

REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: Monday, June 6, 2016

SUBJECT: Energy Management Update

PRESENTER: Rachel Kipar, Environmental Programs Coordinator

ATTACHMENTS: Yes,
1. Energy & Fuel Management Data

SUMMARY OF REQUEST:

The attachment provides information to the Board about the County's energy use across all County facilities in the areas of electricity, natural gas, and water/sewer. It compares the current FY 3rd quarter with the previous year to illustrate historical trends in commodity consumption. Supplementary cost analyses represent the monthly cost profile comparing 2015 and 2016 YTD for the highest-cost commodity at each facility. Selected fuel consumption information is also provided for the current FY 3rd quarter period.

BOARD ACTION REQUESTED:

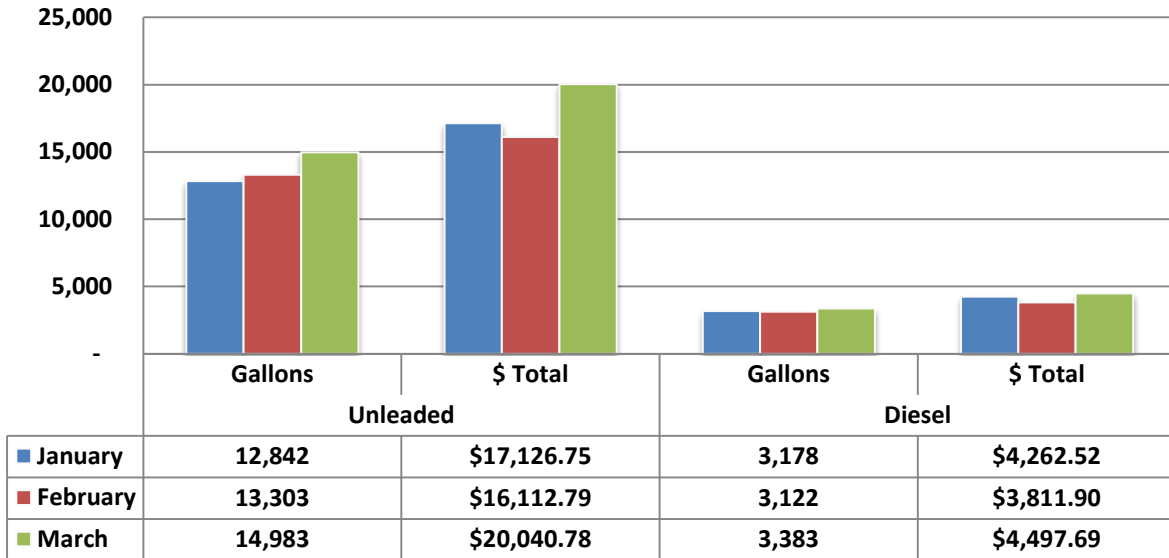
No Board action is requested. This item is for informational purposes only.

Suggested Motion:
No motion suggested.

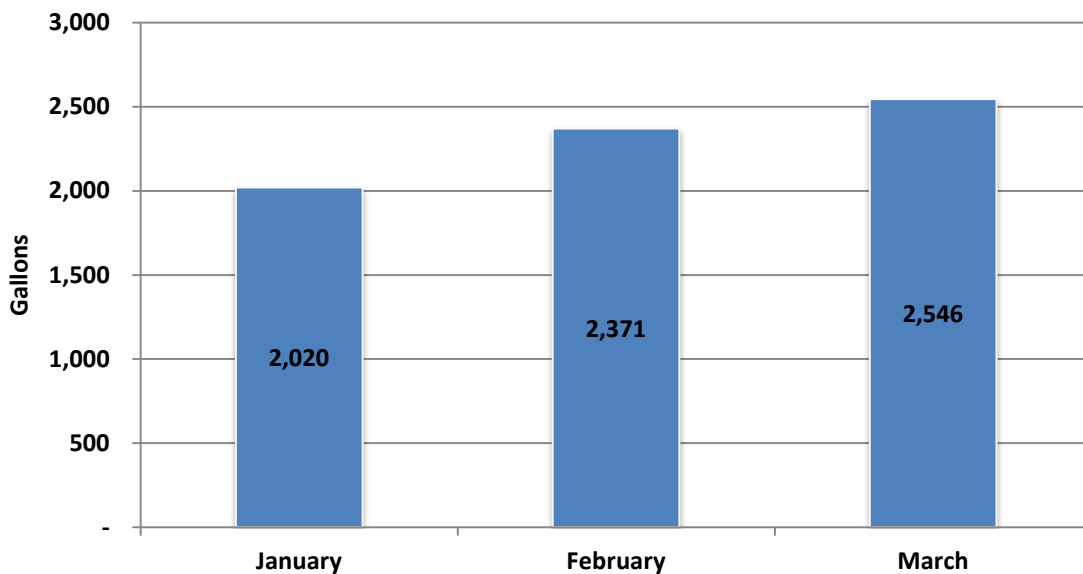
Energy and Fuel Management Data for Qtr. 3, FY15-16
January - March 2016
BOC Meeting: June 6, 2016

FUELS & FLEET INFORMATION

**Henderson County Fleet Conventional Fuel Consumption,
 Qtr. 3 FY 15-16 (Jan-Mar 2016)**

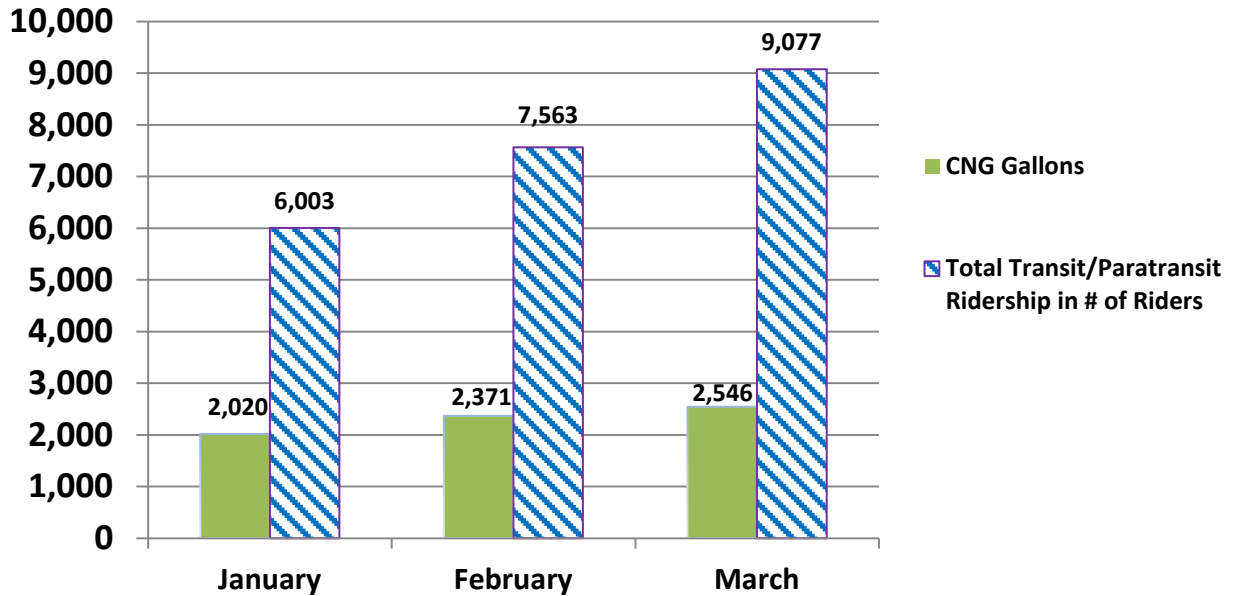


**Henderson County CNG Fleet
 Fuel Consumption, Qtr. 3 FY 15-16 (Jan-Mar 2016)***



* Departments include: Building Inspections, Solid Waste, Utilities, WCCA Buses

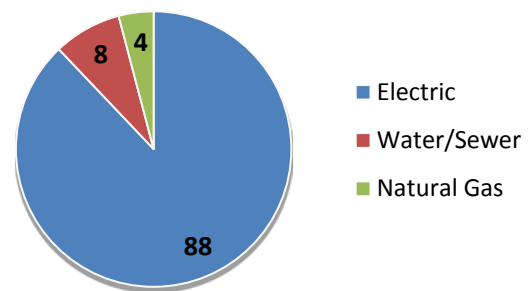
**WCCA Ridership Totals Compared to
Total Gallons of CNG Consumed, January - March 2016**



UTILITY USAGE INFORMATION

*Environmental Programs is tracking:
 46 City of Hendersonville Water/Sewer meters
 110 Duke Energy meters
 21 PSNC Natural Gas meters

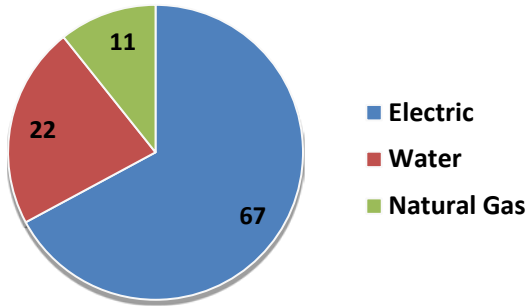
***Expense Breakdown of Henderson
County Facilities in Total Costs YTD %**



The graph above is a cumulative comparison by percentage of the total utility cost breakdown of the 177 tracked meters across all commodities (water, electricity, natural gas) at all Henderson County facilities, including parks. The graph represents the cost percentage of each commodity over the most recent 12 months, not including the current month or last month [data tracking program assumes data for these months may be incomplete based on varying billing cycles among the different utilities]).

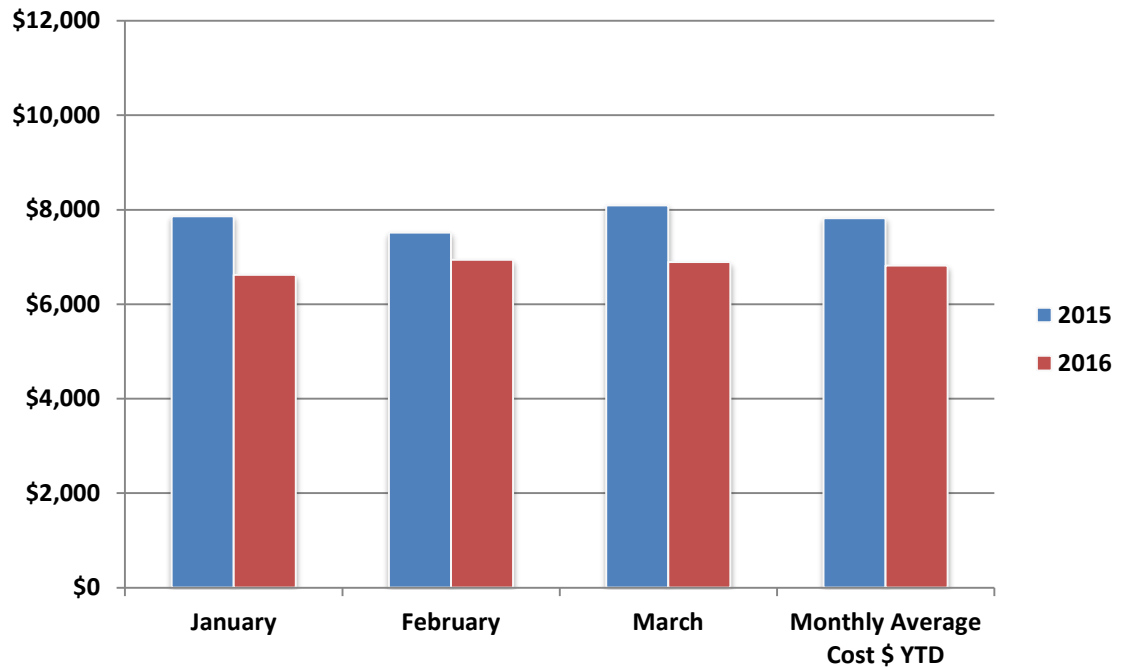
1995 Courthouse Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

95 Courthouse Electricity Usage Comparison Qtr. 3, 2015-2016

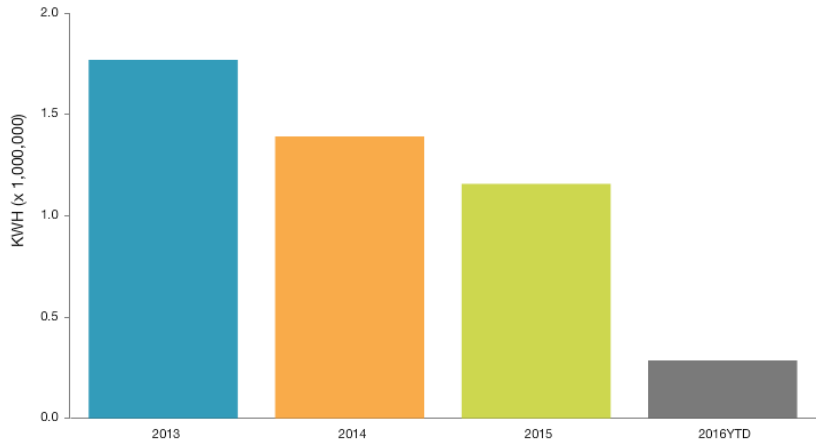


1995 Courthouse Utility Use

Location: Henderson County-> 95COURTHOUSE [95 Courthouse]
Time: 04/25/2016 1:06:37 AM **Commodity:** Electric

