Fayetteville State University

Utilities at a Glance

Fayetteville State University Utilities

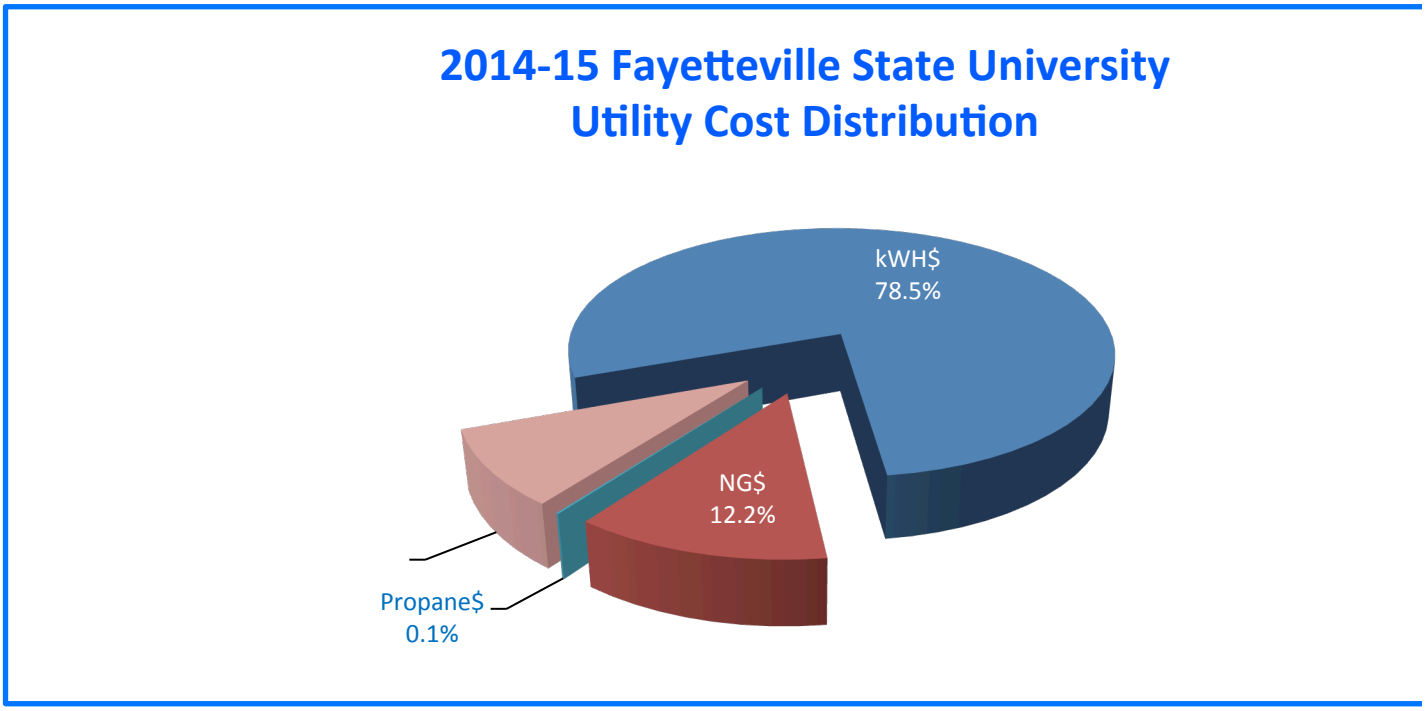
Metric	Basline 2002-2003	Current 2014-2015	% change
Gross square feet	831,147	1,512,819	82%
Btu per square foot per year	143,218	92,178	-36%
Cost per million Btu	$ 12.26	$ 16.41	34%
Total Avoided Cost		$ 3,514,433.78	
Electric consumption in kWh	19,064,400	23,063,513	21%
Electric Cost	$ 1,036,961	$ 1,976,612	91%
Natural Gas consumption in Therms	538,778	606,298	13%
Natural Gas Cost	$ 420,311	$ 308,233	-27%
#2 Fuel oil gallons	0	0	%
#2 Fuel oil cost	$ -	$ -	%
#6 Fuel oil gallons	0	0	%
#6 Fuel oil cost	$ -	$ -	%
Propane gallons	1,195	1,372	15%
Propane cost	$ 1,507	$ 3,336	121%
Steam thousands of pounds	0	0	%
Steam cost	$ -	$ -	%
Chilled Water tons	0	0	%
Chilled Water cost	$ -	$ -	%
Water thousands of gallons	14,857	33,110	123%
Water & Sewer cost	$ 69,462	$ 228,751	229%

