



Sustainability Initiatives at Hinds Community College

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Topics for Today

- Energy Conservation
- Recycling/Waste Management





Energy Conservation

Hinds Community College
Hinds Community College - MS

Energy Conservation Program CAP - 19

Cumulative Cost Savings

January 2020

Expected Energy Cost	\$53,619,712
Actual Energy Cost	\$36,300,807
<hr/>	
Program Savings	\$17,318,905
Percent Savings	32.3%
<hr/>	
Other Savings	\$18,307
Total Savings	\$17,337,211



Greenhouse Gas Reduction

Cumulative Greenhouse Gas Reduction

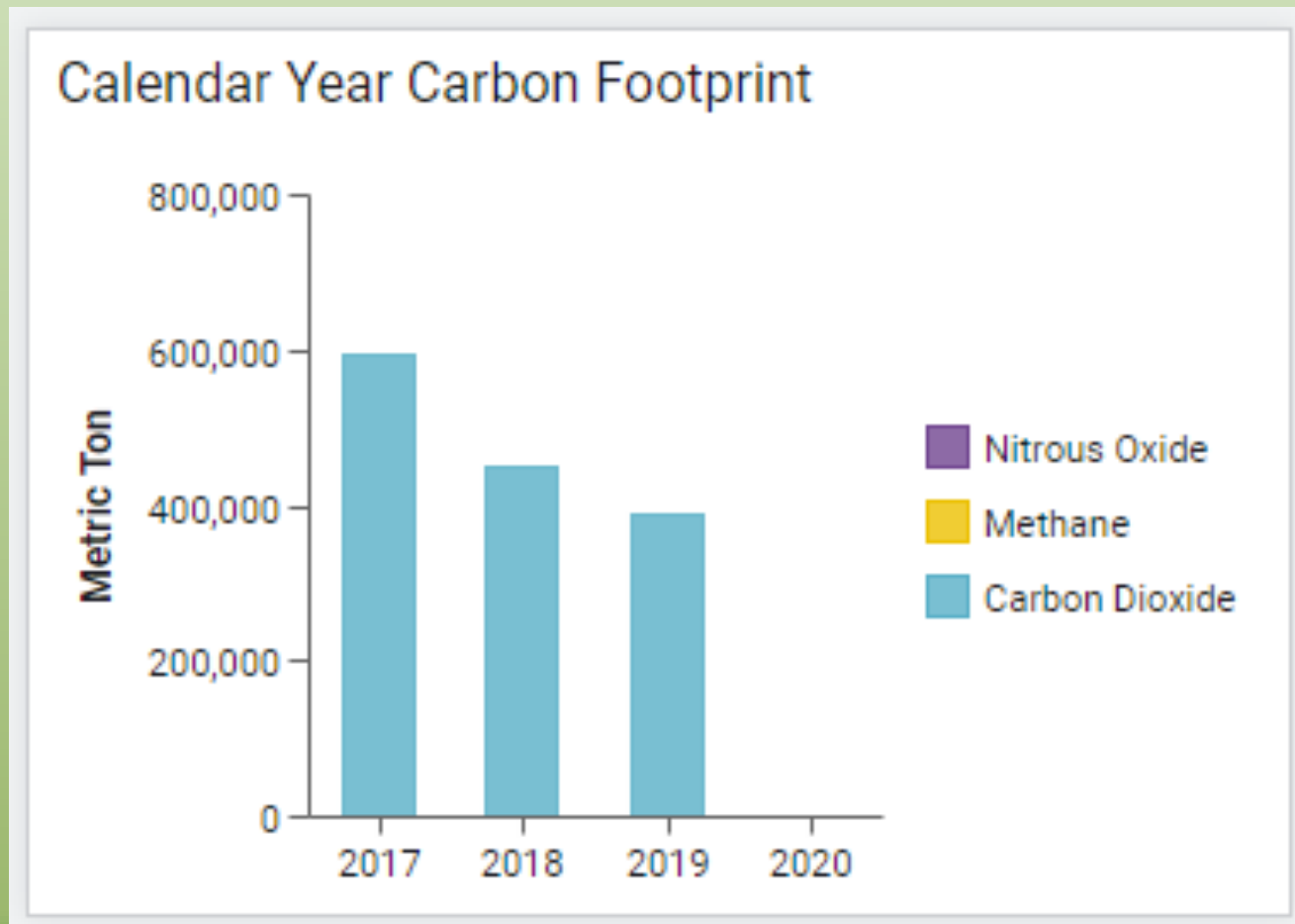
Energy Reduction Impact:	-51,020,045 MMBTU	-2,670,013	equiv. metric tons of CO ₂
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This is equivalent to the following:

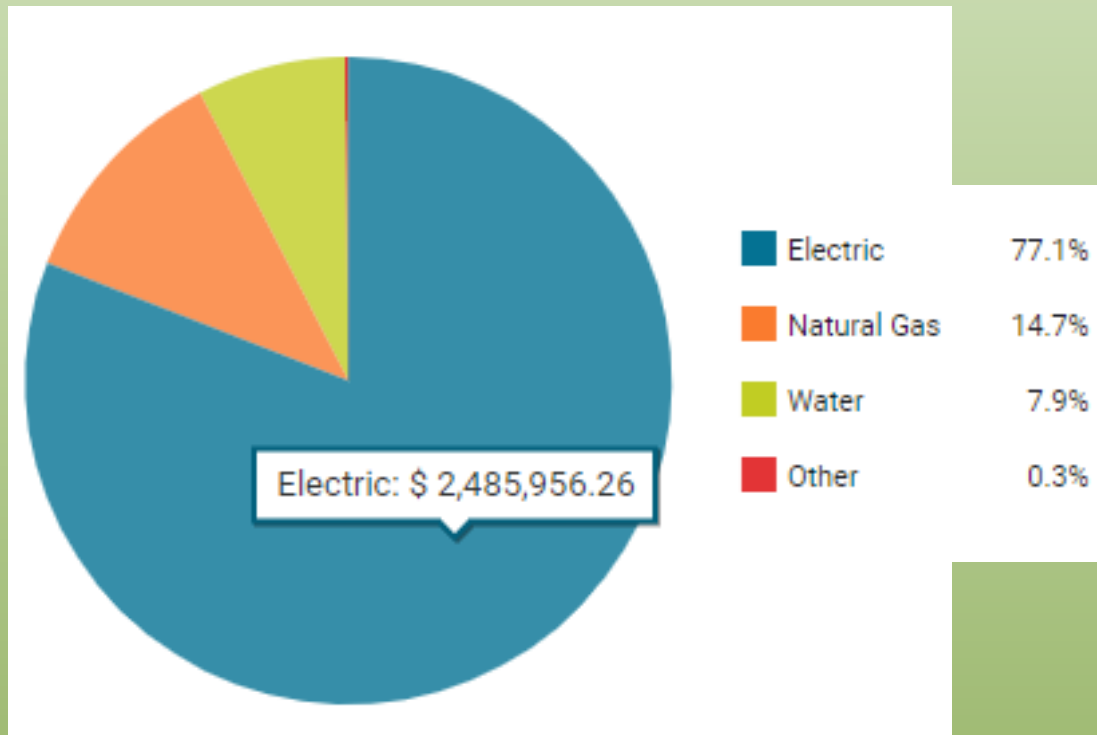
Passenger cars not driven for one year:	-556,253
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Tree seedlings grown for 10 years:	-68,461,860
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Carbon Footprint



