## **REQUEST FOR BOARD ACTION**

## HENDERSON COUNTY BOARD OF COMMISSIONERS

| <b>MEETING DATE:</b> | March 1 <sup>st</sup> , 2021                       |
|----------------------|--|
| SUBJECT:             | Energy Management Update                           |
| PRESENTER:           | Christine Wittmeier                                |
| ATTACHMENTS:         | Yes,<br>1. FY19-20 Energy & Fuel Management Report |

#### **SUMMARY OF REQUEST:**

The attachment provides information to the Board about the County's energy management use in the areas of electricity, natural gas, fuel, and water for Fiscal Year 2019-20.

## **BOARD ACTION REQUESTED:**

No Board action is requested. This item is for informational purposes only.

**Suggested Motion:** *No motion suggested.* 



## Henderson County Energy & Fuel Management Report Fiscal Year 2019 - 2020

## **Table of Contents**

| Summary of FY 19-20 Utility & Fuel Budgets by Type and Commodity      | 2  |
|---|----|
| Assessment Methods  | 3  |
| Total Budget View: Approved FY Budget Breakdown by Commodity Category | 5  |
| Utility & Fuel Usage and Cost by Budget Allocation                    | 6  |
| Quarters 1-2 Assessment   | 6  |
| Quarters 3-4 Assessment   | 6  |
| Fuel Consumption FY 19-20: Gallons and Costs                          | 10 |

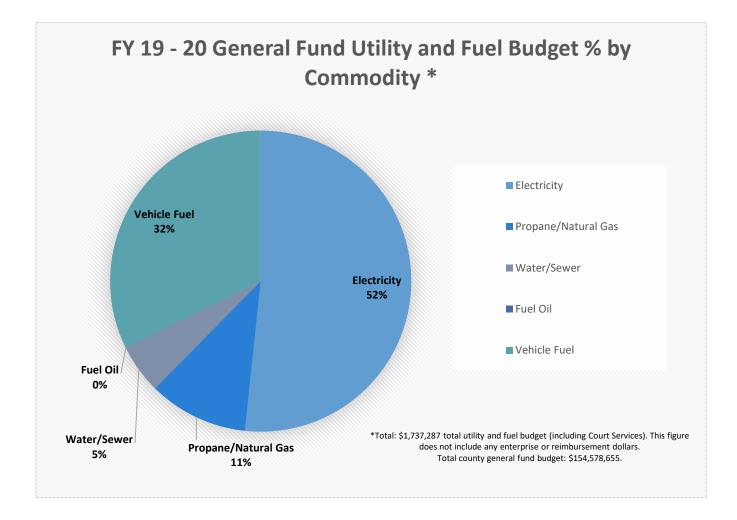
Christine Wittmeier Environmental Programs Coordinator cwittmeier@hendersoncountync.gov

## Summary of FY 19-20 Utility & Fuel Budgets by Type and Commodity

This report is a compilation of FY 2019-2020 utility and fuel usage assessing the budgeted versus actual figures of Henderson County departments' consumption of fuel and utilities (electricity, natural gas/propane, water/sewer, fuel oil, unleaded fuel, diesel fuel, and compressed natural gas [CNG]0. The data is portrayed in dollars, kWh (kilowatt hours to measure electricity), BTUs (British Thermal Units or Therms as a measurement of heat), and Gal (gallons of water/sewer).

The total county budget approved for FY 2019-2020 was \$154,578,655. Of this overall budget, the following amounts were allocated to utilities and fuel in the general fund (including Court Services as this department has dedicated general fund line items):

- \$897,834 electricity
- \$185,950 propane/natural gas
- \$92,000 water/sewer
- \$500- fuel oil
- <u>\$561,003 vehicle fuel (diesel, unleaded, natural gas)</u> \$1,737,287 of the total budgeted in FY 19-20 for utilities and vehicle fuel.



Enterprise funds (Solid Waste, Justice Academy, Cane Creek):

- \$50,900 electricity
- \$2,800 propane/natural gas
- \$10,980 water/sewer
- \$0- fuel oil
- <u>\$58,750- vehicle fuel (diesel, unleaded, natural gas)</u> \$123,430 total budgeted in FY 19-20 for utilities and vehicle fuel

Reimbursements from other agencies (Public Transit, WCCA):

• <u>\$75,850- vehicle fuel (diesel, unleaded, natural gas)</u> \$75,850 total budgeted in FY 19-20 for utilities and vehicle fuel

In total, all these allocations make up about 1.1% of the total county budget, approved for FY 19-20 at \$154,578,655.

## Assessment Methods

The data in this report are broken down biannually, with observations detailing combined figures for Quarters 1-2 (July - December 2019) and Quarters 3-4 (January - June 2020). Financial figures were gathered from end-of-year Munis reports and analyzed with basic formulas using Excel and other methods. Major findings and conclusions throughout this report are shown as italicized text.

