| DOCKETED                |                                                                          |
|-------------------------|--------------------------------------------------------------------------|
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| <b>Project Title:</b>   | Fuels and Transportation Merit Review                                    |
| TN #:                   | 211161                                                                   |
| <b>Document Title:</b>  | Presentation - Burbank Water and Power Electric Vehicle Charging Program |
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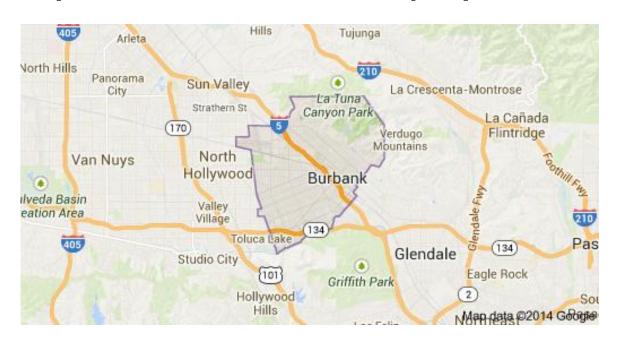
# Burbank Water and Power Electric Vehicle Charging Program



A Presentation to the California Energy Commission – Merit Review April 25, 2016

#### Burbank

- 105,000 residents in 17 square miles
- Media Capital of the world
- Daily influx of studio employees



#### EV Charging Program Philosophy

- Customer Service
  - Electric / Water / Fiber
  - EV charging? Yes!
- Cost-Effectiveness
  - Grants
  - Service Revenue
- Grid Impacts
- Environmental and Policy Impacts

## **EV** Charging Program

#### Residential

- Rebates up to \$500 for Level 2 equipment
- Time of Use pricing 8 cents per kWh after IIp and on weekends

#### Commercial

- Rebates up to \$1,000 for Level 2 equipment
- Time of Use pricing already in effect

#### Public

- 28 chargers at 14 locations throughout Burbank
- Charging rates of 17 cents/kWh nearly all hours, increasing to 31 cents/kWh during summer weekday peak hours – 4pm to 7pm

## EV Charge – 2011 pilot

- I I Level 2 chargers located mostly in downtown Burbank
  - DOE grant funded
  - Experimental pricing



#### Successes and Findings

- The EV Market increased:
  - Usage of the chargers doubled every year
  - Charging revenue became sustainable
- Customers wanted:
  - More chargers
    - Throughout the city and not just downtown
    - Accessible to Multi Unit Dwellings
  - Convenience just like at a gas station
  - Equitable pricing per kWh
  - More enforcement
    - Primary remove ICE cars
    - Secondary more EV turnover

#### Charge 'N Go – Summer 2015

- FIRST Curbside project in the country!
- 8 dual Level 2 chargers at 8 sites throughout the city
- Located curbside on public right of way
- Funded through a CEC grant
  - \$230,000 total project cost (about \$30k per site)
  - \$165,000 paid by CEC
  - \$65,000 BWP net cost
    - Estimated payback of 5-10 years
- Accepts payment through credit card or smartphone app

#### Charge 'N Go – Details

- Equipment dual charger w/ retractable cord
- Internal outreach with City Departments, including Public Works and Police/Traffic
- External outreach to businesses whose patrons are losing their "public" parking spaces
- Marketing through:
  - Local and regional media
  - Driver resources such as Plugshare
- Data collection and analysis:
  - Greenlots dashboard
  - UCLA Luskin Center

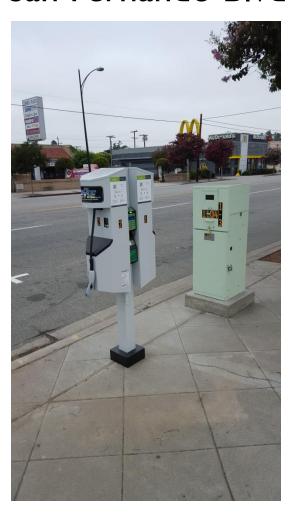
• 340 N Buena Vista – near Library and Park