Commodity Cost (2019)



Daily Cost

Daily Cost



2.6%

\$ 9,847

Previous Year

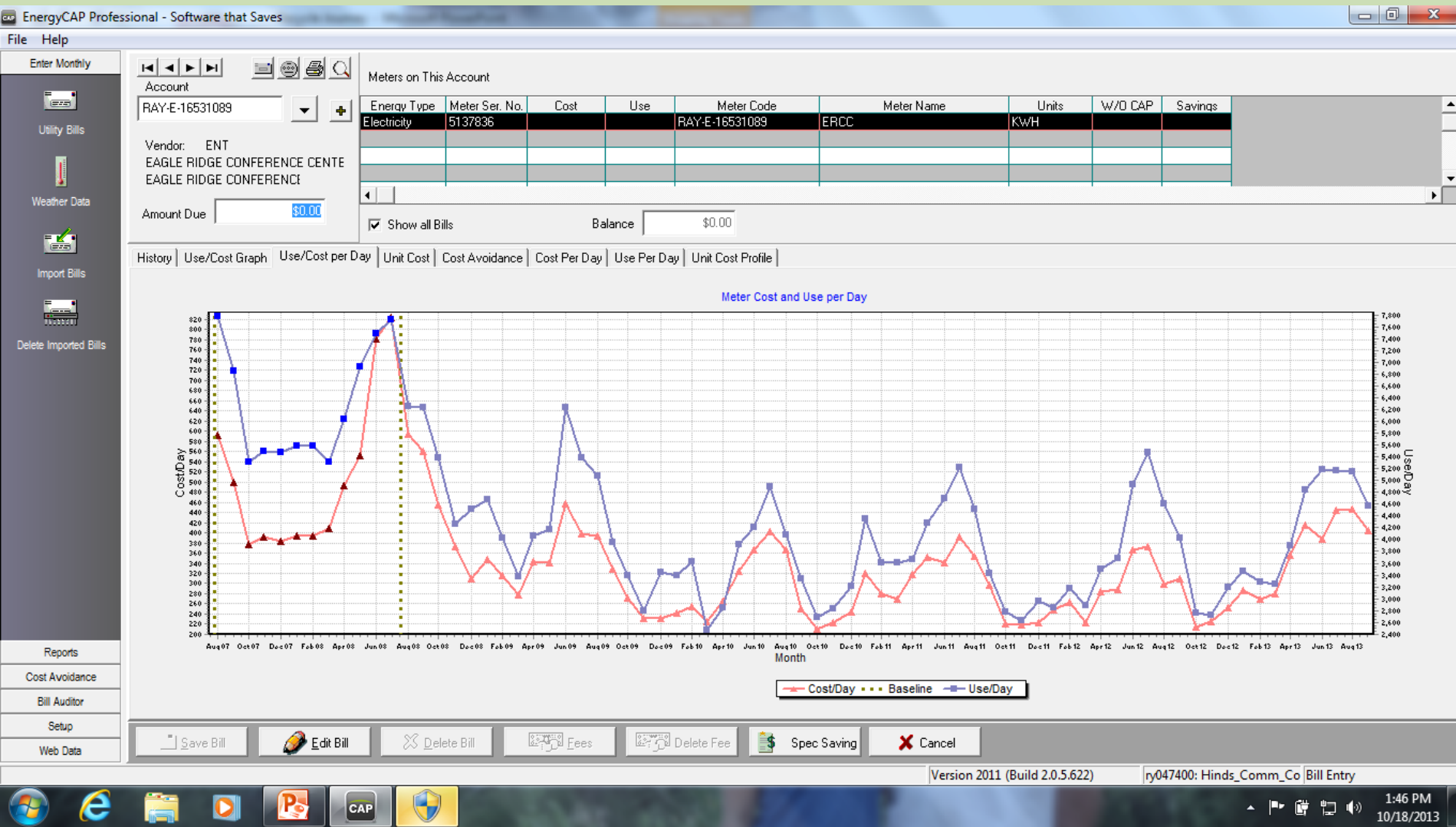
Jan 2018–Dec 2018

\$ 9,587

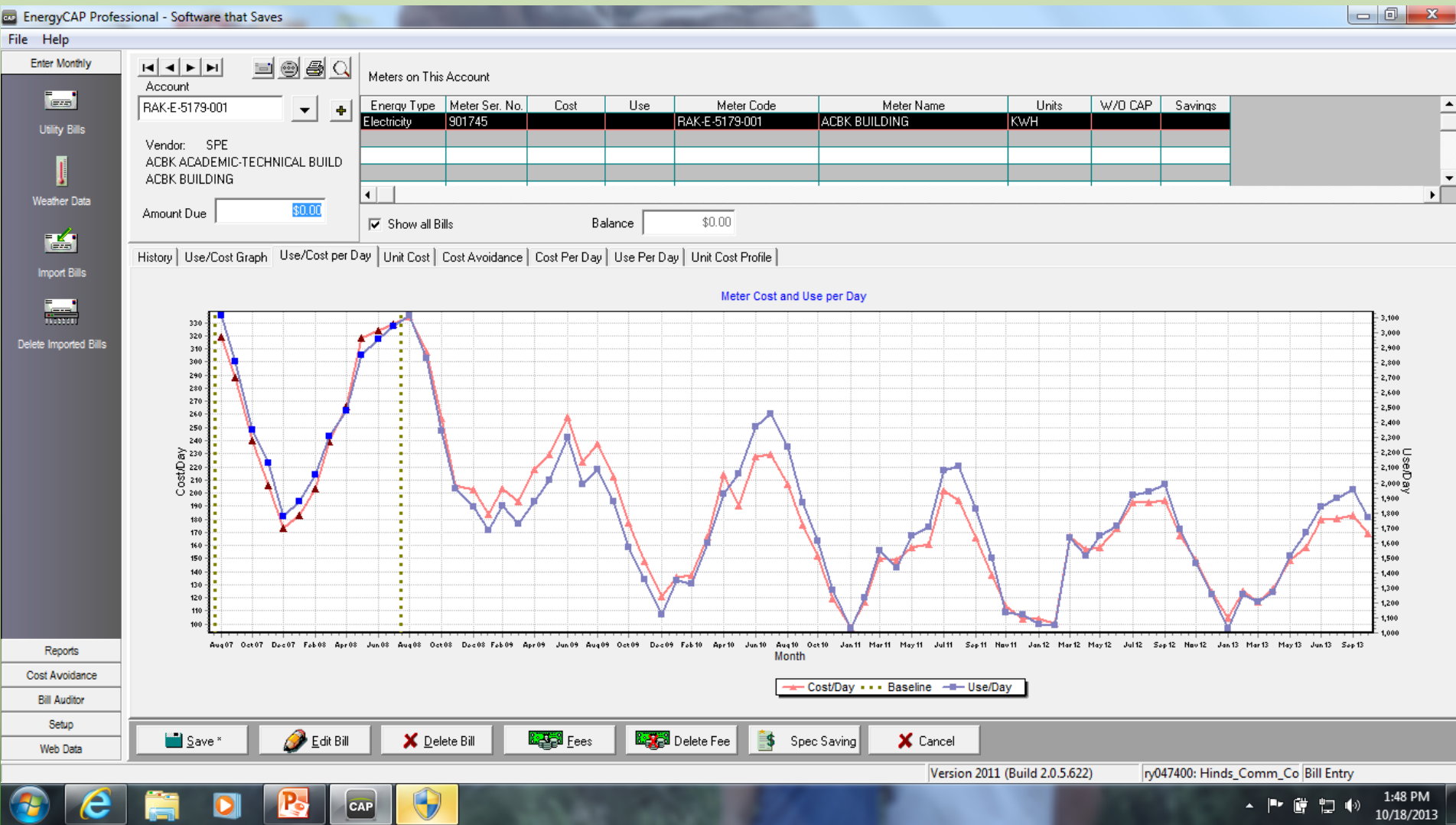