The accounts represented in this report are detailed by commodity and department as follows:

|        | DEPARTMENT              |        | ACCOUNT             |
|--------|-------------------------|--------|---------------------|
| 115419 | FACILITY SERVICES       | 534001 | ELECTRICITY         |
| 115419 | FACILITY SERVICES       | 534002 | PROPANE/NATURAL GAS |
| 115419 | FACILITY SERVICES       | 534003 | WATER/SEWER         |
| 115419 | FACILITY SERVICES       | 534004 | FUEL OIL            |
| 115421 | COURT FACILITIES        | 534001 | ELECTRICITY         |
| 115421 | COURT FACILITIES        | 534002 | PROPANE/NATURAL GAS |
| 115421 | COURT FACILITIES        | 534003 | WATER/SEWER         |
| 605472 | SOLID WASTE             | 534001 | ELECTRICITY         |
| 605472 | SOLID WASTE             | 534002 | PROPANE/NATURAL GAS |
| 605472 | SOLID WASTE             | 534003 | WATER               |
| 615711 | CANE CREEK              | 534001 | ELECTRICITY         |
| 615711 | CANE CREEK              | 534002 | PROPANE/NATURAL GAS |
| 615711 | CANE CREEK              | 534003 | WATER               |
| 635711 | JUSTICE ACADEMY         | 534001 | ELECTRICITY         |
| 635711 | JUSTICE ACADEMY         | 534003 | WATER               |
| 115404 | ADMINSITRATIVE SERVICES | 525001 | FUEL COSTS          |
| 115414 | ASSESSOR                | 525001 | FUEL COSTS          |
| 115419 | FACILITY SERVICES       | 525001 | FUEL COSTS          |
| 115420 | GARAGE                  | 525001 | FUEL COSTS          |
| 115431 | SHERIFF                 | 525001 | FUEL COSTS          |
| 115432 | DETENTION               | 525001 | FUEL COSTS          |

| 115433 | EMERGENCY MANAGEMENT       | 525001 | FUEL COSTS     |
|--------|----------------------------|--------|----------------|
| 115434 | FIRE MARSHAL/SERVICES      | 525001 | FUEL COSTS     |
| 115435 | BUILDING SERVICES          | 525001 | FUEL COSTS     |
| 115436 | WELLNESS                   | 525001 | FUEL COSTS     |
| 115437 | EMERGENCY MEDICAL SERVICES | 525001 | FUEL COSTS     |
| 115438 | ANIMAL SERVICES            | 525001 | FUEL COSTS     |
| 115471 | SOIL AND WATER             | 525001 | FUEL COSTS     |
| 115491 | PLANNING                   | 525001 | FUEL COSTS     |
| 115492 | CODE ENFORCEMENT           | 525001 | FUEL COSTS     |
| 115495 | COOPERATIVE EXTENSION      | 525001 | FUEL COSTS     |
| 115496 | PROJECT MANAGEMENT         | 525001 | FUEL COSTS     |
| 115510 | PUBLIC HEALTH              | 525001 | FUEL COSTS     |
| 115512 | ENVIRONMENTAL HEALTH       | 525001 | FUEL COSTS     |
| 115531 | DEPT. OF SOCIAL SERVICES   | 525001 | FUEL COSTS     |
| 115611 | LIBRARY                    | 525001 | FUEL COSTS     |
| 115612 | RECREATION                 | 525001 | FUEL COSTS     |
| 115420 | GARAGE                     | 525002 | CNG FUEL COSTS |
| 335497 | PUBLIC TRANSIT             | 525001 | FUEL COSTS     |
| 605472 | SOLID WASTE                | 525001 | FUEL COSTS     |
| 615711 | CANE CREEK                 | 525001 | FUEL COSTS     |

COLOR CODES: ENTERPRISE FUNDS REIMBURSED COSTS PARTIAL STATE REIMBURSEMENTS

Court Services has dedicated general fund line items and have therefore been included in general fund analysis. Court Services receives some state and federal financial reimbursements for utilities, whereby consumption monitoring becomes critical for annual planning. Our partnership with Western Carolina Community Action (WCCA) for the Apple Country Transit System does not receive its own approved line item in the Henderson County general fund budget, however; this system is a very large fuel user of our CNG fueling station on Williams Street and we do monitor the fuel usage of WCCA.

Presently, all departments (including enterprise funds and those departments that receive reimbursements) budget their own fuel costs for vehicle usage annually. Fuel usage is also closely monitored for unleaded, diesel, and CNG consumption by department heads, Administration, Finance, and Environmental Programs.

The Facilities Services department utility line items account for electricity, water/sewer, natural gas/propane, and fuel oil consumed in all Henderson County buildings and facilities. This singular designation to this department allows better interpretation of usage information as multiple departments occupy county buildings and facilities, rather than allocating a percentage of utility budgets to each department in a building based on that department's square footage occupancy.