Electricity in KWH

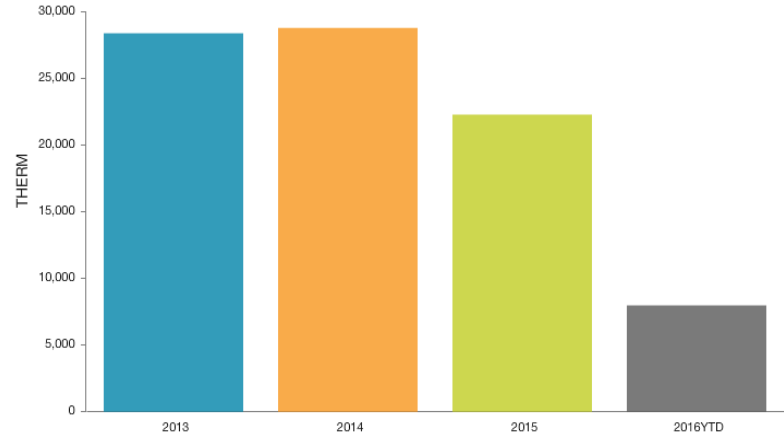
Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> 95COURTHOUSE [95 Courthouse]
Time: 04/25/2016 1:06:37 AM **Commodity:** Natural Gas

Natural Gas in Therms

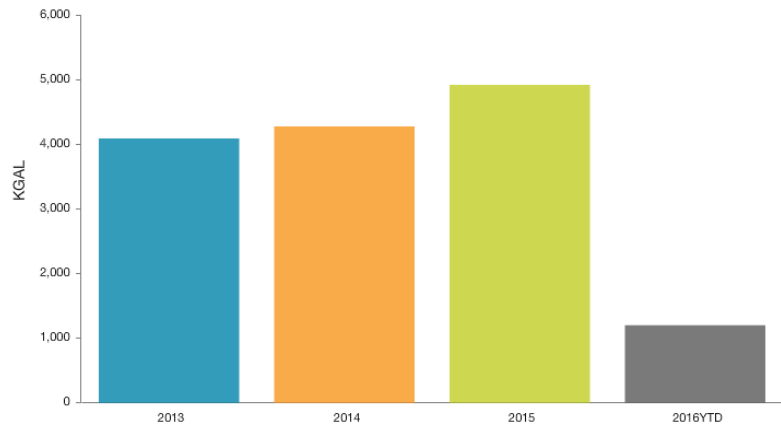
Total Use Summary
(FY ends in Dec of year shown)



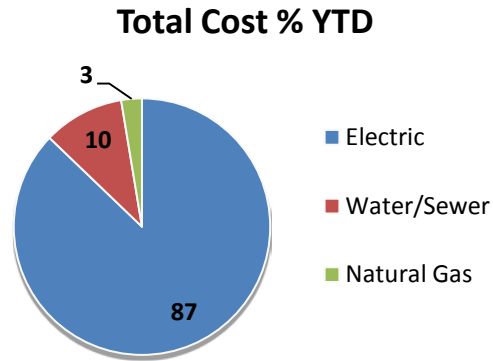
Location: Henderson County-> 95COURTHOUSE [95 Courthouse]
Time: 04/25/2016 1:06:37 AM **Commodity:** Water

Water in Thousands of Gal

Total Use Summary
(FY ends in Dec of year shown)

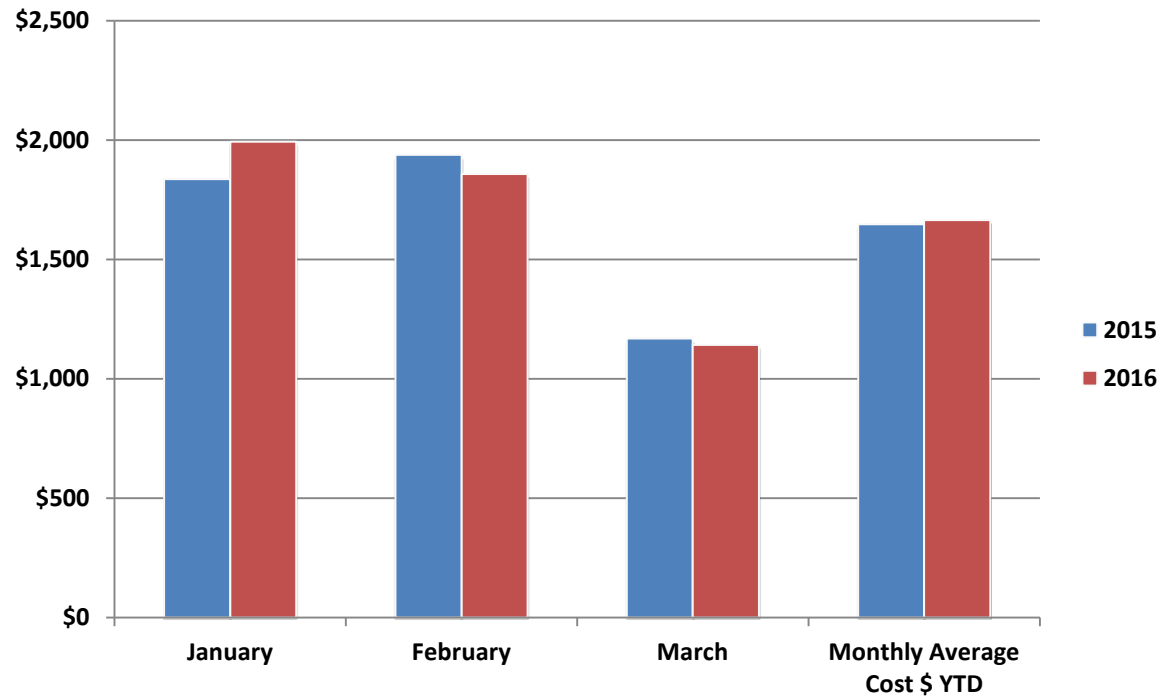


Animal Services Utility Use



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

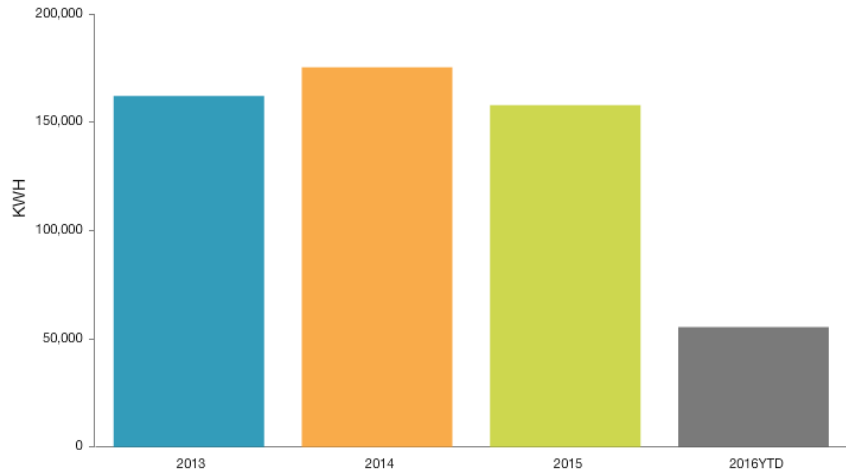
Animal Services Electricity Usage Comparison Qtr. 3, 2015-2016



Animal Services Utility Use

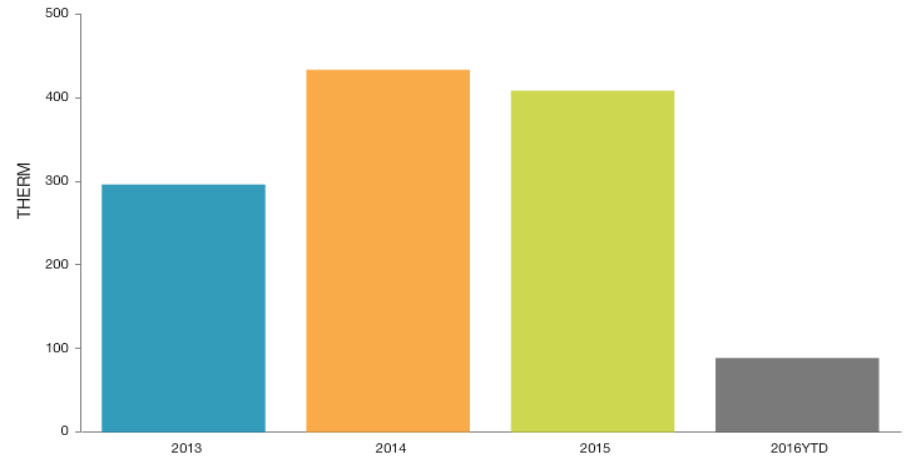
Location: Henderson County-> ANIMALSERVICES [Animal Services] Electricity in KWH
Time: 04/25/2016 1:06:37 AM **Commodity:** Electric

Total Use Summary
(FY ends in Dec of year shown)



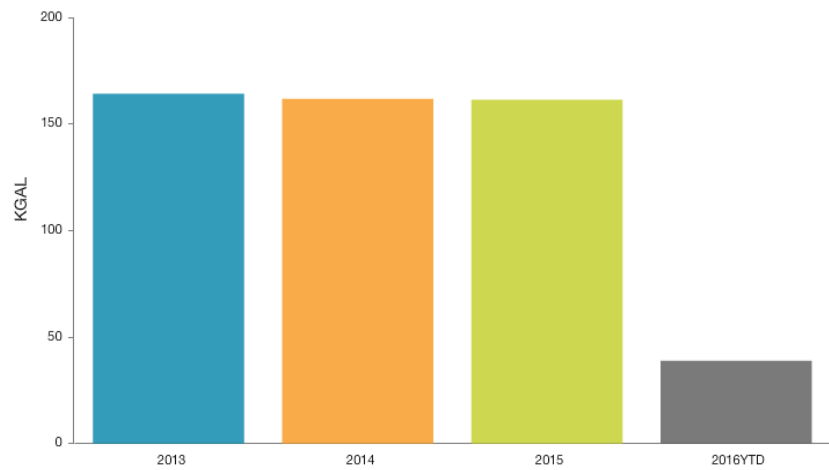
Location: Henderson County-> ANIMALSERVICES [Animal Services] Natural Gas in Therms
Time: 05/04/2016 1:06:34 AM **Commodity:** Natural Gas

Total Use Summary
(FY ends in Dec of year shown)

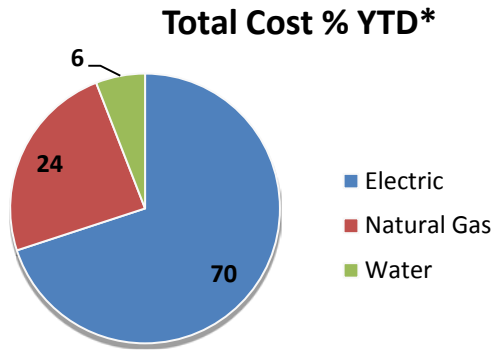


Location: Henderson County-> ANIMALSERVICES [Animal Services] Water in Thousands of Gal
Time: 04/25/2016 1:06:37 AM **Commodity:** Water

Total Use Summary
(FY ends in Dec of year shown)

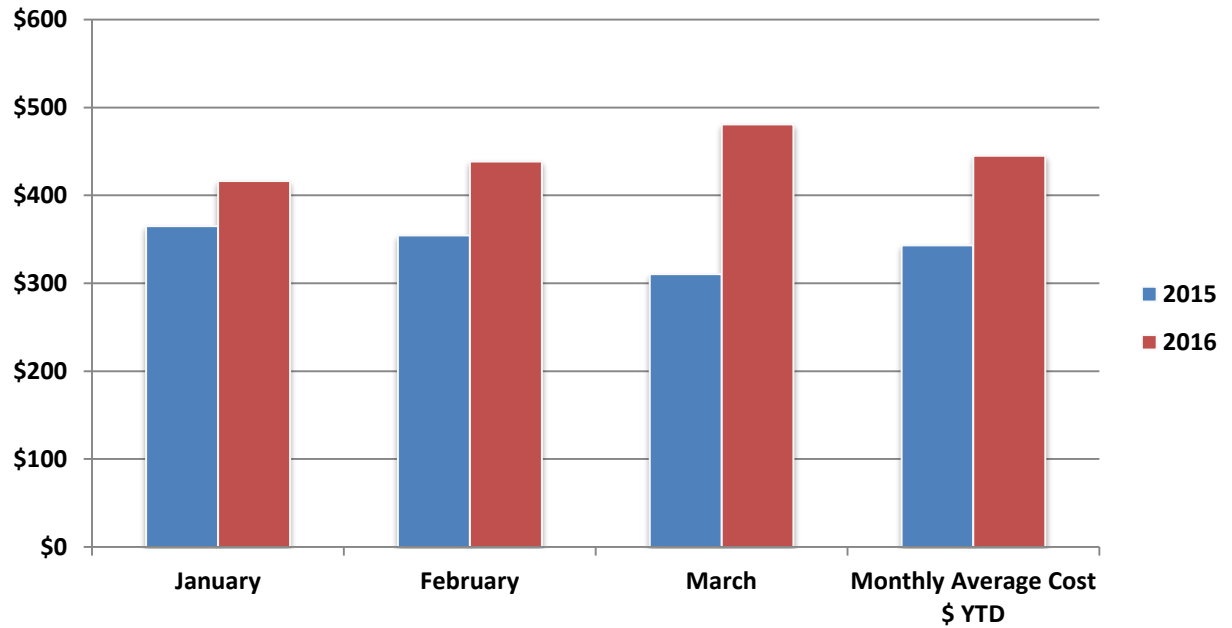


Board of Elections Utility Use



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

Board of Elections Electricity Use Comparison Qtr. 3, 2015-2016

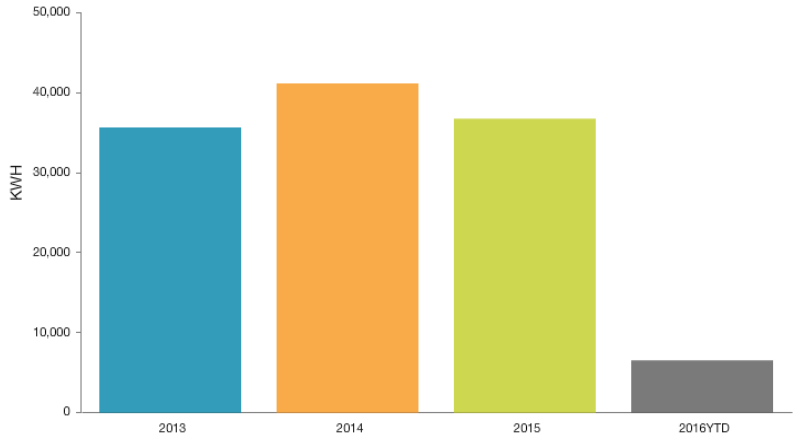


Board of Elections Utility Use

Location: Henderson County-> BOARD OF ELECTIONS [Board Of Elections]
Time: 05/02/2016 1:06:09 AM **Commodity:** Electric