Current Year

Jan 2019–Dec 2019

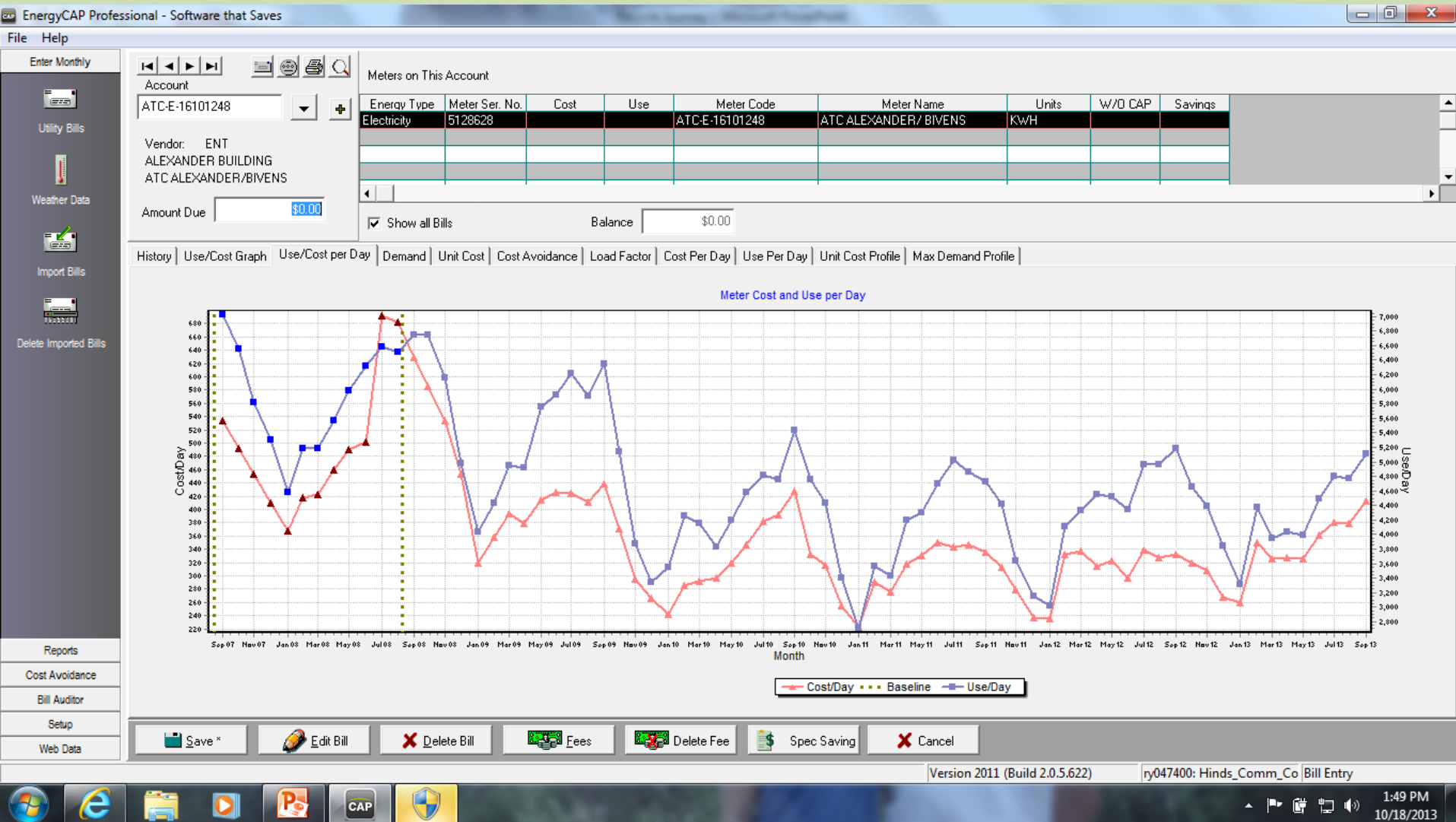
Eagle Ridge CC



Rankin – BLDG Closest to HWY 80



Jackson ATC



Tracking the Savings..