## Total Budget View: Approved FY Budget Breakdown by Commodity Category

|        | t                          | \$ 154,578,655               |                          |             |                         |                 |          |            |               |
|--------|----------------------------|------------------------------|--------------------------|-------------|-------------------------|-----------------|----------|------------|---------------|
|        | DEPARTMENT                 | ACCC                         | DUNT                     | ELECTRICITY | PROPANE/<br>NATURAL GAS | WATER/<br>SEWER | FUEL OIL | FUEL COSTS | TOTAL         |
| 115419 | FACILITY SERVICES          | 534001                       | ELECTRICITY              | \$ 825,000  |                         |                 |          |            | \$<br>825,000 |
| 115419 | FACILITY SERVICES          | 534002                       | PROPANE/NATURAL GAS      |             | \$ 170,000              |                 |          |            | \$<br>170,000 |
| 115419 | FACILITY SERVICES          | 534003                       | WATER/SEWER              |             |                         | \$ 82,000       |          |            | \$<br>82,000  |
| 115419 | FACILITY SERVICES          | 534004                       | FUEL OIL                 |             |                         |                 | \$ 500   |            | \$<br>500     |
| 115421 | COURT FACILITIES           | 534001                       | ELECTRICITY              | \$ 72,834   |                         |                 |          |            | \$<br>72,834  |
| 115421 | COURT FACILITIES           | 534002                       | PROPANE/NATURAL GAS      |             | \$ 15,950               |                 |          |            | \$<br>15,950  |
| 115421 | COURT FACILITIES           | 534003                       | WATER/SEWER              |             |                         | \$ 10,000       |          |            | \$<br>10,000  |
| 605472 | SOLID WASTE                | 534001                       | ELECTRICITY              | \$ 20,000   |                         |                 |          |            | \$<br>20,000  |
| 605472 | SOLID WASTE                | 534002                       | PROPANE/NATURAL GAS      |             | \$ 800                  |                 |          |            | \$<br>800     |
| 605472 | SOLID WASTE                | 534003                       | WATER                    |             |                         | \$ 10,000       |          |            | \$<br>10,000  |
| 615711 | CANE CREEK                 | 534001                       | ELECTRICITY              | \$ 27,500   |                         |                 |          |            | \$<br>27,500  |
| 615711 | CANE CREEK                 | 534002                       | PROPANE/NATURAL GAS      |             | \$ 2,000                |                 |          |            | \$<br>2,000   |
| 615711 | CANE CREEK                 | 534003                       | WATER                    |             |                         | \$ 850          |          |            | \$<br>850     |
| 635711 | JUSTICE ACADEMY            | 534001                       | ELECTRICITY              | \$ 3,400    |                         |                 |          |            | \$<br>3,400   |
| 635711 | JUSTICE ACADEMY            | 534003                       | WATER                    |             |                         | \$ 130          |          |            | \$<br>130     |
|        |                            |                              |                          |             | 1                       |                 | 1        | I          |               |
| 115404 | ADMINISTRATIVE SERVICES    | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 1,200   | \$<br>1,200   |
| 115414 | ASSESSOR                   | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 8,000   | \$<br>8,000   |
| 115419 | FACILITY SERVICES          | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 14,000  | \$<br>14,000  |
| 115420 | GARAGE                     | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 8,000   | \$<br>8,000   |
| 115431 | SHERIFF                    | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 328,303 | \$<br>328,303 |
| 115432 | DETENTION                  | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 20,000  | \$<br>20,000  |
| 115433 | EMERGENCY MANAGEMENT       | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 1,250   | \$<br>1,250   |
| 115434 | FIRE MARSHAL/SERVICES      | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 10,000  | \$<br>10,000  |
| 115435 | BUILDING SERVICES          | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 16,500  | \$<br>16,500  |
| 115436 | WELLNESS CLINIC            | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 2,500   | \$<br>2,500   |
| 115437 | EMERGENCY MEDICAL SERVICES | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 88,750  | \$<br>88,750  |
| 115438 | ANIMAL SERVICES            | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 1,250   | \$<br>1,250   |
| 115471 | SOIL AND WATER             | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 1,125   | \$<br>1,125   |
| 115491 | PLANNING                   | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 750     | \$<br>750     |
| 115492 | CODE ENFORCEMENT           | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 2,250   | \$<br>2,250   |
| 115495 | COOPERATIVE EXTENSION      | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 2,500   | \$<br>2,500   |
| 115496 | PROJECT MANAGEMENT         | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 4,750   | \$<br>4,750   |
| 115510 | HEALTH DEPARTMENT          | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 2,125   | \$<br>2,125   |
| 115512 | ENVIRONMENTAL HEALTH       | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 15,000  | \$<br>15,000  |
| 115531 | DEPT. OF SOCIAL SERVICES   | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 11,250  | \$<br>11,250  |
| 115611 | LIBRARY                    | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 3,500   | \$<br>3,500   |
| 115612 | RECREATION                 | 525001                       | FUEL COSTS               |             |                         |                 | ļ        | \$ 15,000  | \$<br>15,000  |
| 115420 | GARAGE                     | 525002                       | CNG FUEL COSTS           |             |                         |                 |          | \$ 3,000   | \$<br>3,000   |
| 335497 | PUBLIC TRANSIT             | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 75,850  | \$<br>75,850  |
| 605472 | SOLID WASTE                | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 50,000  | \$<br>50,000  |
| 615711 | CANE CREEK                 | 525001                       | FUEL COSTS               |             |                         |                 |          | \$ 8,750   | \$<br>8,750   |
|        |                            |                              | Total                    | \$897,834   | \$185,950               | \$92,000        | \$500    | \$561,003  | \$1,737,28    |
|        |                            |                              | % of utilities budget    | 52%         |                         | 5%              | 0.03%    | 32%        |               |
|        |                            |                              | % of total county budget | 0.58%       | 0.12%                   | 0.06%           | 0.00%    | 0.36%      | 1.129         |
|        |                            | PARTIAL STATE REIMBURSEMENTS |                          |             |                         |                 |          |            |               |