Fayetteville State University

Year End Utility Comparison

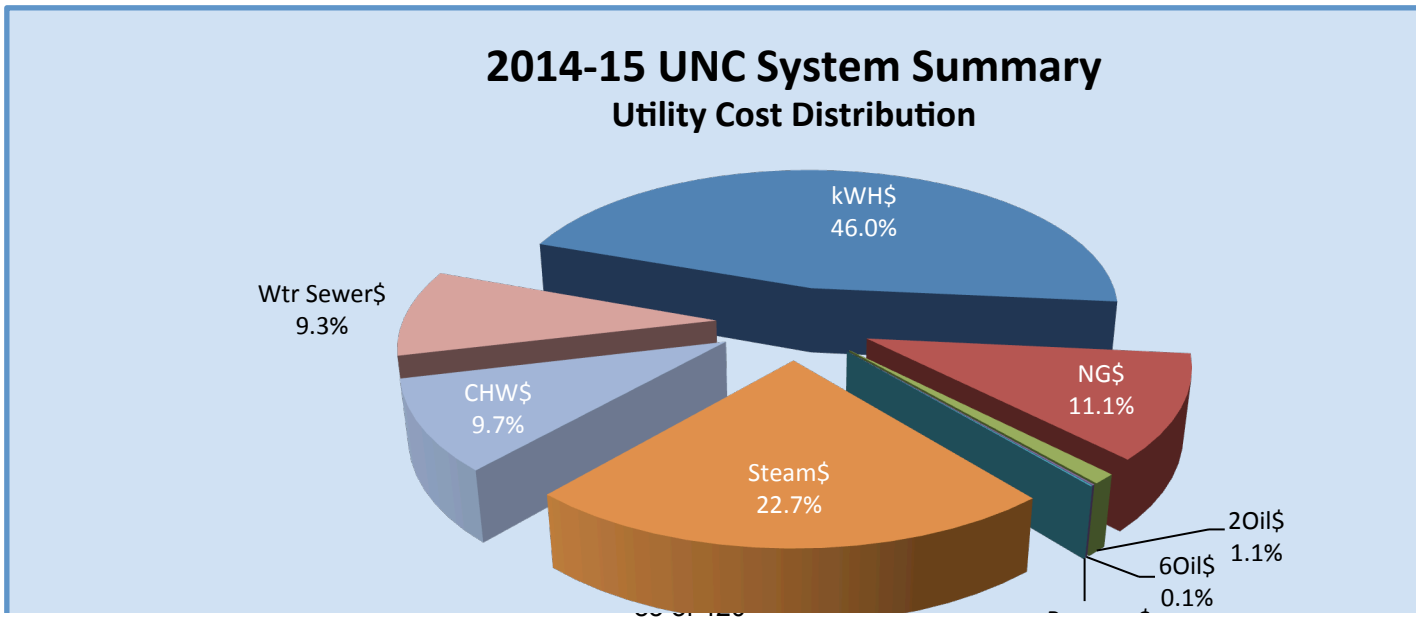
FSU Utilities Summary 2014-15

kWH$	NG$	2Oil$	6Oil$	Propane$	Steam$	CHW$	Wtr Sewer$
$ 1,976,612	$ 308,233			$ 3,336			$ 228,751



UNC System Utilities Summary 2014-15

kWH$	NG$	2Oil$	6Oil$	Propane$	Steam$	CHW$	Wtr Sewer$
$ 106,341,037	$ 25,650,437	$ 2,433,883	$ 240,540	$ 219,997	$ 52,453,892	$ 22,389,388	$ 21,535,495

