



The Sharing Economy for the Electricity Grid in Connected Communities

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Challenge:

- Can we use a Sharing Economy model to exploit underutilize EV assets for electricity services?

Solution:

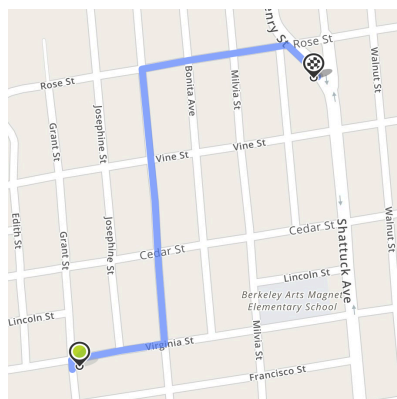
- Sharing EVs as mobile energy storage for demand charge reduction
- Piggyback on electrified transportation network companies (TNCs) for real world implementation

Supply Side



- Supply side
- Increasing EV adoption
 - 95% of time parked

Matching Platform



- CPS platform manages
- Matching
 - Flow of information
 - Flow of money

Demand Side



- Demand side
- Eager to reduce demand charge
 - Installed bi-directional charger

Scientific Impact:

- Temporal statistics for peaks in C&I loads
- Platforms for sharing EVs to jointly provide transport & electricity services

Broader Impact:

- Increase EV utilization and adoption
- Help businesses to manage their peak loads
- Help TNCs to better utilize their fleets and reduce traffic congestion

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