## <u>3-Year Comparison of Overall Energy Use from FY 2016-2017 to FY 2018-2019</u>

The table below outlines the overall energy usage of all county facilities and buildings from FY 17-18 to FY 19-20. There was an increase in electricity but a decrease in water and propane/natural gas. The decrease in water and natural gas could be the result of county employees working from home during the beginning of COVID-19 when it was still cold. Usage patterns are referenced in more detail on page 8 and 9 in the Quarter Assessment sections.

| Unit of<br>Measurement | 2017-2018 Energy Usage<br>at All Facilities | 2018-2019 Energy Usage<br>at All Facilities | 2019-2020 Energy Usage<br>at All Facilities | Percent Change<br>from Previous Year |
|------------------------|---|---|---|--------------------------------------|
| kWh                    | 8,778,900                                   | 9,378,736                                   | 9,639,985                                   | 2.8%                                 |
| Therms                 | 242,879                                     | 262,114                                     | 241,214                                     | -8.0%                                |
| Gal                    | 11,349,600                                  | 13,125,700                                  | 9,790,600                                   | -25%                                 |

## **Utility & Fuel Usage and Cost by Budget Allocation**

The following two tables show the budget versus actual costs for utilities and fuel across all departments. These tables are broken down by general fund, enterprise funds, and departments that received partial state or other reimbursement. Note that the energy management data for the public schools, rescue squad and community college are not reflected in the information presented in this RBA.

## Quarters 1-2 Assessment

The first table (page 8) reflects Quarters 1-2 of FY19-20 and all commodities and fuel usage are benchmarked for consumption halfway through the year at 50%. This allows departments to recognize the pace at which the approved budget per commodity is being utilized for the first six months of the fiscal year. Should a department use more than 50% of a utility or fuel budget within quarters 1-2 of the fiscal year, an appropriate response would be to closely monitor and prepare for less usage in the second half of the year to avoid line item budget transfers before the close of the fiscal year.

*Of the utilities (electricity, propane/natural gas, water/sewer, and fuel oil), there were no departments that exceeded the 50% threshold. For fuel costs, there were only two departments that exceeded the 50% threshold in Quarter 1 (Recreation by 4% and Solid Waste by 9%).* 

## Quarters 3-4 Assessment

The second table (page 9) reflects Quarters 3-4 of FY 19-20 and all commodities and fuel usage are benchmarked for consumption for the final six months of the fiscal year at 100%. This percentage was determined by combining the percentage used in July-December 2019 with the percentage of the budget used from January-June 2020, completing the entire fiscal year. *Of the utilities (electricity, propane/natural gas, water/sewer, and fuel oil), five departments exceeded the 100% threshold. Facility Services' water/sewer exceeded by 23% and Court Services' water/sewer exceeded by the 39%. Of the* 

enterprise funds, Solid Waste's electricity exceeded by 4%, Solid Waste's water/sewer exceeded by 39% and Cane Creek's water/sewer exceeded by 14%. All other enterprise fund utilities were well maintained. Of the vehicle fuel budgeted for each department, two departments exceeded the 100% benchmark. Facility Services exceeded by 53% % and Solid Waste exceeded by 7%. All other departments stayed within the 100% threshold budgeted in FY19-20.

Facility Services did not have any major water events last year, but water is a hard utility to predict. For Court Services, the Courthouse and Detention Center are on the same water meter therefore showers and toilets at the Detention Center could have caused Court Service's to exceed the 100% threshold. Also, the increase in water could reflect increased cleaning and sanitation to prevent the spread of COIVD-19 for both departments.

