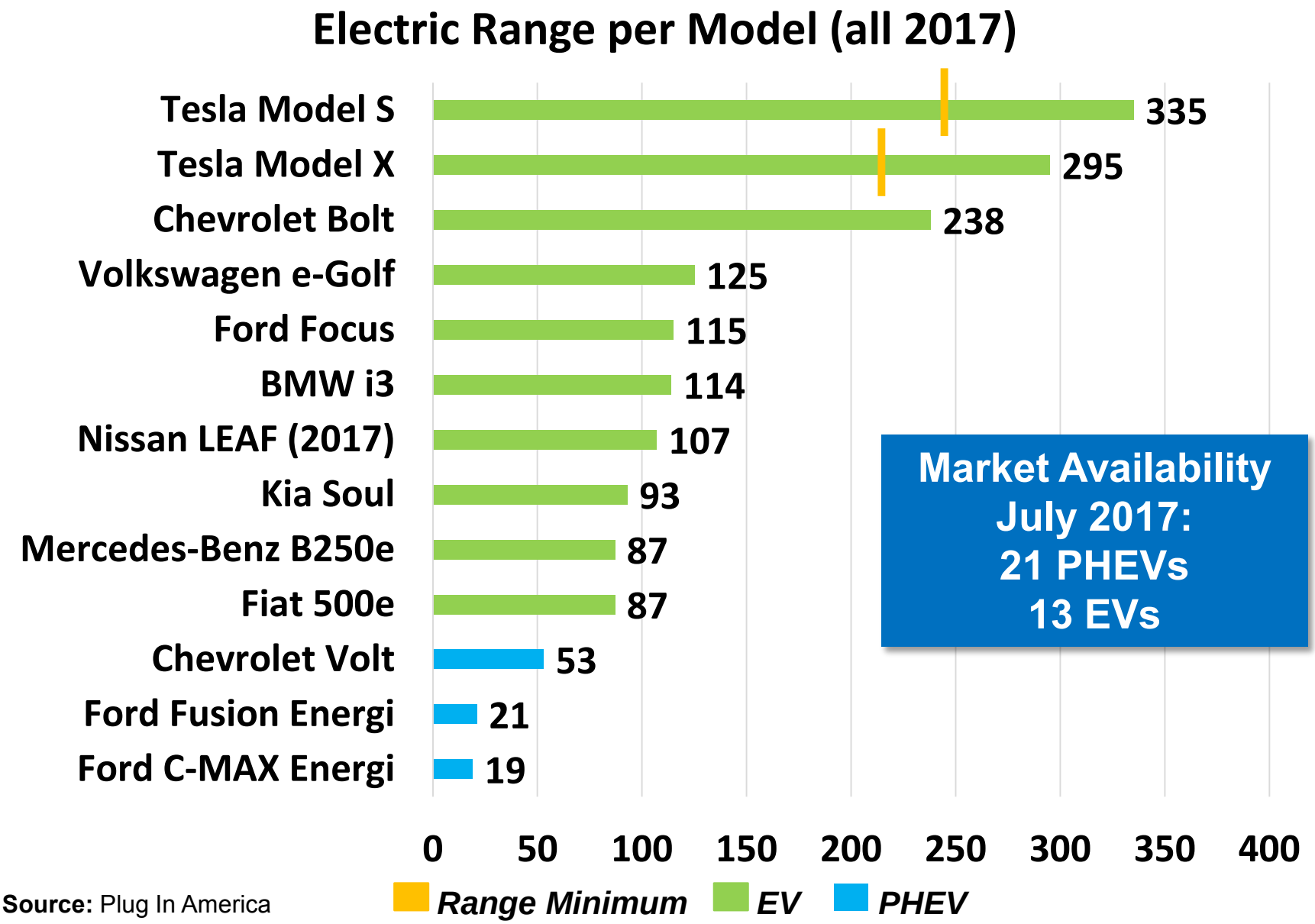
EV Benefits - Cost

Type of Cost	Electric Vehicles		Conventional Gasoline Vehicles	
	2017 Nissan LEAF	2017 Chevrolet Volt	2017 Chevrolet Cruze	2017 Toyota Camry
Annual Fuel Use	3,652 kWh electricity	68 gallons gasoline + 2,812 kWh electricity	342 gallons gasoline	422 gallons gasoline
Annual Fuel Cost	$402	$473	$815	$1,003
Annual Operating Cost	$2,507	$2,730	$3,072	$3,261
Cost per Mile	**$0.21**	**$0.23**	**$0.26**	**$0.27**

Source: U.S. DOE Alternative Fuels Data Center Vehicle Cost Calculator http://www.afdc.energy.gov/calc

EV Benefits – Energy Security

EV Benefits – Maturing Market



Source: Plug In America

Benefits of Installing EV Infrastructure

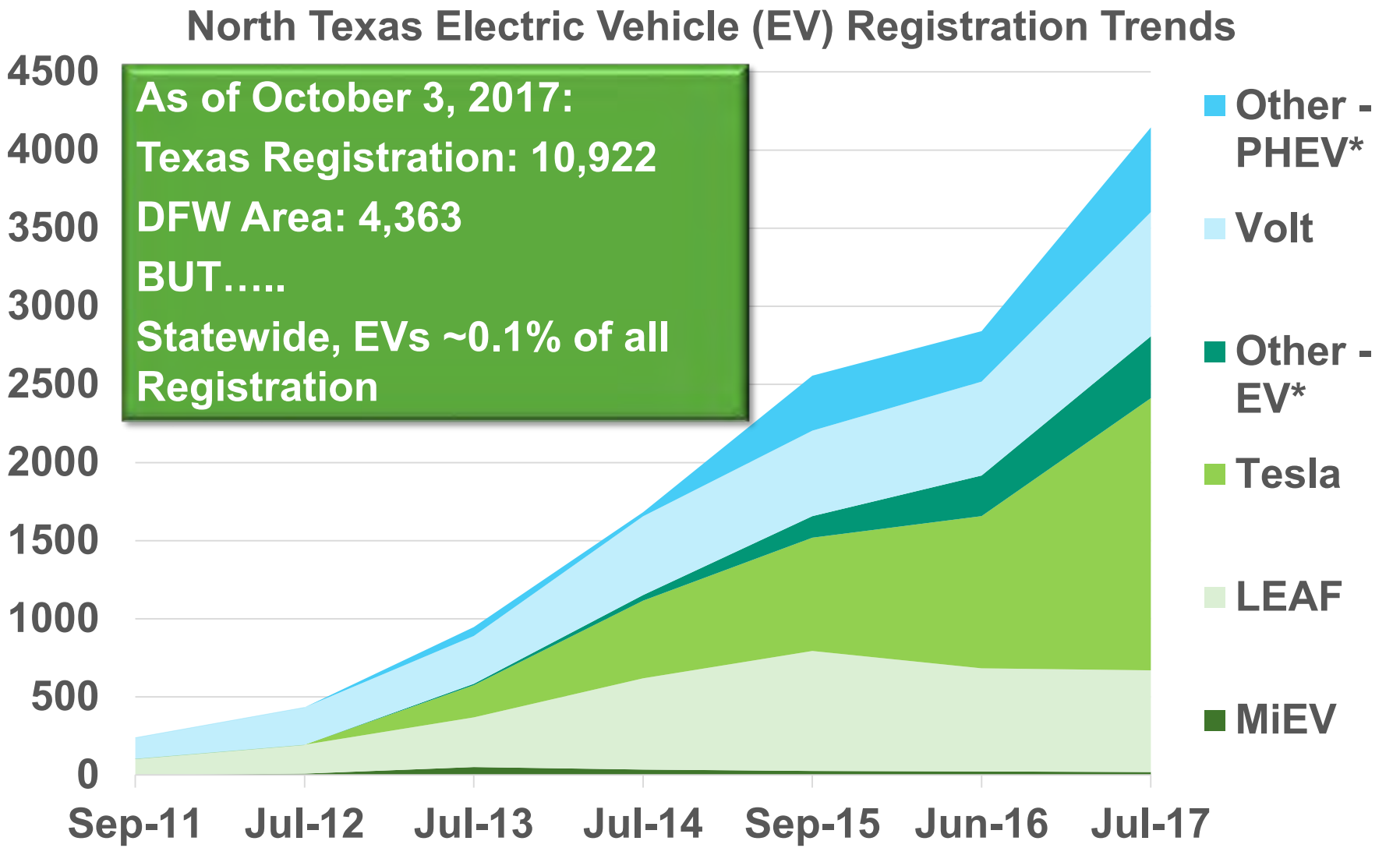
Facilitate Increased Deployment of EVs

Capture “Green” Market Share

Increase Exposure and Foot Traffic

Attract and Retain Employees

Regional Data Trends



*Other EV includes the BMW i3, Chevrolet Bolt, Fisker Karma, Ford Focus Electric; Other PHEV includes the BMW i8, Ford C-Max Energi, Ford Fusion Electric, Chevrolet Bolt, Chevrolet Spark EV, Fiat 500e, and Mercedes B250e

Types of Electric Vehicle Supply Equipment (EVSE)