Electricity in KWH

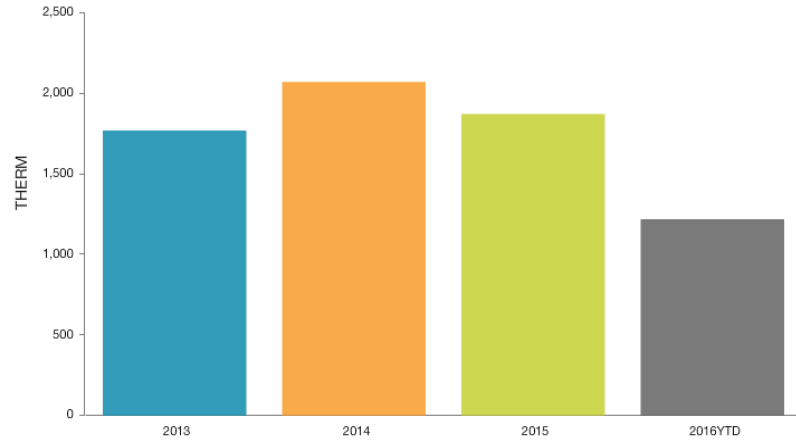
Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> BOARD OF ELECTIONS [Board Of Elections]
Time: 04/25/2016 1:06:37 AM **Commodity:** Natural Gas

Natural Gas in Therms

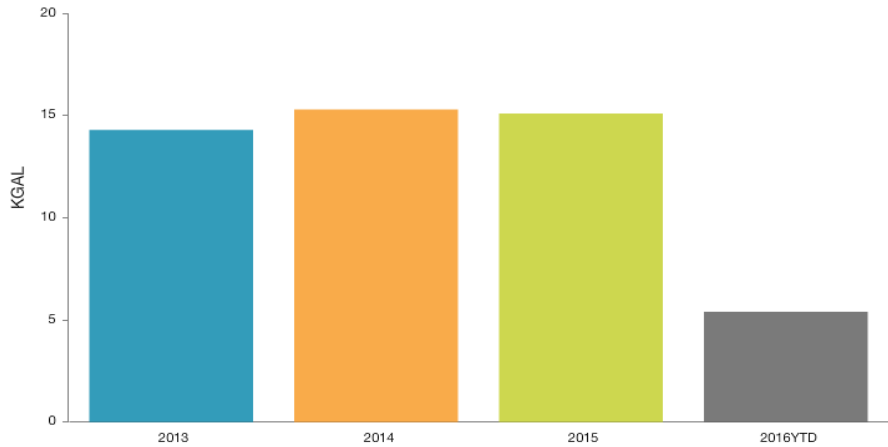
Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> BOARD OF ELECTIONS [Board Of Elections]
Time: 04/25/2016 1:06:37 AM **Commodity:** Water

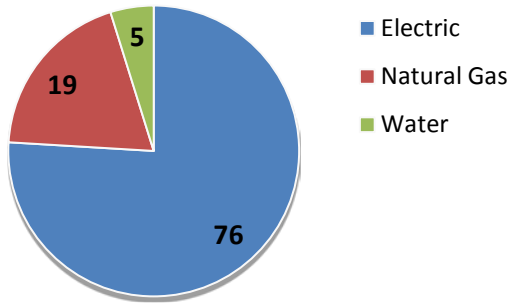
Water in Thousands of Gal

Total Use Summary
(FY ends in Dec of year shown)



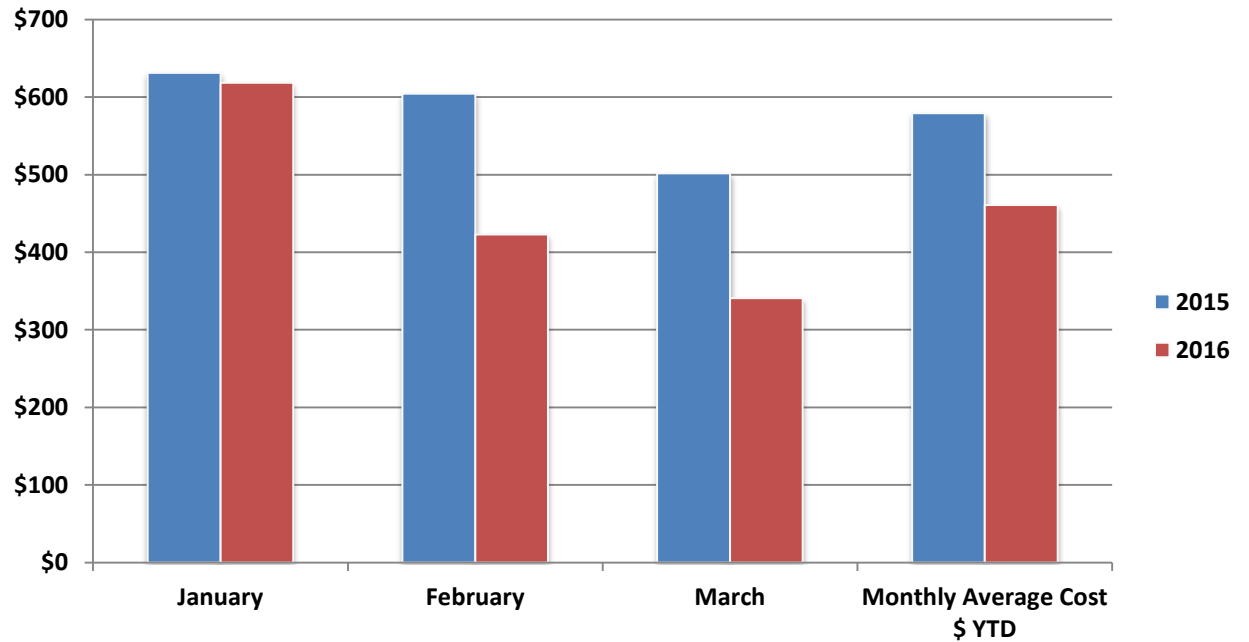
Central Services Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

Central Services Electricity Use Comparison Qtr. 3 2015-2016

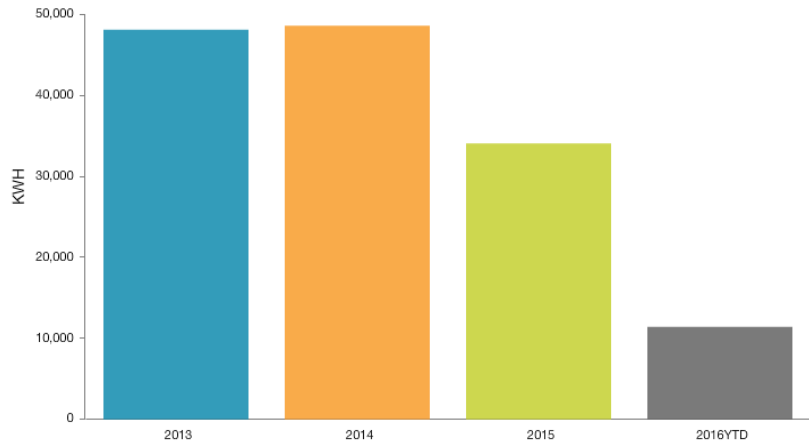


Central Services Utility Use

Location: Henderson County-> CENTRALSERVICES [Central Services]
Time: 04/25/2016 1:06:37 AM
Commodity: Electric

Electricity in KWH

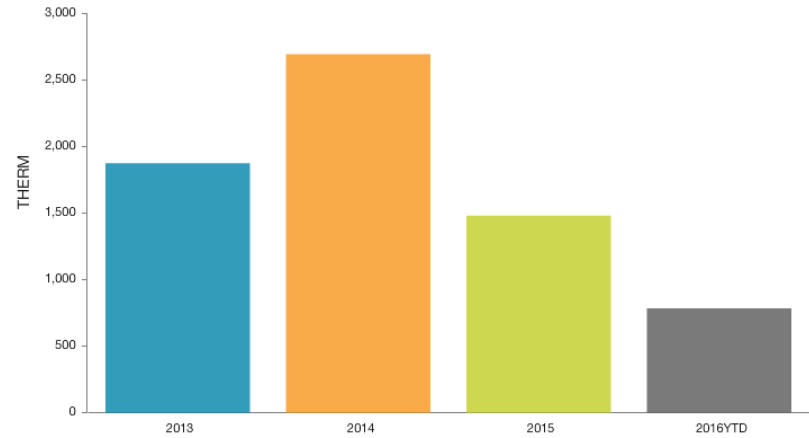
Total Use Summary
 (FY ends in Dec of year shown)



Location: Henderson County-> CENTRALSERVICES [Central Services]
Time: 05/04/2016 1:06:34 AM
Commodity: Natural Gas

Natural Gas in Therms

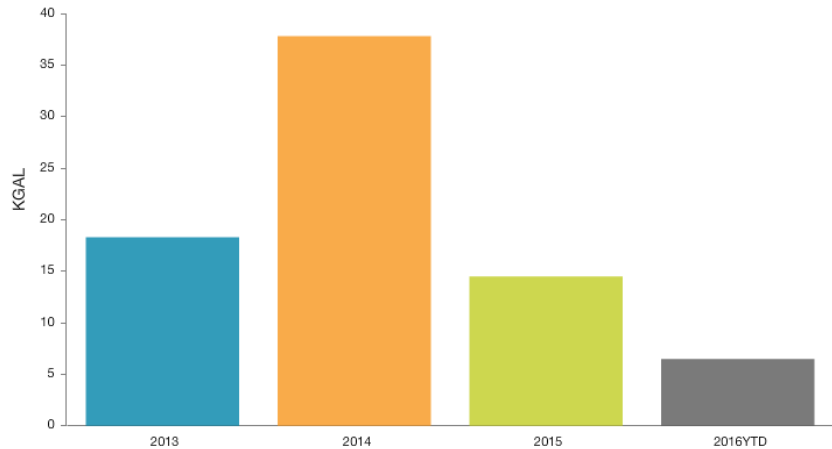
Total Use Summary
 (FY ends in Dec of year shown)



Location: Henderson County-> CENTRALSERVICES [Central Services]
Time: 04/25/2016 1:06:37 AM
Commodity: Water

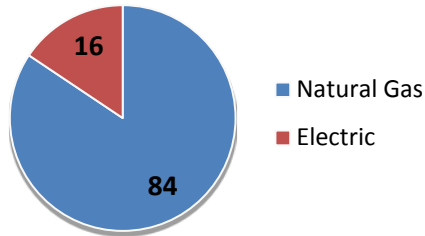
Water in Thousands of Gal

Total Use Summary
 (FY ends in Dec of year shown)



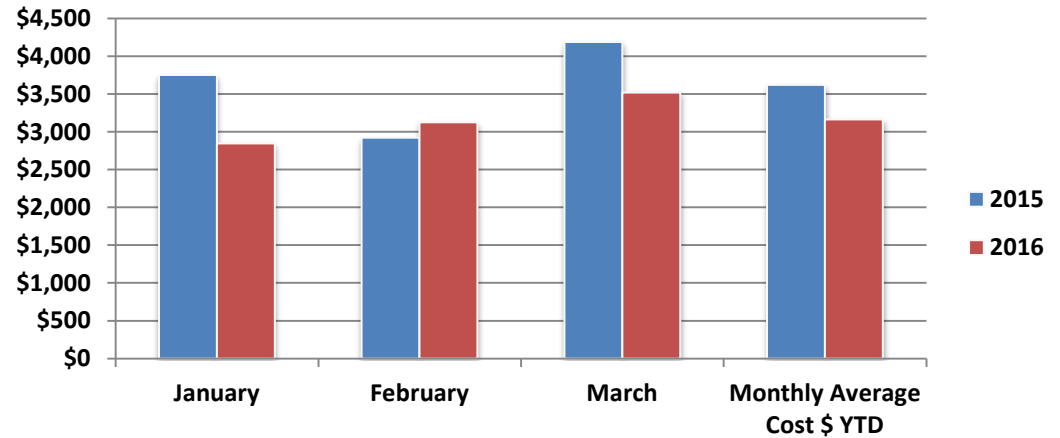
CNG Station Utility Use

Total Cost % YTD



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

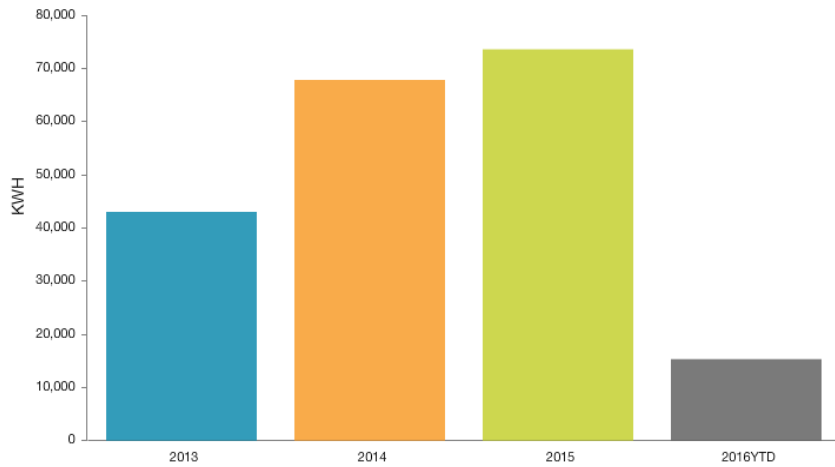
CNG Station Natural Gas Use Comparison Qtr. 3, 2015-2016



