



Fleet & EV Transition

Presented by

Office of Sustainability & Air Quality



CURRENT FLEET STATUS

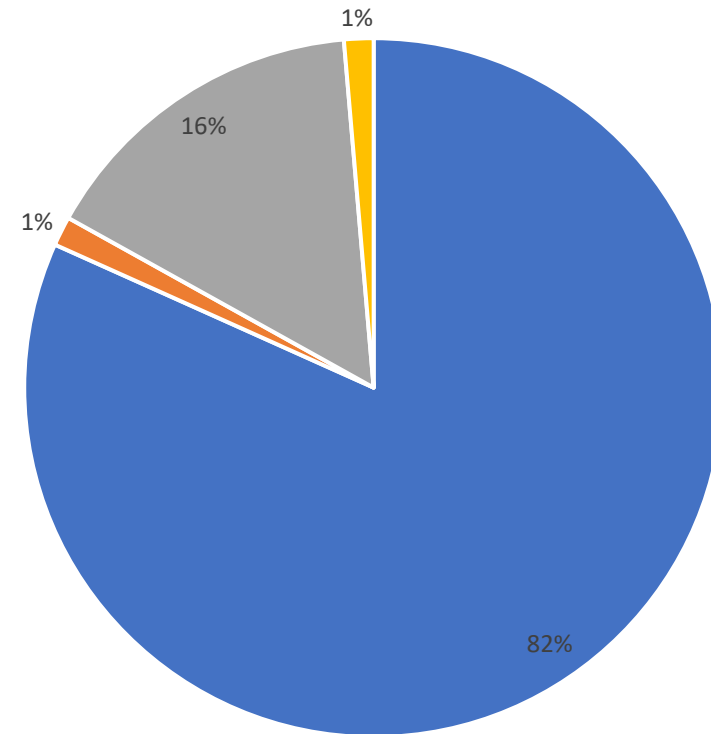
Total vehicles: 560

- Sheriff: 302
- General Government: 239
- Ambulances: 19

Avg age: 7.3 years

Avg mileage: 111,000 miles

Fleet Fuel Type



■ diesel/ gas ■ natural gas ■ hybrid ■ electric



SUSTAINABLE FLEET POLICY

- Goal is to transition to low/zero emission vehicles
- Aligns fleet procurement with strategic goals
- All County facility renovations or new construction projects will include EV charging infrastructure
- Proposed vehicle purchases will be assigned to a tiered system by Fleet Management
 - Tier I – Zero emission vehicle
 - Tier II – Alternative fueled internal combustion engine
 - Tier III – Hybrid internal combustion engine
 - Tier IV – Conventional internal combustion engine – Gasoline
 - Tier V – Conventional internal combustion engine – Diesel