2009: -0.5%

2010: 23%

2011: 25%

2012: 24%

2016: 30%

2019: 32.3%

How did we trim our energy consumption by over 32%?

- 1. Energy Manager
- 2. Data
- 3. Temperature set-points
- 4. Researched occupancy trends
- 5. Verified equipment is operating as designed

1. Energy Manager

- Somebody has to be dedicated to the energy conservation efforts.
- A energy conservation policy should be implemented and enforced.
- Energy management isn't 8-4. Its 24/7.
- Energy management is never complete.

Step 2: Dealing with Data

The screenshot displays the EnergyCAP web application interface. The browser address bar shows the URL `app.energycap.com/app/dashboards/user/1148`. The page title is "Hinds Community College". The left sidebar contains navigation options: Dashboards, My Dashboards, My Maps, Dashboards Shared with Me, and Maps Shared with Me. The main content area is titled "SAMPLE: Utility Bill Accounting" and includes a filter by building or building group. The dashboard is divided into several sections:

- Bills Created: Last 7 Days**: A large number display showing 85.
- Bills Held From Export**: A large number display showing 0.
- Top 15 Vendors Costs: 1 Year**: A table listing vendors and their costs.
- Cost Center Totals: 1 Year**: A large yellow box displaying the total cost for Hinds Community College - MS.
- Top 20 Cost Center Costs: 1 Year**: A table listing cost centers and their costs.

The Windows taskbar at the bottom shows the search bar and various application icons. The system clock indicates the time is 1:43 PM on 2/24/2020.

Vendor	Cost
ENERGY	\$1,960,715
SOUTHWEST MISSISSIPPI ELECTRIC	\$559,077
ATMOS ENERGY	\$266,996
SOUTHERN PINE ELECTRIC ASSOCIATION	\$169,077
RAYMOND WATER DEPARTMENT	\$127,303
TOWN OF UTICA	\$91,337
REEDTOWN WATER ASSOCIATION	\$63,827
CENTERPOINT ENERGY	\$54,711
CITY OF JACKSON	\$35,221
CITY OF PEARL	\$21,006
CITY OF VICKSBURG	\$18,483
SOUTH CENTRAL WATER	\$8,701
CULKIN WATER DISTRICT	\$3,554

Cost Center	Cost
Hinds Community College - MS	\$3,380,007

Actual Bill Data in EnergyCap

Gradebook - SP20 BAD2613RFVA x CAP Meter > Bills x

app.energycap.com/app/buildings/meter/3681/bills

EnergyCAP Hinds Community College

Buildings & Meters

- Hinds Community College - MS
- ATC-G-4028481267
- Hinds Community College -
- Hinds Community College -
- Hinds Community College -
- VIC-E-157341827
- HINDS COMMUNITY COLLEGE
- HINDS COMMUNITY COLLEGE
- HINDS COMMUNITY COLLEGE
- JACKSON CAMPUS
 - ALEXANDER BUILDING
 - ALEXANDER BLDG
 - ATC ALEXANDER
 - ATC ALEXANDER
- atc sign
- CHILD CARE BUILDING
- Jobie Martin Bldg An
- OLD CHURCH DAYCA
- STREET LIGHTS - ATC
- TEMPORARY TRAILER

... > JACKSON CAMPUS > ALEXANDER BUILDING > ⚡ ATC ALEXANDER/ BIVENS [ATC-E-16101248]

Bills Actual Data Calendarized Data Normalized Data Interval Data Savings Properties Flags