Location: Henderson County-> CNGSTATION [Cng Station] **Commodity:** Electric
Time: 04/25/2016 1:06:37 AM

Electricity in KWH

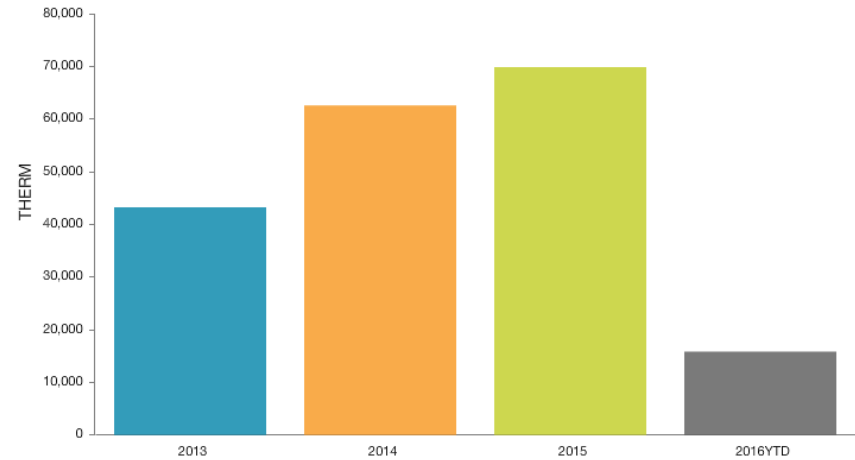
Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> CNGSTATION [Cng Station] **Commodity:** Natural Gas
Time: 04/25/2016 1:06:37 AM

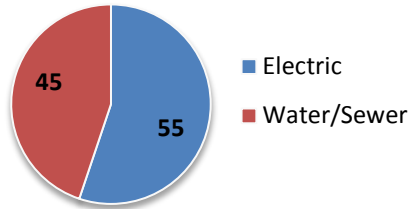
Natural Gas in Therms

Total Use Summary
(FY ends in Dec of year shown)



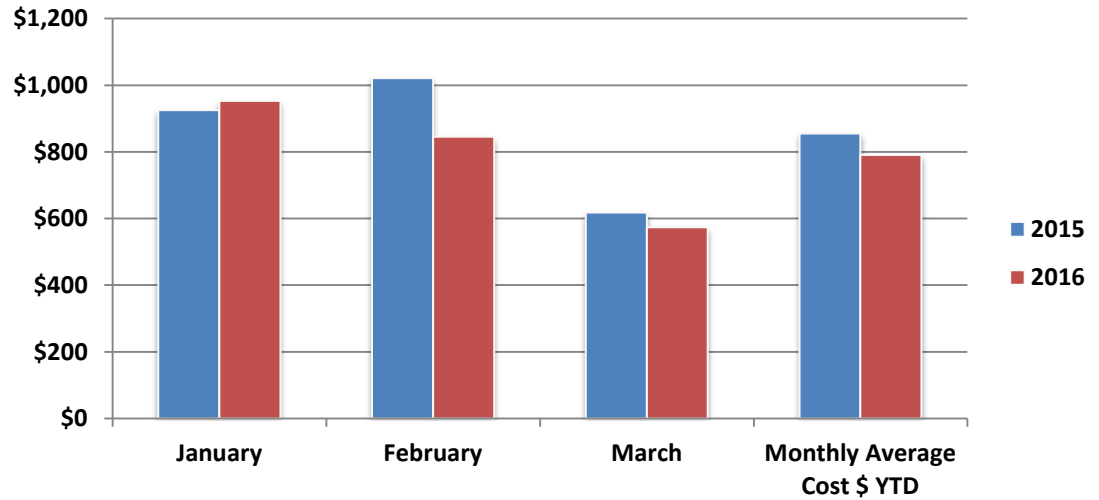
Cooperative Extension Utility Use

Total Cost % YTD



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

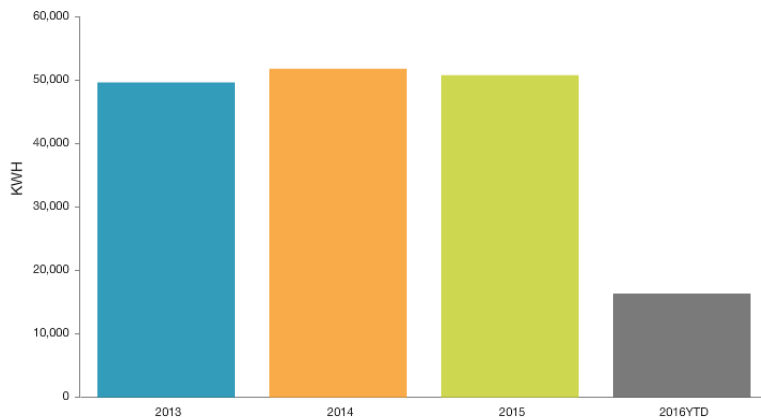
Cooperative Extension Electricity Use Comparison Qtr. 3, 2015-2016



Location: Henderson County-> COOPERATIVEEXTENSION [Cooperative Extension]
Time: 05/04/2016 1:06:34 AM
Commodity: Electric

Electricity in KWH

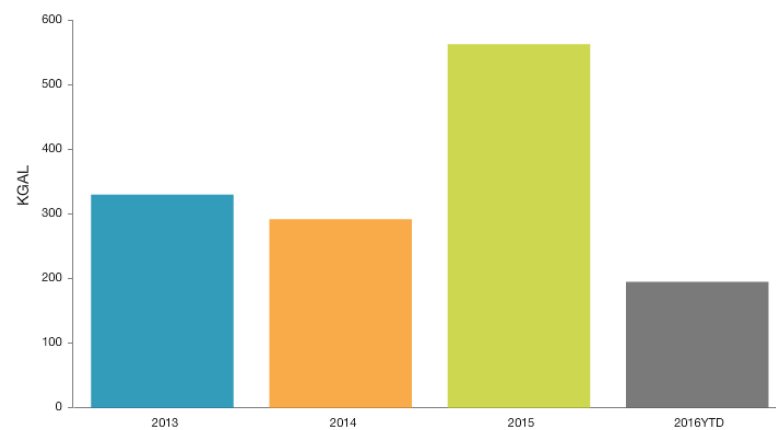
Total Use Summary (FY ends in Dec of year shown)



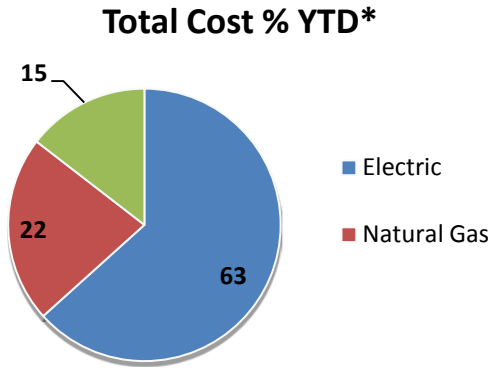
Location: Henderson County-> COOPERATIVEEXTENSION [Cooperative Extension]
Time: 04/25/2016 1:06:37 AM
Commodity: Water

Water in Thousands of Gal

Total Use Summary (FY ends in Dec of year shown)

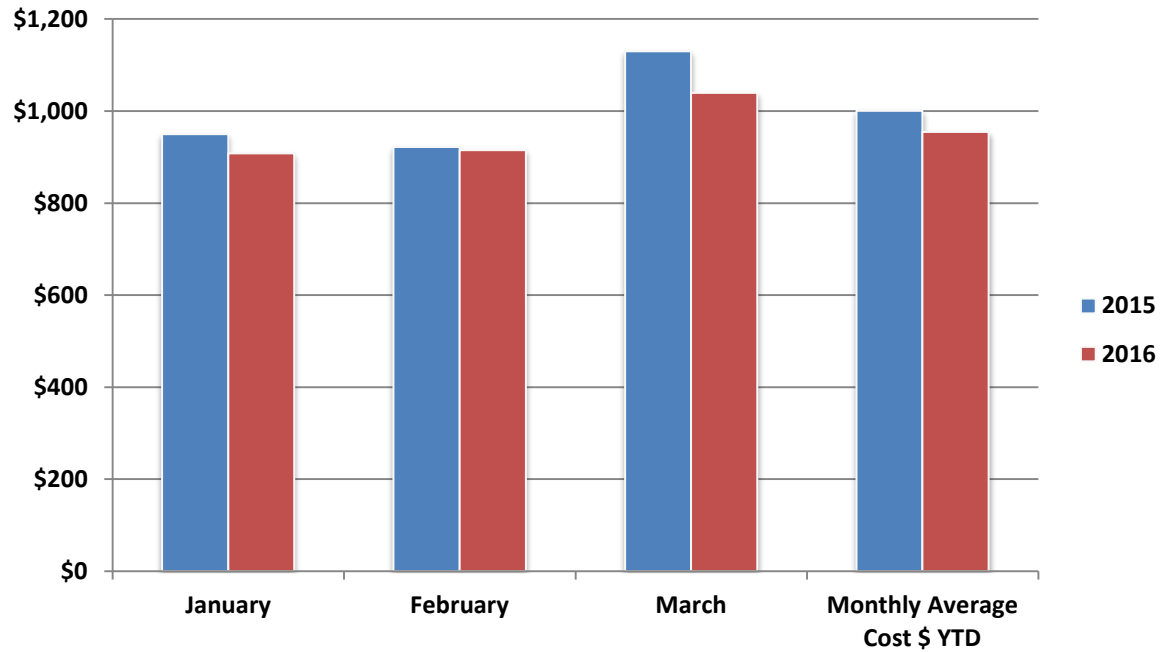


Court Services Utility Use



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

**Court Services Electricity Use Comparison
Qtr. 3, 2015-2016**

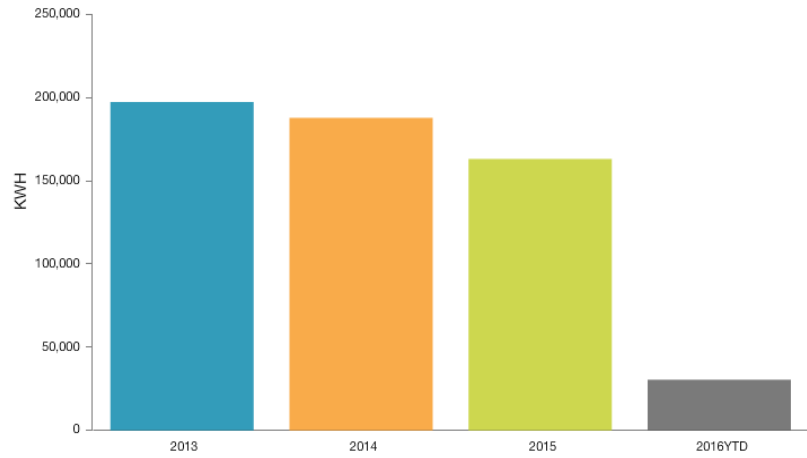


Court Services Utility Use

Location: Henderson County-> OLDHEALTHDEPARTMENT_3560 [Court Services Building]
Time: 04/25/2016 1:06:37 AM
Commodity: Electric

Electricity in KWH

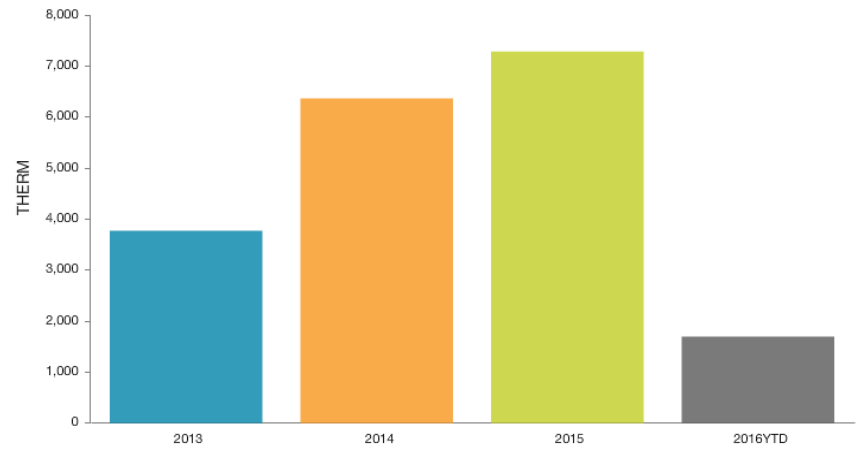
Total Use Summary
 (FY ends in Dec of year shown)



Location: Henderson County-> OLDHEALTHDEPARTMENT_3560 [Court Services Building]
Time: 04/25/2016 1:06:37 AM
Commodity: Natural Gas

Natural Gas in Therms

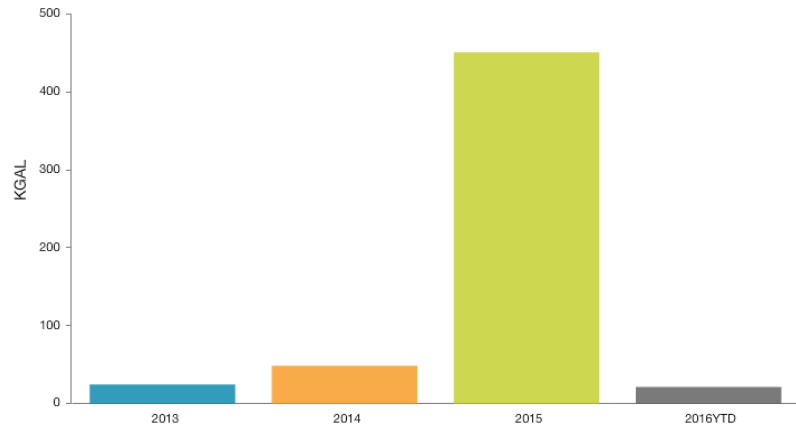
Total Use Summary
 (FY ends in Dec of year shown)



Location: Henderson County-> OLDHEALTHDEPARTMENT_3560 [Court Services Building]
Time: 05/03/2016 1:06:17 AM
Commodity: Water

Water in Thousands of Gal

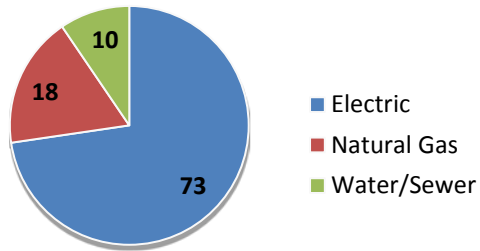
Total Use Summary
 (FY ends in Dec of year shown)



A major water leak was detected in late November and was fixed by Henderson County Facilities Services; the abnormal usage is reflected in this graph.

