DEUSA Fleet Success Stories: Bert Mooney Airport

Location: Butte, MT
Fleet type: Light-duty gas, diesel and electric vehicles

Narrative: In 2023, Bert Mooney Airport in Butte, Montana applied for funding through a Federal Aviation Administration (FAA) Zero Emissions Grant to acquire two Ford F-150 Lightning electric vehicles. The vehicles were intended for onsite use, supporting airport security and maintenance operations. The project was fully funded through the grant, covering 100% of acquisition costs.

Upon delivery, the two electric vehicles replaced an older Ram 1500 and a Ford F-150 that required significant annual maintenance and fuel expenditures. These legacy vehicles had become increasingly costly to operate, requiring many thousands of dollars each year in combined maintenance and fuel costs.

Over the past two years of operation, the Ford Lightning vehicles have required virtually no maintenance, aside from a single set of tires replaced on one of the trucks. This has resulted in a substantial reduction in both operating costs and administrative maintenance burden.

Operationally, the vehicles have performed well under typical airport duty cycles. During summer months, the security vehicle is charged approximately once per week, while the maintenance vehicle requires charging roughly every week and a half. In winter conditions, there is a slight reduction in battery range; however, this has not significantly affected the charging schedule or operational readiness.

When asked about potential issues or drawbacks, Assistant Airport Manager Rick Ryan responded simply that there were “none,” reflecting a strong level of satisfaction with vehicle performance and reliability.

Given this successful deployment, airport staff indicated strong interest in pursuing additional electrification opportunities should future funding become available. Depending on equipment eligibility and options, the airport would be open to electrifying additional ground support equipment, such as baggage handling or towing equipment, although much of this equipment is currently operated by a private contractor.

Overall, the vehicles have been described by staff as “working awesome” and have become a positive example of electric vehicle integration in airport operations.

Outputs & Outcomes

Outputs

- Replacement of two older gasoline-powered light-duty trucks (Ram 1500 and Ford F-150)
- Deployment of two fully electric Ford F-150 Lightning vehicles
- Establishment of on-site EV charging and refueling routine for airport operations

Outcomes

- Significant reduction in annual fuel and maintenance costs
- Reduction in greenhouse gas emissions and gasoline consumption
- Improved operational reliability with minimal maintenance requirements
- Increased familiarity and confidence in electric vehicle use across airport staff
- Strengthened institutional support for future electrification of airport equipment

Best Practices & Lessons Learned: This project demonstrates the value of leveraging diverse funding sources, including FAA-specific zero-emission programs, to support fleet electrification in aviation-related operations. Early adoption in a controlled operational environment (onsite airport use) helped minimize risk while maximizing visibility and staff acceptance.

Key lessons include:

- FAA and aviation-specific grant programs can be highly effective pathways for electrifying airport fleets
- Light-duty EVs can successfully replace internal combustion vehicles in predictable duty-cycle environments such as airport grounds operations
- Reduced maintenance requirements can quickly offset operational costs and improve fleet uptime
- Positive staff experience is a strong driver for future electrification adoption
- Successful pilot deployments can build internal support for expanding electrification into additional equipment categories