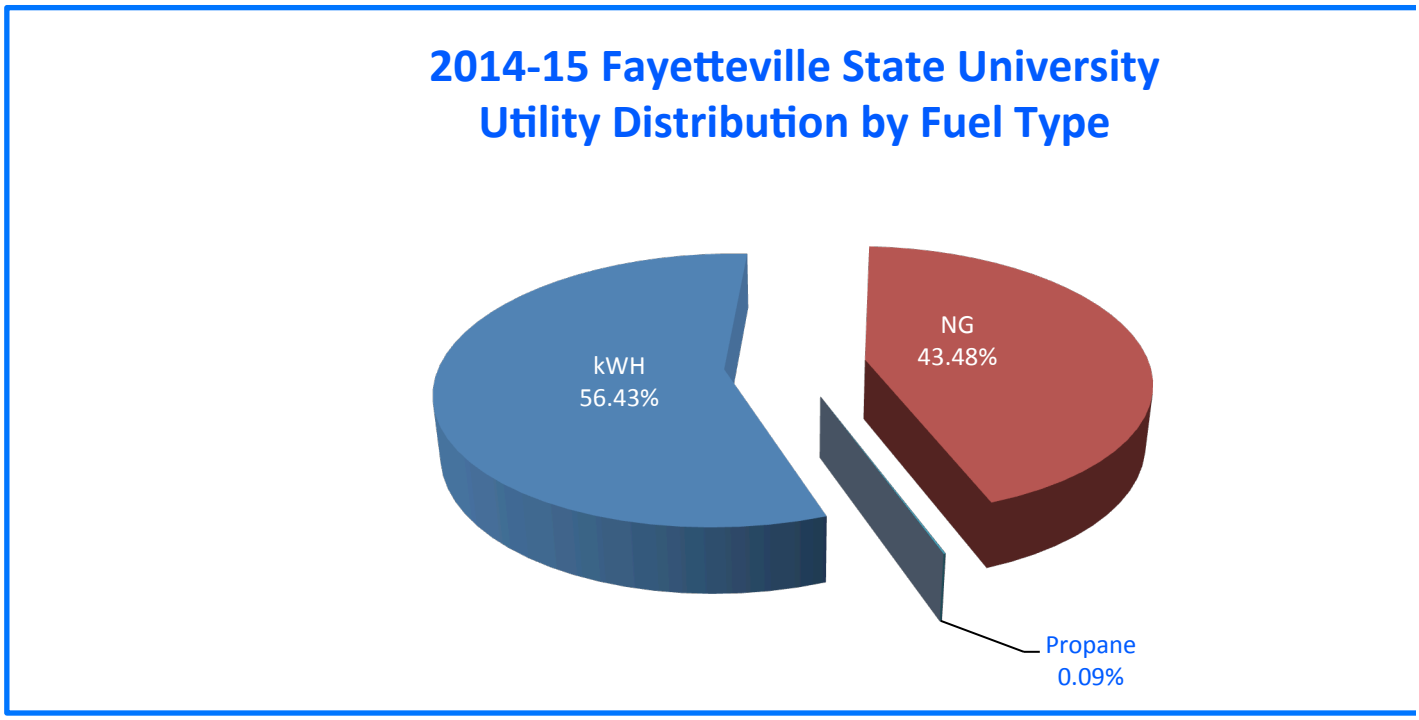


Fayetteville State University

Year End Btu by Fuel Type for 2014-15

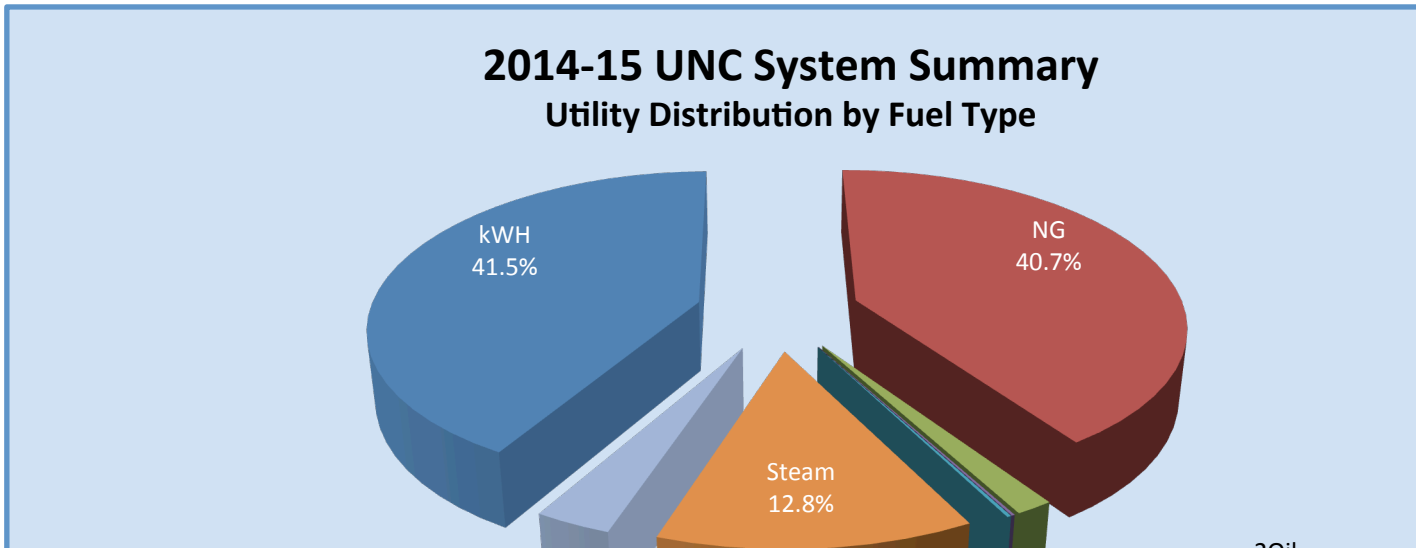
Fayetteville State University Btu by Fuel Type 2014-15

