



# Disneyland Resort Electric Vehicle Charging April, 2014





# Disneyland Resort



- California's premiere tourist attraction, with the single largest cumulative attendance (>700 million) than any theme park in the world.
- 500 acre multi-day family destination, complete with two theme parks, three hotels, and a shopping, dining, and entertainment district known as Downtown Disney.
- 26,000 Cast (employees)





# 2014 Environmental Targets







# Electric Vehicle Charging



- Started with level 1 (110V outlets) electric vehicle chargers – offered free of charge
- In 2013, a corporate policy was issued not to provide power free of charge.
- In an effort to comply and to get on the EVC map, Disneyland Resort installed 30 ‘networked’ electric vehicle chargers for Guest & Cast.
- There are additional plans for electric vehicle charging expansion to include resort-wide coverage.

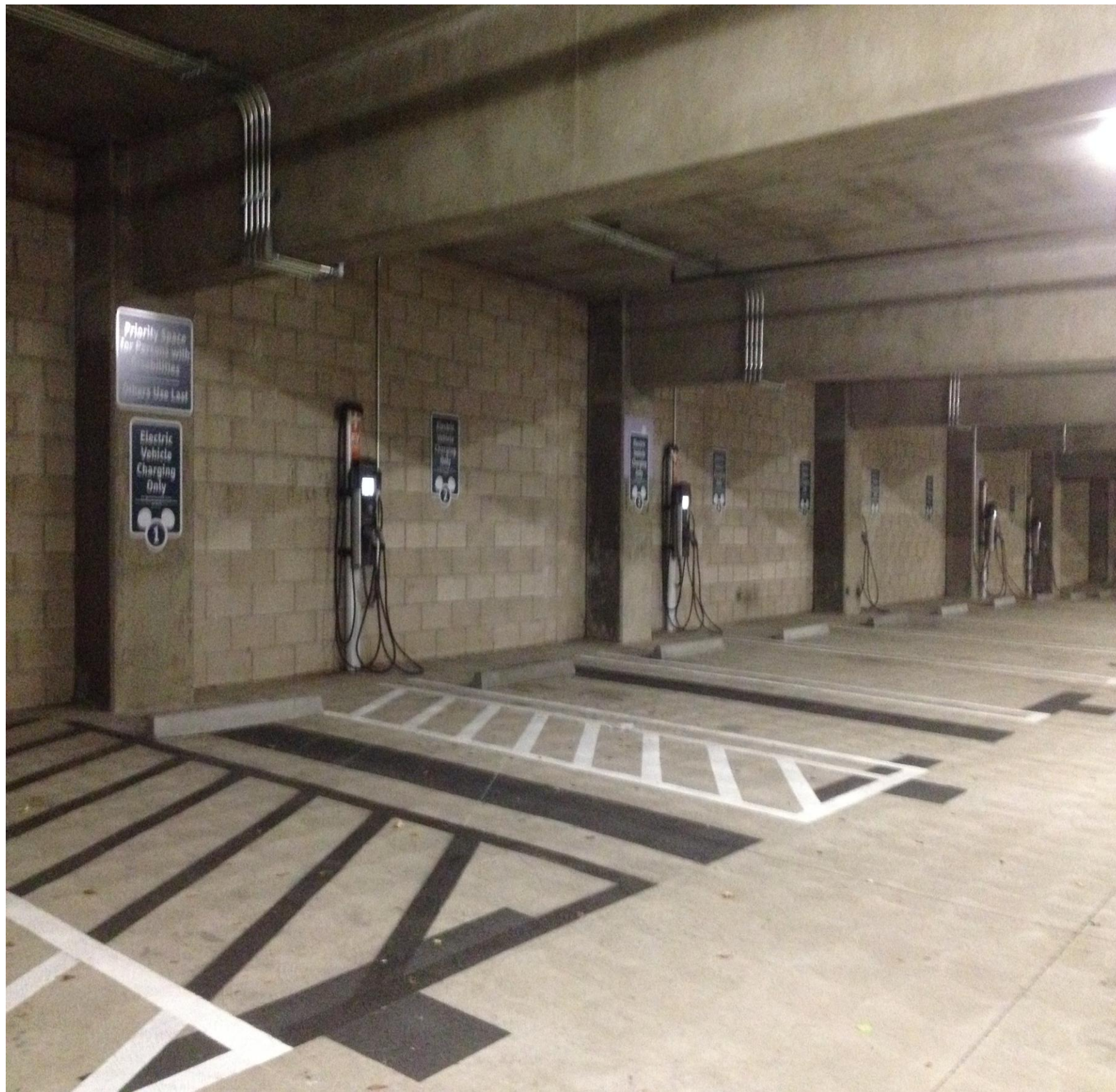
● Existing EVCs

● Planned EVCs





# Developing an EVC Strategy



- Focused on cost effective installation sites for maximum impact.
- Used demand analysis and pricing strategies to manage EVC supply & demand and pro forma development
- Developed a communication / signage strategy
- Developed a low touch operational and maintenance plan.
- Developed contingency plans for the unforeseen.





# Post Implementation Observations



- After 60 days of utilization, Cast (employee) electric vehicle chargers are 75% utilized on a daily average basis.
- The peak hour utilization rate is below 80%.
- The average charge (plug-in) time is 6.5 hours, with a 2.5 actual charge time.
- Average KWh/vehicle is 8.12