1 - 100 of 149

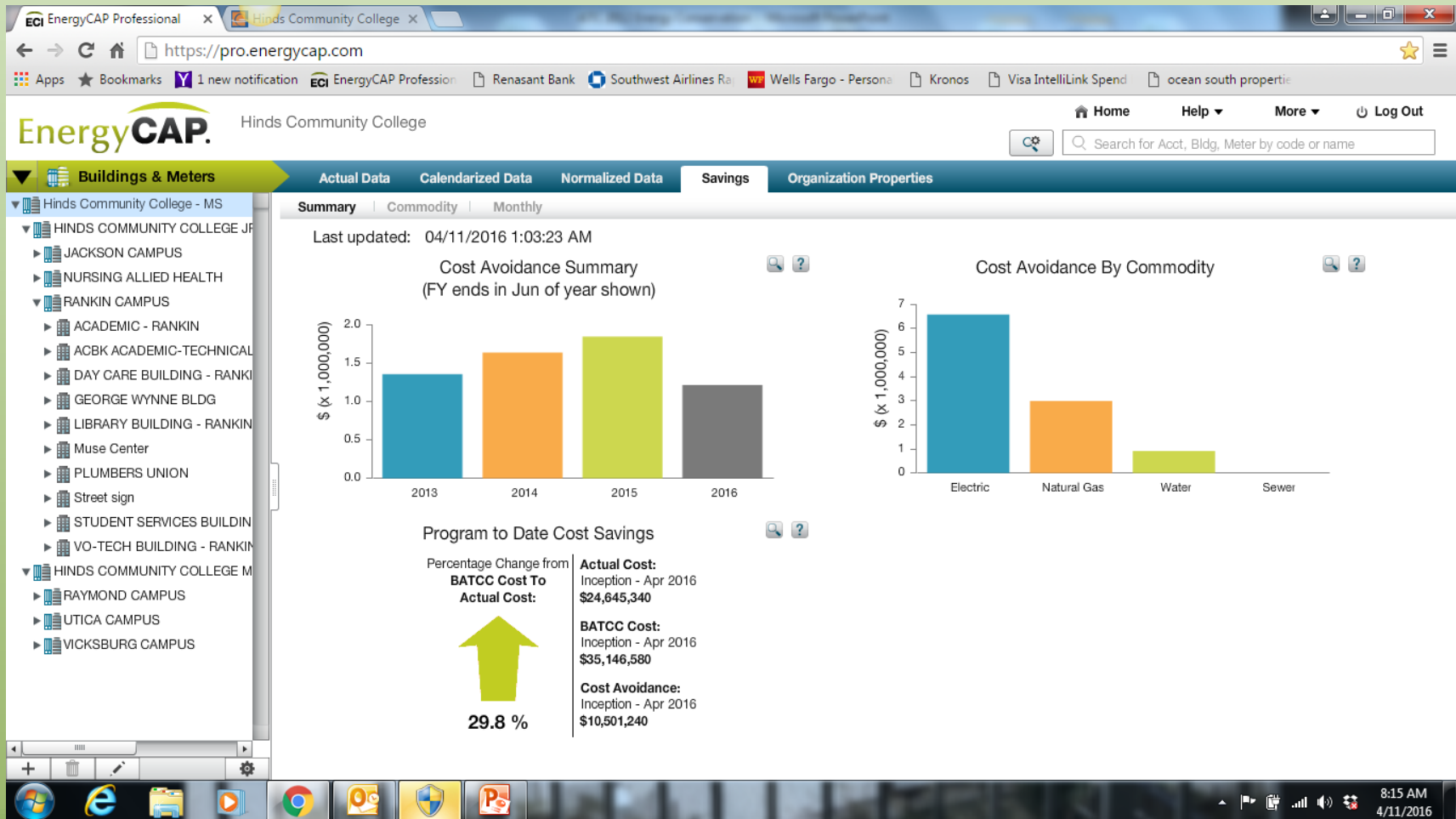
\$ 1,632,768.93 Total Cost of 149 Bills

Account Code - 2	Billing Period - 1	Bill Begin Date	Bill End Date	Meter Cost	Use	Use Unit	Use/Day
ATC-E-16101248	Jan 2020	12/21/2019	01/23/2020	\$ 10,919.92	112,800	kWh	3,418.18
ATC-E-16101248	Dec 2019	11/18/2019	12/21/2019	\$ 10,630.81	117,520	kWh	3,561.21
ATC-E-16101248	Nov 2019	10/21/2019	11/18/2019	\$ 10,156.45	119,400	kWh	4,264.29
ATC-E-16101248	Oct 2019	09/18/2019	10/21/2019	\$ 13,020.46	156,600	kWh	4,745.45
ATC-E-16101248	Sep 2019	08/16/2019	09/18/2019	\$ 13,815.04	171,000	kWh	5,181.82
ATC-E-16101248	Aug 2019	07/20/2019	08/16/2019	\$ 10,243.84	119,400	kWh	4,422.22
ATC-E-16101248	Jul 2019	06/19/2019	07/20/2019	\$ 11,922.26	148,200	kWh	4,780.65
ATC-E-16101248	Jun 2019	05/17/2019	06/19/2019	\$ 11,698.56	154,200	kWh	4,672.73
ATC-E-16101248	May 2019	04/20/2019	05/17/2019	\$ 9,301.56	113,400	kWh	4,200.00
ATC-E-16101248	Apr 2019	03/20/2019	04/20/2019	\$ 9,887.01	122,400	kWh	3,948.35
ATC-E-16101248	Mar 2019	02/18/2019	03/20/2019	\$ 9,093.09	111,000	kWh	3,700.00