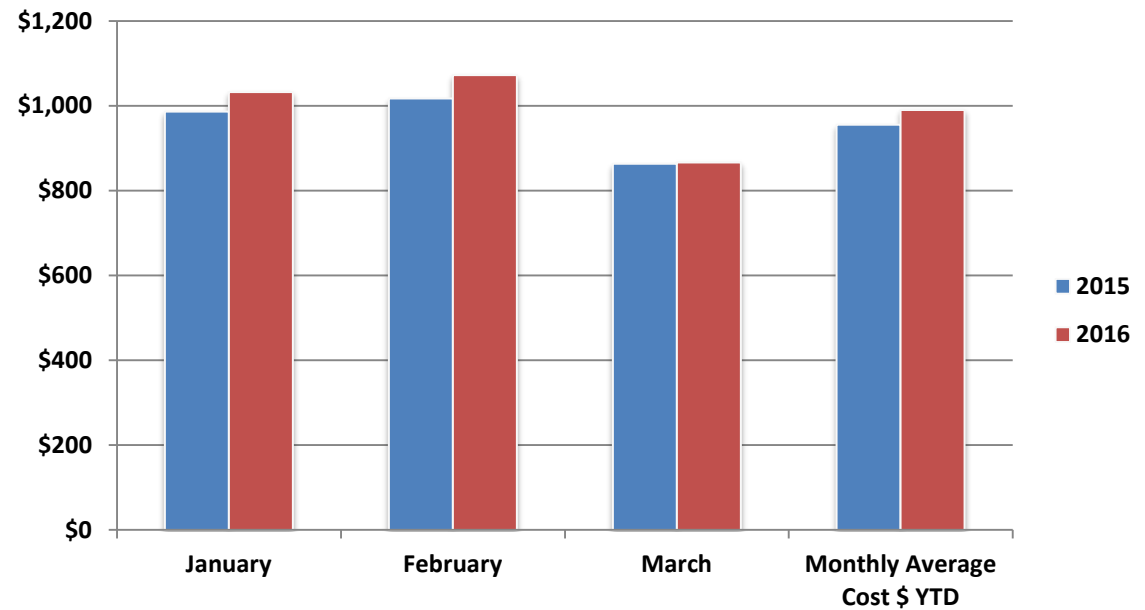
Emergency Services Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

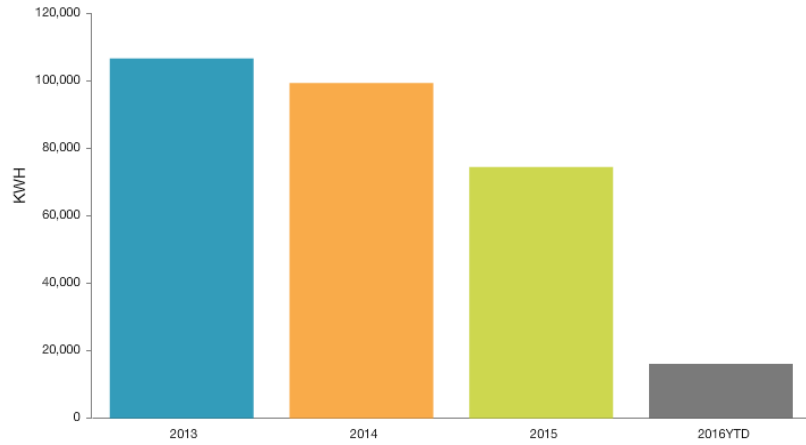
Emergency Services Electricity Use Comparison Qtr. 3, 2015-2016



Emergency Services Utility Use

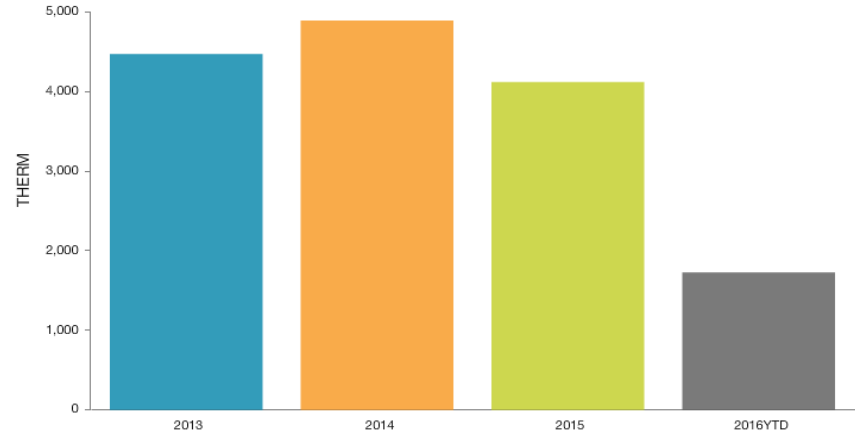
Location: Henderson County-> EMERGENCYSERVICES [Emergency Services]
Time: 05/04/2016 1:06:34 AM **Commodity:** Electric **Electricity in KWH**

Total Use Summary
(FY ends in Dec of year shown)



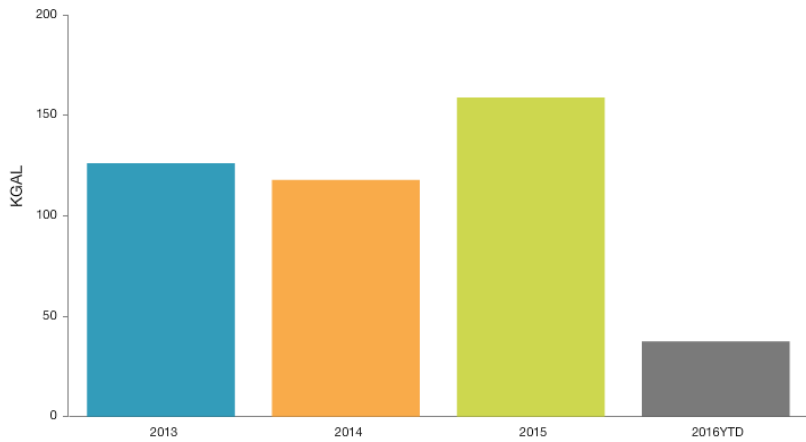
Location: Henderson County-> EMERGENCYSERVICES [Emergency Services]
Time: 04/25/2016 1:06:37 AM **Commodity:** Natural Gas **Natural Gas in Therms**

Total Use Summary
(FY ends in Dec of year shown)

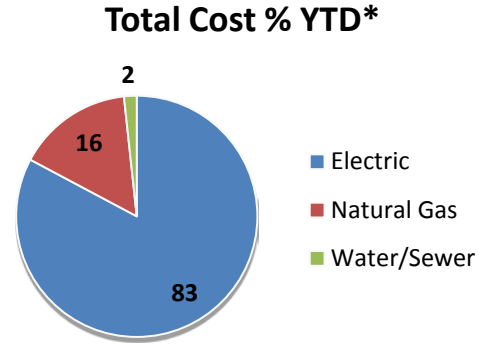


Location: Henderson County-> EMERGENCYSERVICES [Emergency Services]
Time: 04/25/2016 1:06:37 AM **Commodity:** Water **Water in Thousands of Gal**

Total Use Summary
(FY ends in Dec of year shown)

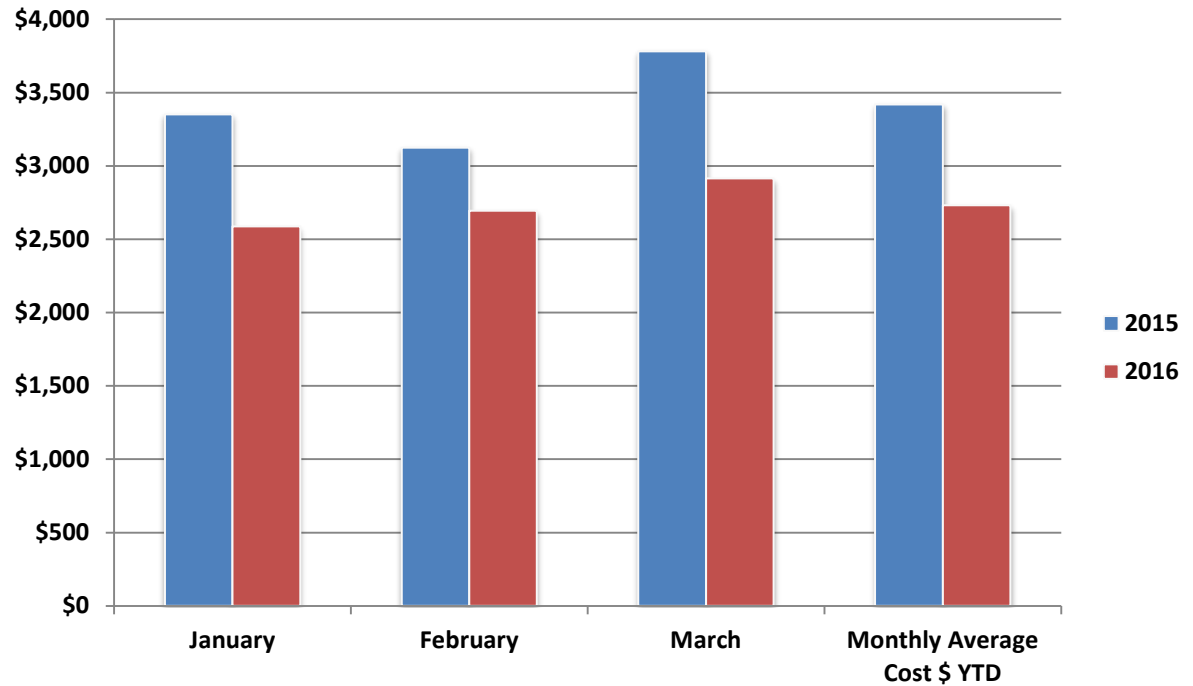


Historic Courthouse Utility Use



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

**Historic Courthouse Electricity Use Comparison,
Qtr. 3 2015-2016**

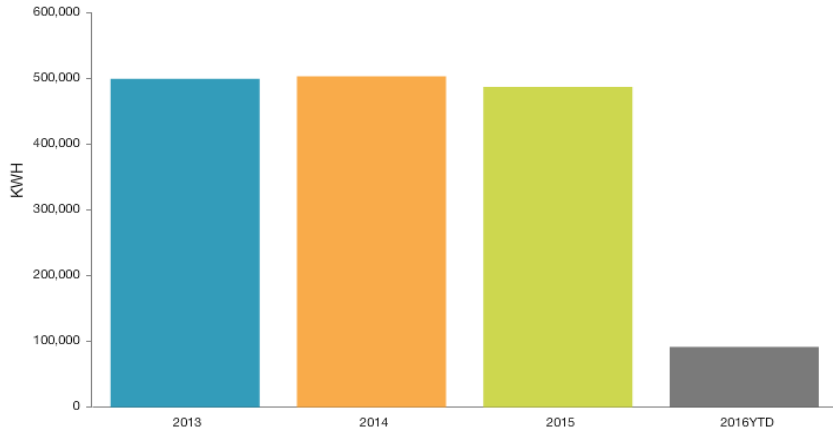


Historic Courthouse Utility Use

Location: Henderson County-> HISTORICCOURTHOUSE [Historic Courthouse]
Time: 04/25/2016 1:06:37 AM

Electricity in KWH

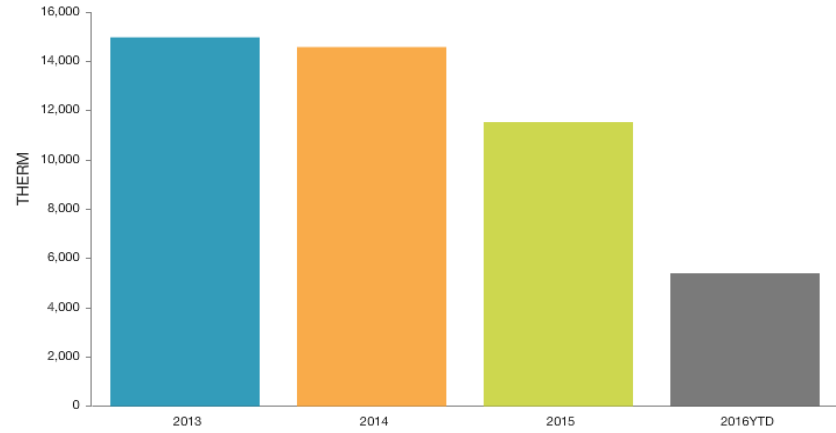
Total Use Summary
 (FY ends in Dec of year shown)



Location: Henderson County-> HISTORICCOURTHOUSE [Historic Courthouse]
Time: 04/25/2016 1:06:37 AM

Natural Gas in Therms

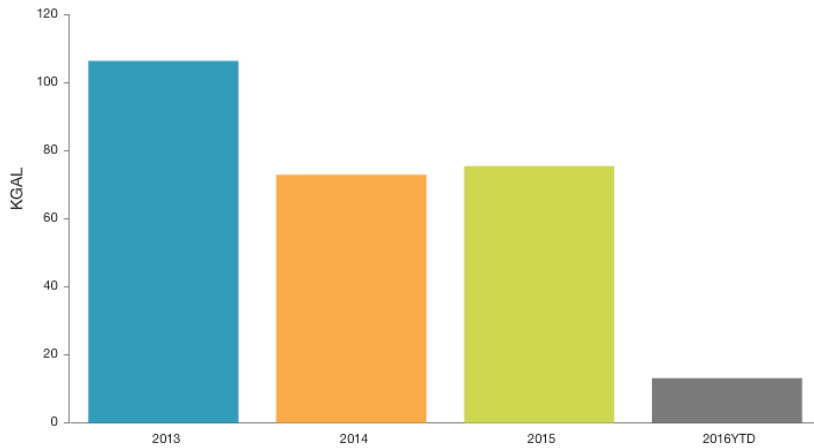
Total Use Summary
 (FY ends in Dec of year shown)