For Solid Waste, the Convenience Center experienced 11,000 more customers than last fiscal year therefore the recycling compactors were used more often, resulting in an increase in electricity consumption. Solid Waste did experience some water leaks and replaced old piping. Solid Waste also cleans the Transfer Station floors every day and the amount of water used depends on how dirty the floors get, which is unpredictable. The increase in water usage for Cane Creek is the results of cleaning the lift stations.

The fuel overage for Facility Services was due to two events last year. The generator's fuel for Law Enforcement Center, Detention Center and Emergency Services was coded with the vehicle fuel costs. The Emergency services generator is a 2000-gallon fill. Additionally, the fuel tanks for the Courthouse and Detention Center generators were replaced, which is another 2000-gallons. A new line item called "Generator Fuel" (534004) was created and will keep these expenses separate for next year.

In MUNIS, the Garage Fuel is over by 240% because all the fuel purchased for the County's onsite fuel pumps is coded to this line item and reflect how much the County has purchased, not consumed. According to GoEnergies, Garage only spent \$270.01 in Quarter 1 and \$912.94 in Quarter 2, only using 15% of their fuel budget.

The Garage CNG budget is for the CNG fuel costs. This covers the amount that Dominion energy bills us each month for natural gas usage at the CNG station and for the federal and state alternative fuel excise taxes. It was over by 240% because it was a new line item and under budgeted. Facility Services also doubled the size of the CNG motors.

Solid Waste's fuel has multiple variables that can affect it therefore it is hard to predict. Last fiscal year, the tonnage was down but the volume of customers increased.

# Overall, 87% of the departments stayed well under or just within the budgeted amount for utilities and fuel during FY 19-20.

| Total County Budget            | \$ 154,578,655 |                               |
|--------------------------------|----------------|-------------------------------|
| Total County Utility & Fuel    |                | OTD 1 2: Depekmente Usego 50% |
| Budget*                        | \$ 1,737,287   | QTR 1-2: Benchmark Usage 50%  |
| Utilities & Fuel as % of Total |                | (July-December 2019)          |
| County Budget                  | 1.12%          |                               |

| DEPARTMENT                   | E  | LECTRICITY<br>BUDGET | NA | ROPANE/ WATER/ SEWER<br>TURAL GAS BUDGET<br>BUDGET |    | -        |    |       | % BUDGET<br>ACTUALIZED (July-<br>Dec 2019 of 50%) |
|------------------------------|----|----------------------|----|--|----|----------|----|-------|---|
| FACILITY SERVICES            | \$ | 825,000              |    |  |    |          |    |       | 42%   |
| FACILITY SERVICES            |    |                      | \$ | 170,000  |    |          |    |       | 25%   |
| FACILITY SERVICES            |    |                      |    |  | \$ | 82,000   |    |       | 61%   |
| FACILITY SERVICES            |    |                      |    |  |    |          | \$ | 500   | 0%  |
| COURT FACILITIES             | \$ | 72,834               |    |  |    |          |    |       | 41%   |
| COURT FACILITIES             |    |                      | \$ | 15,950   |    |          |    |       | 18%   |
| COURT FACILITIES             |    |                      |    |  | \$ | 10,000   |    |       | 71%   |
| Total                        |    | \$897,834            |    | \$185,950  |    | \$92,000 |    | \$500 |   |
| % of utilities & fuel budget |    | 52%                  |    | 11%  |    | 5%       |    | 0.0%  |   |
| % of total county budget     |    | 0.58%                |    | 0.12%  |    | 0.06%    |    | 0.00% |   |

| ENTERPRISE FUND      | E  | LECTRICITY<br>BUDGET | NA | ROPANE/<br>TURAL GAS<br>BUDGET | WA | TER/ SEWER<br>BUDGET | FUEL OIL<br>BUDGET | % BUDGET<br>ACTUALIZED (July-<br>Dec 2019 of 50%) |
|----------------------|----|----------------------|----|--------------------------------|----|----------------------|--------------------|---|
|                      | \$ | 20,000               |    |                                |    |                      |                    | 48%   |
| SOLID WASTE          |    |                      | \$ | 800                            |    |                      |                    | 85%   |
|                      |    |                      |    |                                | \$ | 10,000               |                    | 33%   |
| Total Utility Budget | \$ | 30,800               |    |                                |    |                      |                    |   |
|                      |    |                      |    |                                |    |                      |                    |   |
|                      | \$ | 27,500               |    |                                |    |                      |                    | 47%   |
| CANE CREEK           |    |                      | \$ | 2,000                          |    |                      |                    | 15%   |
|                      |    |                      |    |                                | \$ | 850                  |                    | 47%   |
| Total Utility Budget | \$ | 30,350               |    |                                |    |                      |                    |   |
|                      |    |                      |    |                                |    |                      |                    |   |
|                      | \$ | 3,400                |    |                                |    |                      |                    | 42%   |
| JUSTICE ACADEMY      |    |                      |    |                                | \$ | 130                  |                    | 27%   |
| Total Utility Budget | \$ | 3,530                |    |                                |    |                      |                    |   |

