

Costs Comparison of Electric vs. Gas powered Golf Carts

Here are potential cost savings that can be realized by switching from gas powered to electric powered carts.

| Summary of Costs: | | | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------------|
| Type | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Total Cost for 7 Years |
| Gas powered cart (fuel cost) | \$ 500.00 | \$ 500.00 | \$ 500.00 | \$ 500.00 | \$ 500.00 | \$ 500.00 | \$ 500.00 | \$ 3,500.00 |
| Electric powered cart (fuel cost) | \$ 117.75 | \$ 117.75 | \$ 117.75 | \$ 117.75 | \$ 117.75 | \$ 117.75 | \$ 117.75 | \$ 824.25 |
| Lease Amount (Difference between Gas and Electric Carts) | \$ 408.26 | \$ 408.26 | \$ 408.26 | \$ 408.26 | \$ 408.26 | \$ 300.00 | \$ 300.00 | \$ 2,641.30 |
| Average Operation and Maintenance of Gas Carts (Cost avoided) | \$ 109.08 | \$ 109.08 | \$ 109.08 | \$ 109.08 | \$ 109.08 | \$ 109.08 | \$ 109.08 | \$ 763.56 |
| Cost Savings | \$ 83.07 | \$ 83.07 | \$ 83.07 | \$ 83.07 | \$ 83.07 | \$ 191.33 | \$ 191.33 | \$ 798.01 |

To be conservative I used the cost estimate provided by Standard Gas Car in comparison to the electric cart estimate which shows a lease difference of \$408.26 per year for years 1-5 and reducing to \$300 for years 6-7. Additionally, I assumed annual usage rates of 5,000 miles, a gas rate of \$3.00 per gallon, and an electric rate of .1413 per kWh.

The savings over 7 years are \$798.01 per cart or \$50K for 60 carts plus 2 maintenance vehicles. This includes the cost avoided from maintenance that is required in gas carts. For example, gas powered carts require frequent oil changes, air filters and fuel system maintenance. Electric carts have fewer moving parts and have lower maintenance costs.

The electric carts are considered zero emission vehicles and will reduce GHG emissions compared to gas powered carts. This aligns with the County's sustainability goals and climate action plan. Additionally, with Fox Tail Flats coming online, within one year of project completion the County's electricity will be close to 90% renewable, clean energy, making these carts truly zero emission.

Taking these steps to utilize electric golf carts demonstrates Los Alamos County's commitment to environmental sustainability.