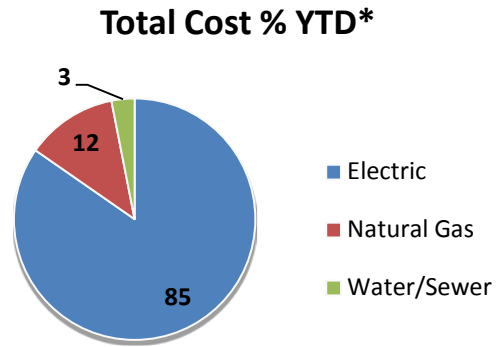
Location: Henderson County-> HISTORICCOURTHOUSE [Historic Courthouse]
Time: 04/25/2016 1:06:37 AM

Water in Thousands of Gal

Total Use Summary
 (FY ends in Dec of year shown)

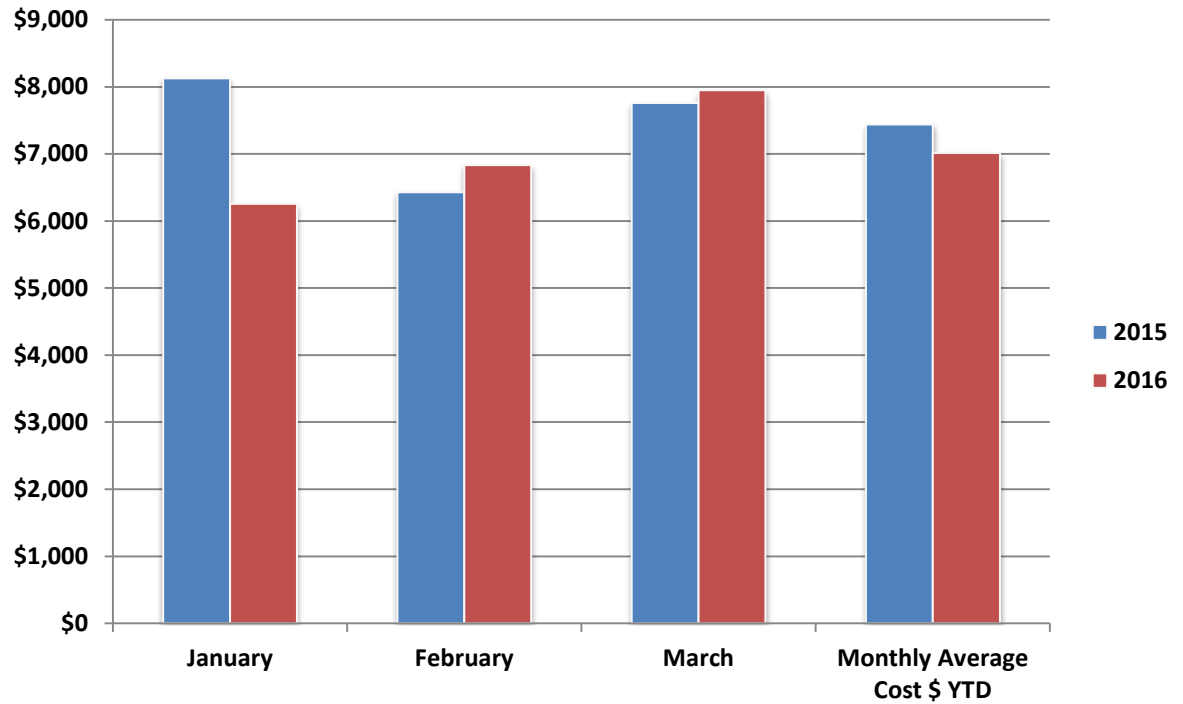


Human Services Utility Use



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

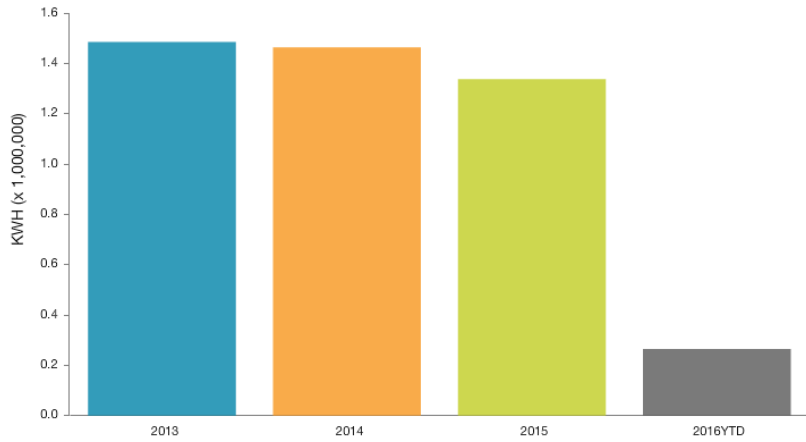
Human Services Electricity Use Comparison Qtr. 3, 2015-2016



Human Services Utility Use

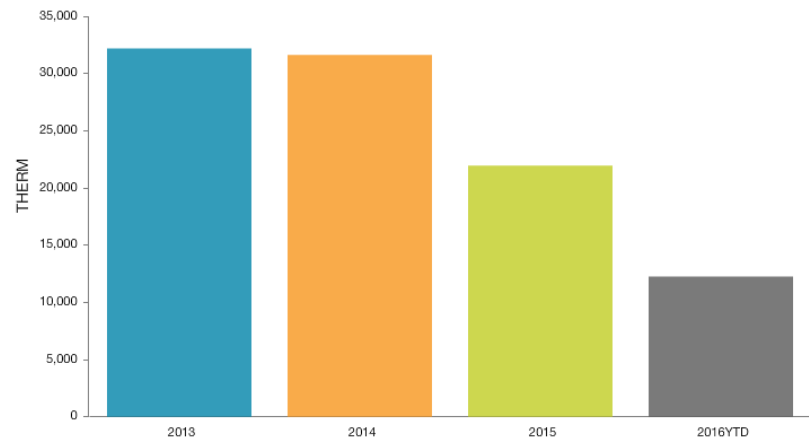
Location: Henderson County-> HUMANSERVICES [Human Services]
Time: 04/25/2016 1:06:37 AM
Commodity: Electric
Electricity in KWH

Total Use Summary
 (FY ends in Dec of year shown)



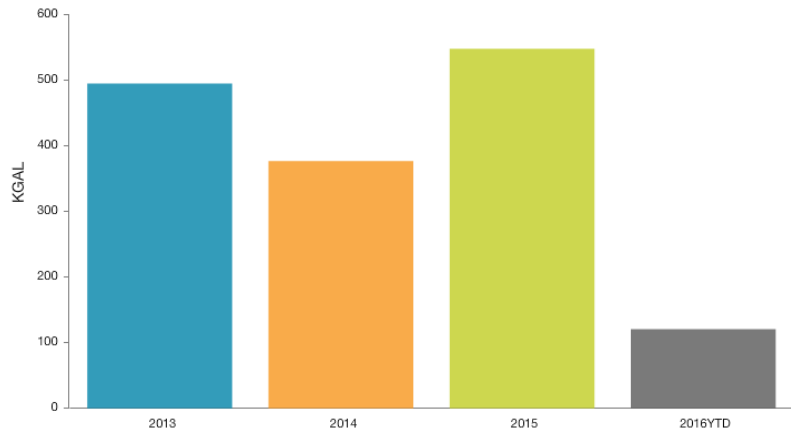
Location: Henderson County-> HUMANSERVICES [Human Services]
Time: 05/04/2016 1:06:34 AM
Commodity: Natural Gas
Natural Gas in Therms

Total Use Summary
 (FY ends in Dec of year shown)



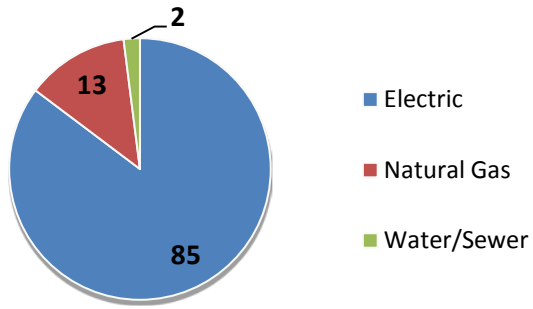
Location: Henderson County-> HUMANSERVICES [Human Services]
Time: 04/25/2016 1:06:37 AM
Commodity: Water
Water in Thousands of Gal

Total Use Summary
 (FY ends in Dec of year shown)



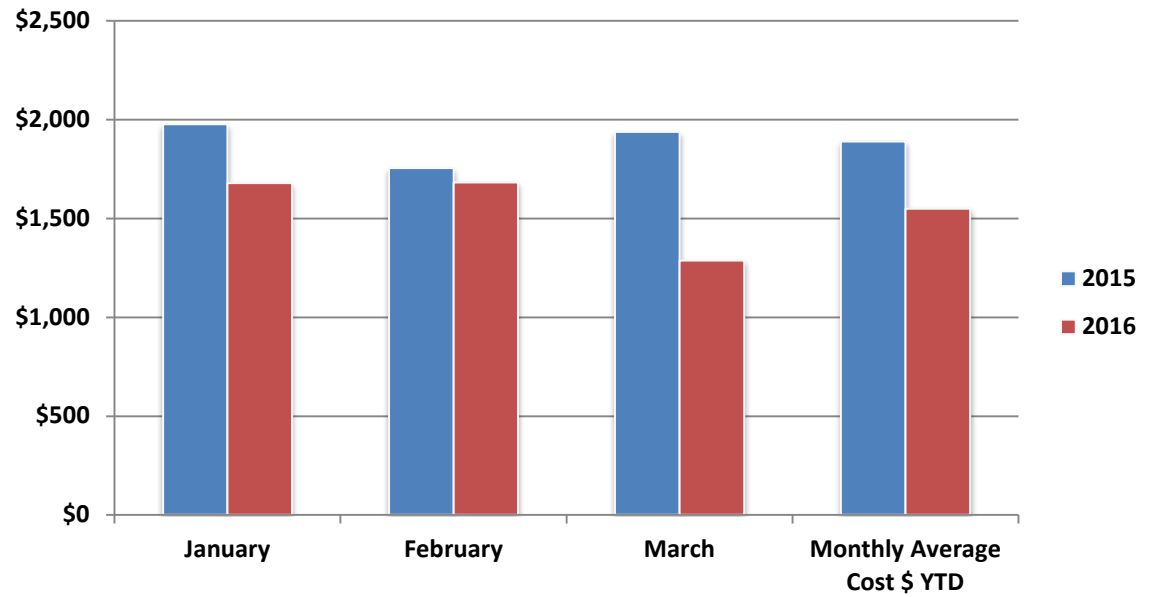
King Street Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

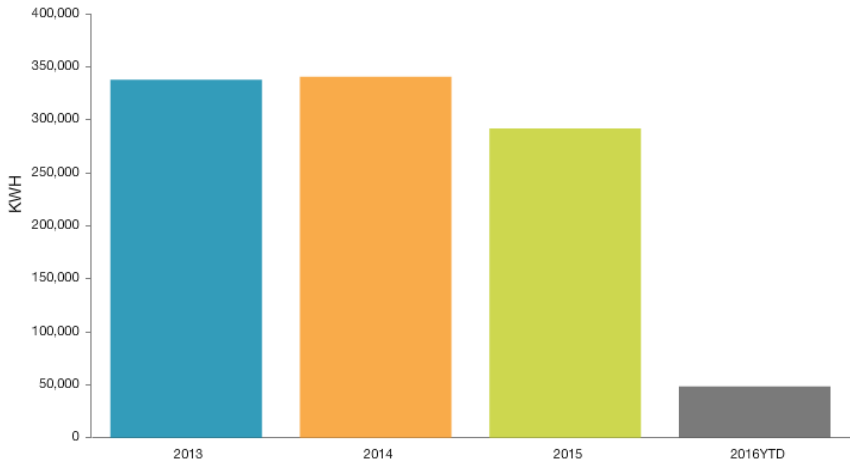
King Street Electricity Use Comparison Qtr. 3, 2015-2016



King Street Utility Use

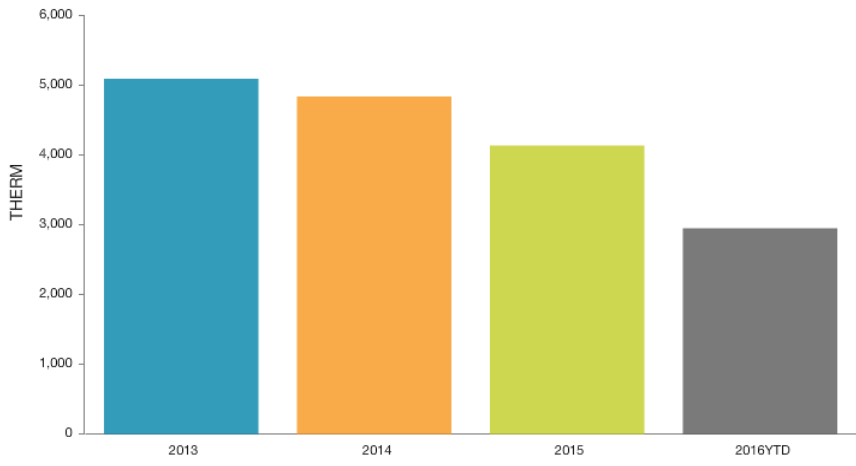
Location: Henderson County-> KINGSTREETBUILDING [King Street Building]
Time: 05/04/2016 1:06:34 AM **Commodity:** Electric **Electricity in KWH**