| DEPARTMENT                   |                | HICLE FUEL<br>TS BUDGET | % BUDGET<br>ACTUALIZED<br>(July-Dec 2019 of<br>50%) |
|------------------------------|----------------|-------------------------|---|
| ADMINISTRATIVE SERVICES      | \$             | 1,200                   | 17%   |
| ASSESSOR                     | \$             | 8,000                   | 35%   |
| FACILITY SERVICES            | \$             | 14,000                  | 47%   |
| GARAGE                       | \$             | 8,000                   | 3%  |
| SHERIFF                      | \$             | 328,303                 | 43%   |
| DETENTION                    | \$             | 20,000                  | 33%   |
| FIRE MARSHAL                 | \$<br>\$<br>\$ | 10,000                  | 43%   |
| EMERGENCY MEDICAL SERVICES   | \$             | 88,750                  | 45%   |
| BUILDING SERVICES            |                | 16,500                  | 41%   |
| ANIMAL SERVICES              | \$             | 1,250                   | 49%   |
| SOIL AND WATER               | \$<br>\$<br>\$ | 1,125                   | 37%   |
| PLANNING                     | \$             | 750                     | 27%   |
| CODE ENFORCEMENT             | \$             | 2,250                   | 41%   |
| COOPERATIVE EXTENSION        | \$<br>\$       | 1,500                   | 21%   |
| PUBLIC HEALTH                | \$             | 2,125                   | 30%   |
| ENVIRONMENTAL HEALTH         | \$             | 15,000                  | 31%   |
| DEPT. OF SOCIAL SERVICES     | \$             | 11,250                  | 43%   |
| LIBRARY                      | \$<br>\$       | 3,500                   | 21%   |
| RECREATION                   | \$<br>\$       | 15,000                  | 54%   |
| PROJECT MANAGEMENT           | \$             | 4,750                   | 29%   |
| GARAGE CNG                   | \$             | 3,000                   | 205%  |
| PUBLIC TRANSIT               | \$             | 75,600                  | 21%   |
| SOLID WASTE                  | \$             | 50,000                  | 59%   |
| CANE CREEK                   | \$             | 8,750                   | 14%   |
| Total ^                      |                | \$553,253               |   |
| % of utilities & fuel budget |                | 32%                     |   |
| % of total county budget     |                | 0.36%                   |   |

 \* This total includes all general fund line items budgeted, plus Rescue Squad and Court
Services, which receive reimbursements. This total does not include any enterprise fund dollars or Public Transit (WCCA) funds.

^ This total includes all general fund line items budgeted plus Rescue Squad, which receives reimbursements. This total does not include any enterprise fund dollars or Public Transit (WCCA) funds.

| COLOR CODES: | ENTERPRISE | REIMBURSED | PARTIAL STATE  |
|--------------|------------|------------|----------------|
| COLOR CODES. | FUNDS      | COSTS      | REIMBURSEMENTS |

Energy & Fuel Management RBA FY 19-20

Page | 8

| Total County Budget                    | \$<br>154,578,655 |  |
|--|-------------------|--|
| <b>Total County Utility &amp; Fuel</b> |                   |  |
| Budget*                                | \$<br>1,737,287   | QTR 3-4: % TOTAL FY UTILITY BUDGET USE<br>(July 2019- June 2020 of 100%) |
| Utilities & Fuel as % of Total         |                   | (July 2019- June 2020 01 100%)   |
| County Budget                          | 1.12%             |  |

| DEPARTMENT                   | 1  | ELECTRICITY<br>BUDGET | NA | ROPANE/<br>TURAL GAS<br>BUDGET | 5  | VATER/ SEWER<br>BUDGET | l Oil<br>Dget | % TOTAL FY<br>UTILITY BUDGET<br>USED (July 2016 -<br>June 2017 of<br>100%) |
|------------------------------|----|-----------------------|----|--------------------------------|----|------------------------|---------------|--|
| FACILITY SERVICES            | \$ | 825,000               |    |                                |    |                        |               | 87%  |
| FACILITY SERVICES            |    |                       | \$ | 170,000                        |    |                        |               | 88%  |
| FACILITY SERVICES            |    |                       |    |                                | \$ | 82,000                 |               | 123%   |
| FACILITY SERVICES            |    |                       |    |                                |    |                        | \$<br>500     | 0%   |
| COURT FACILITIES             | \$ | 72,834                |    |                                |    |                        |               | 87%  |
| COURT FACILITIES             |    |                       | \$ | 15,950                         |    |                        |               | 53%  |
| COURT FACILITIES             |    |                       |    |                                | \$ | 10,000                 |               | 139%   |
| Total                        |    | \$897,834             |    | \$185,950                      |    | \$92,000               | \$500         |  |
| % of utilities & fuel budget |    | 52%                   |    | 11%                            |    | 5%                     | 0.0%          |  |
| % of total county budget     |    | 0.58%                 |    | 0.12%                          |    | 0.06%                  | 0.00%         |  |