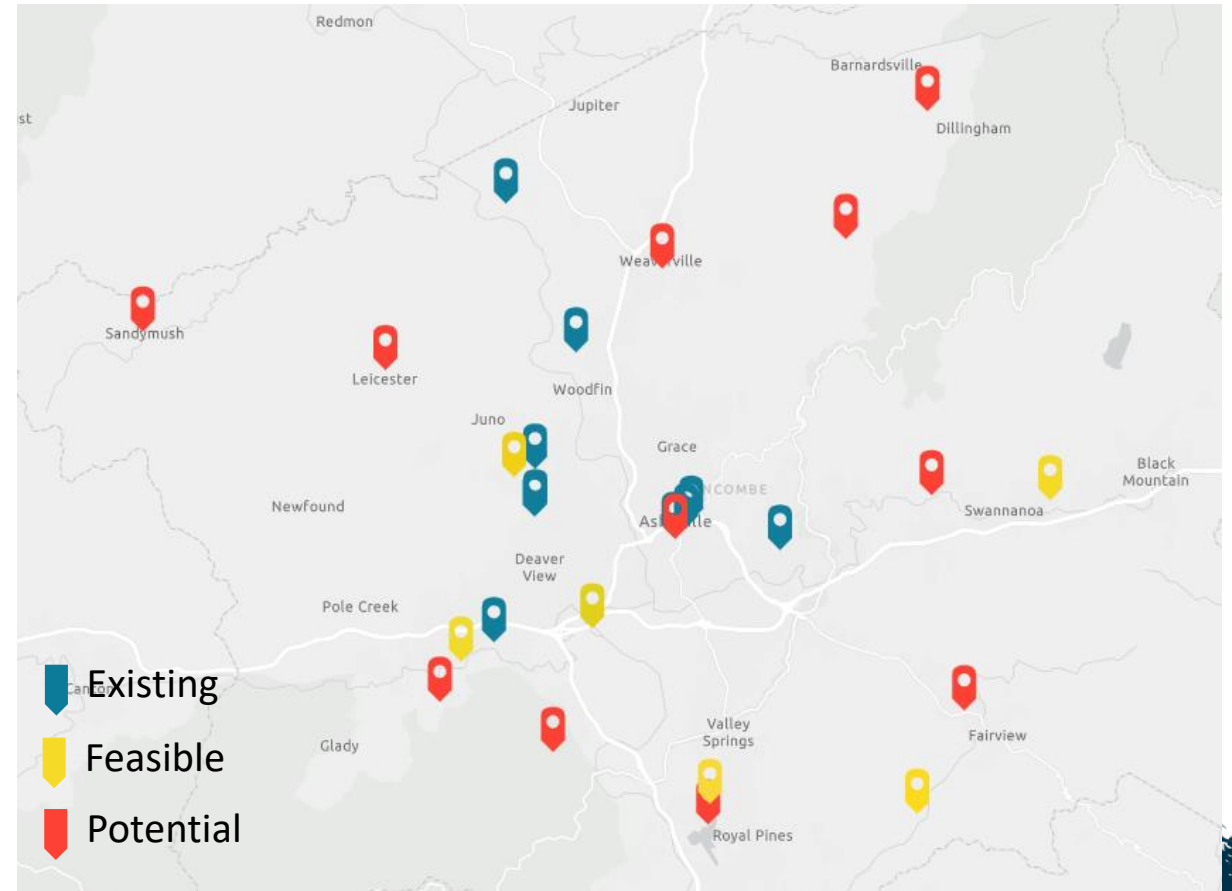
CURRENT STATUS OF COUNTY EVSE

- 32 Chargers; 10 locations (4 public, 6 fleet only)
- Multiple charging models
- Rapidly evolving markets and technologies
- Limited parking and electrical capacity