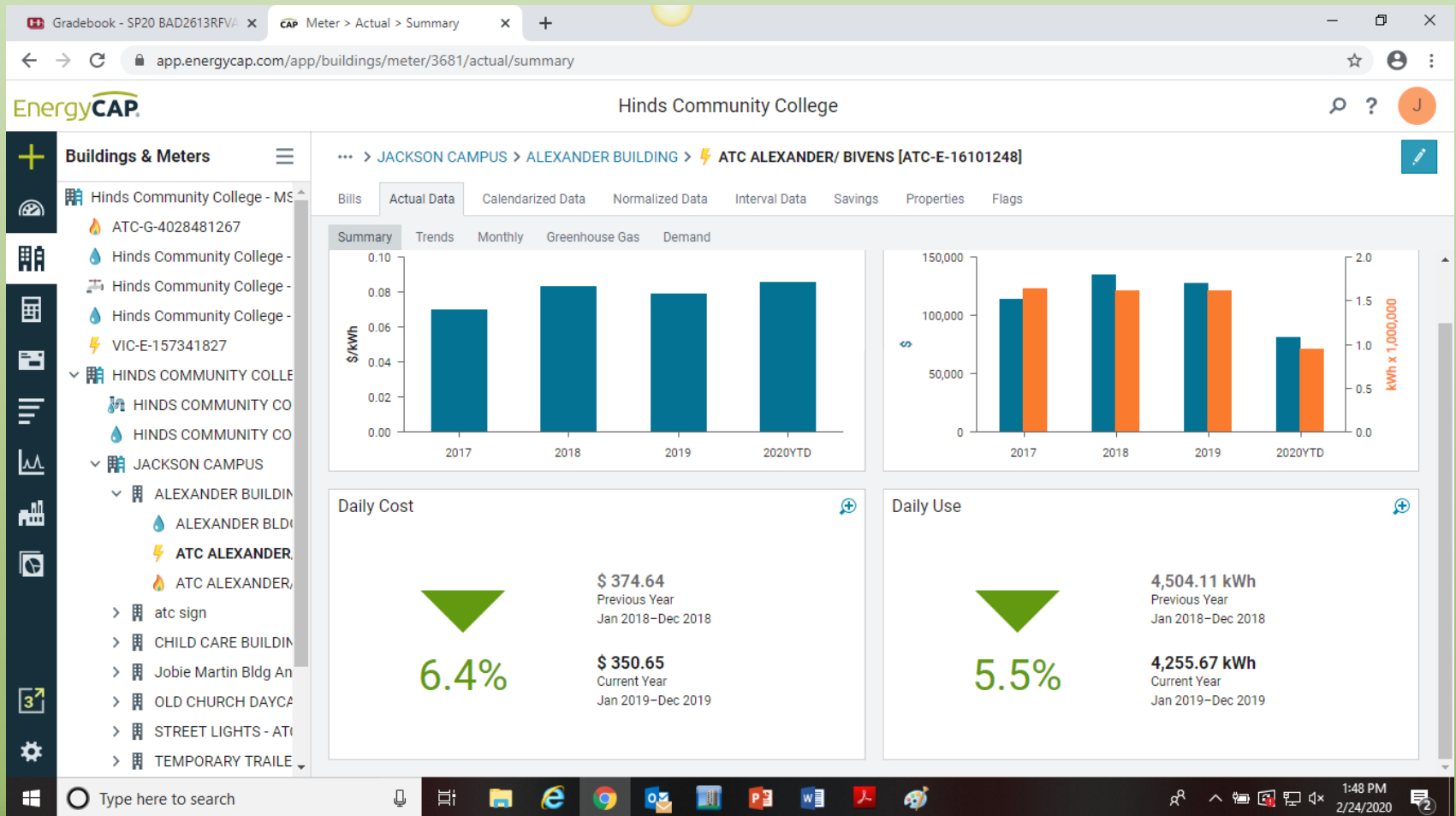
Type here to search

1:47 PM 2/24/2020

Buildings in EnergyCap



Trend Analysis



3. Space Set-points

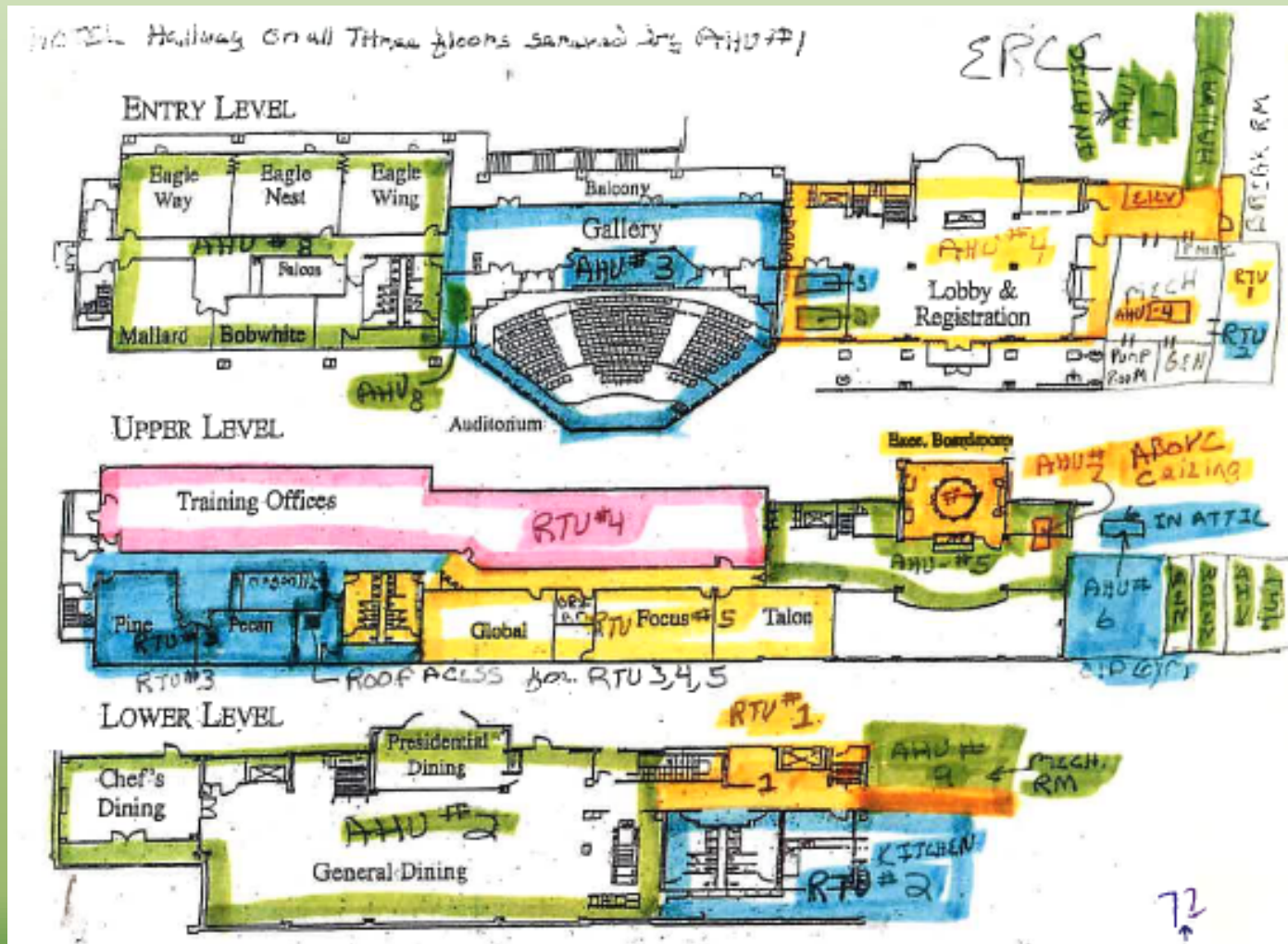
- Occupied:
 - Heating: 68-70
 - Cooling: 72
- Unoccupied:
 - Heating: 55-60
 - Cooling: 80-85

**Buildings vary - monitor humidity and adjust accordingly.

4. Occupancy

- A huge opportunity exists to save energy when spaces are unoccupied..
- Run reports/Survey to find unoccupied areas and setback these units. Excel/Ad Astra, etc.
- Consolidate as much as possible under your most efficient AHU/RTU zones.
- Unoccupy buildings, floors, HVAC zones.

