Electric Vehicles in North Texas

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October Public Meetings, 2018
Electric Vehicle (EV) 101
Market Availability as of July 2018:
26 PHEVs
19 EV/PEVs

- Hybrid Electric Vehicle (HEV)
- Plug-In Hybrid Electric Vehicle (PHEV)
- All-Electric Vehicle (EV) or Plug-In Electric Vehicle (PEV)
Benefits of EVs

- Helps Air Quality - EVs are Zero to Low Emissions
- Lower Vehicle Maintenance and Fuel Costs
- Can “Refuel” at Home
- Energy Security
- Instant Torque - i.e. FAST & FUN to Drive!
## ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)

<table>
<thead>
<tr>
<th>Type</th>
<th>Specs</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>AC 100-120 V</td>
<td>2 to 5 miles per 1 hour of charge</td>
</tr>
<tr>
<td></td>
<td>12 or 16 amps</td>
<td></td>
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<tr>
<td></td>
<td>1.44, 1.92 kWh</td>
<td></td>
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<tr>
<td></td>
<td>J1772 charge port</td>
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</tr>
<tr>
<td></td>
<td>10 to 20 miles per 1 hour of charge</td>
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</tr>
<tr>
<td></td>
<td>16-80 amps</td>
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</tr>
<tr>
<td></td>
<td>3.3-19.2 kWh</td>
<td></td>
</tr>
<tr>
<td>Level 3/DC Fast Charge</td>
<td>DC 200-450 V</td>
<td>60 to 80 miles per 20 minutes of charge</td>
</tr>
<tr>
<td></td>
<td>≤ 200 amps</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≤ 90 kWh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J1772 combo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHAdeMO combo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tesla combo</td>
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</tr>
</tbody>
</table>

Source: Alternative Fuels Data Center
HOW DO EVs AFFECT THE GRID?

The Electrical Load of 3 EVs Is Approximately Equal to That of 1 Average House
**EV FORECASTS**

### Electric Vehicle Forecast as a Proportion of Total U.S. Fleet Composition

- **Energy Innovation Policy & Technology LLC**
- **International Monetary Fund (Fast-adoption)**
- **International Monetary Fund (Slow-adoption)**

### Electric Vehicle Forecast as a Proportion of U.S. New Car Sales

- **Energy Innovation Policy & Technology LLC**
- **Edison Electric Institute (EEI)**
- **Electric Power Research Institute (Medium Adoption)**
- **Electric Power Research Institute (High Adoption)**

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**Energy Innovation Policy & Technology Source:** [https://us.energypolicy.solutions/](https://us.energypolicy.solutions/)

**Edison Electric Institute Source:** [http://www.edisonfoundation.net/iei/publications/Documents/IEI_EEI%20PEV%20Sales%20and%20Infrastructure%20through%202025_FINAL_02.pdf](http://www.edisonfoundation.net/iei/publications/Documents/IEI_EEI%20PEV%20Sales%20and%20Infrastructure%20through%202025_FINAL_02.pdf)


EVs in North Texas
As of October 1, 2018
Texas Registration: 15,056
DFW Area: 5,752 (38% of TX)

*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
REGIONAL ELECTRIC CHARGING STATIONS

DC Fast Charging Stations*
DC Fast Charging Stations* - Call Ahead
DC Fast Charging Stations - Tesla
Level 2 Charging Stations**

EV Registration by Zip Code
- 1 - 11
- 11 - 31
- 31 - 59
- 59 - 80

Note: DC Fast Charging Stations may include Level 2 Charging Stations
Note: Level 2 Charging Stations may include Level 1 Charging Stations

North Central Texas Council of Governments
July 2018
NATIONAL DRIVE ELECTRIC WEEK (NDEW)

A Celebration of All Things Electric Held Every September

Gathering of Vehicle Owners, Dealerships, Manufacturers, and Anyone Interested in EVs

2018 Event: Over 169 EVs gathered (in the rain!) at the DFW NDEW held in Grapevine

2nd Largest National Drive Electric Week in the Country

driveelectricDFW.org
Funding Opportunities
## CURRENT EV INCENTIVES

<table>
<thead>
<tr>
<th>Vehicle Incentives</th>
<th>Amount</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug-In Electric Drive Motor Vehicle Credit</td>
<td>Up to $7,500</td>
<td>Federal</td>
</tr>
<tr>
<td>Light-Duty Motor Vehicle Purchase or Lease Incentive Program (LDUP)</td>
<td>Up to $2,500</td>
<td>State of Texas</td>
</tr>
<tr>
<td>AirCheckTexas Drive a Clean Machine Program</td>
<td>Up to $3,500</td>
<td>Participating Counties</td>
</tr>
</tbody>
</table>

**Total Possible Savings Per Vehicle**: Up to $13,500

**An Additional $3,000 Rebate on a Nissan LEAF Available to Oncor Customers; Must Present Incentive Flyer**

[www.dfwcleancities.org/evnt](http://www.dfwcleancities.org/evnt)
EV OPPORTUNITIES THROUGH THE VOLKSWAGEN SETTLEMENT

Total Settlement to Date: $14.7 Billion

Vehicle Buyback and Modification - $10 Billion

Environmental Mitigation Trust (EMT) - Distributed to States - $2.7 Billion

Texas’ Share: $209 Million

15% set aside for EV Infrastructure

Zero Emission Vehicle (ZEV) Investment - Managed by Electrify America - $2 Billion

Will Establish a Comprehensive DCFC Charging Network Across the U.S.

Plans Announced to Invest on Interstates Connecting DFW to Neighboring States and Major Cities
FOR MORE INFORMATION

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DFW Clean Cities and Electric Vehicles
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