

Jefferson County  
Board of Commissioners  
Agenda Request

**To:** Board of Commissioners  
Mark McCauley, County Administrator

**From:** Monte Reinders, P.E., Public Works Director/County Engineer 

**Agenda Date:** August 12th, 2024

**Subject:** Workshop – Electric Vehicle Plans

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**Statement of Issue:** Public Works staff would like to present and discuss with the County Commissioners on the future plans for electric vehicles within the fleet and the research that shows the cost analysis of comparable internal combustion engine vehicles and electric vehicles.

**Analysis/Strategic Goals/Pro's & Con's:** The goal of the fleet department is to purchase vehicles and equipment that meet the internal customers requirements and specific needs in the most economical way. The strategy being used by the fleet department follows the departments' goal by carefully considering electric vehicle replacements for departments as the assets come up in the replacement models. Departments with vehicles that are used by administrative staff or as motor pool vehicles are the vehicles that have been targeted to replace with an electric version. Meetings have taken place with the individual departments to discuss their needs, electric vehicle options, and the cost comparisons.

Cost comparison spreadsheets have been attached to this request

**Fiscal Impact/Cost Benefit Analysis:** Several successes have taken place as a result of these individual meetings with the internal customer departments.

- Public Works has agreed to replace one motor pool sedan that is set to be replaced in 2025 with an EV model.
- Public Health has agreed to replace a sedan model that is set to be replaced in 2025 with an EV model.
- JCSO has requested to purchase as a concept test the new Chevy Blazer EV pursuit vehicle.

The purchasing of these vehicles does however hinge on the infrastructure being in place to support them.

**Recommendation:** Public Works would like the Board of County Commissioners questions and feedback on the course of action being pursued as it pertains to purchasing electric vehicles.

**Department Contact:** Josh Montgomery, Fleet Manager

**Reviewed By:**

  
\_\_\_\_\_  
Mark McCauley, County Administrator

8/6/24  
\_\_\_\_\_  
Date

|                                               |                           |                          |
|-----------------------------------------------|---------------------------|--------------------------|
| <b>Asset Type:</b>                            | <b>Sedan EV</b>           | <b>Sedan</b>             |
| <b>Model Description:</b>                     | <b>2024 Nissan Leaf S</b> | <b>2024 Nissan Versa</b> |
| <b>Scenario:</b>                              | <b>1</b>                  | <b>2</b>                 |
| <b>Avg Miles Per Year</b>                     | 12000                     | 12000                    |
| <b>Avg MPG :</b>                              | 3.07                      | 32                       |
| <b>Estimated Fuel Cost:</b>                   | \$0.1112                  | \$3.97                   |
| <b>Cost (incl tax):</b>                       | \$35,731                  | \$20,660                 |
| <b>Surplus/(Deficit) Applied to Purchase:</b> | \$0                       | \$0                      |
| <b>Upfitting Cost:</b>                        | \$3,000                   | \$3,000                  |
| <b>Adjusted Acquisition Cost:</b>             | \$38,731                  | \$23,660                 |
| <b>Est. Residual %</b>                        | 10%                       | 10%                      |
| <b>Life Cycle (Years):</b>                    | 10                        | 10                       |
| <b>Est. Residual Value</b>                    | \$3,573.10                | \$2,066.00               |
| <b>Miles @ Total Life Cycle:</b>              | 120000                    | 120000                   |
| <b>Annual Inflation:</b>                      | 3%                        | 3%                       |
| <b>Est. Replacement Cost:</b>                 | \$48,019                  | \$27,765                 |
|                                               |                           |                          |
| <b>Annual Depreciation:</b>                   | \$3,486                   | \$2,129                  |
| <b>Annual Repl Premium:</b>                   | \$1,229                   | \$711                    |
| <b>Annual M/R:</b>                            | \$125                     | \$250                    |
| <b>Annual Fuel:</b>                           | \$435                     | \$1,489                  |
| <b>Total Annual:</b>                          | <b>\$5,274</b>            | <b>\$4,579</b>           |
|                                               |                           |                          |
| <b>Monthly Depreciation:</b>                  | \$290                     | \$177                    |
| <b>Monthly Repl Premium:</b>                  | \$102                     | \$59                     |
| <b>Monthly M/R:</b>                           | \$10                      | \$21                     |
| <b>Monthly Fuel:</b>                          | \$36                      | \$124                    |
| <b>Total Monthly:</b>                         | <b>\$440</b>              | <b>\$382</b>             |
|                                               |                           |                          |
| <b>Annual Usage Hours:</b>                    |                           |                          |
| <b>Hourly Rental Rate:</b>                    | <b>#DIV/0!</b>            | <b>#DIV/0!</b>           |