Total Use Summary
(FY ends in Dec of year shown)



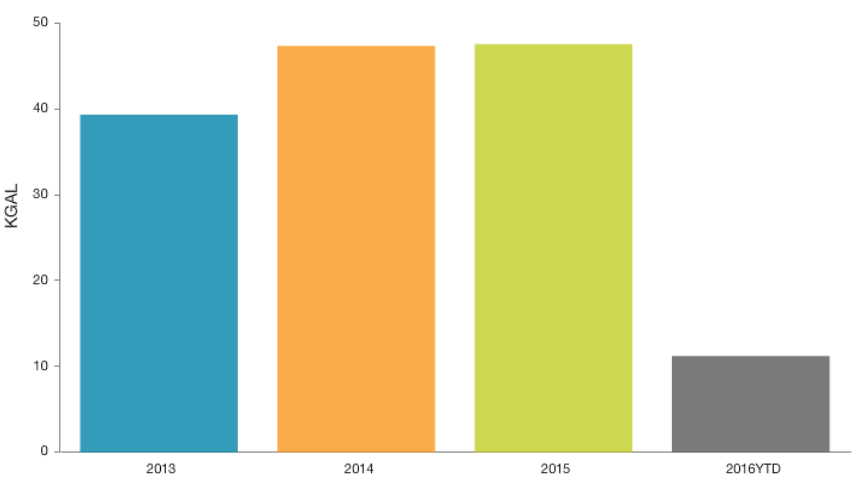
Location: Henderson County-> KINGSTREETBUILDING [King Street Building]
Time: 04/25/2016 1:06:37 AM **Commodity:** Natural Gas **Natural Gas in Therms**

Total Use Summary
(FY ends in Dec of year shown)



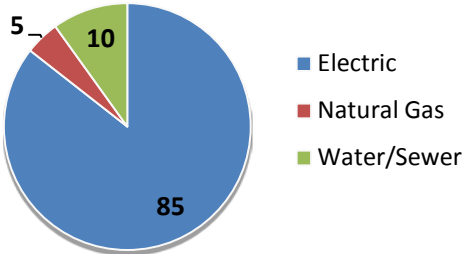
Location: Henderson County-> KINGSTREETBUILDING [King Street Building]
Time: 04/25/2016 1:06:37 AM **Commodity:** Water **Water in Thousands of Gal**

Total Use Summary
(FY ends in Dec of year shown)



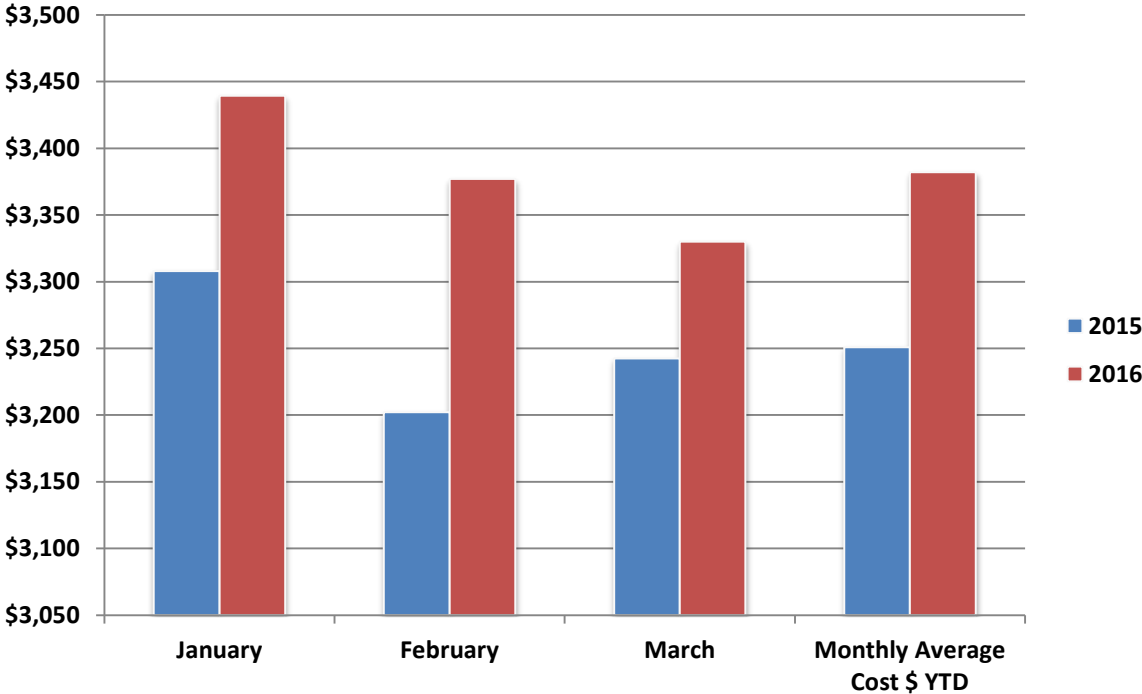
Library Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

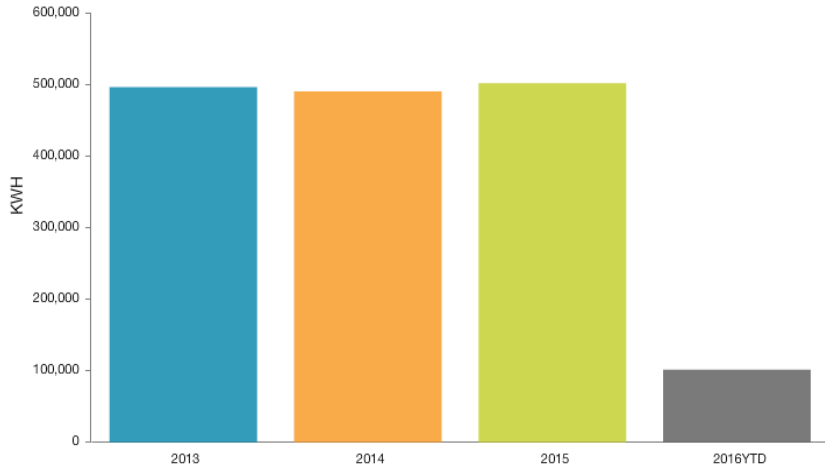
**Libraries Electricity Use Comparison
Qtr. 3, 2015-2016**



Library Utility Use

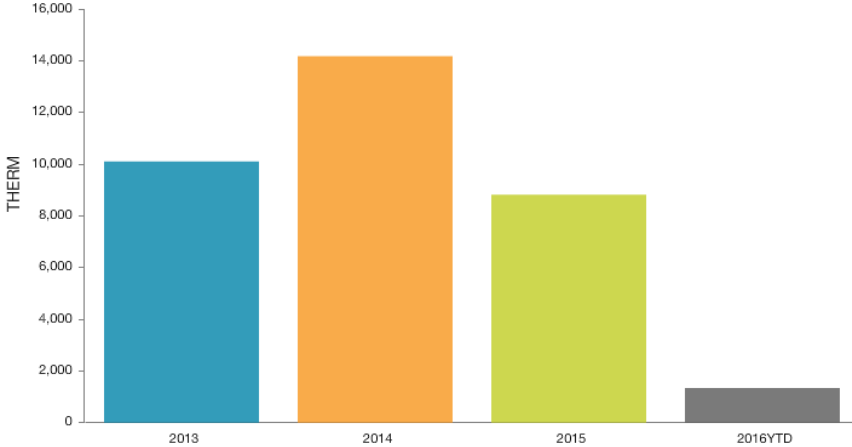
Location: Henderson County-> LIBRARY [Library] **Electricity in KWH**
Time: 04/25/2016 1:06:37 AM **Commodity:** Electric

Total Use Summary
(FY ends in Dec of year shown)



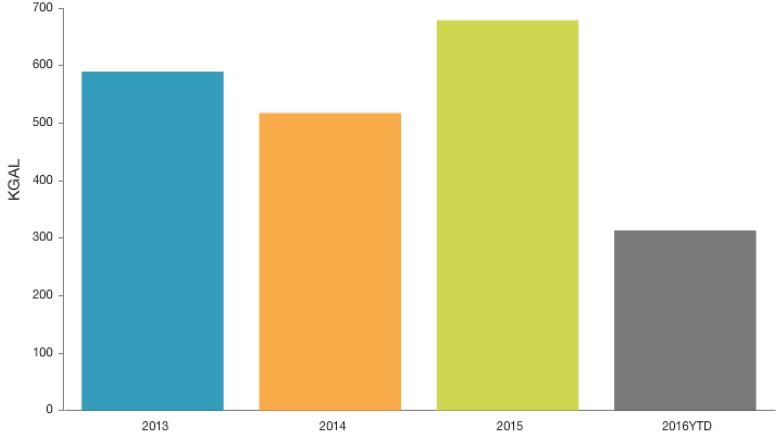
Location: Henderson County-> LIBRARY [Library] **Natural Gas in Therms**
Time: 04/25/2016 1:06:37 AM **Commodity:** Natural Gas

Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> LIBRARY [Library] **Water in Thousands of Gal**
Time: 04/25/2016 1:06:37 AM **Commodity:** Water

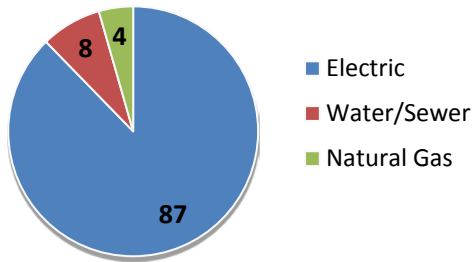
Total Use Summary
(FY ends in Dec of year shown)



*A major water leak was discovered in March that began in late February at the Main Library on Washington Street. The problem has been repaired but the leak caused a large increase in unanticipated volume.

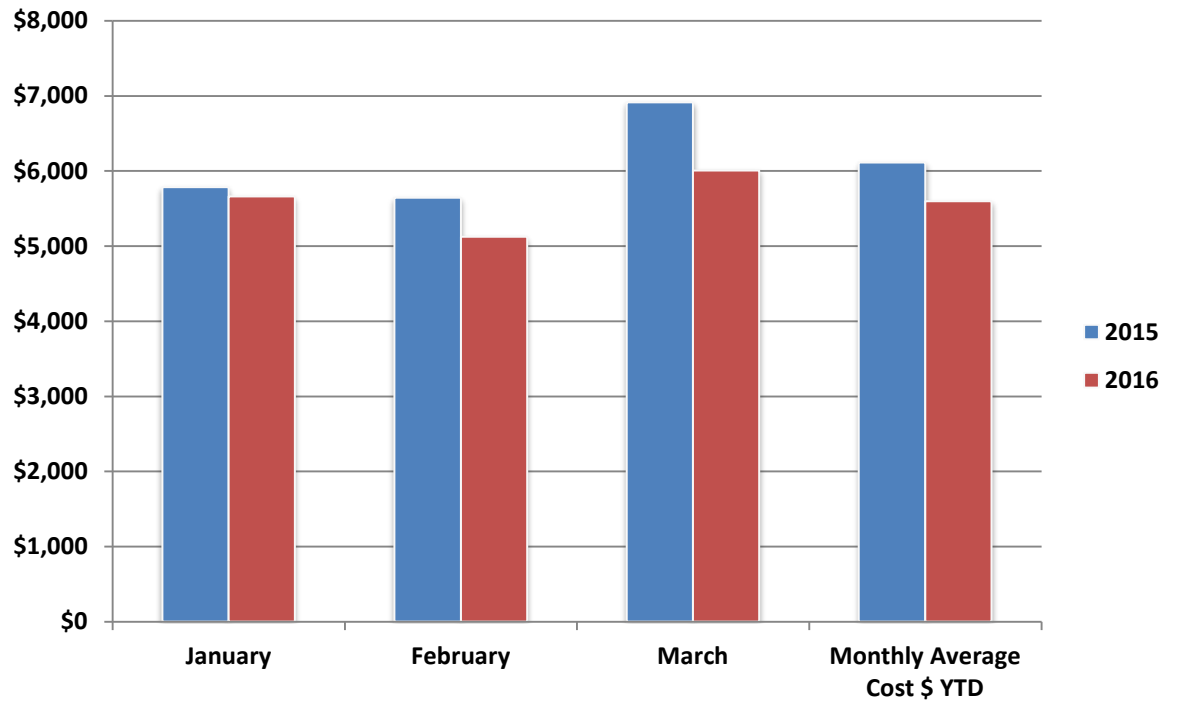
Parks and Recreation Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

Parks & Recreation Electricity Use Comparison Qtr. 3, 2015-2016

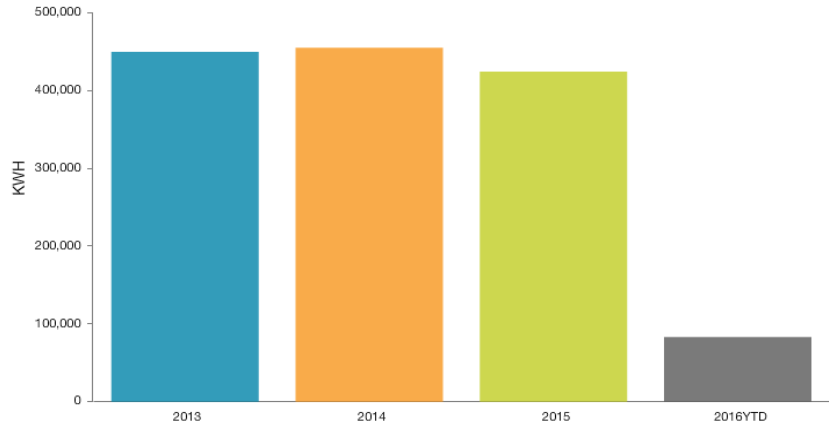


Parks and Recreation Utility Use

Location: Henderson County-> PARKS&RECREATION [Parks & Recreation]
Time: 05/04/2016 1:06:34 AM
Commodity: Electric