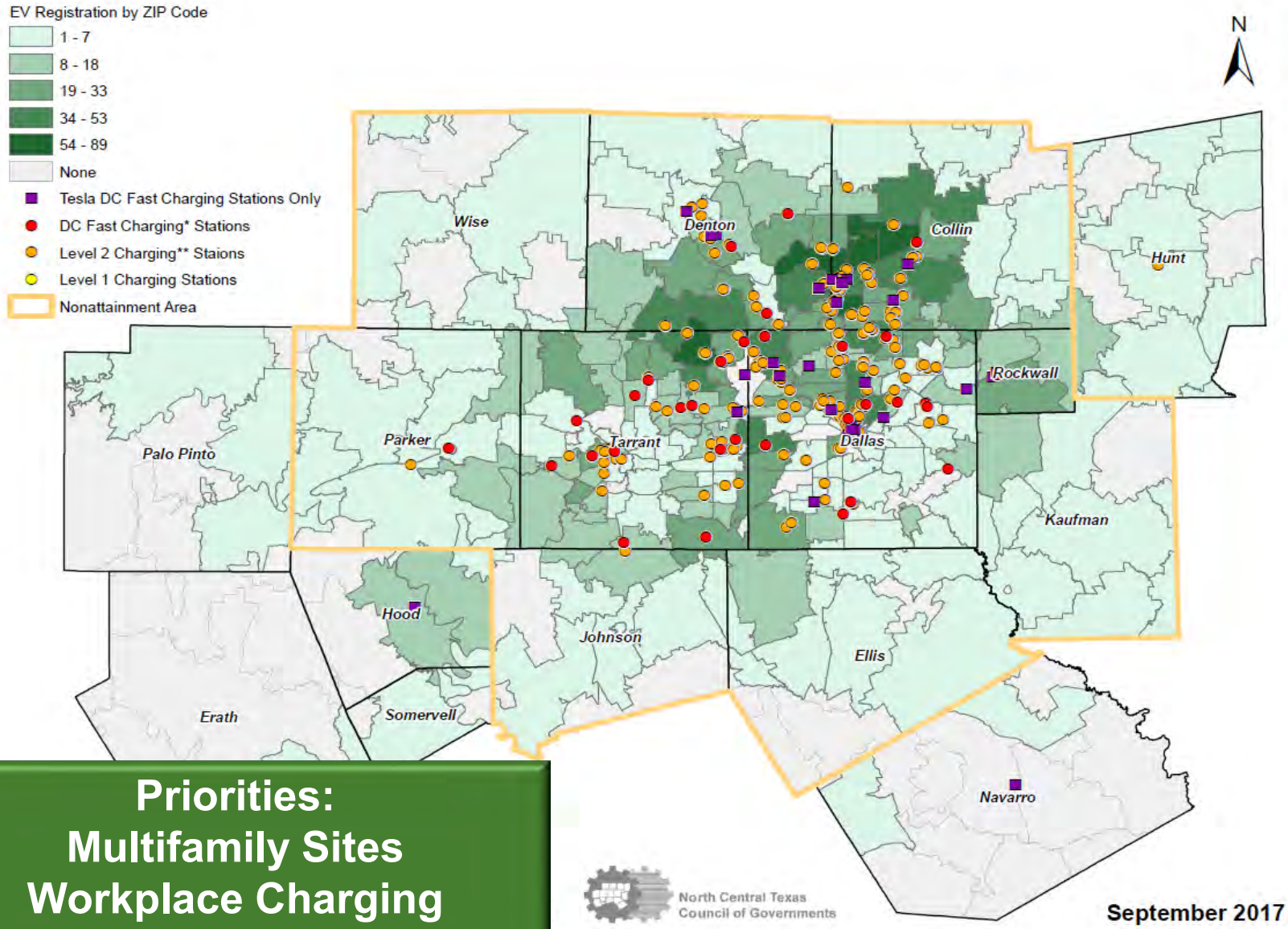
Level 1: Ordinary Three Prong Household Outlet Rated at 110-120 Volts; 2-5 Miles of Driving Range per Hour of Charging

Level 2: 240 Volts, Broad Range of Charging Speeds up to 19.2 kW; 10-30 Miles of Driving Range per Hour of Charging

DC Fast Charging (DCFC): Fastest and Most Expensive; Up to 40 Miles of Driving Range with 10 Minutes of Charging

List Available from Plug-in America at
https://pluginamerica.org/get-equipped/charging/

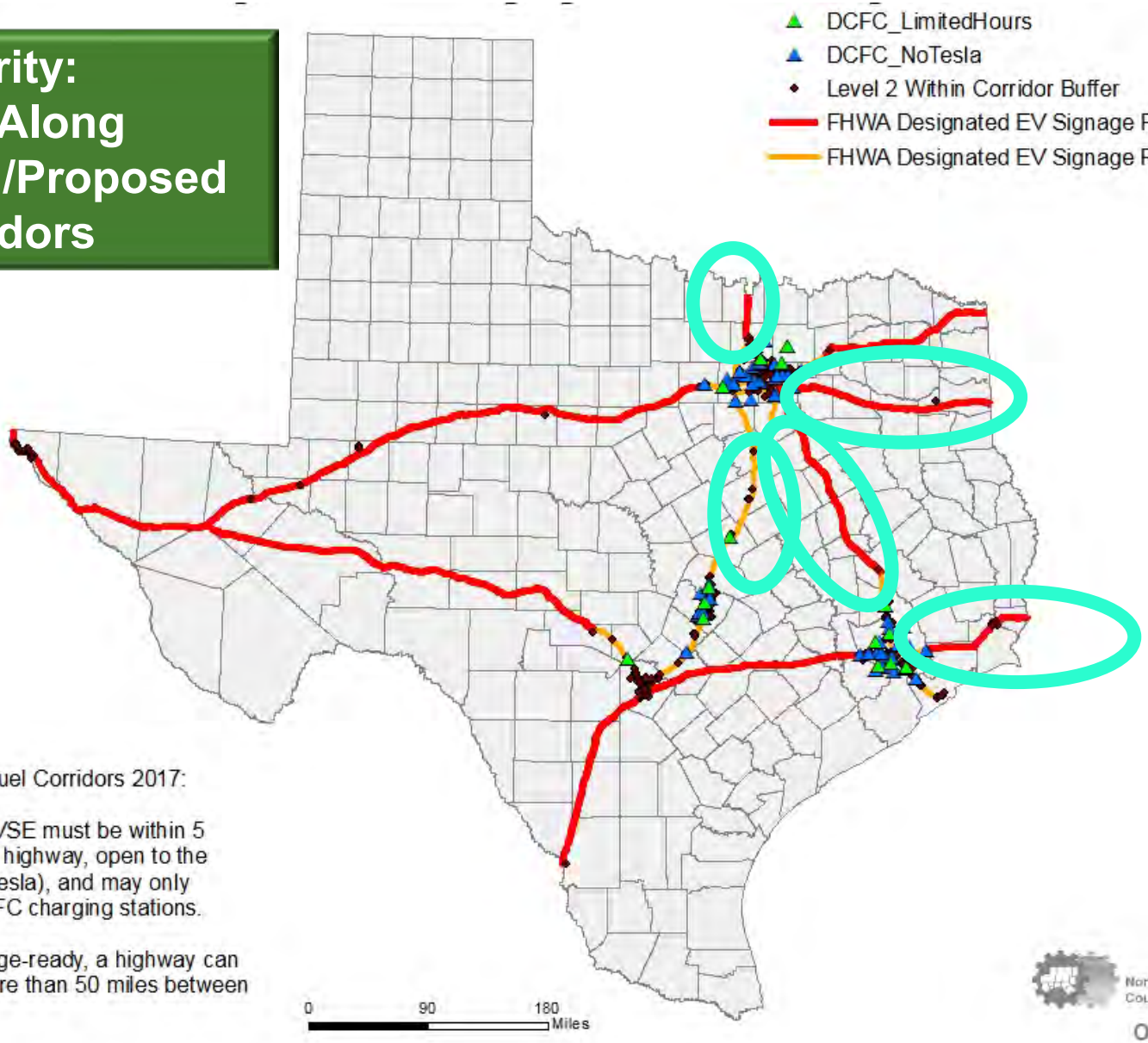
Regional Infrastructure Availability and EV Registration by ZIP Code



Priorities:
Multifamily Sites
Workplace Charging
DCFC to Fill Gaps

Designated Statewide Alternative Fuel Corridors and DC Fast Charge Infrastructure

Priority: DCFC Along Designated/Proposed Corridors



FHWA Alt Fuel Corridors 2017:

Qualified EVSE must be within 5 miles of the highway, open to the public (no Tesla), and may only include DCFC charging stations.

To be signage-ready, a highway can have no more than 50 miles between stations.

North Centra
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EV-Readiness: Policy Assessment

EVs for Local Fleets

Clean Cities' Plug-in Electric Vehicle Handbook for Fleet Managers:
www.afdc.energy.gov/pdfs/pev_handbook.pdf

EV-Ready Construction Codes & Permitting Requirements

EV Ready Codes for the Built Environment:
www.transportationandclimate.org/ev-ready-codes-built-environment

Zoning Policies

EV-Friendly Parking Ordinances & Benefits

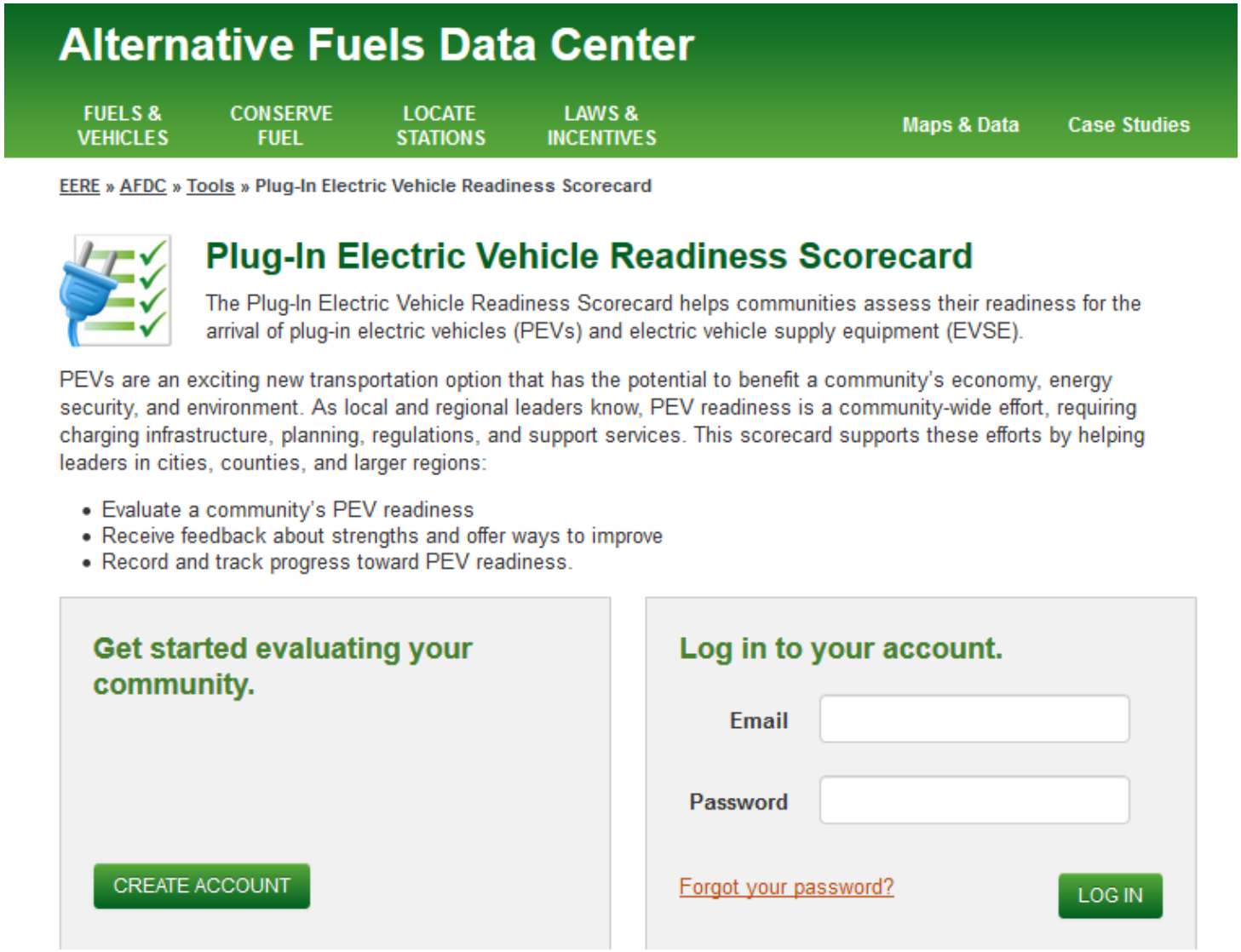
Local Incentives for EV Purchase or EVSE Installation

Special Utility Rates

Electric Vehicle Policy Survey:

www.surveymonkey.com/r/CHFWVMD

EV-Readiness: Community Assessment



https://www.afdc.energy.gov/pev-readiness

Siting EVSE: Best Practices

Minimize Cost – Locate Close to Electrical Service

Maximize Convenience – Access and Egress, Signage

Ensure Accessibility – Compliance with ADA, State, Local, and Organizational Policies

Avoid Hazards (Specifically, Tripping over Cords)

Prevent Impacts – Curbs, Bollards, Wheel Stops, etc.