• 2116 N Glenoaks Blvd – near Starbucks



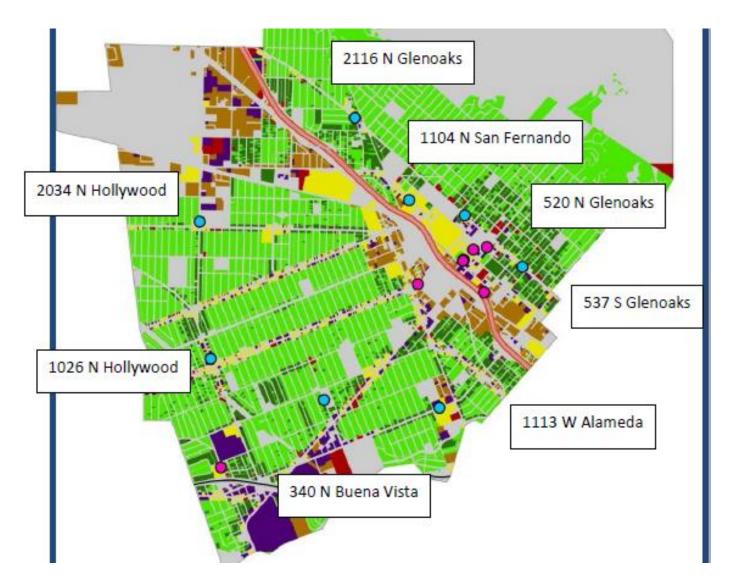
I 104 N San Fernando Blvd – near retail



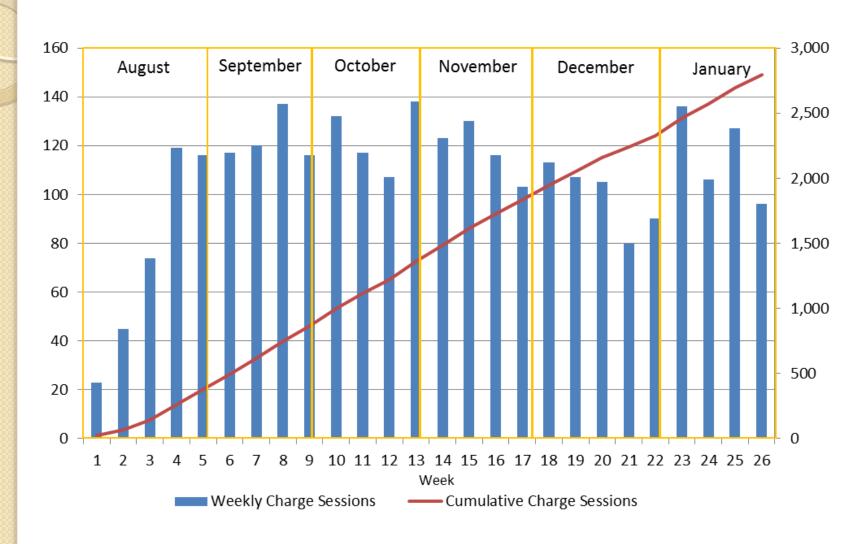
• III3 W Alameda Ave – near Starbucks, retail



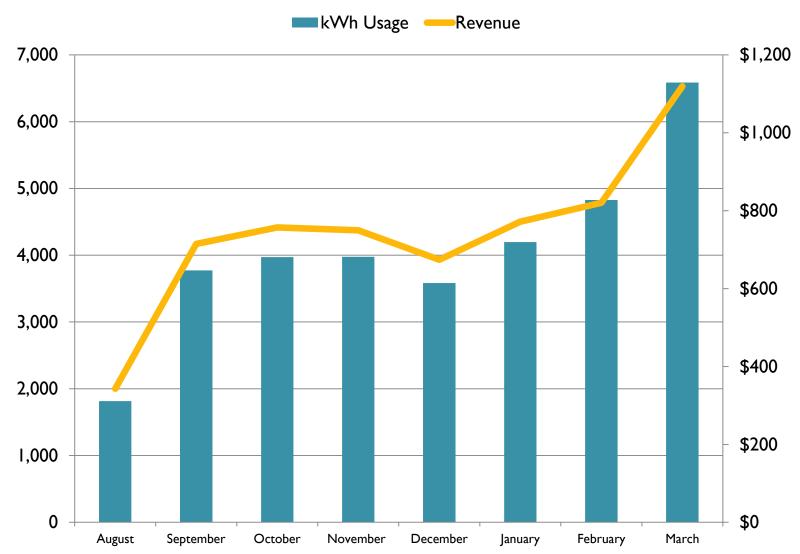
## Charger Sites



#### Cumulative Curbside Charge Sessions over Time



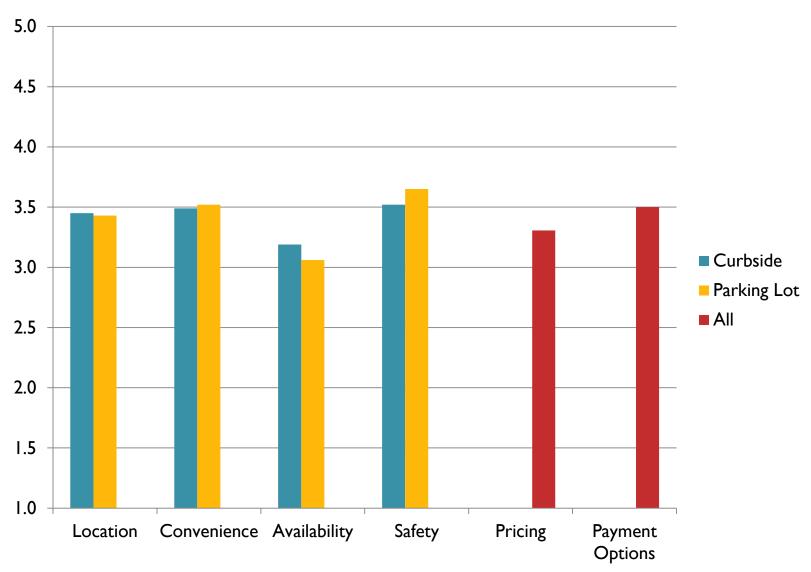
#### Usage and Revenue over Time



## Share of Charge Sessions by Time of Day by Charge Station Type



#### Customer Satisfaction



#### Findings

- Daily monitoring of charger status and usage
  - Comparison of curbside versus parking lot / legacy chargers
  - Customer satisfaction
    - Availability EV residence time, ICEing, etc.
    - Repairs and maintenance
    - Payment options
- Strategic expansion of charger network
- Increase accessibility for Multi Unit Dwelling residents

#### Acknowledgements

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- Questions
- Discussion
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