Electricity in KWH

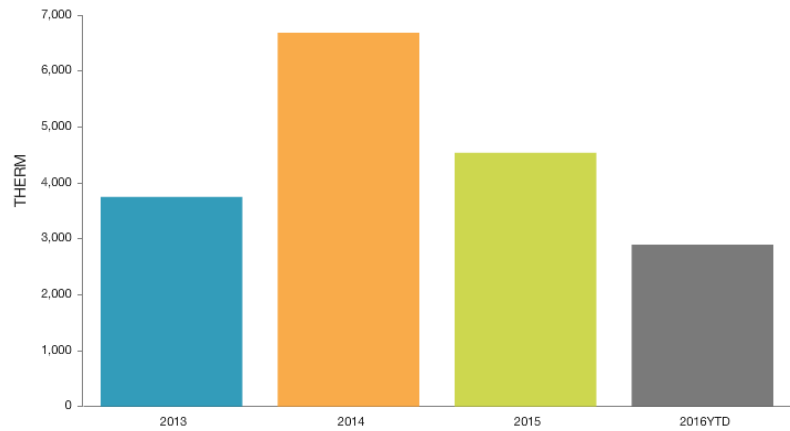
Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> PARKS&RECREATION [Parks & Recreation]
Time: 05/04/2016 1:06:34 AM
Commodity: Natural Gas

Natural Gas in Therms

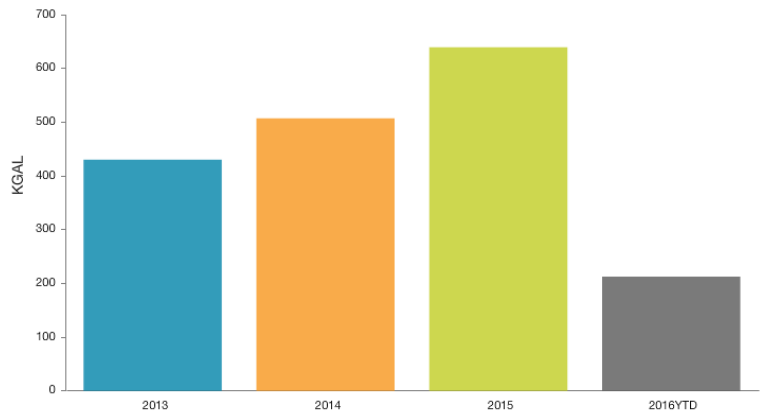
Total Use Summary
(FY ends in Dec of year shown)



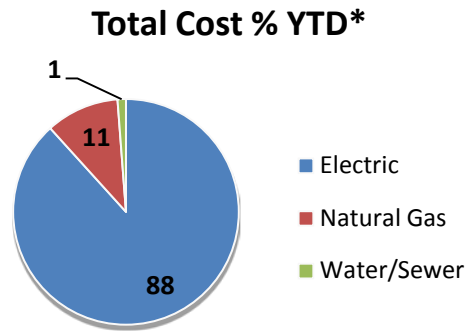
Location: Henderson County-> PARKS&RECREATION [Parks & Recreation]
Time: 04/25/2016 1:06:37 AM
Commodity: Water

Water in Thousands of Gal

Total Use Summary
(FY ends in Dec of year shown)

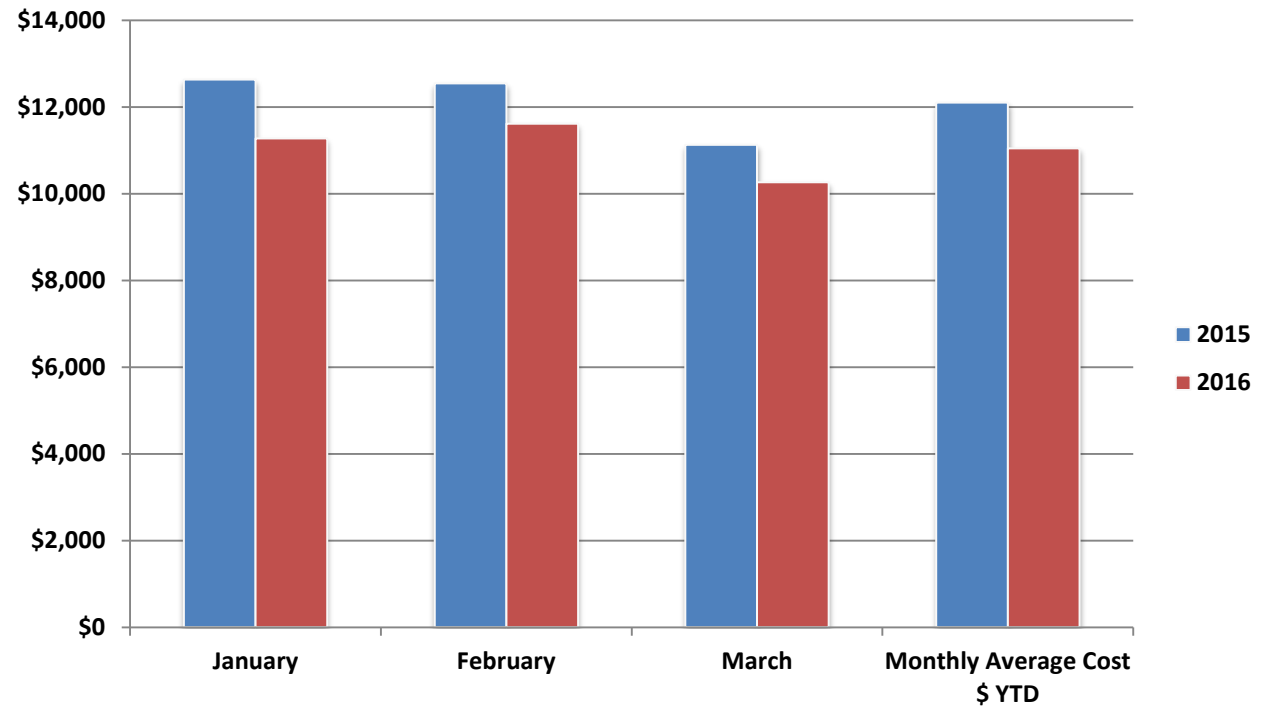


Sheriff's Complex Utility Use



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

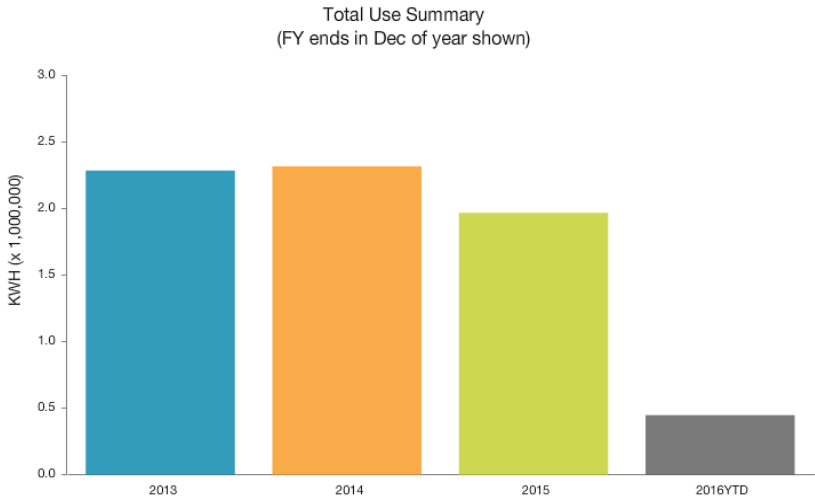
Sheriff's Complex Electricity Use Comparison Qtr. 3, 2015-2016



Sheriff's Complex Utility Use

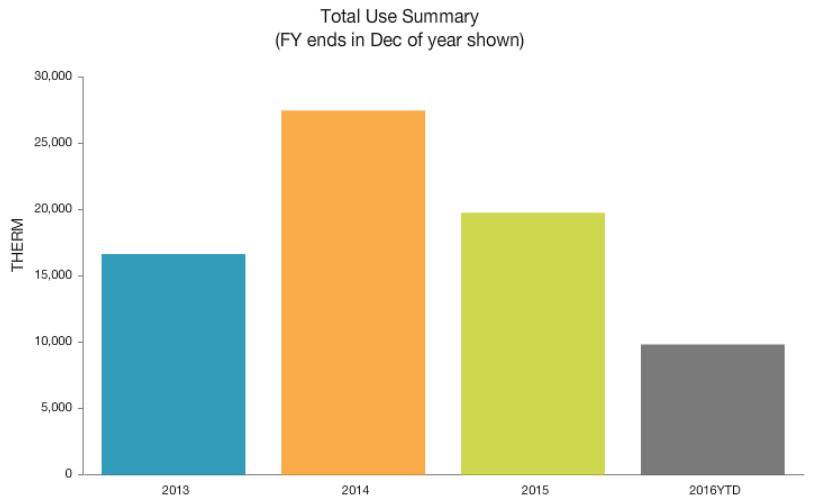
Location: Henderson County-> SHERIFF (Sheriff) **Commodity:** Electric

Electricity in KWH



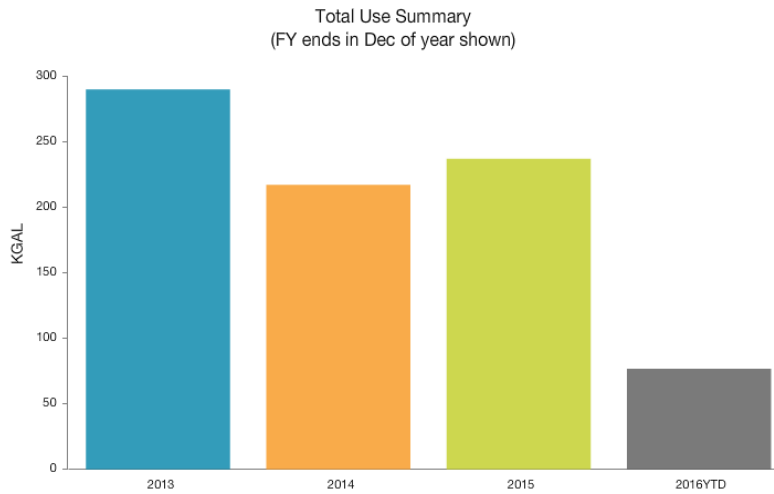
Location: Henderson County-> SHERIFF (Sheriff) **Commodity:** Natural Gas

Natural Gas in Therms



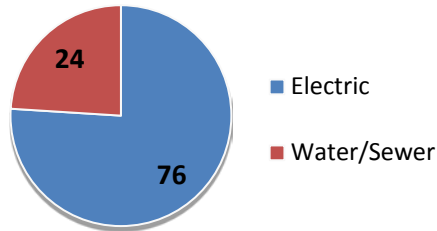
Location: Henderson County-> SHERIFF (Sheriff) **Commodity:** Water

Water in Thousands of Gal



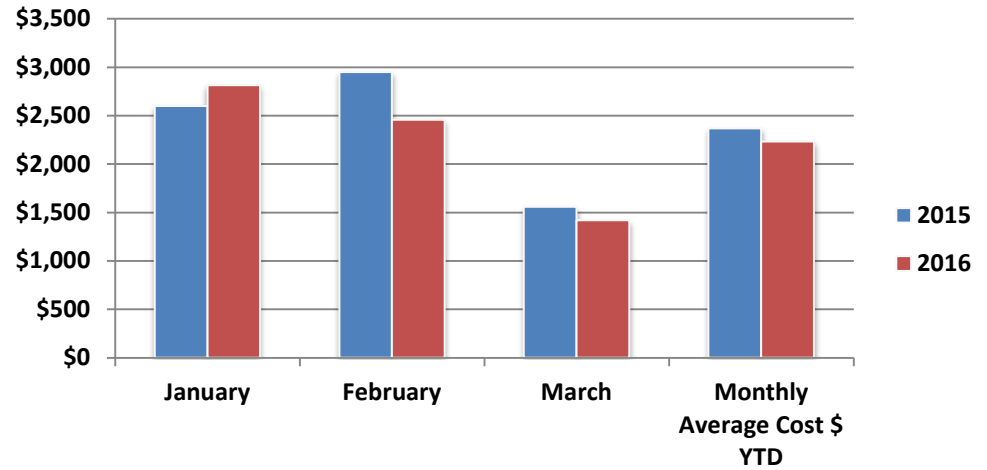
Solid Waste Utility Use

Total Cost % YTD*



* The cost percentage of each commodity over the most recent 12 months, not including the current month or last month (FacilityDude assumes the data for these months may be incomplete).

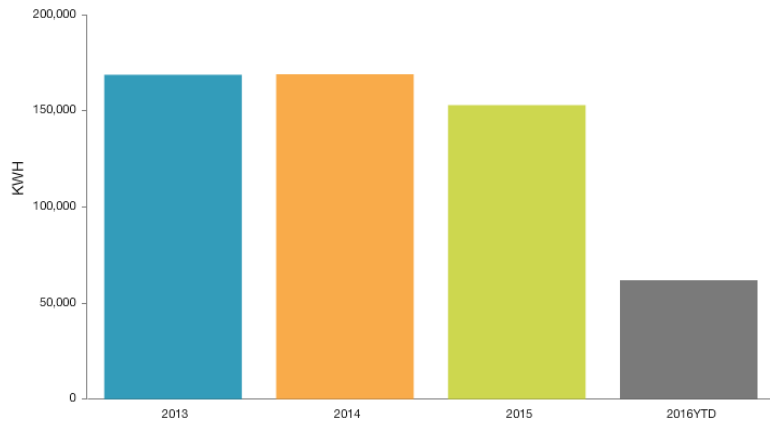
Solid Waste Electricity Use Comparison Qtr. 3, 2015-2016



Location: Henderson County-> SOLIDWASTE [Solid Waste]
Time: 04/25/2016 1:06:37 AM Commodity: Electric

Electricity in KWH

Total Use Summary
(FY ends in Dec of year shown)



Location: Henderson County-> SOLIDWASTE [Solid Waste]
Time: 04/25/2016 1:06:37 AM Commodity: Water

Water in Thousands of Gal

Total Use Summary
(FY ends in Dec of year shown)

