


# Electric Vehicle Fast Charging Technology and Demand Charges

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“Opportunities for Vehicle Electrification in the Denver Metro area and Across Colorado”

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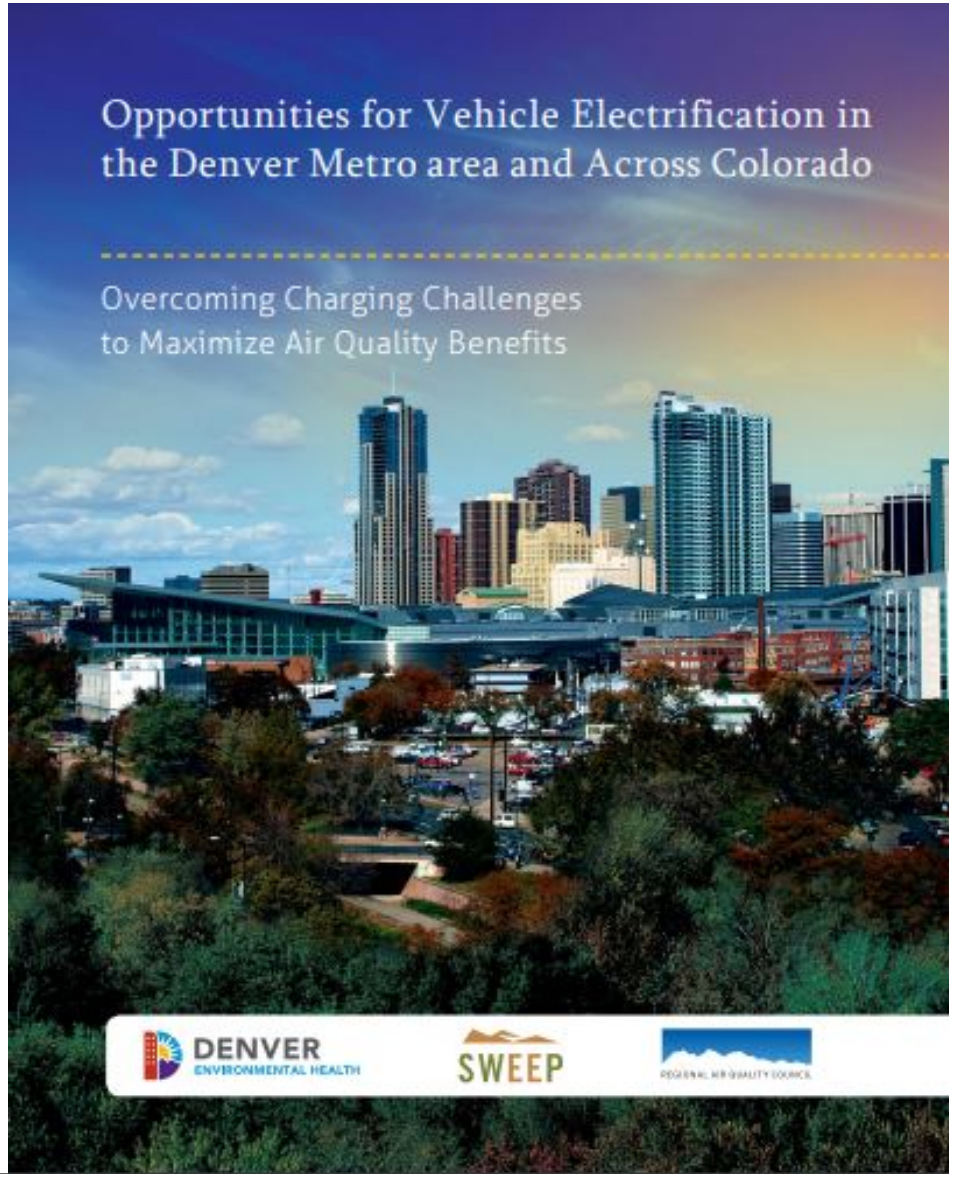
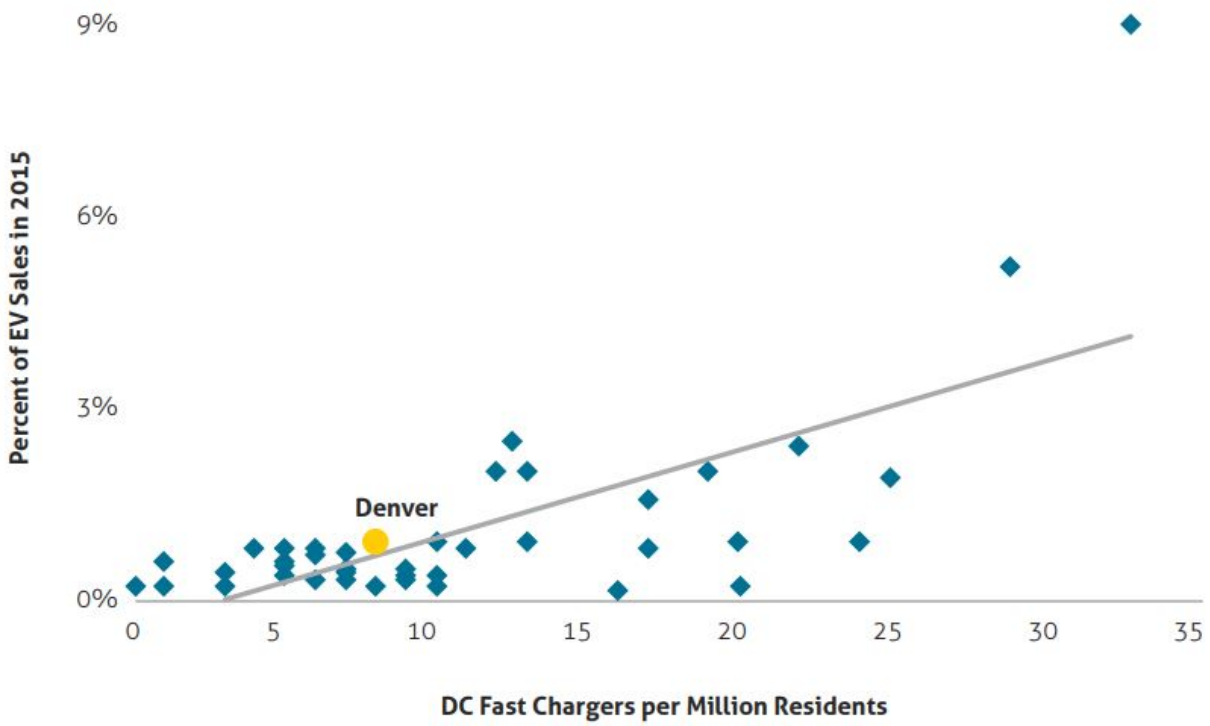