| ENTERPRISE FUND      | ELECTRICITY<br>BUDGET | NA | ROPANE/<br>FURAL GAS<br>BUDGET | v  | VATER/ SEWER<br>BUDGET | FUEL OIL<br>BUDGET | % TOTAL FY<br>UTILITY BUDGET<br>USED (July 2019 -<br>June 2020 of<br>100%) |
|----------------------|-----------------------|----|--------------------------------|----|------------------------|--------------------|--|
| SOLID WASTE          | \$<br>20,000          |    |                                |    |                        |                    | 104%   |
|                      |                       | \$ | 800                            |    |                        |                    | 139%   |
|                      |                       |    |                                | \$ | 10,000                 |                    | 88%  |
| Total Utility Budget | \$<br>30,800          |    |                                |    |                        |                    |  |
|                      |                       |    |                                |    |                        |                    |  |
| CANE CREEK           | \$<br>27,500          |    |                                |    |                        |                    | 97%  |
|                      |                       | \$ | 2,000                          |    |                        |                    | 35%  |
|                      |                       |    |                                | \$ | 850                    |                    | 114%   |
| Total Utility Budget | \$<br>30,350          |    |                                |    |                        |                    |  |
|                      |                       |    |                                |    |                        |                    |  |
| JUSTICE ACADEMY      | \$<br>3,400           |    |                                |    |                        |                    | 92%  |
|                      |                       |    |                                | \$ | 130                    |                    | 81%  |
| Total Utility Budget | \$<br>3,530           |    |                                |    |                        |                    |  |

| DEPARTMENT                   |                | EHICLE FUEL<br>DSTS BUDGET | % TOTAL FY<br>FUEL BUDGET<br>USED (July 2019<br>- June 2020 of<br>100%) |
|------------------------------|----------------|----------------------------|---|
| ADMINSITRATIVE SERVICES      | \$             | 1,200                      | 17%   |
| ASSESSOR                     | \$             | 8,000                      | 55%   |
| FACILITY SERVICES            | \$             | 14,000                     | 153%  |
| GARAGE                       | \$             | 8,000                      | 15%   |
| SHERIFF                      | \$<br>\$<br>\$ | 328,303                    | 75%   |
| DETENTION                    | \$             | 20,000                     | 66%   |
| FIRE MARSHAL                 | \$             | 10,000                     | 77%   |
| EMERGENCY MEDICAL SERVICES   | \$             | 88,750                     | 66%   |
| BUILDING SERVICES            | \$             | 16,500                     | 76%   |
| ANIMAL SERVICES              | \$             | 1,250                      | 12%   |
| SOIL AND WATER               | \$<br>\$       | 1,125                      | 75%   |
| PLANNING                     | \$             | 750                        | 49%   |
| CODE ENFORCEMENT             | \$             | 2,250                      | 35%   |
| COOPERATIVE EXTENSION        | \$<br>\$       | 1,500                      | 71%   |
| PUBLIC HEALTH                |                | 2,125                      | 34%   |
| ENVIRONMENTAL HEALTH         | \$             | 15,000                     | 48%   |
| DEPT. OF SOCIAL SERVICES     | \$             | 11,250                     | 51%   |
| LIBRARY                      | \$             | 3,500                      | 50%   |
| RECREATION                   | \$<br>\$       | 15,000                     | 64%   |
| PROJECT MANAGEMENT           | \$             | 4,750                      | 33%   |
| GARAGE CNG                   | \$             | 3,000                      | 505%  |
| PUBLIC TRANSIT               | \$             | 75,600                     | 36%   |
| SOLID WASTE                  | \$<br>\$       | 50,000                     | 107%  |
| CANE CREEK                   | \$             | 8,750                      | 54%   |
| Total ^                      | \$             | 563,613.00                 |   |
| % of utilities & fuel budget |                | 32%                        |   |
| % of total county budget     |                | 0%                         |   |

\* This total includes all general fund line items budgeted, plus Rescue Squad and Court Services, which receive reimbursements. This total does not include any enterprise fund dollars or Public Transit (WCCA) funds.