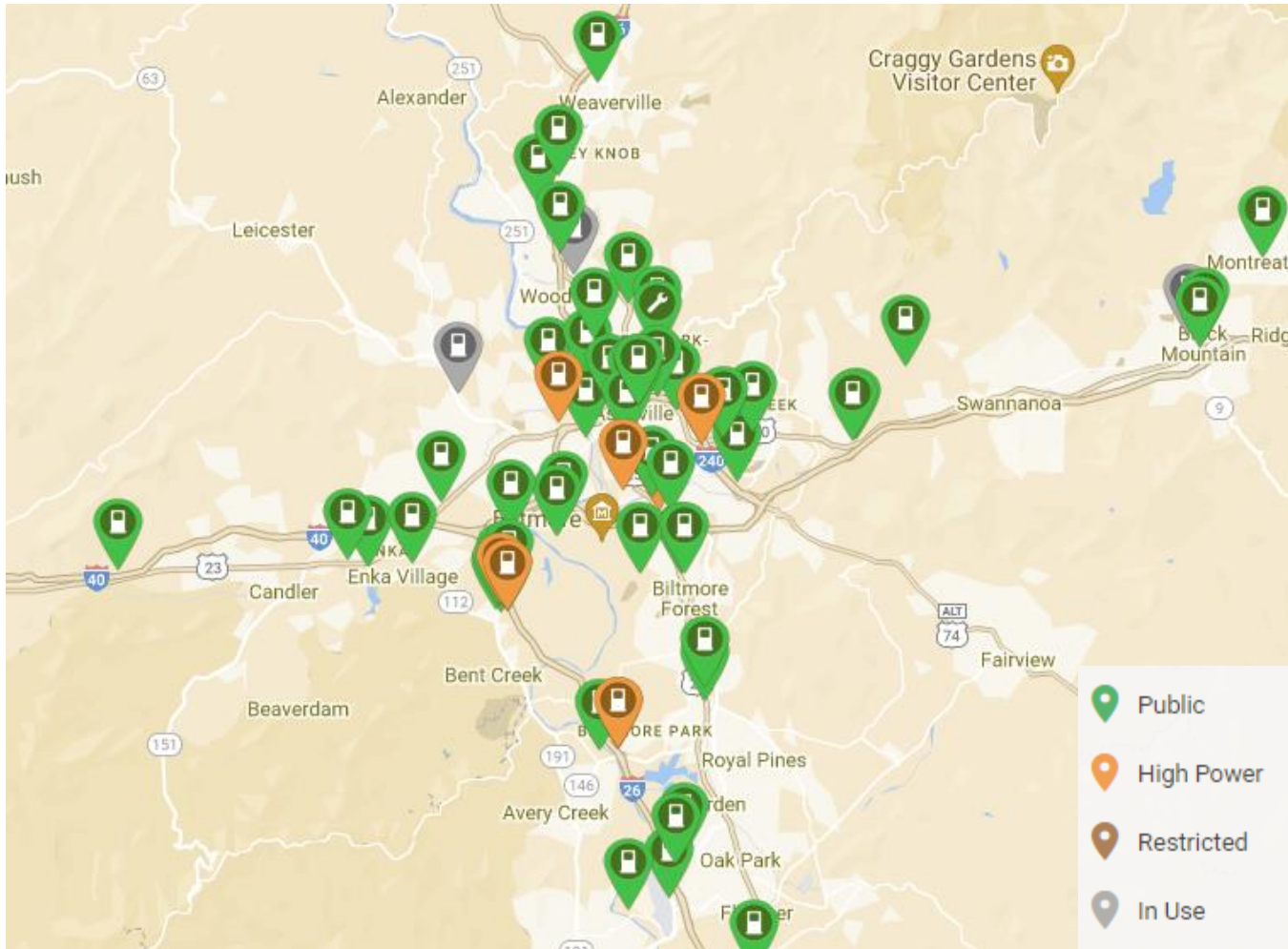
Charge Time Comparison



COUNTY-OWNED CHARGING STATIONS



PUBLIC CHARGING



More public EVSE coming:

- Tesla opening chargers
- NEVI (\$5B)
- IRA tax credits driving private investment
 - Walmart, Shell, Pilot, BP
 - Joint Manufacturer Venture
- VW Funding
- DEQ funding transportation project
- Duke Home Charger Credit



EV INFRASTRUCTURE SAMPLE PROJECTS

Project: College Deck

Estimated Project Cost: ~\$425K

Est. Utility rebate: ~\$36K; Est.

Federal Rebate: ~\$116K

Total project cost: ~\$273K

Level-2 chargers: 28

DCFC: 1

Project: Land Of Sky Offices (completed)

Project Cost: ~\$16K

Grant award: \$15K

Total project cost: ~\$1K

Level-2 chargers: 3



OPPORTUNITIES

- Policy
- New pursuit rated EVs coming to market
- Rebate and incentive programs





From NC DAQ

Electric School Buses

- First Electric School Bus in NC-Cherokee (NC VW settlement funds)
 - 6 Electric Buses Now
 - Range: 120-130 miles
 - Diesel vs Electric: \$800-\$1,000 per month diesel fuel per bus vs \$400 per month to charge one bus, reduced maintenance \$
 - Diesel bus is 4X the cost of electric-cost effective with grant dollars
 - Biggest challenges: Electrical equipment upgrades, supply chain
- EPA Clean School Bus Program
 - BIL-\$5 billion over 5 years. \$500 million per year (1/2 for zero emission buses)
 - Low income and tribes-priority
 - Grants and Rebate Programs
 - Buncombe County Schools Application pending (5 bus replacements)
- Vehicle to Grid (V2G) Technology
 - Climate Resiliency

QUESTIONS?



© marketoonist.com