Provide Lighting/Shelter

Prevent Pooled Water/Irrigation

Managing EVSE: Key Considerations

Do you own the property? Is the owner interested in collaborating?

Do you want to manage or outsource maintenance?

Do you want to know how the site is being used?

Do you want users to pay? If so, how?

Do you want to limit access to certain users? Certain Hours?

How will you enforce restricted access or EV-only signage?

Are existing electrical resources adequate or do they require upgrades?

Additional Considerations & Resources

Guidance on Infrastructure Development:
www.afdc.energy.gov/fuels/electricity_infrastructure.html

Creating EV-Ready Towns and Cities:
www.transportationandclimate.org/creating-ev-ready-towns-and-cities-guide-planning-and-policy-tools

The Basics about EVs and EVSE Hosting/Ownership:
www.afdc.energy.gov/pdfs/51227.pdf

Consider Cost Recovery (if applicable) and Ongoing Maintenance:
www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Additional Considerations - Workplaces

Consider Policies to Ensure Fair and Equitable Access

Examples: Time Limitations for Individual Users; Encouraging Staff to Move Vehicle Once Charging Complete

Conduct a Survey to Assess Demand and Determine the Following:

- Number of Charging Connections
- Type of Equipment
- 24 hour or Limited Access
- Sample Survey: www.afdc.energy.gov/uploads/publication/WPCC_sample_employee_survey_0816.pdf

www.afdc.energy.gov/fuels/electricity_charging_workplace.html

Additional Considerations - Universities

Consider Enlisting the Help of Engineering Students/Departments in Planning

Determine Whether EVSE will be Utilized for Ongoing Research

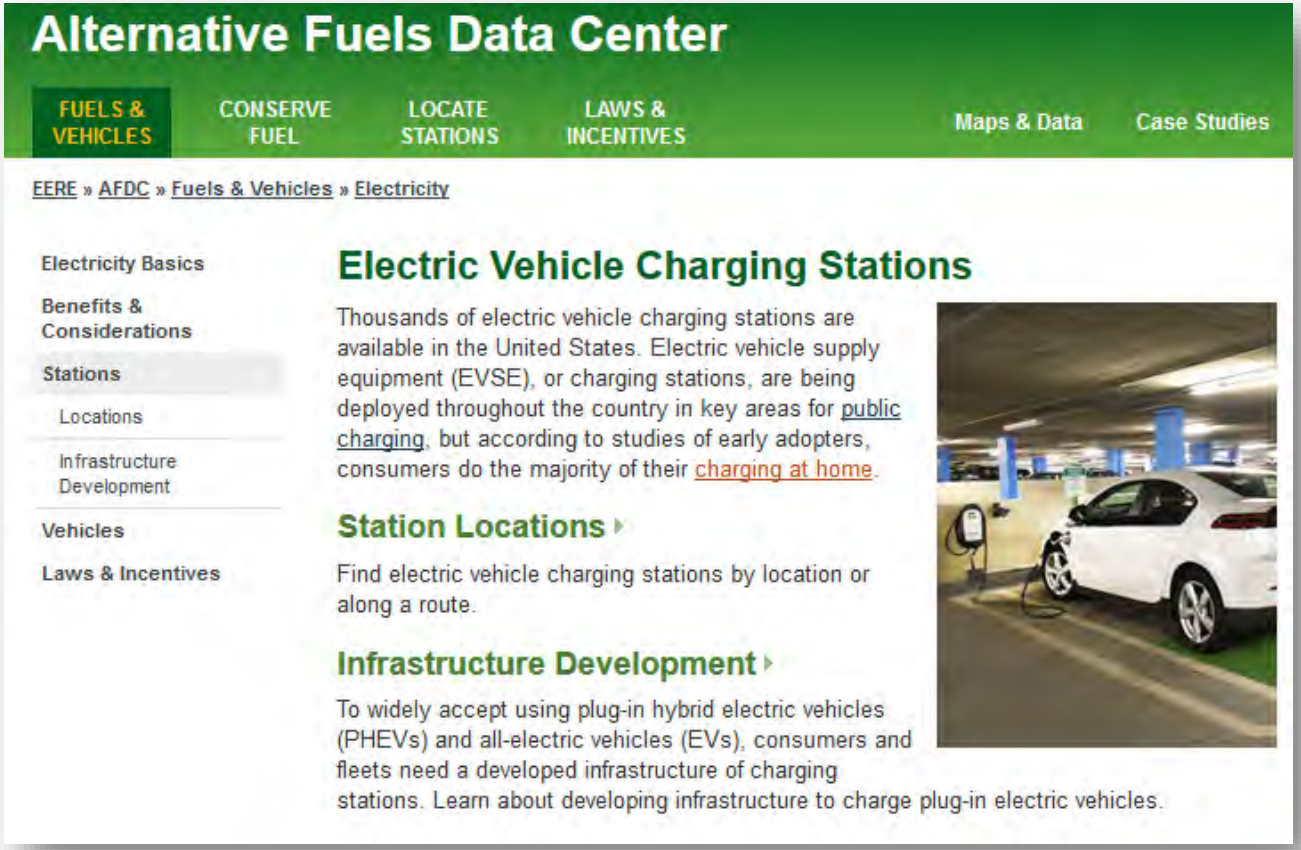
Determine how Charging Stations fit into University Sustainability Planning (e.g. LEED)

www.afdc.energy.gov/uploads/publication/wpc_charging_university_campuses.pdf

Additional Considerations - Multi-Unit Dwellings

Consider Current Parking Ownership Model (Assigned, Deeded, or Common Area)

www.afdc.energy.gov/fuels/electricity_charging_multi.html



Available Incentives

Vehicles

Amount	Incentive Program
Up to $7,500	Qualified Plug-In Electric Drive Motor Vehicle Tax Credit
$3,500	AirCheckTexas Drive a Clean Machine Program
$2,500	Light-Duty Motor Vehicle Purchase or Lease Incentive Program *Estimated Summer/Fall 2018*

Infrastructure

Amount	Incentive Program
Up to 50% Project Cost	Alternative Fueling Facilities Program Join us November 9 at 9:00 am!
Up to 100% if Government-Owned; 80% if Non-Government Owned	Volkswagen Settlement Environmental Mitigation Trust???? *Texas Plans To Be Determined*

NCTCOG Grant Assistance

Provide Letters of Support

Identify Whether Proposed Site Fills Gaps

Provide Registration Data by City/County/ZIP to Support Demand Estimates

Assess Station Location Against Alternative Fuel Corridor Criteria:
www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/

For More Information

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www.dfwcleancities.org/evnt
https://www.afdc.energy.gov/

North Central Texas Council of Governments

evnt Electric Vehicles North Texas

Dallas-Fort Worth CLEAN CITIES

North Lake College

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Chris Marrs

Senior Associate Director of Facilities

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What did we want to achieve

- Increase parking to match enrollment growth
- Improve storm water flow
- Improve the existing lighting conditions. Solar vs LED
- Improve staff and faculty parking
- Add irrigation to the landscape.

Design Factors

- Pedestrian safety
- Landscape to match native planting on campus
- Storm Water Review
- Traffic flow problems
- Tree Campus USA
- Budget surprise


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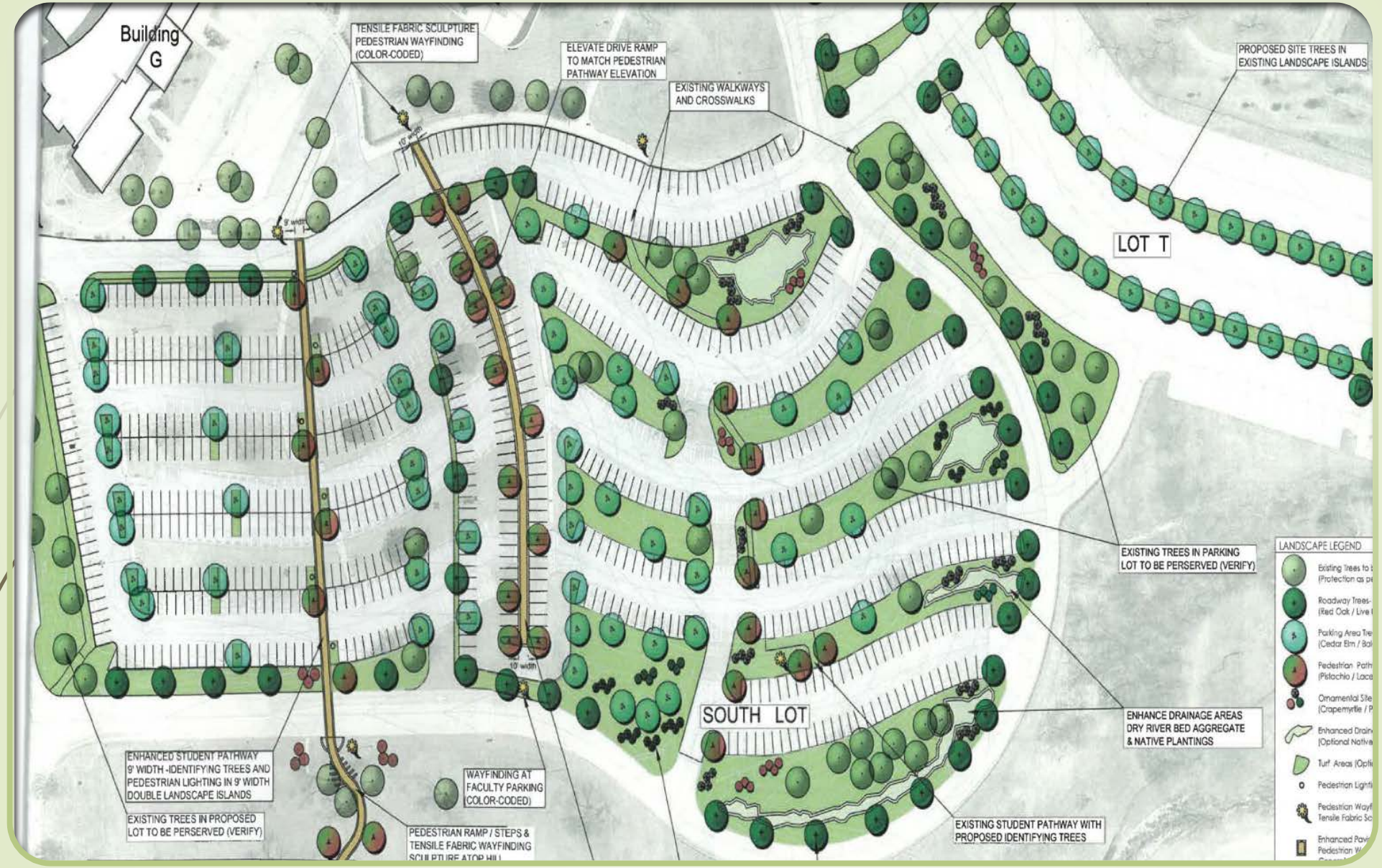
© 2011 Google
Imagery Date: 6/12/2011
2001
32°52'16.55" N 96°58'01.67" W elev 482 ft
©2010 Google
Eye alt 2227 ft