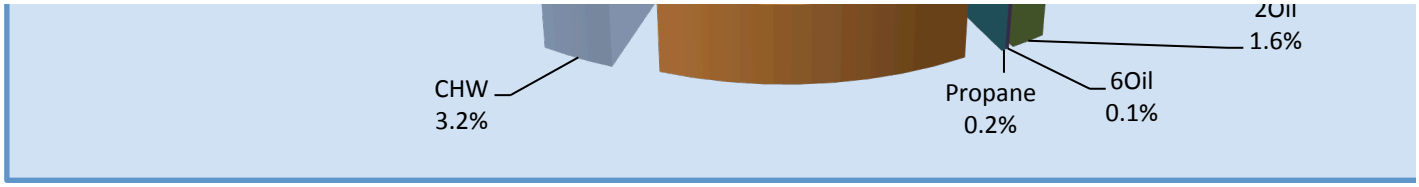
kWH	NG	2Oil	6Oil	Propane	Steam	CHW	Total Btu
78,692,706,356	60,629,800,000	0	0	125,741,056	0	0	139,448,247,412



UNC System Btu by Fuel Type 2014-15

kWH	NG	2Oil	6Oil	Propane	Steam	CHW	Total Btu
4,591,246,083,495	4,501,777,515,560	171,709,572,258	14,789,870,472	19,674,195,302	1,416,944,874,000	348,826,898,192	11,064,969,009,279



