



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

ELECTRIC VEHICLE CHARGING STATIONS

**Board Presentation
January 28, 2019**



PURPOSE OF PRESENTATION

- **Review of Existing AVAQMD Grant**
- **Review of Year 2018 Usage of Electric Vehicle (EV) Charging Stations**
- **Discussion of Use of EV Station During Business and Non-Business Hours**
- **Steps in Seeking additional Grant for EV Stations**



History of Present Grant

- AVAQMD Grant – August 30, 2017 (50% Cost Share)
- Two Electric Vehicle Charging Stations
 - CPE1001-CMB Level 3 – Fast Charger
 - CT4001-CCM Level 2– Slow Charger

Installation and Operation

- AVAQMD Review – October 26, 2017
- Ribbon Cutting/Press Event – December 5, 2017
- Operational – December 5, 2017





CT4001-CCM (Level 2)

(Slow Charger)

Used by employees



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CPE1001- CMB Level 3

(Fast Charger)
Used by public and customers



COMPARISON OF CHARGING UNITS

Fast Charger

- 100 miles per charging hour
- One charging port
- Cost = \$13,942 for hardware
- Does not include installation

Slow Charger

- 25 miles per charging hour
- Two charging ports
- Cost = \$7,474 for hardware
- Does not include installation

Note: Costs for hardware are 2017 costs.



COST COMPARISON

Fast Charger

- Hardware = \$13,942
- Installation
 - *Material = \$2,891*
 - *PWD Labor = \$6,000*
- Subtotal = \$22,833

Slow Charger

- Hardware = \$7,474
- Installation
 - *Material = \$2,700*
 - *PWD Labor = \$6,000*
- Subtotal = \$16,174

Effective Cost Share Percentage = 81%
(due to District doing the installation)



