Electric Vehicle (EV) Charging Station Update

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EST. 1848 GEORGETOWN TEXAS

Council Workshop
August 27, 2019

Agenda

- 2011 Early Adopter
- 2019 Outlook
- 2019 EV Market Share
- Station Summary
- Recap of Usage During Program (2011-2019)
- Program Direction Options
  - Cost Summary

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2011 - Early Adopter

- City was an early adopter of technology
- Lack of a wide spread charging network
  - Department of Energy invests in a nationwide charging network – Smart Charge America program
  - Six (6) stations awarded to Georgetown
- Attract EV drivers to utilize downtown businesses
- Evaluate the potential for future revenue

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2019 - Outlook

- Barriers for EV adoption
  - Charging station locations
  - Battery range
  - Cost
- Battery costs continue to decline
  - Range continues to increase
  - Stations no longer needed to be in close proximity
- Cost parity between EV's and conventional vehicles expected in the next 10 years

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2019 EV Market Share

- Market share continues to grow
  - increased vehicle models and charging infrastructure.
  - 20 models available in the Austin area
- Market share for Austin metro area
  - Top 15 areas among new vehicles.
  - 3% of vehicles bought in 2018 were EV's

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Station Summary

- Six (6) stations originally installed in the downtown area
  - Two (2) at the Recreation Center (removed June 2019 due to inoperability)
  - Two (2) at the parking lot on 9th and Main (removed April 2019 due to inoperability)
  - One (1) behind the former council Chambers (removed June 2019 due to inoperability)
  - One (1) at the Library (still active)
- Stations have reached their End-of-Life, replacement parts are not available
- Stations no longer allowed on the Chargepoint network as of December 2019.

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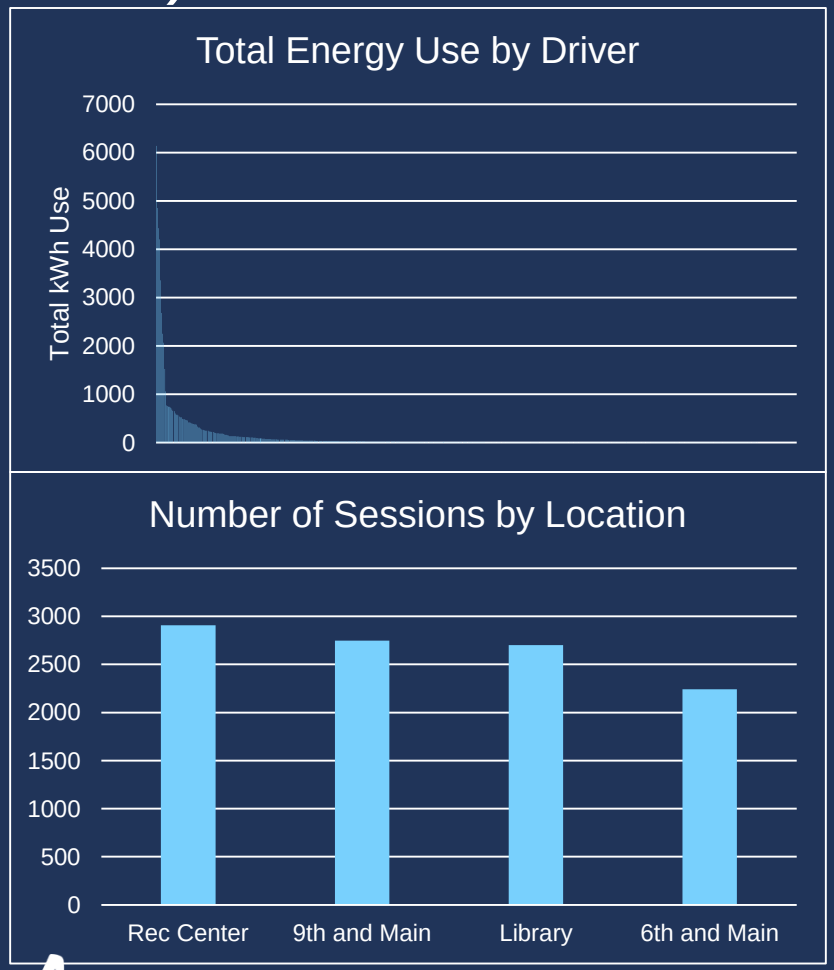
Recap of Usage During EV Program (2011-2019)



- 10 drivers accounted for 47% of the usage.
- Most used stations
  - Rec Center
  - Parking lot at 9th and Main
  - Library