Building G
TENSILE FABRIC SCULPTURE PEDESTRIAN WAYFINDING (COLOR-CODED)
ELEVATE DRIVE RAMP TO MATCH PEDESTRIAN PATHWAY ELEVATION
EXISTING WALKWAYS AND CROSSWALKS
PROPOSED SITE TREES IN EXISTING LANDSCAPE ISLANDS
LOT T
EXISTING TREES IN PARKING LOT TO BE PERSERVED (VERIFY)
LANDSCAPE LEGEND
SOUTH LOT
ENHANCE DRAINAGE AREAS DRY RIVER BED AGGREGATE & NATIVE PLANTINGS
ENHANCED STUDENT PATHWAY 9' WIDTH -IDENTIFYING TREES AND PEDESTRIAN LIGHTING IN 9' WIDTH DOUBLE LANDSCAPE ISLANDS
EXISTING TREES IN PROPOSED LOT TO BE PERSERVED (VERIFY)
WAYFINDING AT FACULTY PARKING (COLOR-CODED)
PEDESTRIAN RAMP / STEPS & TENSILE FABRIC WAYFINDING
EXISTING STUDENT PATHWAY WITH PROPOSED IDENTIFYING TREES

ChargePoint
EV Charging Station Overview

November 2, 2017

Dave Aasheim
dave.aasheim@chargepoint.com
214-449-7544

The World's Largest and Most Open EV Charging Network

Largest Community of EV drivers

+ 70% of new EV drivers join every month
+ A driver plugs into our network every 4 seconds

Charging Everywhere

+ 42,000+ charging spots
+ 600+ ports added every month

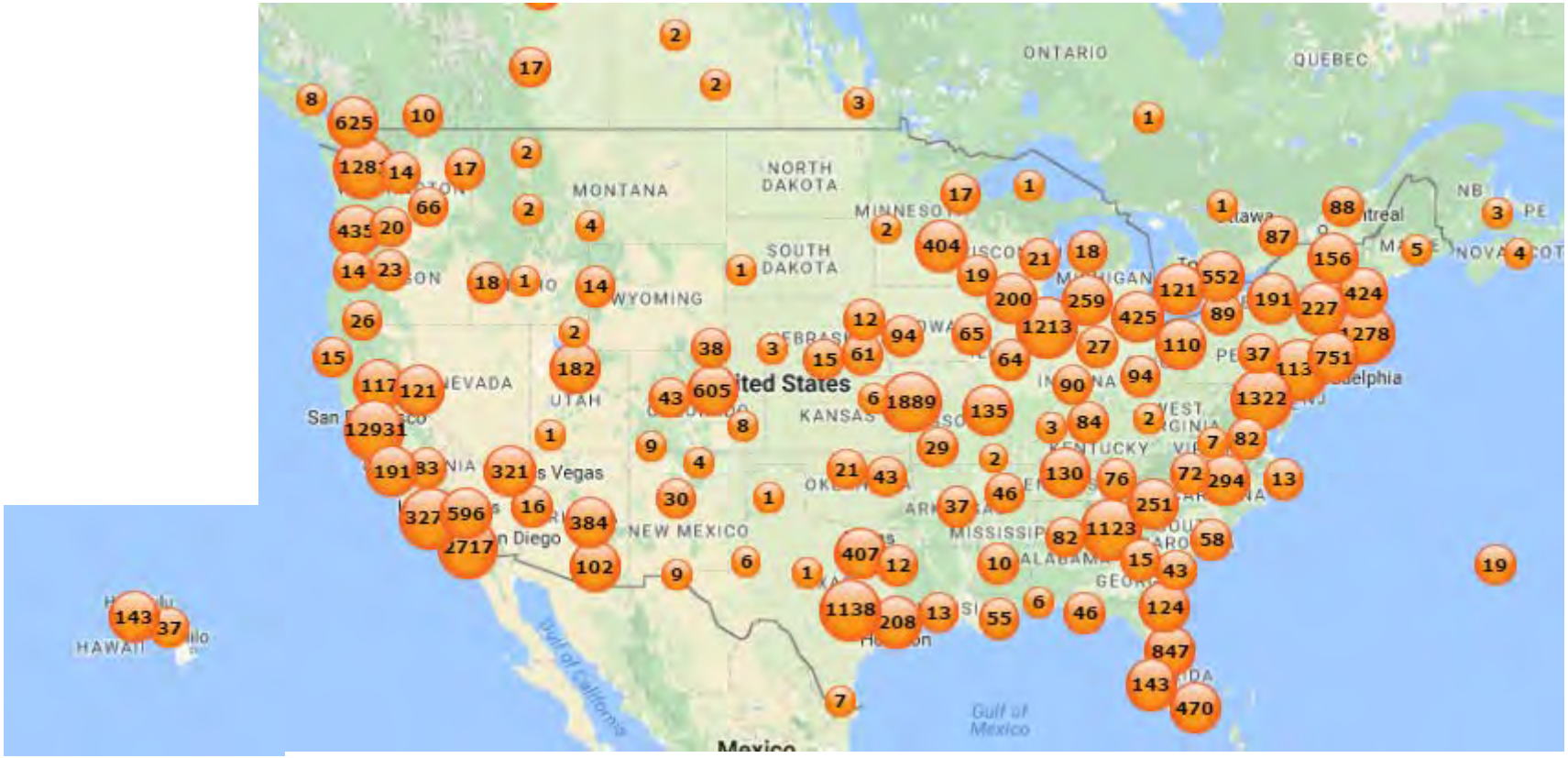
We're Established and Growing

+ $165 million in funding
+ Market share leader
+ European Expansion

We Are the Industry Leader

According to Time, Bloomberg, CNBC, Navigant Research and many others

42,000+ ChargePoint Stations



7,000+ Customers: Some of the World's Best-Known Brands

Stations for Every Situation

Single Family Home

Home
Level 2

Multi-Family, Fleet

CPF25
Level 2

Commercial/Municipal, Mixed Use

CT4000
Level 2

On-Route, Commercial

CPE100
24kW

CPE200
50kW

CPE250
62.5kW

Express Plus
400kW

Fast DC Chargers

Ultra-fast DC Chargers

ChargePoint Level 2 Stations – Six Flavors

+ **Dual Port Level 2 Charging Stations**
  - Standard= 6’ tall with 18’ cords
  - Tallboy= 8’ tall with 23” cords

+ **Single Port Level 2 Charging Stations**

Commercial Level 2 Charging Stations

Charging for businesses and municipalities that want to offer charging to employees, customers and visitors

- **Speed**: 25 RPH (estimated maximum miles of Range Per Hour of charging).
- **Clean Cord Technology**: Self-retracting, maintenance free and ultra-lightweight cord management system.
- **Power Management Options**: Cut installation costs and double the number of parking spots served.
- **Branding and Customization**: Promote your brand with an LCD screen and customizable signage.

Industry Leading: ChargePoint Assure

The Most Comprehensive Station Maintenance & Management Program in the Industry

- 98% Annual Station Uptime Guarantee
- One Business Day Response Time
- Proactive Station Monitoring
- Proactive Dispatch
- Labor Coverage for Vandalism & Accidents
- Monthly Summary & Quarterly Detailed Reports
- Unlimited Software Configuration Changes

Branding Options- Customizable Inserts

Our Automotive Partners: Cars People Love

Co-branded Auto OEM Membership Kits

Chevy Bolt/Volt

Hyundai Ioniq

Toyota Prius Prime

VW e-Golf

BMW i3

BMW eDrive

BMW i8

Honda Clarity

ChargePoint Mobile App

Find Available Stations

See which stations are available to charge your EV

Start Charging

Just hold your phone by the card reader on the station

Get Notified

Receive notifications when your car is done charging, or when a station opens ups

See Station Pictures

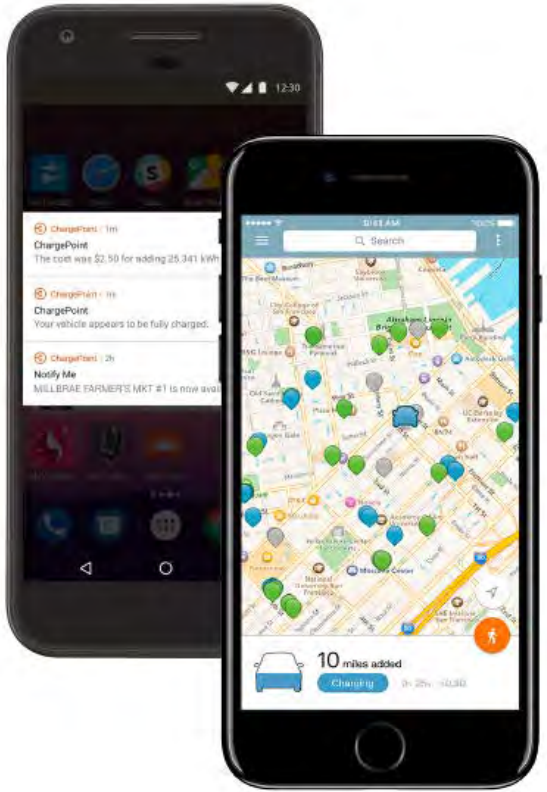
Easily find stations with photos submitted by other drivers

Read Driver Tips

Get helpful advice from other drivers about charging at a particular station

Connect ChargePoint Home

Schedule charging, set reminders, get notifications and track usage



Express DC Fast Chargers

Fast charging for all DC enabled vehicles

- **Speed**: 50 kW station provides 200 RPH (estimated miles of Range Per Hour).
  24 kW station provides 100 RPH (estimated miles of Range Per Hour).
- **Connectors**: CHAdeMO and/or SAE Combo connectors to serve all EVs with fast charging capabilities.
- **Form Factor**: Slim design allows for flexible installation locations, lower shipping and lower install costs.
- **Reliable**: Designed to increase reliability and performance.