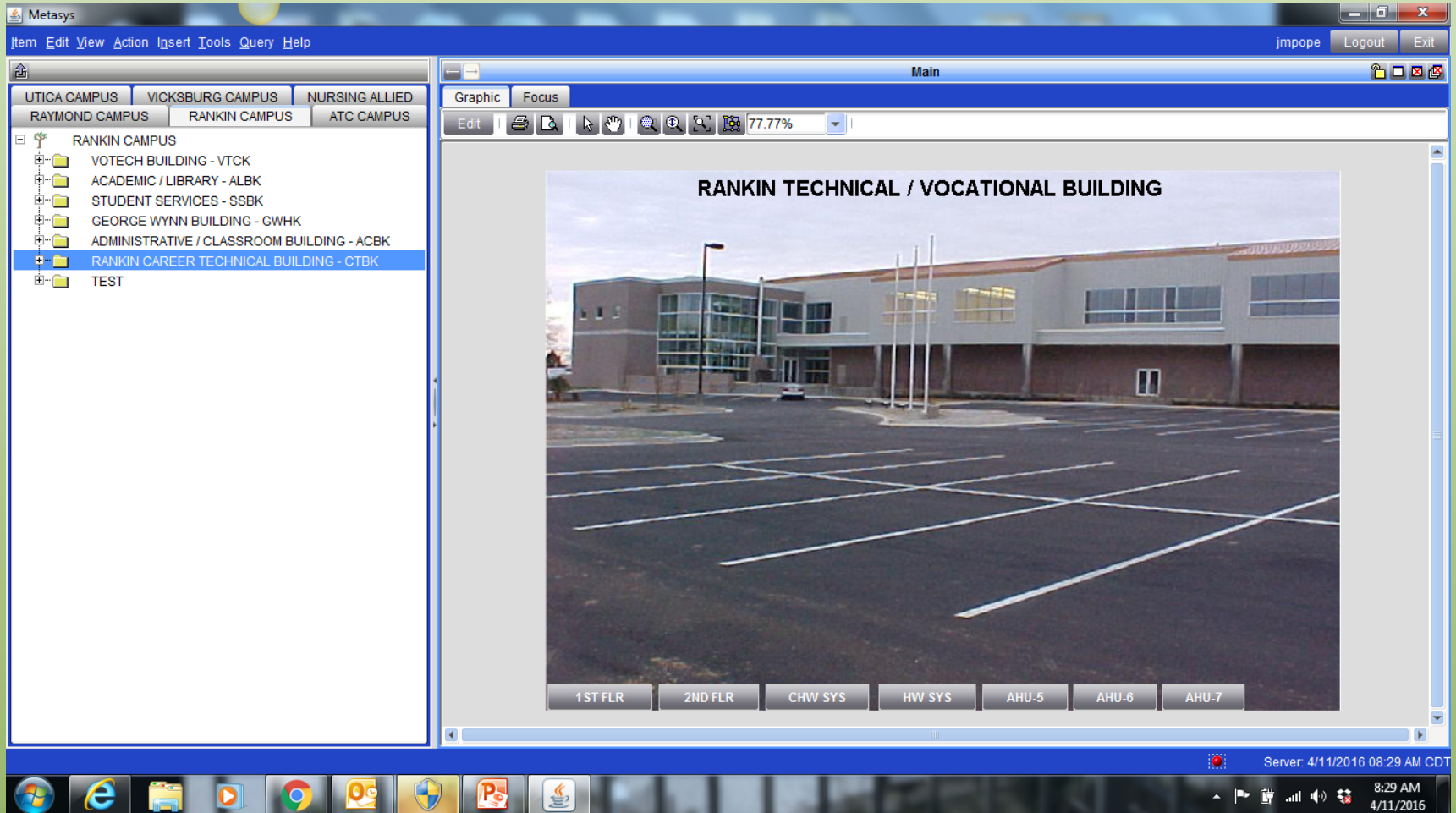
AHU Zone Maps

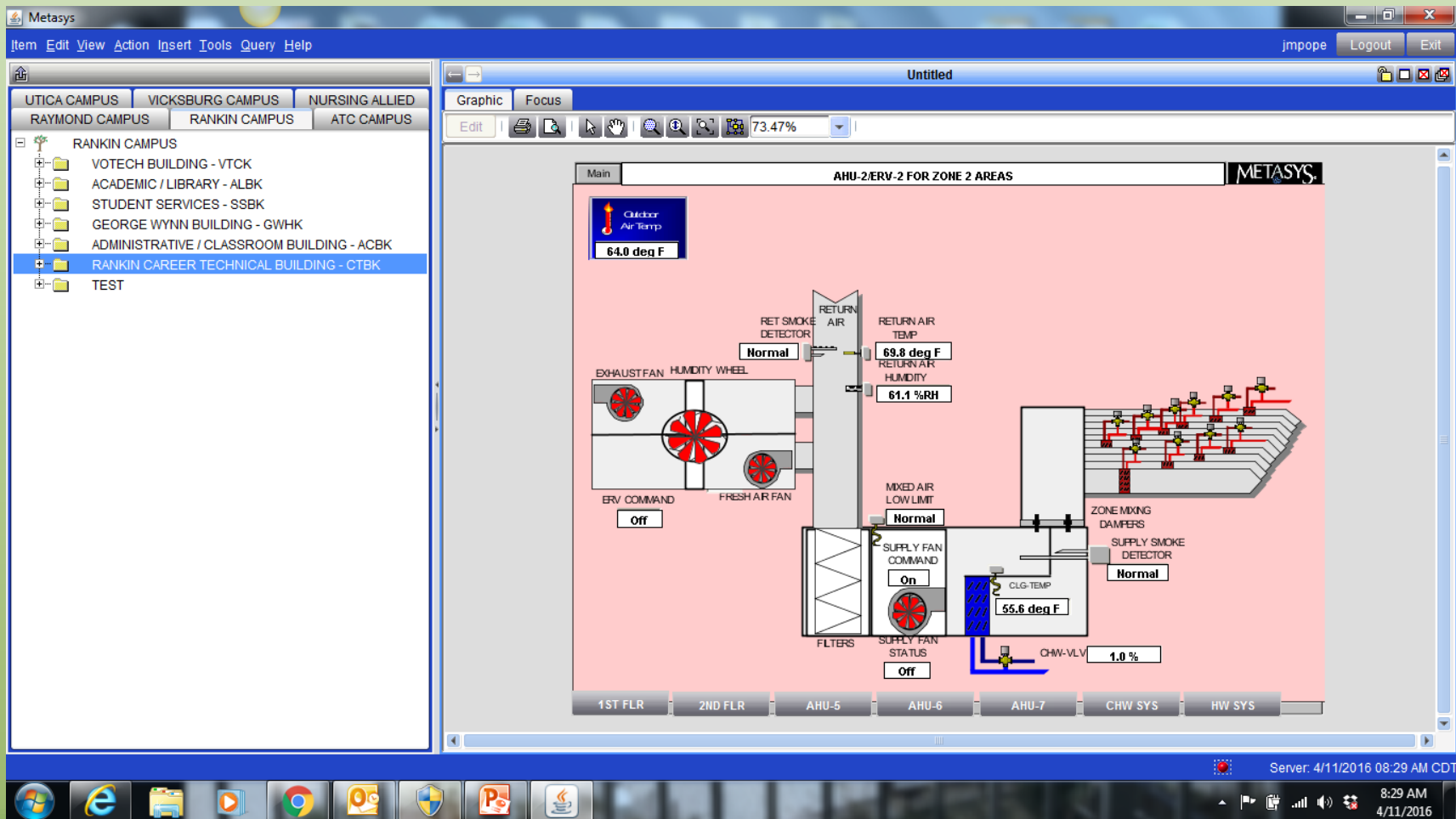


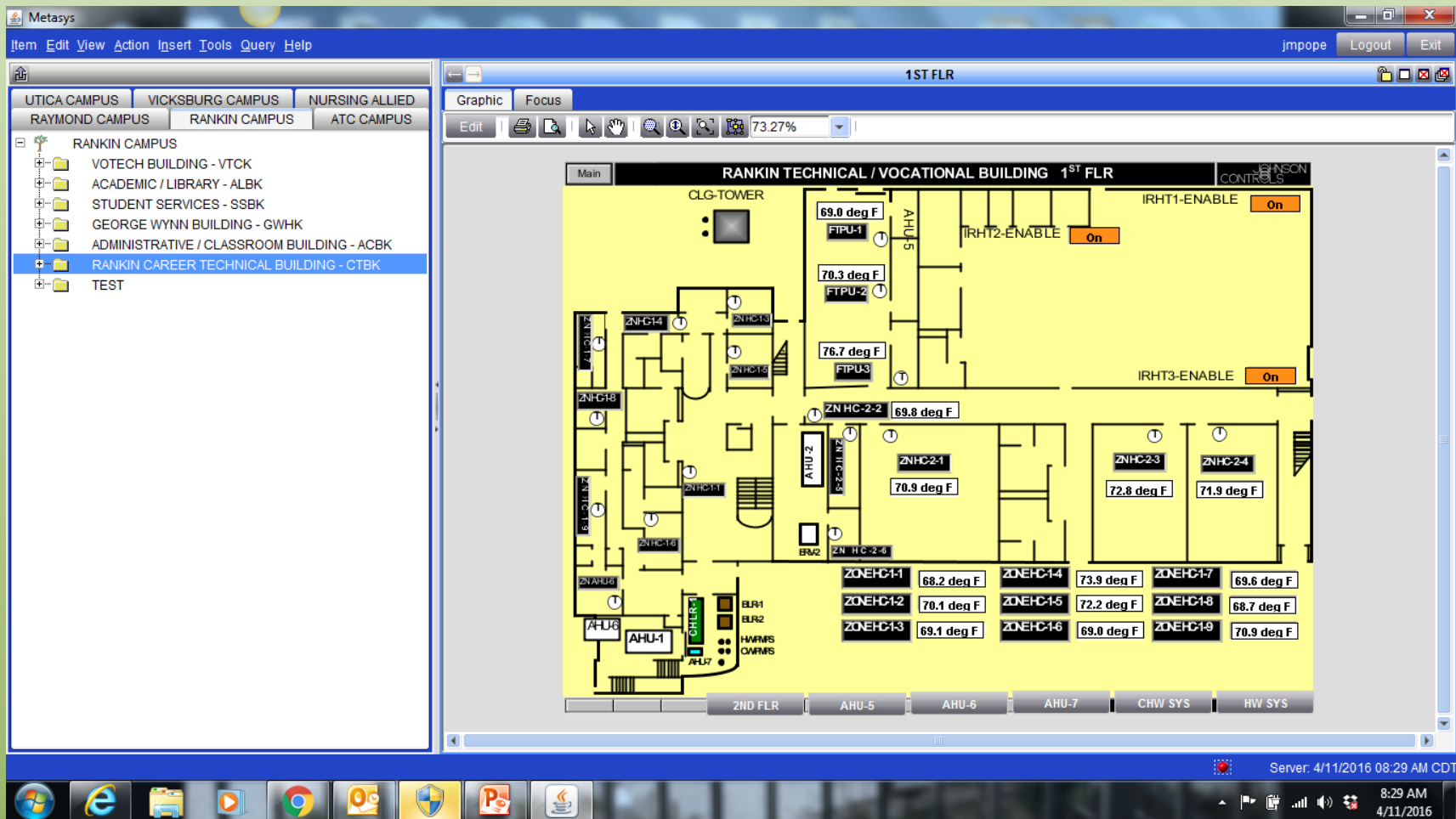
5. Verify Equipment is Operating as Designed

- EMS system issues: sensors, schedules, etc.
- VFD's
- Pump's
- Boiler/Chiller set points
- Fans
- Lights: sensors/schedules
- Turn things off/unoccupy on your EMS and see if things are still running.
- Weekend/Night audits reveal

RK Plumbers Union BLDG







Recycling: What We Want...



A Parking Spot Saver...



A Rain Catcher...



HCC Recycling

The HCC Office of Sustainability would like to remind everyone to only put the following items in the blue recycling bins:

- Paper
- Plastic
- Aluminum
- Cardboard

*Please put everything else in the trash bin

*Please do not put anything with food residue in the blue bin





Recycling























MDEQ/MRC Higher Education Recycler of the Year (Ole Miss finished 2nd)



Volunteer Opportunities

- Shredding
- Sorting paper/Cans/Bottles – Moss Hall
- Baling – Barn
- Campus cleanup (anytime)
- Game Day