# Relationship between PEV Sales Rate and DCFC Stations per Capita by City

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# DCFC Station Challenges

- High Capital Costs

Low Utilization
+ Demand Charges
High Operating Costs

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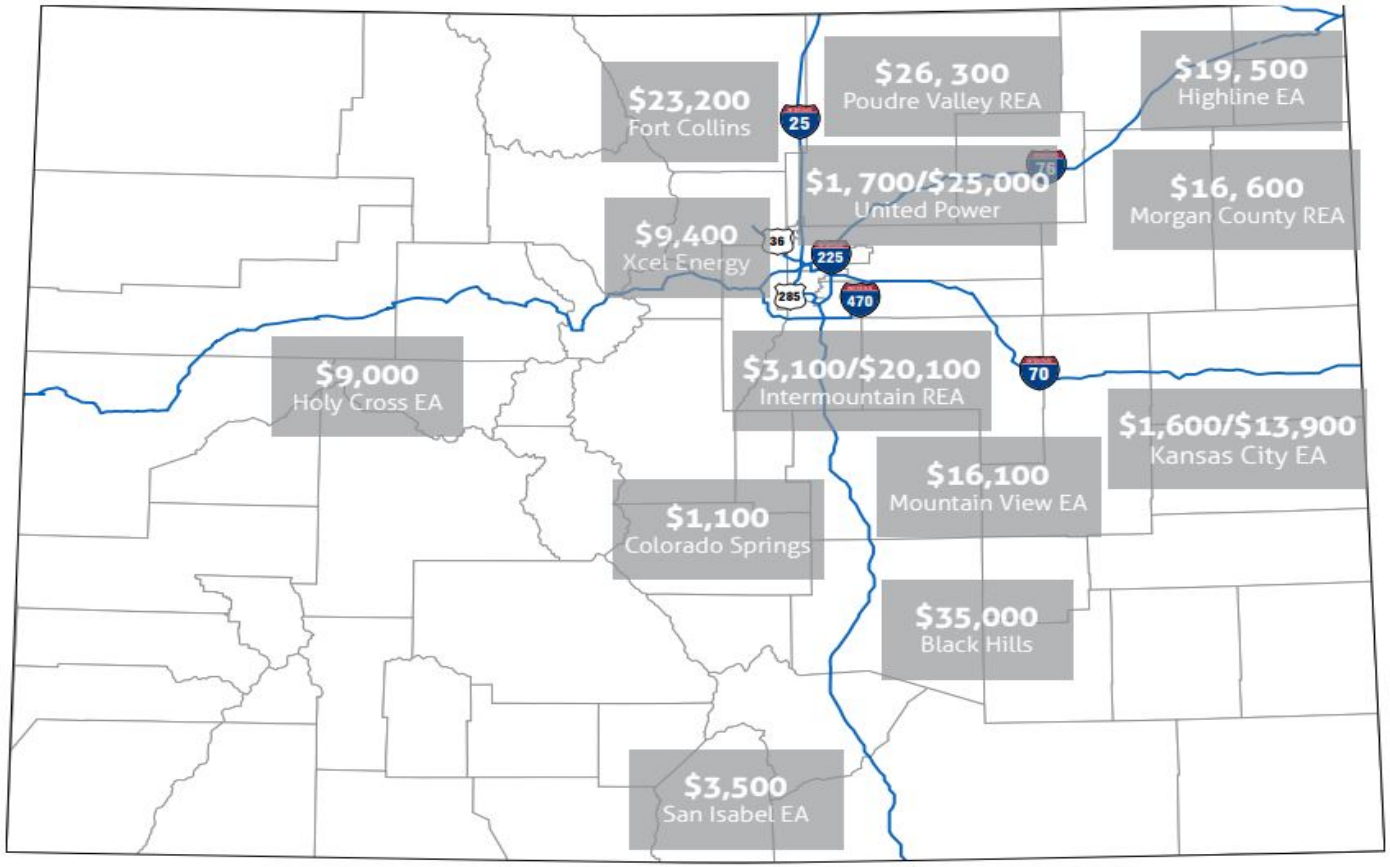