Just Introduced- Express 250

- Up to 62.5 kW standalone charging capacity
- Up to 3 charging cables, all standard connectors supported (factory installed)
- Liquid cooled power modules
- Exceptional ease of use
  - LED for driver notifications
  - LCD for driver interaction
  - Swing arms for easy cable management
- Market Targets
  - Light duty fleets that require fast turnaround times for vehicles
  - High end destinations: hotels, retail
  - Workplaces

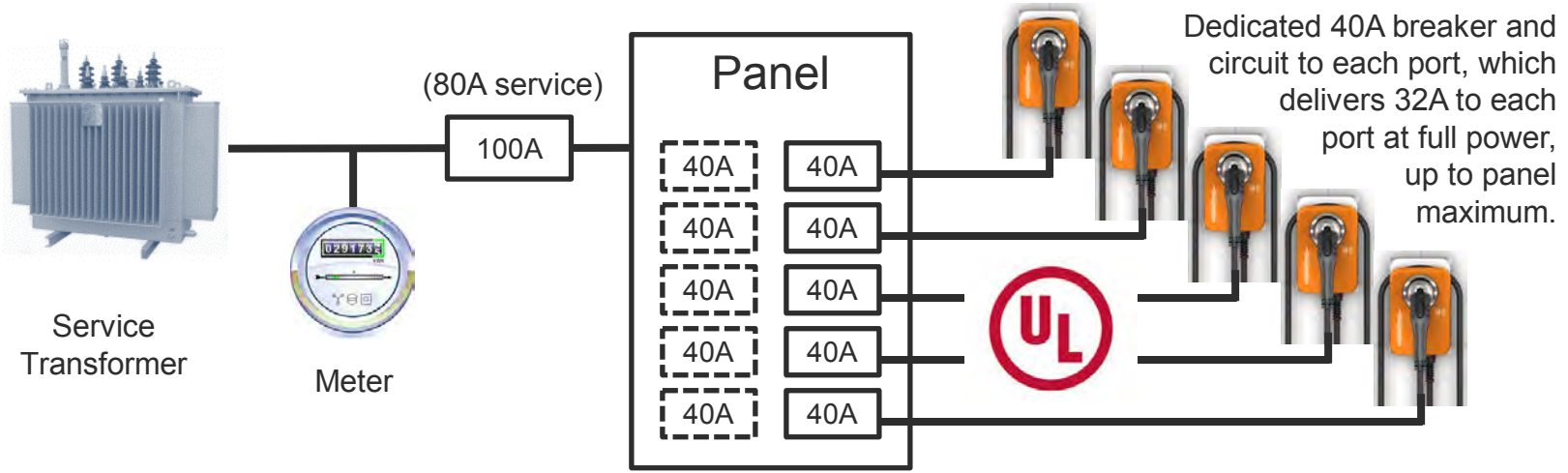
CPF25 Family

Charging for airport, fleet, and multi-family applications

- **Energy Management:** Lower both installation and electricity costs with advanced energy management tools such as panel sharing and scheduled charging.
- **Access Control:** Control who can use your charging stations. Assign RFID cards to vehicles or drivers and allow only those approved vehicles or drivers to charge at your stations.
- **Speed:** Our Level 2 CPF25 stations charge at a maximum rate of 25 RPH (miles of Range Per Hour), supplying up to 7.7 kilowatts (kW).

Panel Sharing- Intelligent Power Management

- ChargePoint Panel Share technology allows a maximum aggregate load to be set on a group of stations.
- The stations, in concert with ChargePoint cloud-based services will manage the individual power output of each station to ensure that the maximum allowed load is never exceeded.
- In this example we show 80A service for 5 stations, which would otherwise draw 5 × 32A = 160A at FULL load (2:1 oversubscription).



ChargePoint Business Model

- Station Host/Owner Decides on Policies
  - Access Control
  - Visibility on public maps
  - Setting Fees
- If fees are set, ChargePoint collects from drivers
  - Reimburses host every 30 days
- Drivers can set up account to pay for sessions
  - Debit or credit card
  - PayPal
  - Fleet accounts can use Voyager or WEX
- Assure= full parts & labor & monitoring service
  - 98% uptime guarantee
  - One business day response

How To Purchase

+ **Direct**
  - NJPA Cooperative Award
  - Installation Options

+ **Channel Partners**
  - Many have Cooperative Awards
    - NJPA & H-GAC
  - Installation Options including Turnkey

Thank You

For further information on ChargePoint,
please contact Dave Aasheim:

dave.aasheim@chargepoint.com

(214) 449-7544

YOUR GUIDES ON THE ROAD TO ELECTRIFYING TRANSPORTATION

Electric vehicles (EVs) are the future of transportation, and drivers expect convenient, fast, and reliable charging on the go.

EVIA offers a range of consulting services to assist clients in deploying EV infrastructure. From program planning to site selection, layout to commissioning, EVIA's expertise will put you on the right path.

Jason Buckland

Founding Partner

214-762-7162

Jason@electricvia.com

www.electricvia.com

EVIA

Full Service Provider of Electric Vehicle Charging Stations Since 2009

NJPA AWARDED CONTRACT

CHARGEPOINT PREMIER PARTNER

- **Introduction to LilyPad EV**
- **Our Products**
- **Our Business Model**
- NJPA AWARDED CONTRACT

Full Service Provider of Electric Vehicle Charging Infrastructure Services

Services

- Plan
- Design
- Implement
- Manage

Markets

- Electric Utilities
- Cities/Counties
- Workplaces
- Retail/Hotels
- Multifamily
- Hospitals
- Highways/C-Store
- Universities

Delivered

- Since 2009
- 1300 stations
- 544 locations
- 10,000 drivers
- 23 states, 130 cities
- 376,000 charges
- 2.5 GWh

CHARGEPOINT PREMIER PARTNER

LilyPad EV Partial Client List

100 clients, public and private, large and small

The largest and most robust manufacturer of charging infrastructure

On-Route Commercial	Commercial Municipal Mixed Use	Multi-Family, Fleet	Single Family Home
			
CPE250 Express Plus 62kW DC – 400 kW DC Cars, Trucks, Buses	CT4000 Level 2	CPF25 Level 2	Home Level 2 Station

Charging Stations For all applications, for all EVs

Cloud Network Most robust in the industry

Assure 98% uptime guarantee

Power Management Minimize install, demand costs

Core Competencies

done right · done smart · done fast

Electric Vehicle Charging Stations

Plan

- Planning
  - Goals
  - Stakeholders
  - Geography

Design

- Design
  - Geography
  - Location Categories
  - Power Management
  - Growth Planning
- Product Selection
  - Cars
  - Trucks
  - Buses
  - Fleets
  - Level 2
  - Fast DC
  - Ultra Fast DC

Implement

- Project Management
  - Process
  - Scheduling
  - Stakeholder coordination
  - Electric Utility Coordination
  - Tracking
  - Reporting
  - Work Queues
- Site Acquisition
  - Host Candidate
  - Site Qualification
  - Site Survey
  - Minimize Install Costs
  - Scope, Cost
  - Contract
- Construction
  - Scope
  - PE drawing
  - Permitting
  - Make Ready
  - Inspection
- Installation
  - Mount Station
  - Power Up Station
  - Configure Station
  - Provision Station
  - Test Station
- Training
  - Owner
  - Host

Manage

- Maintenance
  - Monitoring stations
  - Repair Dispatch
- Management
  - Growth
  - Usage Reporting
  - Forecasting

Full Service Provide of EV Charging Stations

We take care of as much or as little of a project as the customer needs

- Turnkey or a la cart
- Planning, Design, Implementation, Management
- Experienced, Proven
- Large Scale Deployments or Small Projects
- We play well with others
- We will always act in your best interest

Business Model

- Customer owns the charging stations
- LilyPad EV (typically) installs the stations
- Maintenance can be as needed via LilyPad EV
  --or--
  Assure extended warranty/maint program w/98% uptime guarantee
- Driver pays fee via ChargePoint card, phone app or tap, or 800#.
- LilyPad EV can help with ongoing management and planning

NJPA AWARDED CONTRACT
Contract#: 051017-LPE

- LilyPad EV is an NJPA contract holder for EV Charging Stations
- NJPA contract competitively solicited on your behalf
- Your Due Diligence Requirements met w/o hassle of an RFP
- Available to Government, Education, and Non-Profit Agencies
- You are Assured of
  - Experienced Vendor
  - Deeply Discounted Pricing
  - Quality Product
  - Full Turnkey Project

https://www.njpacoop.org/cooperative-purchasing/contracts-fleet/fleet-services-parts-equipment/051017-lpe/

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Click Here to Visit LilyPad EV's Website