| <b>Asset Type:</b>                            | <b>Pursuit EV SUV</b>    | <b>Pursuit SUV</b>        |
|-----------------------------------------------|--------------------------|---------------------------|
| <b>Model Description:</b>                     | <b>2024 Chevy Blazer</b> | <b>2024 Ford Explorer</b> |
| <b>Scenario:</b>                              | <b>1</b>                 | <b>2</b>                  |
| <b>Avg Miles Per Year</b>                     | 20000                    | 20000                     |
| <b>Avg MPG :</b>                              | 2.86                     | 20                        |
| <b>Estimated Fuel Cost:</b>                   | \$0.1112                 | \$3.97                    |
| <b>Cost (incl tax):</b>                       | \$71,205                 | \$55,000                  |
| <b>Surplus/(Deficit) Applied to Purchase:</b> | \$0                      | \$0                       |
| <b>Upfitting Cost:</b>                        | \$20,000                 | \$20,000                  |
| <b>Adjusted Acquisition Cost:</b>             | \$91,205                 | \$75,000                  |
| <b>Est. Residual %</b>                        | 10%                      | 10%                       |
| <b>Life Cycle (Years):</b>                    | 5                        | 5                         |
| <b>Est. Residual Value</b>                    | \$7,120.50               | \$5,500.00                |
| <b>Miles @ Total Life Cycle:</b>              | 100000                   | 100000                    |
| <b>Annual Inflation:</b>                      | 3%                       | 3%                        |
| <b>Est. Replacement Cost:</b>                 | \$82,546                 | \$63,760                  |
|                                               |                          |                           |
| <b>Annual Depreciation:</b>                   | \$16,417                 | \$13,500                  |
| <b>Annual Repl Premium:</b>                   | \$2,268                  | \$1,752                   |
| <b>Annual M/R:</b>                            | \$250                    | \$500                     |
| <b>Annual Fuel:</b>                           | \$778                    | \$3,970                   |
| <b>Total Annual:</b>                          | <b>\$19,713</b>          | <b>\$19,722</b>           |
|                                               |                          |                           |
| <b>Monthly Depreciation:</b>                  | \$1,368                  | \$1,125                   |
| <b>Monthly Repl Premium:</b>                  | \$189                    | \$146                     |
| <b>Monthly M/R:</b>                           | \$21                     | \$42                      |
| <b>Monthly Fuel:</b>                          | \$65                     | \$331                     |
| <b>Total Monthly:</b>                         | <b>\$1,643</b>           | <b>\$1,644</b>            |
|                                               |                          |                           |
| <b>Annual Usage Hours:</b>                    |                          |                           |
| <b>Hourly Rental Rate:</b>                    | <b>#DIV/0!</b>           | <b>#DIV/0!</b>            |

JEFFERSON COUNTY PUD

M-F 9am-4:30pm

(360) 385-5800

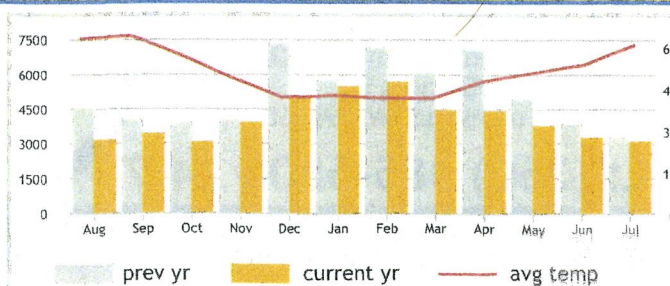
JEFFPUD.ORG

Service Address: [REDACTED]

| Meter #  | Service Description   | From     | To       | Days | Readings |         | Multiplier | Meter Usage |
|----------|-----------------------|----------|----------|------|----------|---------|------------|-------------|
|          |                       |          |          |      | Previous | Present |            |             |
| 10804320 | 24-3P 3 PHASE GENERAL | 06/13/24 | 07/15/24 | 32   | 826      | 904     | 40         | 3,120       |

**ELECTRIC SERVICE CHARGES**

|                                 |                    |                 |
|---------------------------------|--------------------|-----------------|
| Electric Usage                  | 3,120 kWh @ 0.1112 | \$346.94        |
| Electric Base Fee               |                    | \$56.05         |
| <b>Current Electric Charges</b> |                    | <b>\$402.99</b> |

**MONTHLY USAGE COMPARISON**AVG DAILY USE  
98 kWhAVG DAILY COST  
\$12.59/dayAVG DAILY TEMP  
63 F**COPY****Round Up for the Rainy Day Fund**

Help support our county's most at-risk customers with bill payment assistance. The program is entirely funded by customer donations and is administered by OlyCAP and the Society of St. Vincent de Paul.

**CONTACT INFO UPDATE**

Please fill in if any recent info has changed

Name

Mailing Address

City, State, Zip

Email

Phone

Cell Phone



☐ Check box at left to round up your bill to the nearest dollar each month.

Make a one-time donation of \$\_\_\_\_\_ any amount