# Variance in Annual Electric Bills for DCFC Stations in Colorado

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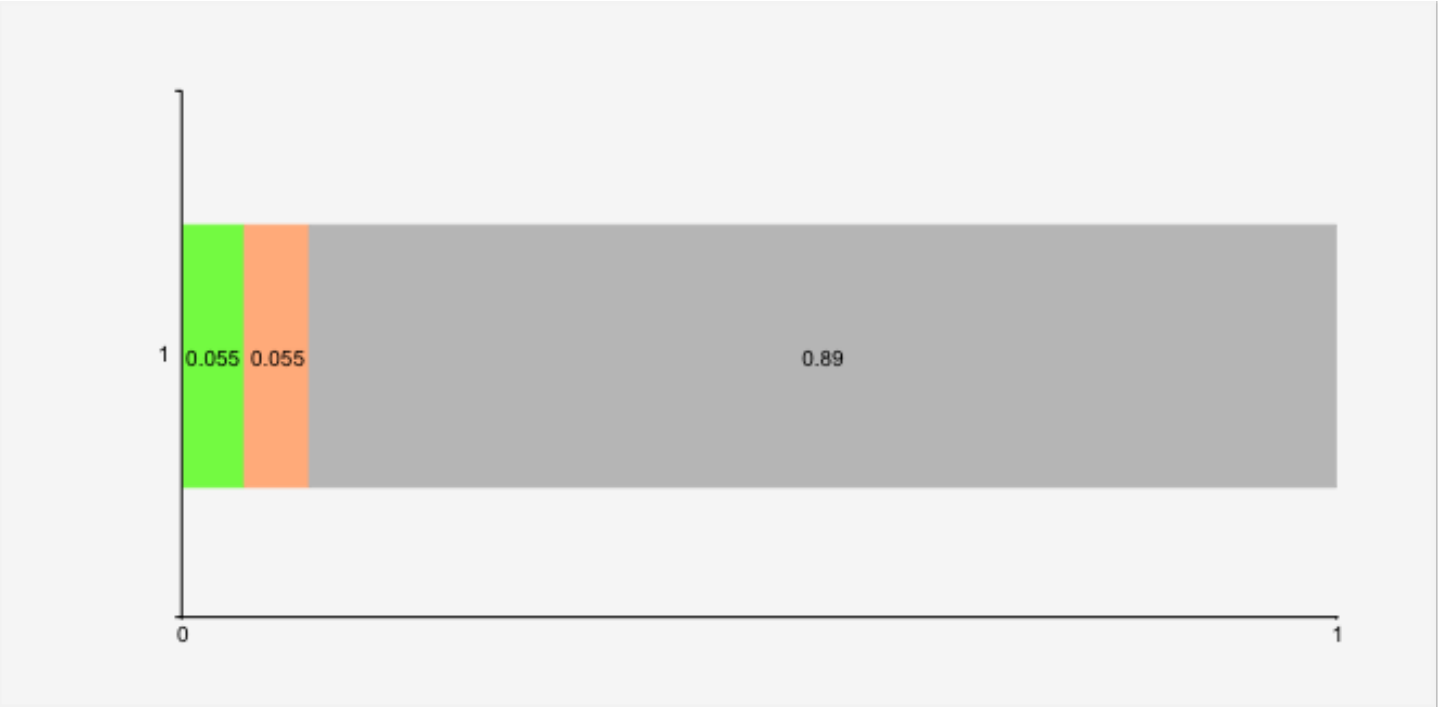
# Across Colorado, Demand Charges Would Account for 89% of a DCFC Station's Electric Bill