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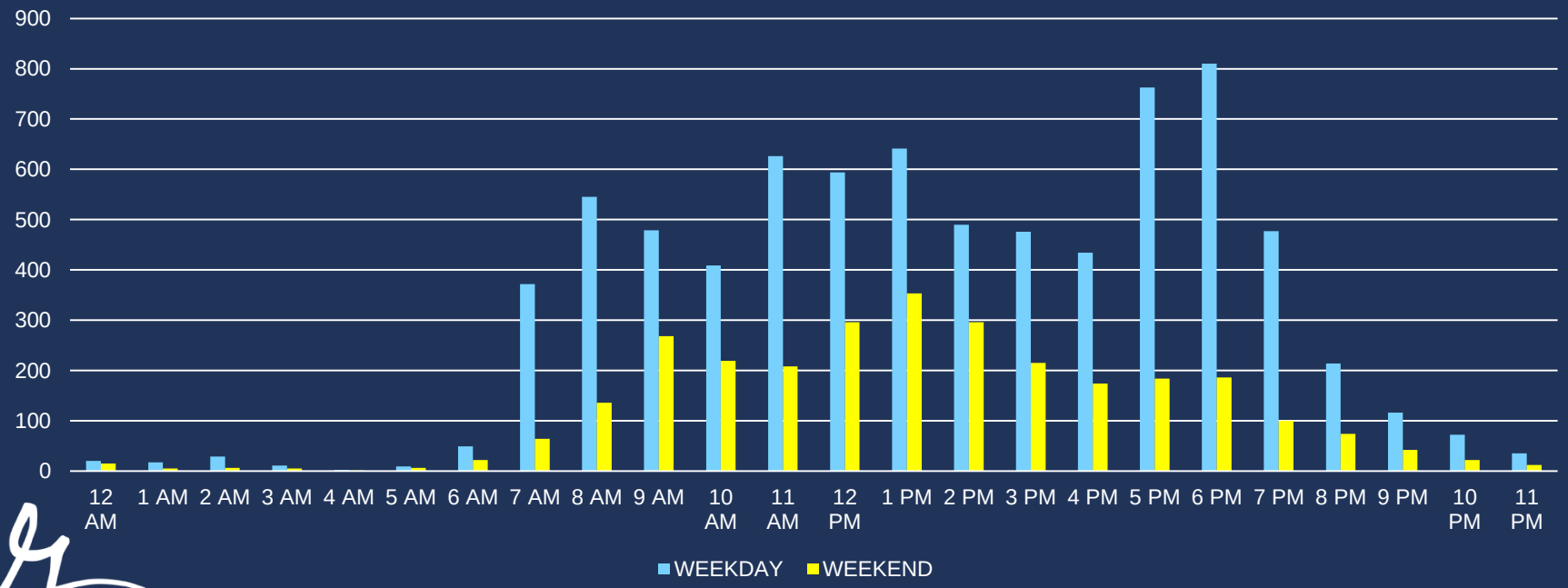
Recap of Usage During EV Program (2011-2019)

- Majority of the usage was during the day
  - Peak usage occurred around 6:00pm.
- Pattern has changed over time
  - From weekends to weekdays.



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Program Direction Options

- Option A: Status Quo
  - One (1) Station currently in operation
    - Remove upon failure or December 2019 – whichever comes first
    - Removal cost is approximately $300
  - Let market determine & drive program with no City assistance

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Program Direction Options

Option B: City owned and operated

- Replacement Cost: $21,000
  - Purchase and install five (5) Level 2 Charging Stations.
- Annual maintenance/licensing fee: $2,200/year
  - Renewable every year after the first year.
- Replacement cycle : every 5 years
- Total 5 year Investment : $29,800 + energy charges
- Energy Charges: Paid by customers using stations
- City is competing with other market providers

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Program Direction Options

Option C : Station as a Service

- Replacement Costs: $0
  - City owns the property - vendor owns the station.
  - Utilize existing station locations
  - Contract with 3rd party to provide stations and service
- Annual Service Fee: $7,500 + energy charges
- Total 5-year investment: $37,500 + energy charges
- Energy Charges: Paid by customers using stations
- City is partnering with vendor for technology & maintenance
  - City is competing with other market providers

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Program Direction Options

Option D: Customer Rebates for EV infrastructure

- Replacement Cost / Annual Fees: $0
  - Stations would be placed on customer's side of the meter,
  - Operation and maintenance would be customer's responsibility
- Rebate Offering: $4,000 - $9,000
  - Market costs for Level 2 charging stations is between $4,000 and $9,000.
  - Set rebate at a desired recovery percentage or at full cost up to a certain level
- Total 5-year investment: Depends on # of rebates
  - Set Maximum amount per year
- Commercial customers have expressed interest in EV chargers as an employee benefit, and to draw business.
- Energy costs paid through rebated customer's electric rate
- Influencing market through station placement

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Cost Summary: 5 Stations

Option	5 Year Investment	Energy Charge	Market Participation
Option A: Status Quo	$0	City	Market drives program
Option B: City owned and Operated	$29,800	Customer	City competes with market providers
Option C: Station as a Service	$37,500	Customer	City's partnership competes with market providers
Option D: Customer Rebate	Predetermined Maximum	Customer	City influences locations

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Questions?

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