^ This total includes all general fund line items budgeted, plus Court Services, which receive reimbursements. This total does not include any

enterprise fund dollars or Public Transit (WCCA) funds.

| COLOR CODES: | ENTERPRISE FUNDS | REIMBURSED | PARTIAL STATE  |  |
|--------------|------------------|------------|----------------|--|
|              |                  | COSTS      | REIMBURSEMENTS |  |

Energy & Fuel Management RBA FY 19-20

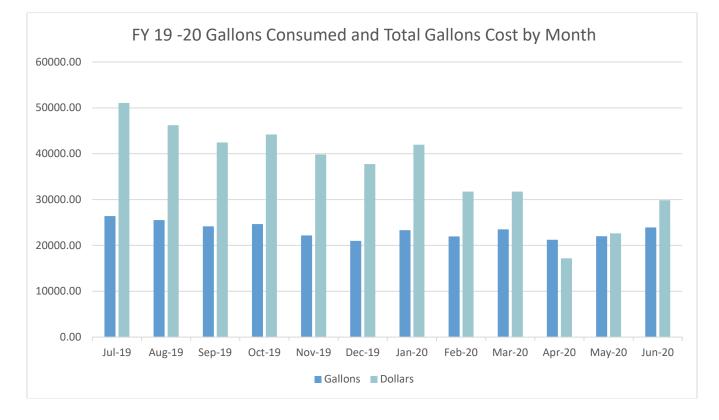
Page | 9

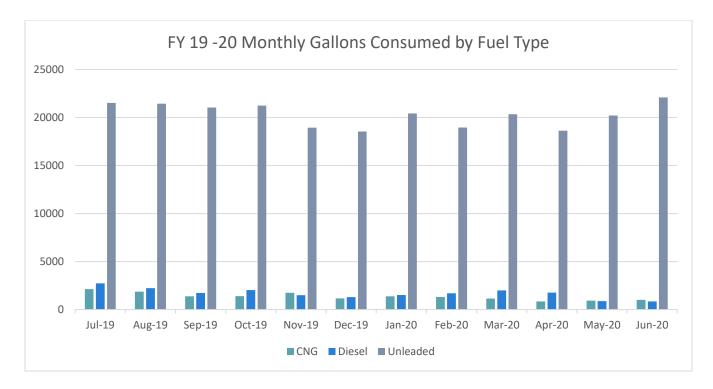
## Fuel Consumption FY 19-20: Gallons and Costs

The graphs below display the fuel consumption across all Henderson County departments (including enterprise funds and the departments that receive reimbursements) from July 2019 until June 2020. The types of fuel included are unleaded, diesel, and compressed natural gas (CNG). It is important to note that the entire fuel usage of two enterprise funds, Solid Waste and Cane Creek Sewer District, and are not fully accounted for in these findings. These departments use an on-site fueling station at the Solid Waste facility for off-road dyed diesel to fuel heavy equipment and other unleaded fueled vehicles used only on the properties. Both departments fuel with CNG as needed at the Williams Street station and these gallons are accounted for in the following data.

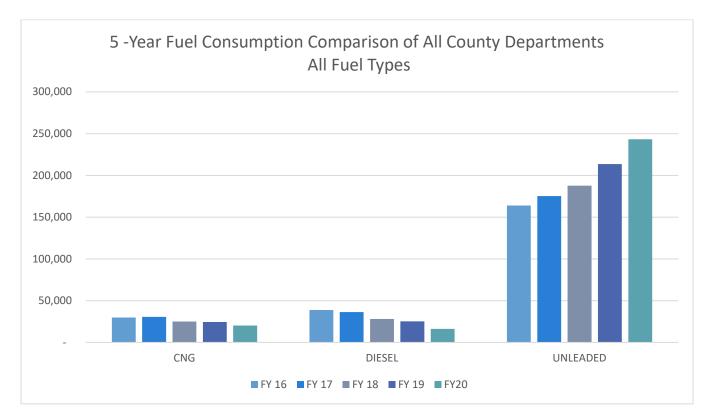
The graph titled "FY 19-20 Gallons Consumed and Total Gallons Cost by Month" shows the number of gallons per month consumed across all county departments relative to the funds spent on fuel monthly. *In total, county departments consumed* **279,818 gallons** of all fuels at a **cost of about \$436,619** (not considering credit card and other processing or purchase fees). This is a **12% decrease** from last year's fuel costs.

On average, county departments consumed 27,818 gallons of fuel (diesel, unleaded, and CNG) at a cost of about \$36,385 per month. The highest use months in the FY 19-20 were July, October and January. This data is displayed in the graph titled "FY 19-20 Monthly Gallons Consumed by Fuel Type."





In comparing the county's consumption of fuel (all types by all departments) from last year, CNG usage decreased from by -17%, diesel usage decreased by -36% but unleaded increased by 14%. The annual total gallons over this 5-year period for each fuel type are shown in the graph below.



Energy & Fuel Management RBA FY 19-20