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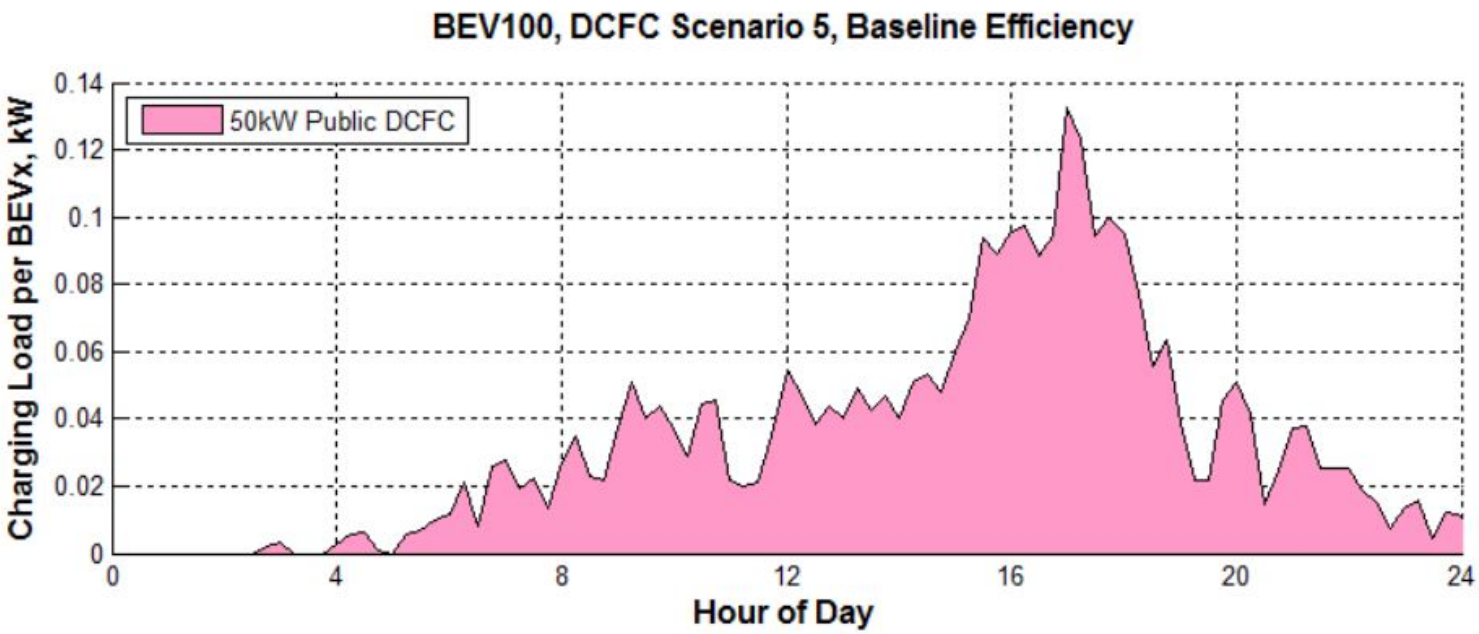
# Modeled DCFC Distribution by Time of Day




