CASE STUDY **UNIVERSITY OF GEORGIA**

PLUG INTO **GEORGIA**





FLEET ELECTRIFICATION AT UGA: AN ONGOING CASE STUDY



In the last five years, the State of Georgia and the University of Georgia have established themselves as leaders in electric mobility innovation, research, and outreach. The state has announced over \$29 billion in investment and over 36.000 iobs in the sector, while UGA has invested in electric mobilityfocused faculty and become an early adopter of electric vehicles across its fleet and grounds equipment.

As of 2025, 8% of the fleet in UGA's Facilities Management Division's (FMD) is electric, which includes 22 low speed vehicles, six EV sedans, and one hybrid SUV. The next focus will be on trucks and vans. With the existing electric fleet,

UGA's FMD has learned valuable lessons, established a business case for electrification, and developed a strategy that can be replicated by other institutions and communities across Georgia.

The Office of Sustainability within FMD is a partner in the recently concluded Interdisciplinary Presidential Seed Grant coordinated by UGA's Carl Vinson Institute of Government. The Institute is working with the Office to translate UGA's on-campus experiences into outreach materials such as this to support electrification decision-making for other government institutions in Georgia.

FMD'S FLEET ELECTRIFICATION STRATEGY



Perform a "Right Size, Right Type" analysis to determine which types of EVs meet specific organizational needs

Plan for charging infrastructure

Build vehicle replacement into _ budget strategy

GASOLINE AND REPAIRS MAKE UP NEARLY HALF OF FMD'S FACILITY **SHOP EXPENSES**



Outside of personnel, gas vehicle fuel and repairs make up nearly half of FMD's facility shop expenses. **UGA FMD modeled potential savings of** converting fleet vehicles to electric and found*:

- Electrifying the eight trucks and vans in the AC/Refrigeration Shop could result in \$14,000 in annual savings.
- Electrifying all 218 trucks and vans in the FMD fleet could result in more than \$360,000 in annual savings.
- Despite somewhat higher initial market prices, an electric vehicle's total cost of ownership is still cheaper over the 10-30+ year life of an FMD fleet vehicle, with the increased cost of an electric vehicle being recovered after a few years.





HIGHER UPFRONT COST **LOWER TCO** 2 YEARS

WHY IS THE TCO LOWER?

- Gas costs \$0.15-\$0.17 more per mile than electricity (78% less efficient).
- EV maintenance costs are approximately 50% less than gas vehicle maintenance costs.



\$0.15-0.17 MORE PER MILE



*All calculations based on data available in 2025 from the UGA Facilities Management Division

KEY CONSIDERATIONS:







1. CHARGING & SITE READINESS

Start with a charging plan. Level 1 and Level 2 are often sufficient for low speed or electric equipment, but electric infrastructure may still need to be upgraded before charging can be installed. Ensure sites are assessed for infrastructure before purchasing an EV.

2. DEMO & DUE DILIGENCE

Thoroughly compare EV options..." and add a comma here: "making a decision, and work with vendors to identify the best fit options and potential financial incentives.

3. START WITH LOW-SPEED EVS

Low-speed EVs offer a good starting point for fleet electrification because they are lower in cost and can utilize Level 1 charging (traditional outlets). However, there are regulatory limitations in where low-speed vehicles can travel (must avoid busy roads).





Carl Vinson Institute of Government Facilities Management Division Office of Sustainability