REVITALIZE

CHARGING SOLUTIONS

REVITALIZE
CHARGING SOLUTIONS

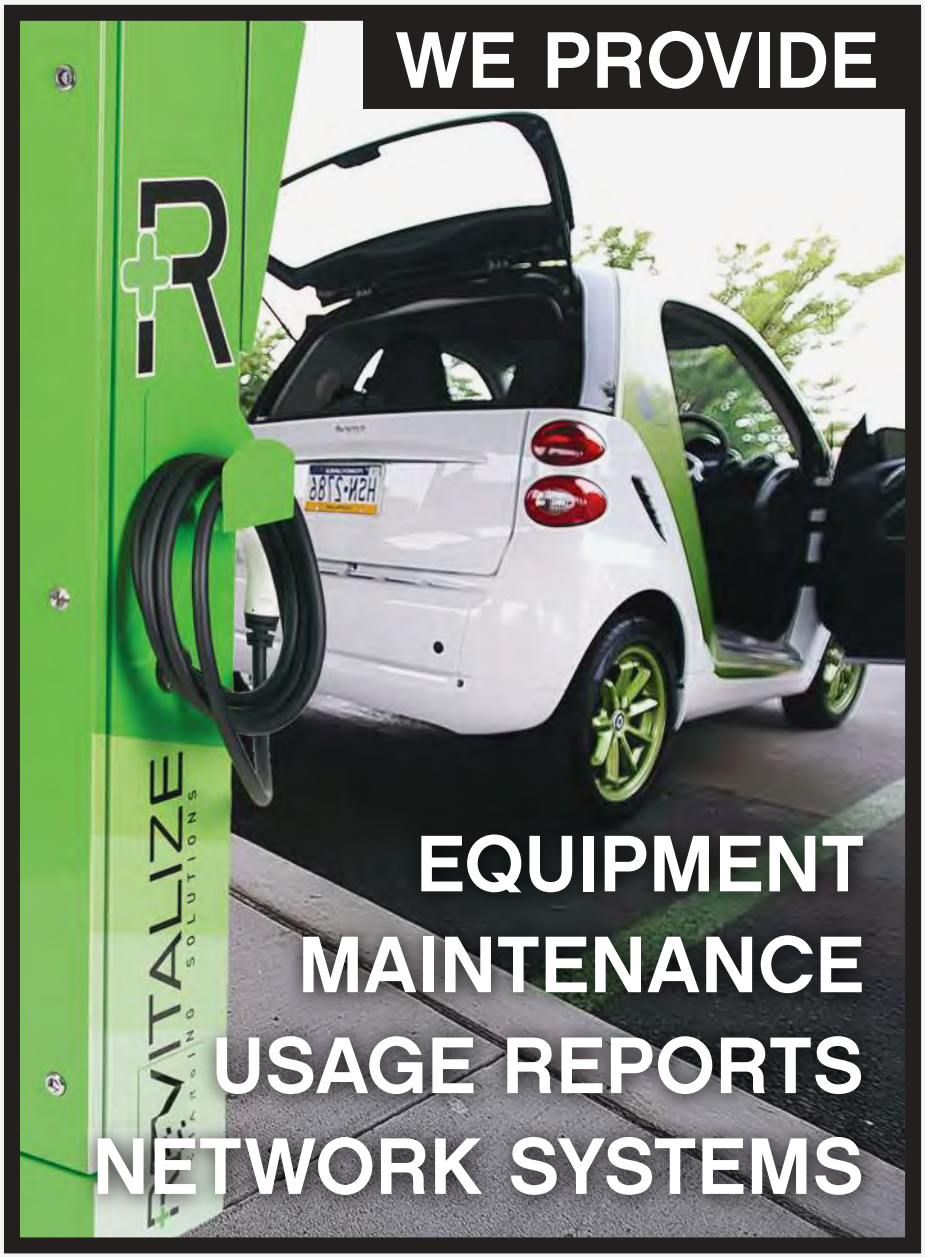
DRIVE NEW BUSINESS TO YOUR LOCATION • $0 ACQUISITION COST

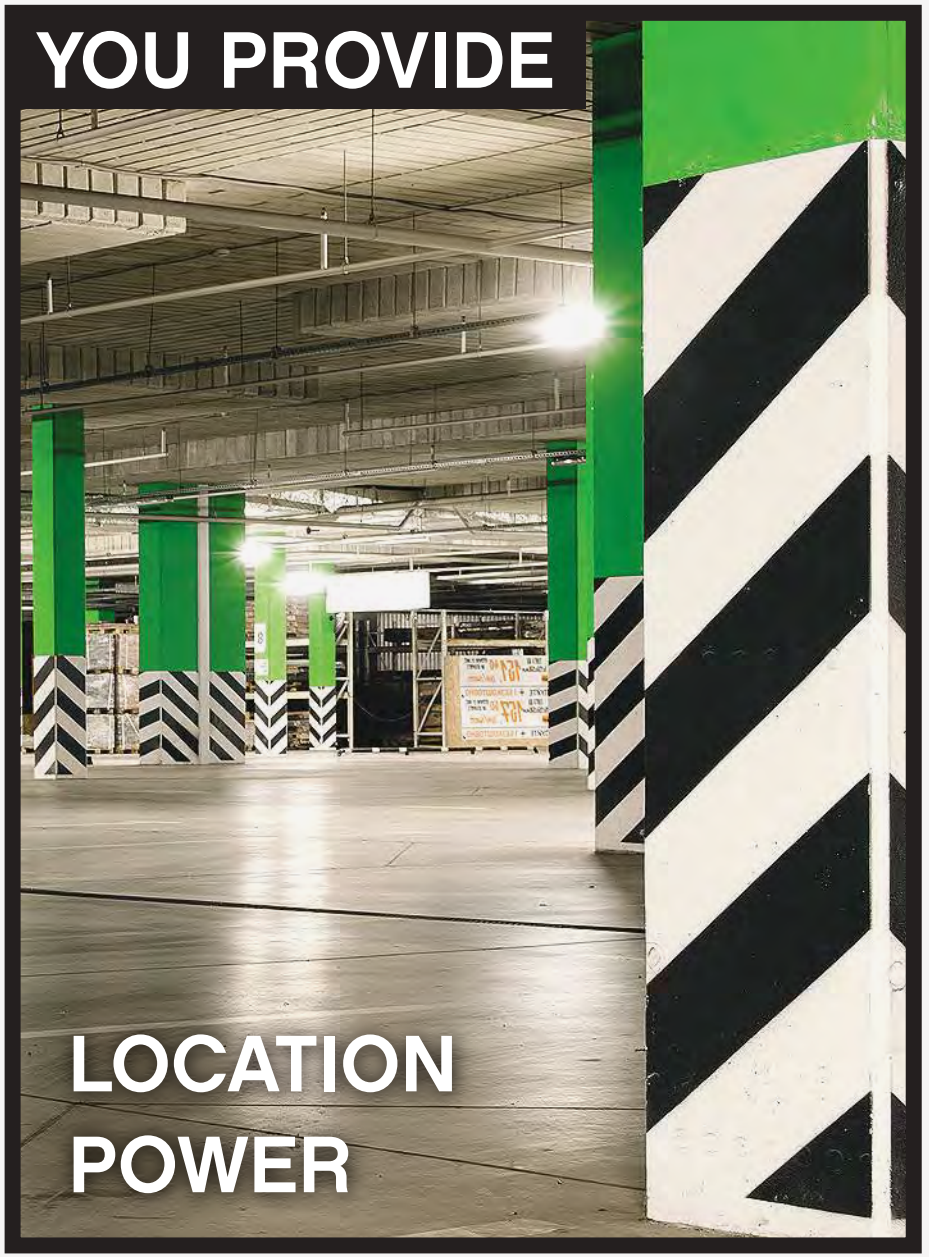
TURNKEY ELECTRIC CAR CHARGER

REVITALIZE
CHARGING SOLUTIONS

TURNKEY SOLUTION

YOU PROVIDE THE SITE AND WE BRING EVERYTHING ELSE





REVITALIZE
CHARGING SOLUTIONS

ALL-IN-ONE PACKAGE

CONNECT WITH YOUR CUSTOMERS WHILE PROVIDING A VALUABLE SERVICE

POS SYSTEM

ADVERTISING OPPORTUNITY

RFID / NFC

CUSTOMIZABLE WRAP

VIDEO DISPLAY

WIRELESS CONNECTIVITY

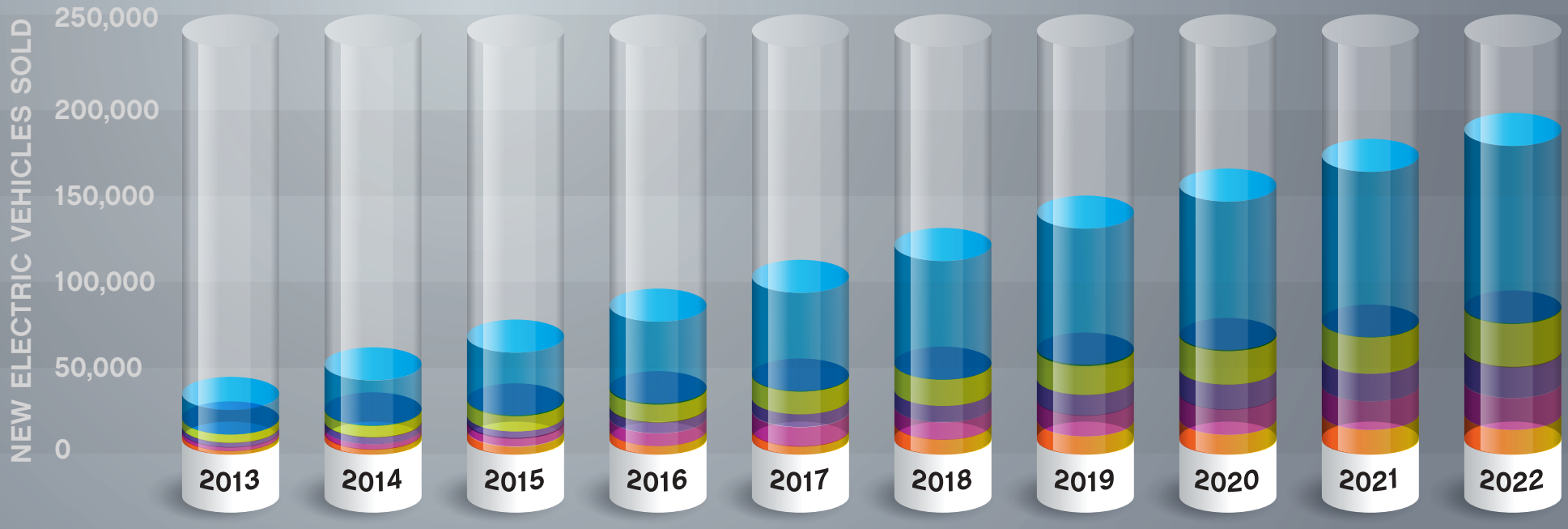
INTEGRATED NETWORK

REVITALIZE
CHARGING SOLUTIONS

EV TRENDS

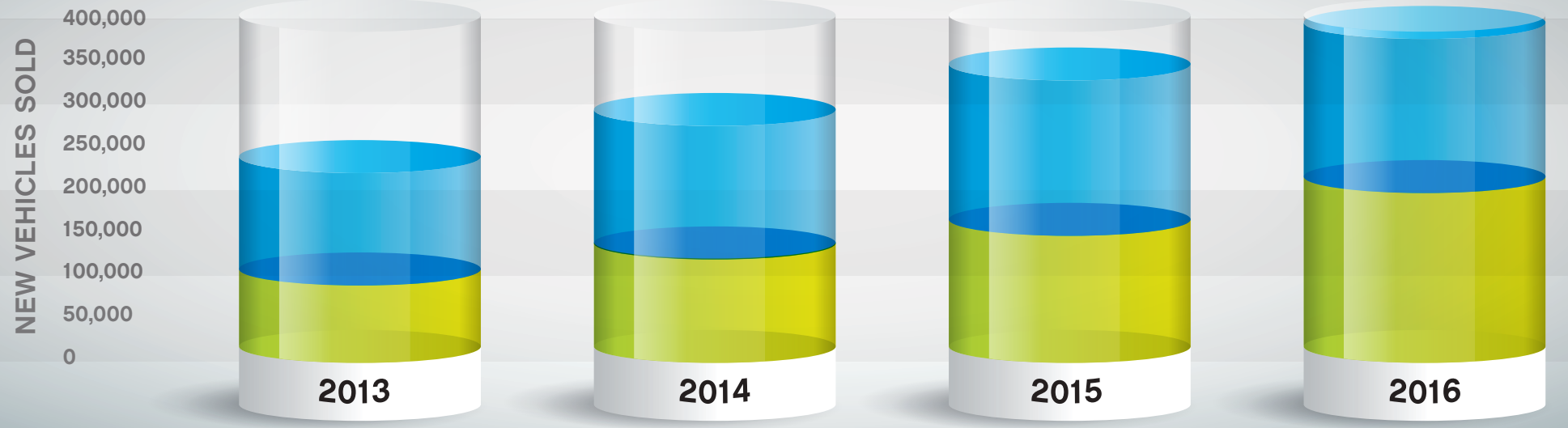
CA NY TX FL WA

SALES VOLUMES - TOP 5 STATES (PROJECTIONS)