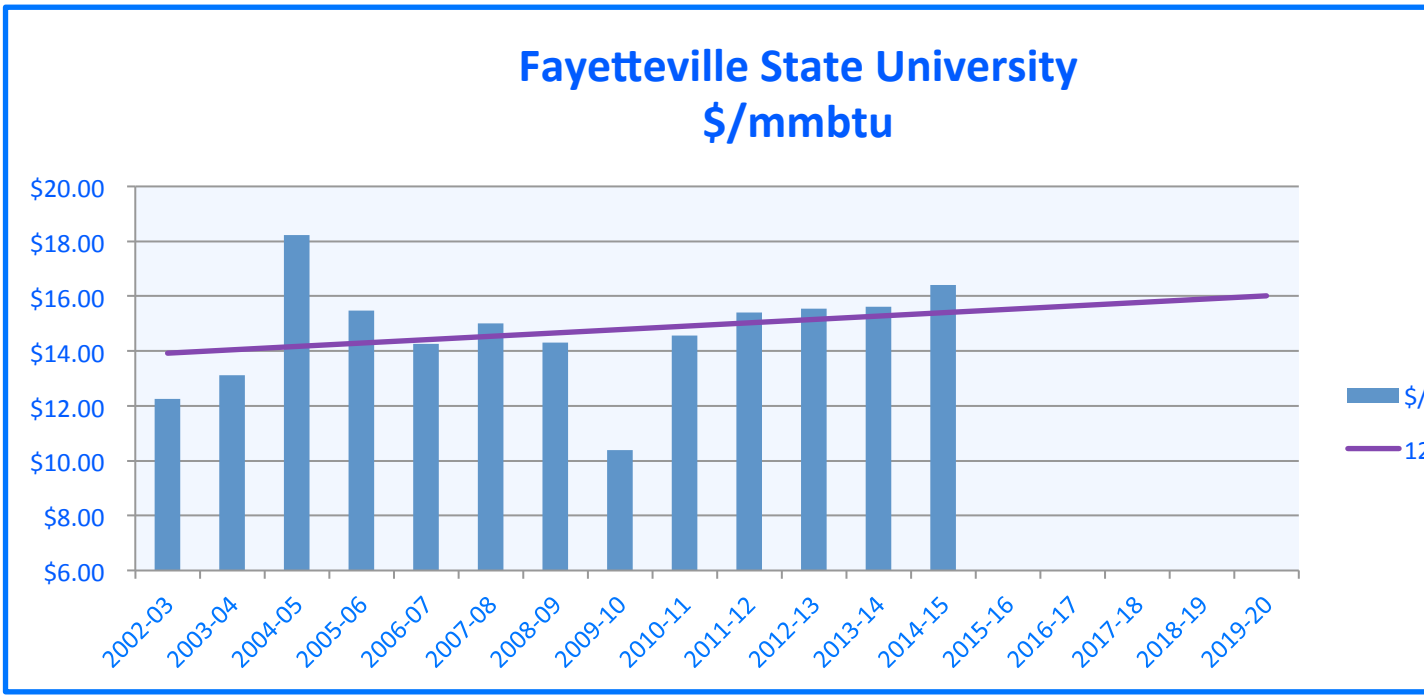


Fayetteville State University

Energy $/mmbtu Evaluation 2003-2015 & Trend Through 2020

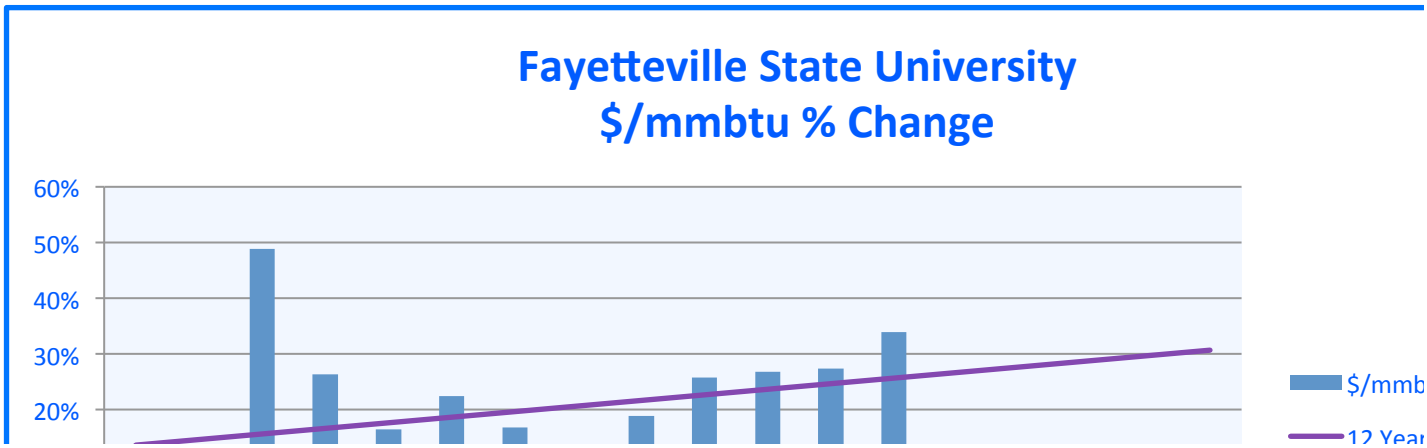
Fayetteville State Energy $/mmbtu

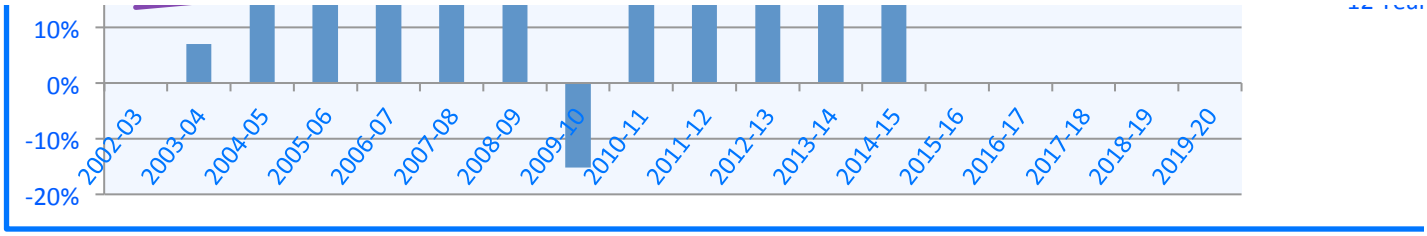
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
$ 12.26	$ 13.11	$ 18.24	$ 15.48	$ 14.27	$ 15.00	$ 14.31	$ 10.39
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
$ 15.41	$ 15.54	$ 15.61	$ 16.41				



Fayetteville State Energy $/mmbtu % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	7%	49%	26%	16%	22%	17%	-15%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
26%	27%	27%	34%				