Source: NREL, Electric Vehicles in Colorado: Anticipating Consumer Demand for DCFC

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# EV Demand Charge Pilots

- Southern California Edison
  - 5 year suspension of demand charges, higher per kWh rate
- San Diego Gas & Electric
  - Eliminates demand charge, focuses more on coincident peak
- Pacific Power 10 year transitional rate
  - No demand charges (under 1 MW), 3 times higher per kWh rate during peak periods

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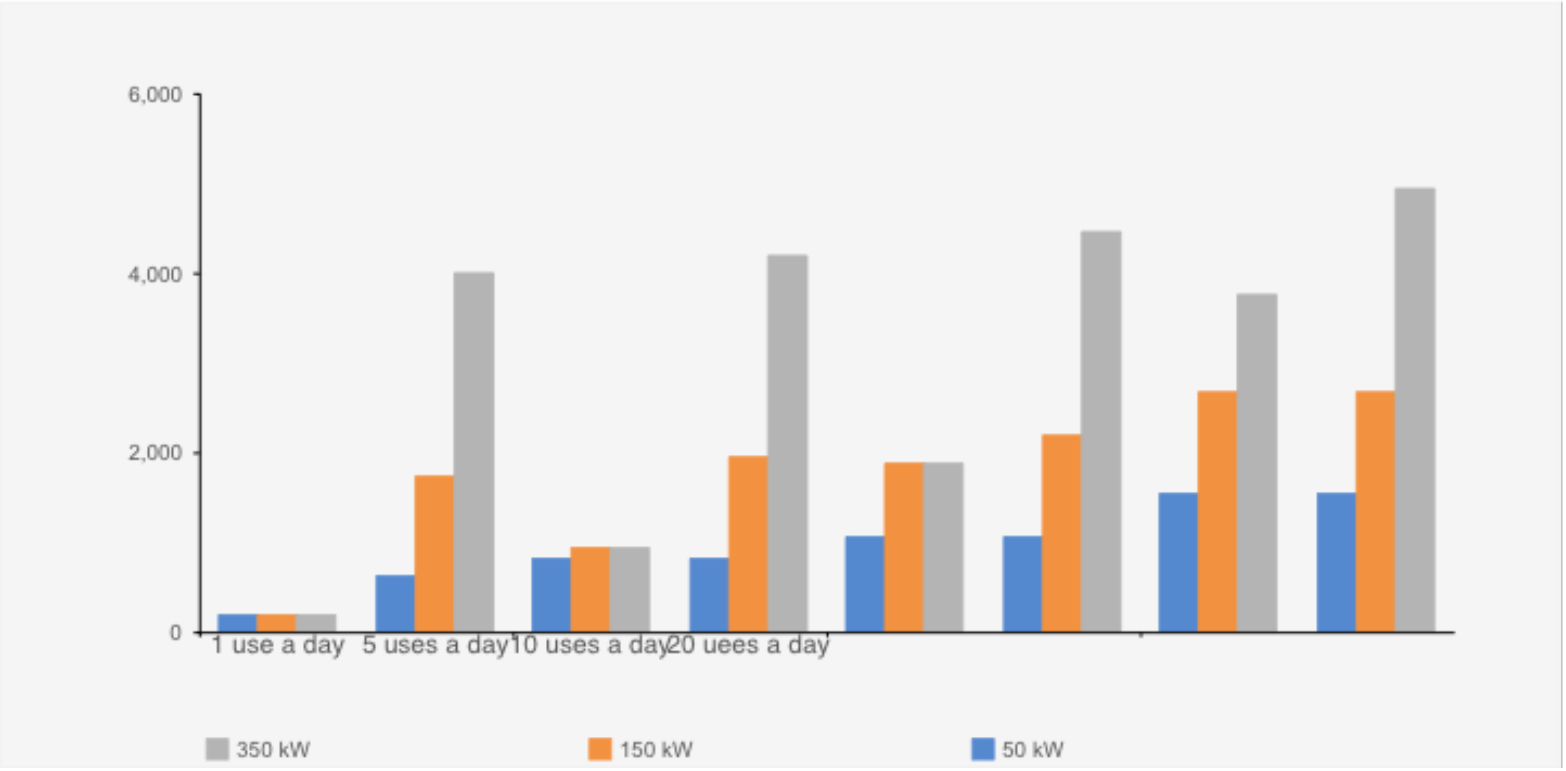
# Xcel Minnesota Demand Charge Limiter

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