USAGE DURING 2018

Kilowatt Hours Used

- 18,211 KW

Greenhouse Gas Emission Reduction

- 7,649 Kilograms or 16,828 pounds

Number of times used

- 1,125

Gasoline Saved

- 2,286 gallons

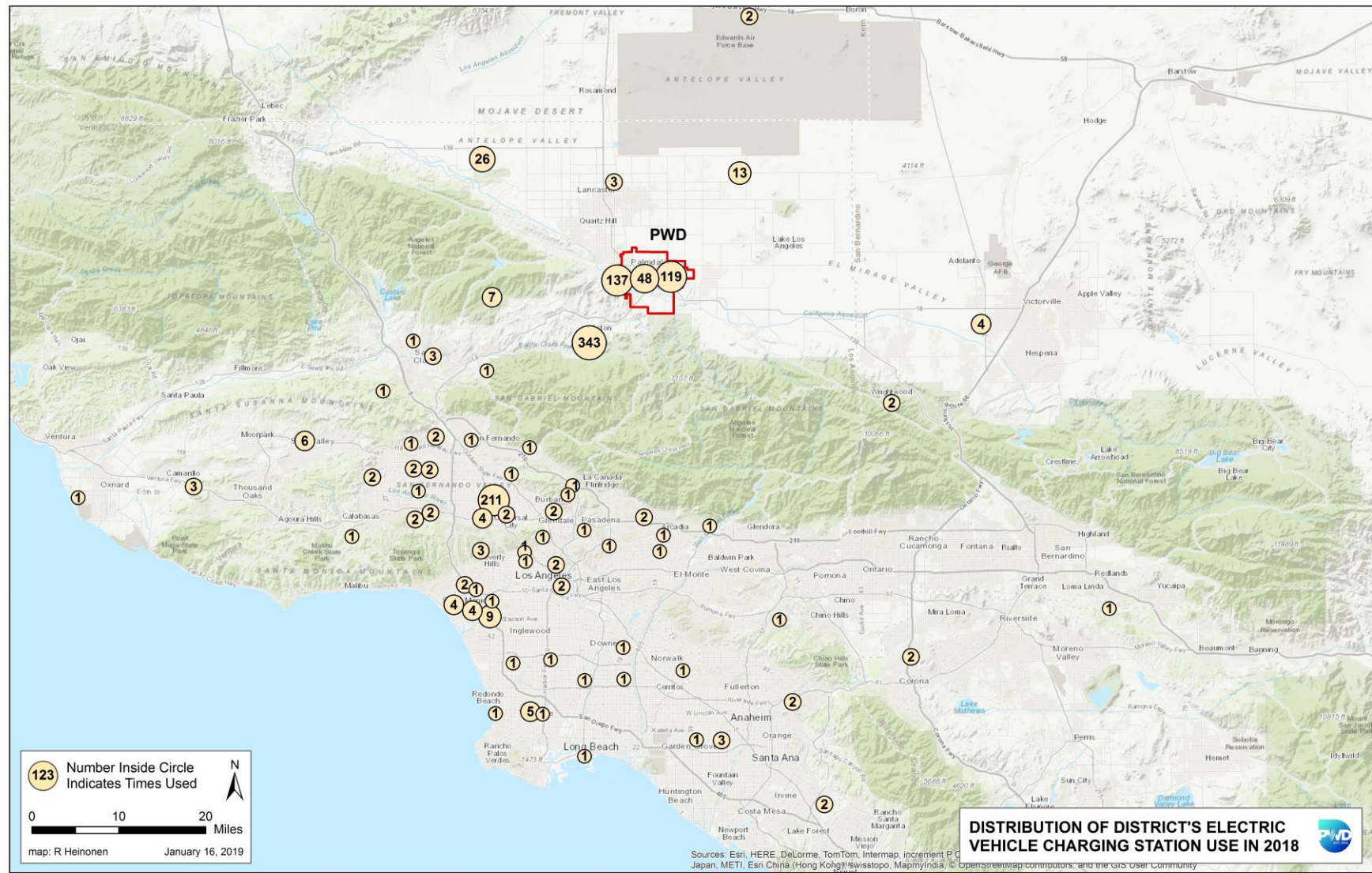


Frequency of use by customers in PWD Service Area

Used 304 times by those living in PWD service area (**27%** of use)

Frequency of use by non-customers outside PWD Service Area

Used 821 times by those living outside PWD service area (**73%** of use)

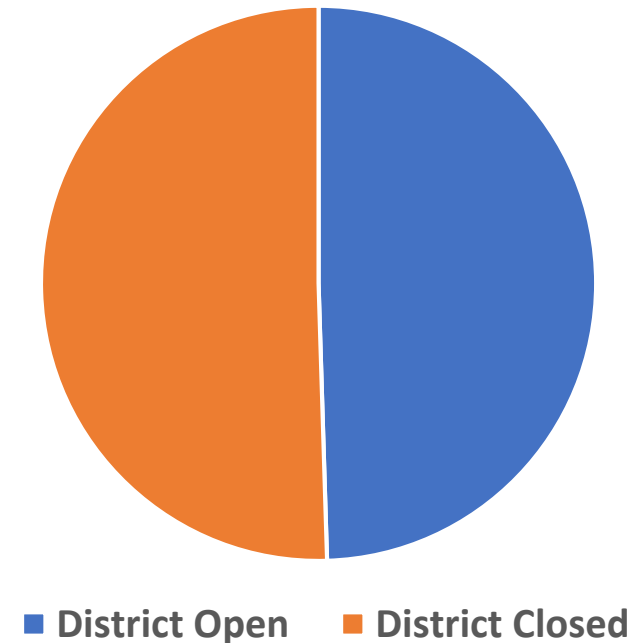


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COMPARISON OF USAGE TO DISTRICT HOURS

- **During District Business Hours**
 - *557 times (49.51%)*
- **During District Non-Business Hours**
 - *Weekends = 225*
 - *Before 6am = 30*
 - *After 6pm = 313*
 - *Subtotal = 568 (50.49%)*

Comparison of Time of Usage



Steps in Pursuing Another Grant

- Brief overview of AVAQMD Grant Funding Application Process
- Identify location(s) at District for EV station
- Contact vendors on cost of EV station hardware
- District staff develop an estimate of cost sharing agreement with AVAQMD
- Prepare application to AVAQMD
- Present application at a future Board meeting for Board approval





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Thank you!