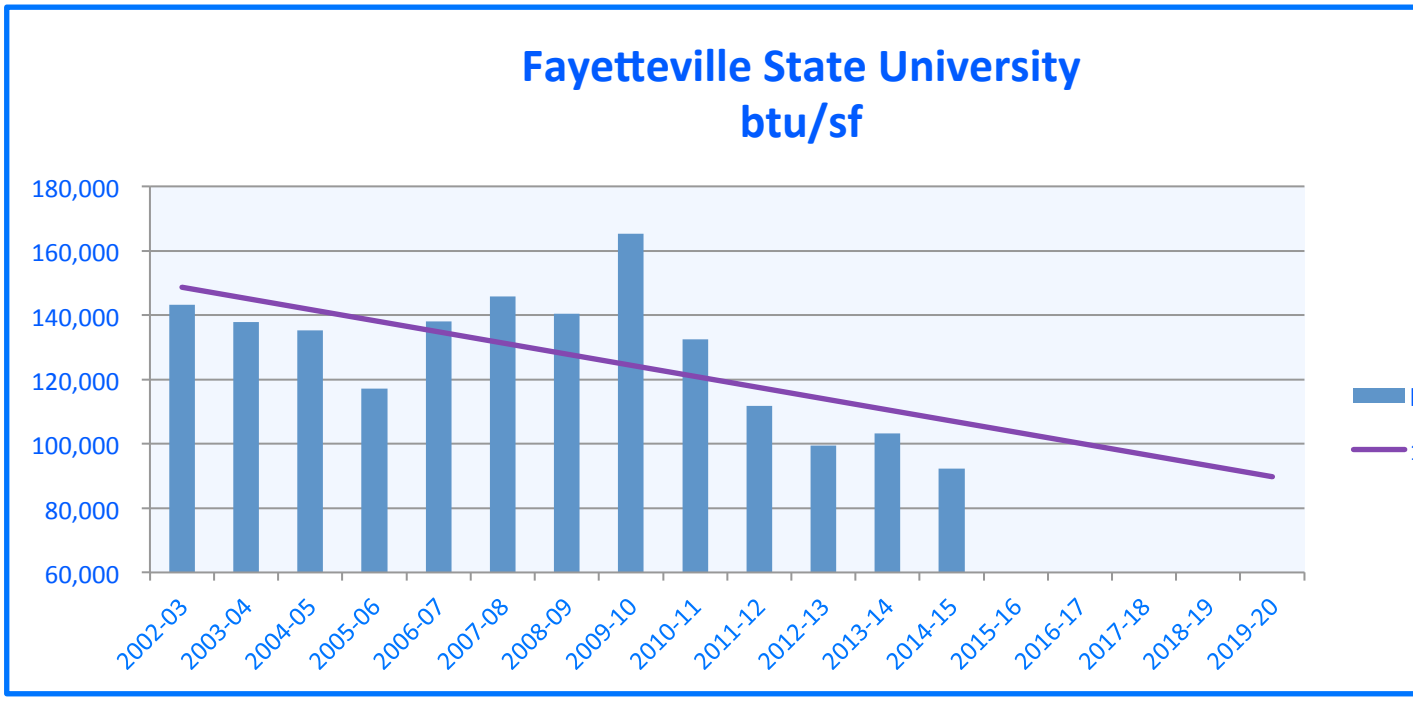


Fayetteville State University

Energy btu/sf Evaluation 2003-2015 & Trend Through 2020

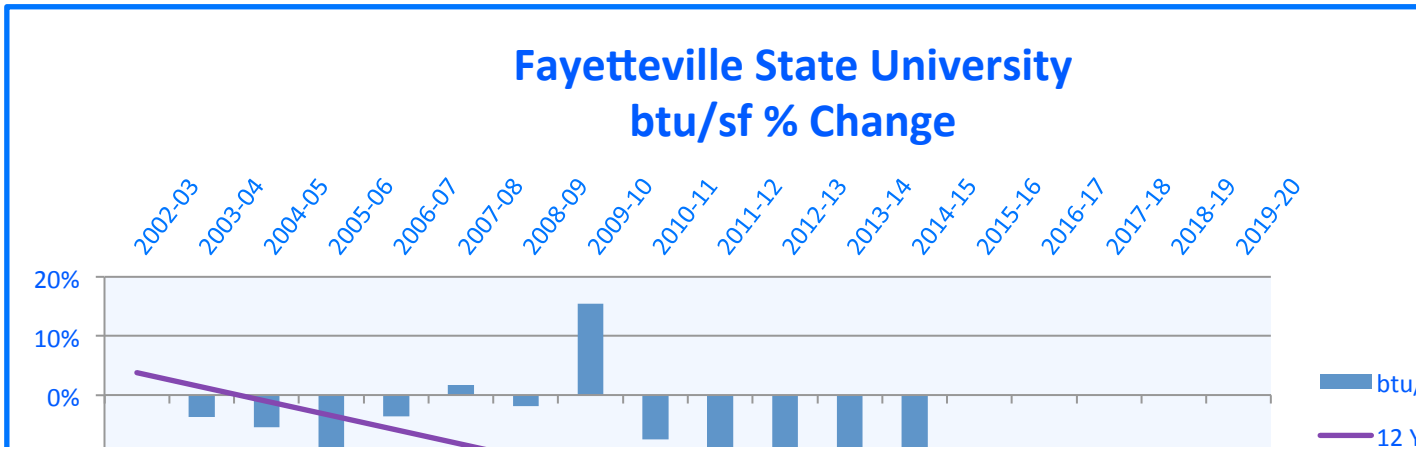
Fayetteville State Energy btu/sf

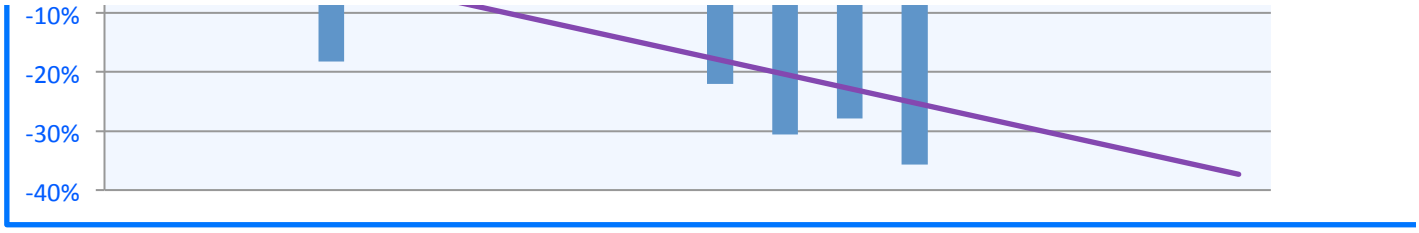
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
143,218	137,845	135,337	117,125	138,073	145,706	140,475	165,324
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
111,682	99,460	103,272	92,178				



Fayetteville State Energy btu/sf % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	-4%	-6%	-18%	-4%	2%	-2%	15%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
-22%	-31%	-28%	-36%				