- Earth Day
- Come Any Day!!

Reasons to Volunteer/Work for Us

- Work Study Jobs
 - Service Hours
 - Resume Builder
 - Scholarships
 - Internship Opportunities
 - Reference for Future Jobs
-
- Sort Recyclables, Campus Cleanups, Ride Around Town..



Startup/Funding/Assistance:

- MDEQ
 - <https://www.mdeq.ms.gov/about-mdeq/grants-loans-and-trust-funds-available-through-mdeq/solid-waste-assistance-grants/>
- Mississippi Recycling Coalition
 - <https://msrecycles.org/>
 - School Grants
 - Student scholarships
 - Annual Conference
- Keep Mississippi Beautiful/Affiliates
- Keep America Beautiful/Coca Cola Foundation
 - Bin Grants

Contacts

- Allen Recycling, Canton, MS – state contract
- FV Recycling, Jackson and Sumrall Locations
- Mindy Stevens, Hinds Community College
- Jennifer Milner, MDEQ, State Recycling Coordinator
- Vending Companies/Private Industry – Brown Bottling Group, etc.

Contact Info

- Mindy Stevens (Recycling)
 - mstevens@hindsgcc.edu
 - 769 798 2403
- Jason Pope
 - jmpope@hindsgcc.edu
 - 601 857 3367

Instagram: hccgreen