SALES VOLUMES - NATIONAL (ACTUAL)

ELECTRIC HYBRID



REVITALIZE
CHARGING SOLUTIONS

TRENDING MARKETS

THE FUTURE IN TRANSPORTATION IS HERE NOW

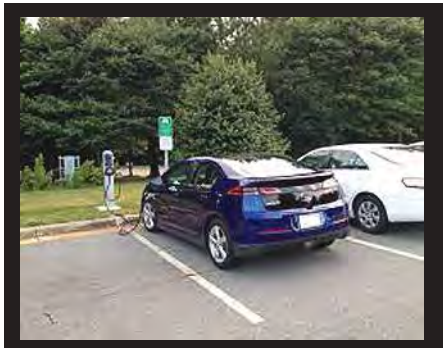
PRIVATE COLLEGE

PARKING GARAGE

RESTAURANT

RETAIL

PUBLIC UNIVERSITY



PUBLIC WORKS

OFFICE BUILDING

ENTERTAINMENT

HOTELS

COMMERCIAL FLEET

HOME

FUEL STATIONS

REVITALIZE
CHARGING SOLUTIONS

ELECTRIC CAR BRANDS

THE FUTURE IN TRANSPORTATION IS HERE NOW

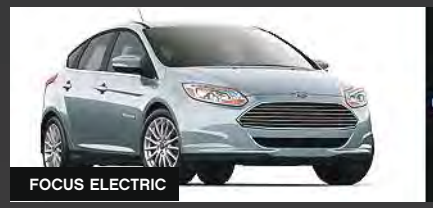

CONCEPT ONE
RIMAC AUTOMOBILI


B-CLASS E DRIVE

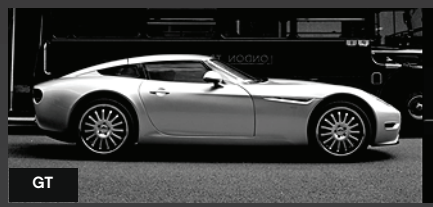

SPARK EV


MODEL S
TESLA


i3
BMW


FOCUS ELECTRIC
Ford


FURTIVE EGT
EXAGON MOTORS


GT
Lightning


E-UP!


FETISH
VENTURI FORMULA-E TEAM


500E
FIAT


SOUL EV
KIA


E-NV200
NISSAN


ED
smart


I MIEV
MITSUBISHI


TWIZY
RENAULT


E6
BYD


FIT EV
HONDA

REVITALIZE
CHARGING SOLUTIONS

ADVERTISING OPPORTUNITY

CONNECT WITH YOUR AUDIENCE IN NEW WAYS

DIGITAL CONTENT

- 10 Video Spots Available
- 30 Seconds Per Spot
- 3000 Total Rotations Per Day

WRAPS

- Custom Graphics
- Full or Half Wraps Available

SPONSOR PACKAGES

- GOLD - 3 Spots + Full Wrap
- SILVER - 2 Spots + Half Wrap

DISCLAIMER: WRAP DESIGNS ILLUSTRATED HERE ARE CONCEPTUAL RENDERINGS ONLY

REVITALIZE
CHARGING SOLUTIONS

PARTNERSHIP REVENUE SHARE

ADVERTISER INCOME WILL PAY YOUR POWER BILLS

EARN

- 10% Revenue Share on Ad $$$

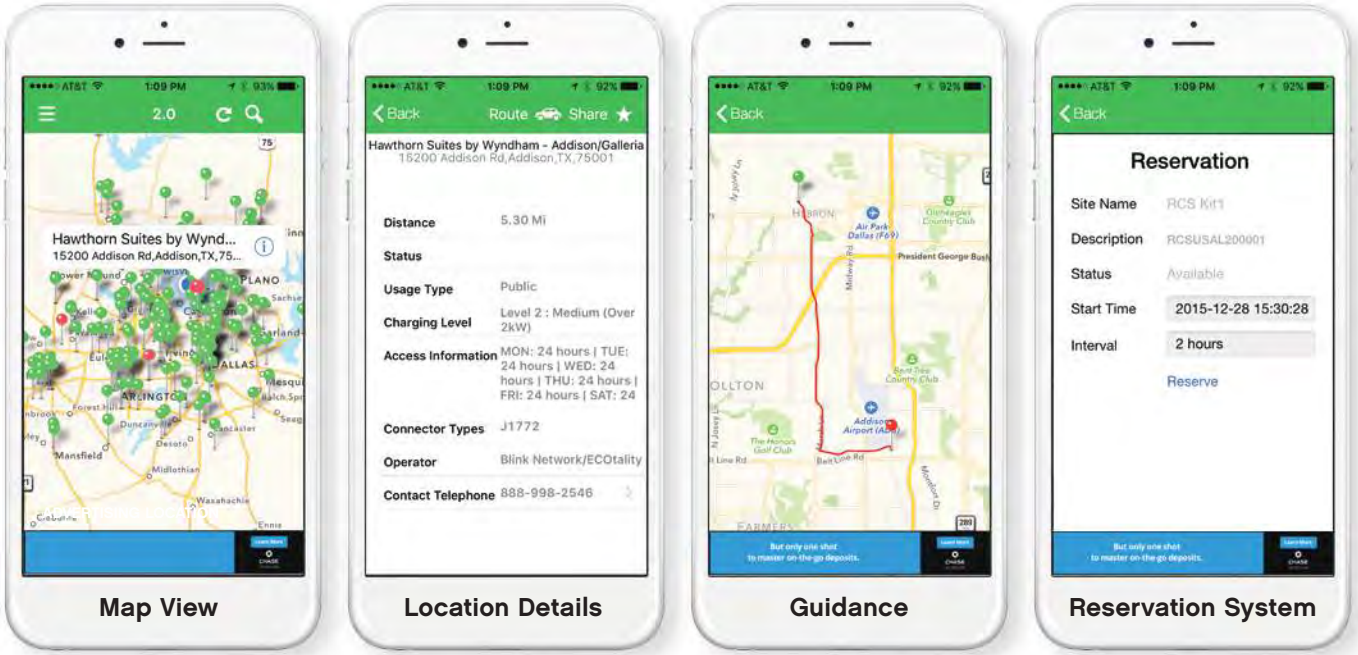
REIMBURSEMENT

- Energy Use for Charge Sessions

REVITALIZE
CHARGING SOLUTIONS

DRIVING TRAFFIC TO YOU

PROVIDING ESSENTIAL TOOLS TO EV DRIVERS



Map View | Location Details | Guidance | Reservation System

REVITALIZE MOBILE APPLICATION

REVITALIZE
CHARGING SOLUTIONS

$0 CAPITAL COST + $0 UTILITY COST + $0 MAINTENANCE COST = FREE!

*SITE PREPARATION FEES MAY APPLY

REVITALIZE

CHARGING SOLUTIONS

PRESENTED BY

EDWARD MORGAN

OFFICE: (817) 659-1030

MOBILE: (504) 812-6921

edward.morgan@revitalizechargingsolutions.com

http://www.revitalizechargingsolutions.com

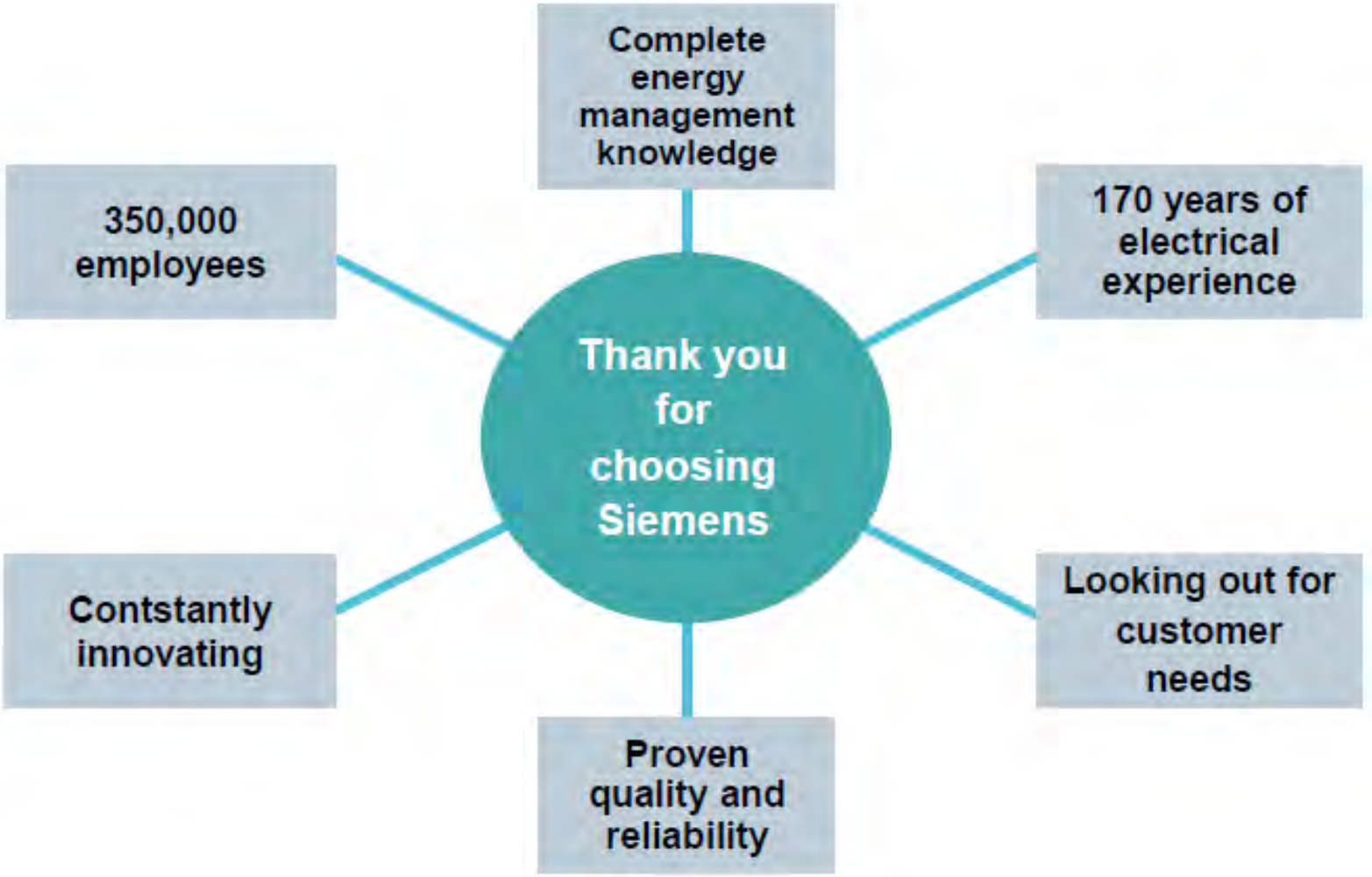
SIEMENS
Ingenuity for life

Siemens VersiCharge™

Product Portfolio Overview

www. usa.siemens.com/versicharge

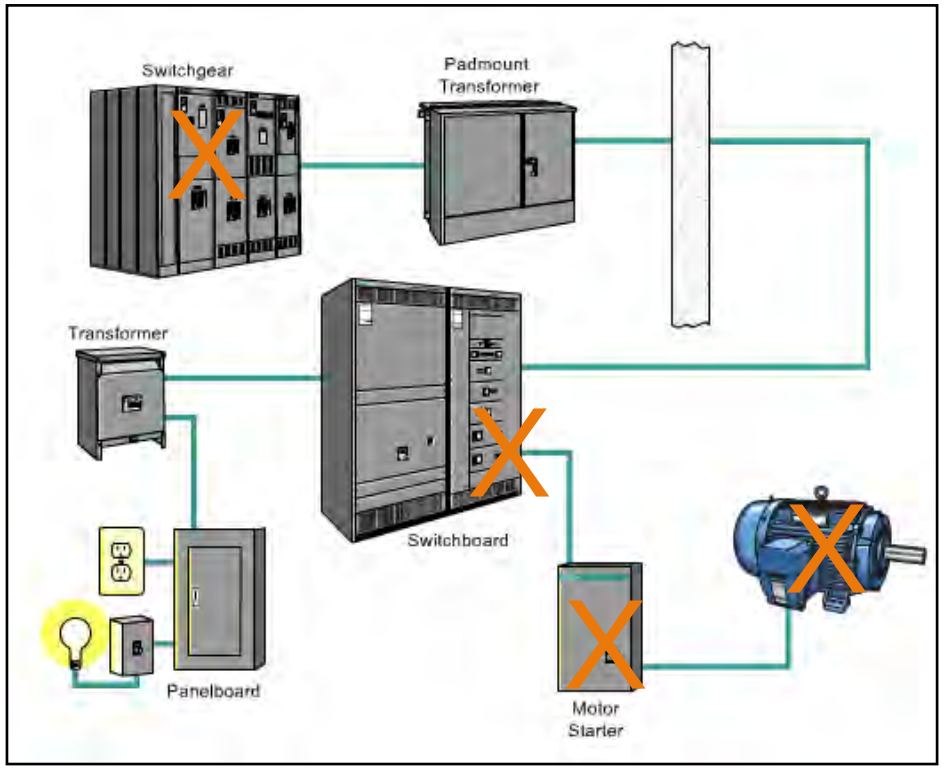
Siemens as you Partner



Elements that Influence Complexity

SIEMENS

What Pieces are in the System



Basic Elements of the Electrical Equipment

Commonly Mounted Equipment

Distribution sections

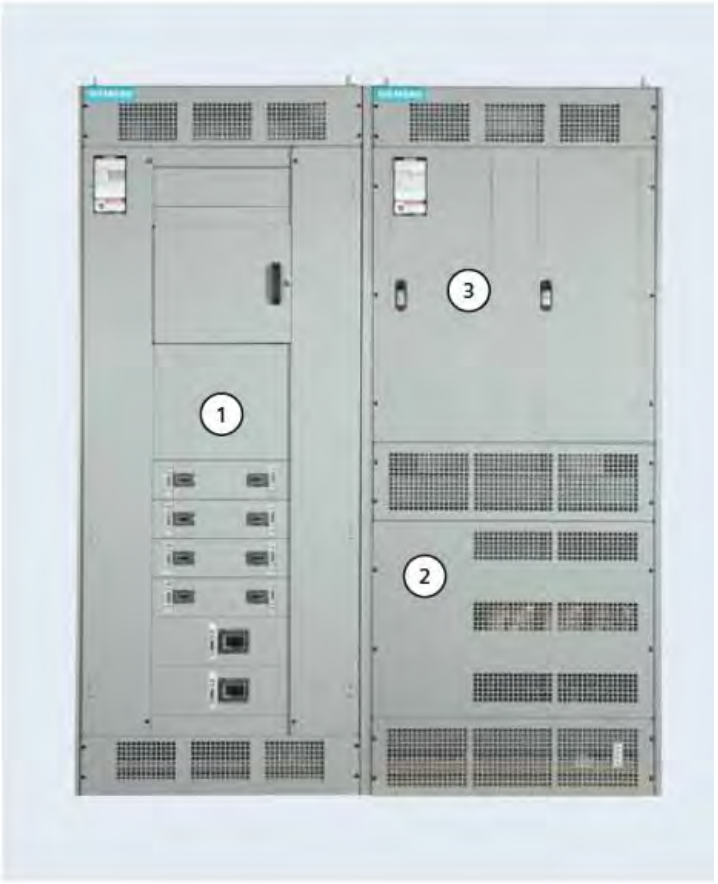
- Up to 3000A (full height)
- Up to 1200A (half height)

Transformers

- Up to 300KVA (full height)
- Up to 150KVA (half height)

Panelboards

- Up to 800A (full height)
- Up to 600A (half height)



Current US Products (www.usa.siemens.com/versicharge)

VersiCharge Universal and Hardwire

VC30GRYU and VC30GRYHW

VersiCharge Post

VCPOSTGRY
(includes tamper resistant screws)

Wi-Fi Enabled VersiCharge SmartGrid (SG)

VCSG30GRYUW
VCSG30GCPUW

What are the Product Pieces for VersiCharge SG

1) VersiCharge SG + OCPP US2:VCSG30GCPUW

+

2) User Access and Payment Management

Greenlots SKY License
(add QR code to station)

Shell License
(user checks in to station via Shell Smartphone app)

+

3) Project Accessories

Post Kit

VersiComm (Cellular) + Data Plan

Path to Project Execution with Preferred Contractor

SIEMENS

Follow if you have a prefered contractor

1. Send the below distributor map link to your contractor
2. Give contractor sales deal and pricing created for NJPA members
3. Contractor will find distributor and reference pricing
4. Contractor visits your location to quote install and potential electrical upgrades
5. Distributor, contractor, and NJPA member agree on total pricing and sign contract
6. Distributor buys equipment from Siemens and contractor install equipment

Distributor Map: https://maps.esp.tl/maps/_NJPA-Distributor-Map/pages/map.jsp?geoMapId=385739&TENANT_ID=176474

NJPA Member Only
Sales Deal #: 30961

NJPA pricing, Versicharge Installation Manuals, and VersiCharge Data Sheets in Packet

Looking forward to working with you

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NATIONAL™ CARCHARGING

NCTCOG

November 2, 2017

Jim Burness

About National Car Charging

- Founded in 2011
- Over 400 clients across 36 states
- One of the largest dedicated charging equipment distributors in the U.S.

NATIONAL CARCHARGING

About National Car Charging

- Full spectrum of solutions
- Carefully selected collection of manufacturers
  - Only UL or Intertek-listed products

CHARGEPOINT PREMIER PARTNER

EVBOX

SIEMENS

efacec

AV aerovironment

BTCPOWER

NATIONAL CARCHARGING

Product Range

NATIONAL CARCHARGING

Our Process

- Step 1: Determine use case
- Step 2: Identify the right product for the use case
- Step 3: Determine installation strategy
  - We can use your electricians or ours
- Step4: Acquire products at the right price
- Step 5: Manage installation including activation and programming (if needed)

NATIONAL CARCHARGING

Business Models

- Site-owned model
  - Host site owns and controls station
  - If networked, the network collects payments and distributes to the site host on a monthly basis
    - Site host can set the amount to charge
  - Maintenance can be done internally or, depending on manufacturer, can be outsourced

NATIONAL CARCHARGING

Business Models

- Third-party model
  - Avoid at all costs!
  - Sounds too good to be true, because it is
  - A financial train wreck
    - Not a viable model
    - Virtually all providers have gone bankrupt
  - Bad for drivers
    - Cost to use is way too high, stations don't get used

NATIONAL CARCHARGING

H-GAC Cooperative Purchasing

- Houston-Galveston Area Council
  - 30 years old
  - www.hgacbuy.org
- No cost to buyer
- Open to:
  - Municipalities, Cities, Counties, State Agencies
  - Almost any other public entity
  - 501(c)(3)s that provide government functions and services
- ChargePoint products currently listed
  - Adding new products in November

NATIONAL CARCHARGING

H-GAC Cooperative Purchasing

- No geographic restriction
- Pre-negotiated pricing
  - H-GAC issued RFP so can often be used in place of a competitive bid process
  - *"HGACBuy uses mass circulation, minority emphasis print media, and internet services to post legal notices and bid solicitations. Therefore, posting of public notices to solicit bids and the formal competitive bid process are satisfied thru HGACBuy procedures."*
- Compare to other cooperative buying programs

NATIONAL CARCHARGING

H-GAC Cooperative Purchasing

- Simple Process
  - Execute an Interlocal Contract (ILC) found on the www.hgacbuy.com website
  - Obtain specific product details at the website
  - Contact National Car Charging and mention H-GAC to get a definitive quote
  - Send PO directly to us and we handle reporting to H-GAC
  - We invoice you directly
  - Be sure to CALL US FIRST!

NATIONAL CARCHARGING

Contact Information

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  - Stay connected
    - Twitter @natlcarcharging
    - Facebook: www.facebook.com/nationalcarcharging
  - CALL US FIRST! You'll be glad you did.

NATIONAL CARCHARGING