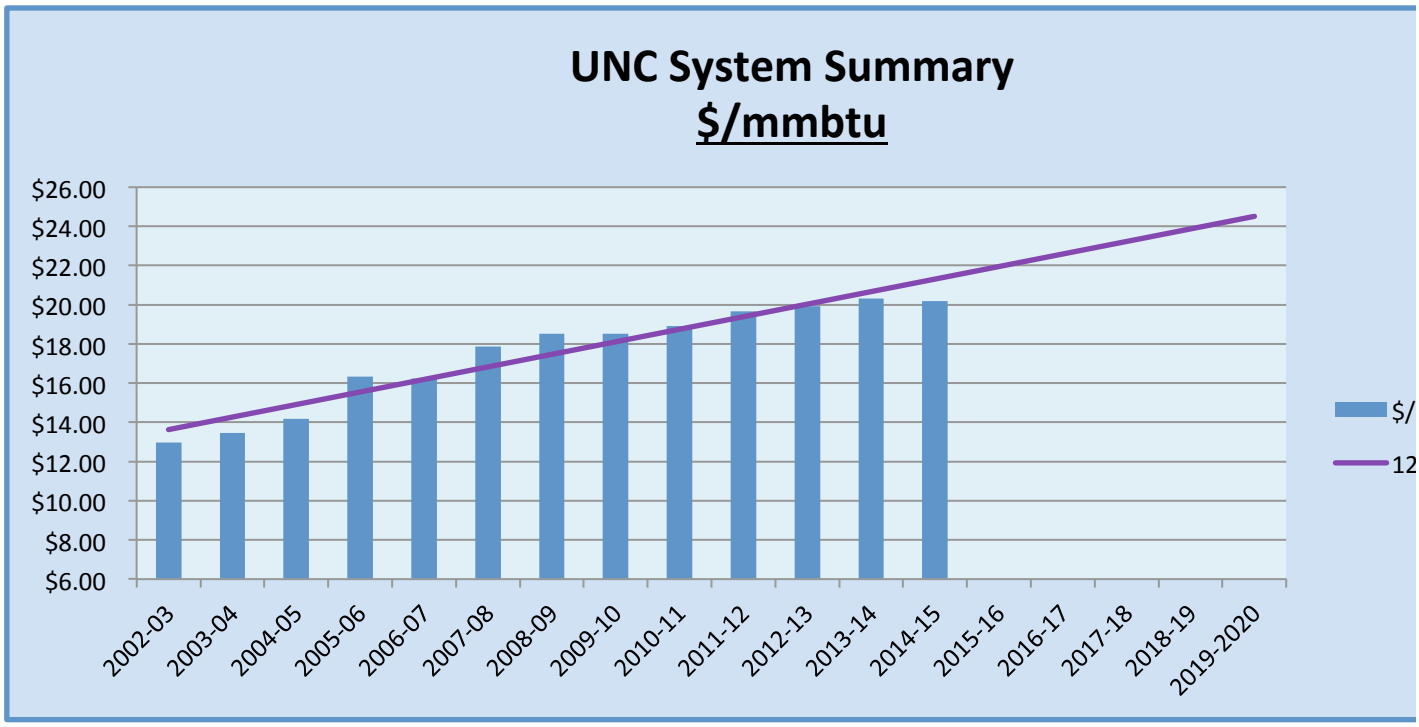


UNC System Summary

Energy $/mmbtu Evaluation 2003-2015 & Trend Through 2020

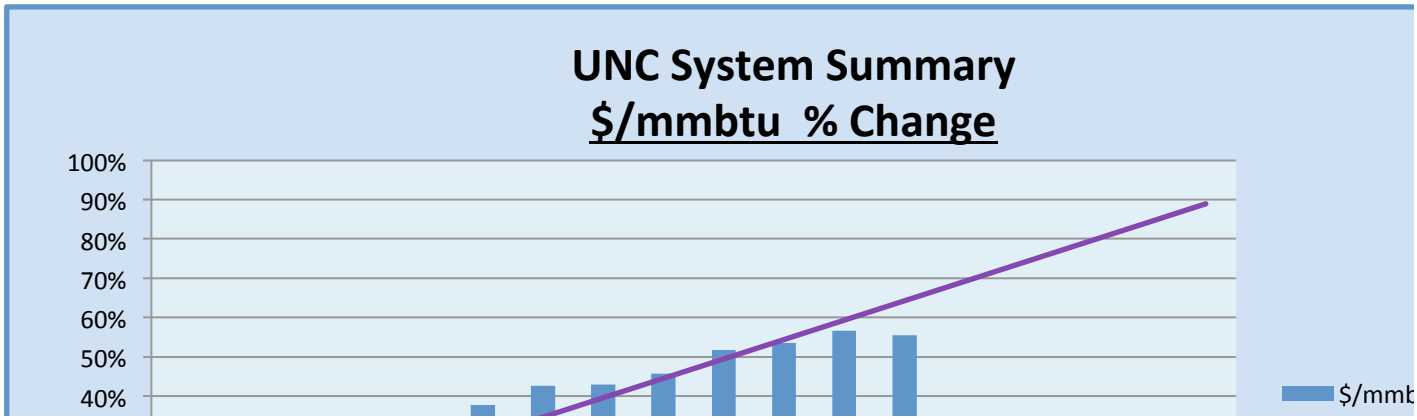
UNC System Energy $/mmbtu

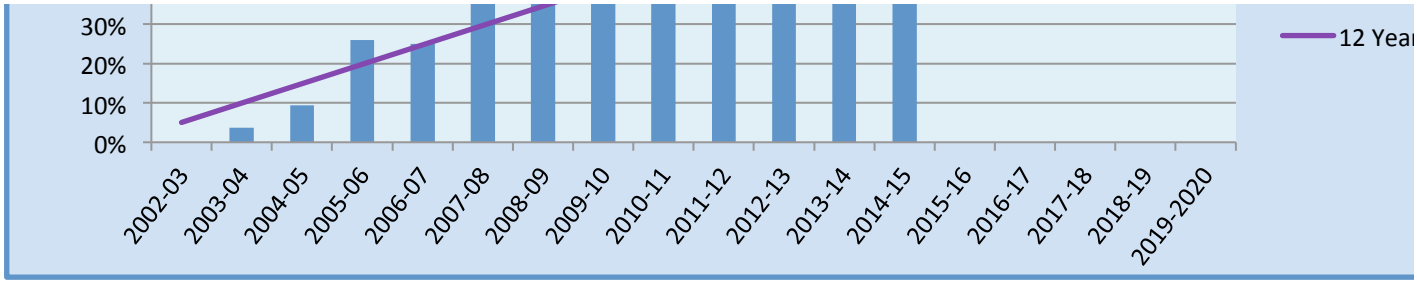
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
$ 12.98	$ 13.45	$ 14.19	$ 16.34	$ 16.23	$ 17.88	$ 18.51	$ 18.54
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
$ 19.68	$ 19.93	$ 20.32	$ 20.17				



UNC System Energy $/mmbtu % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	4%	9%	26%	25%	38%	43%	43%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
52%	54%	57%	55%				



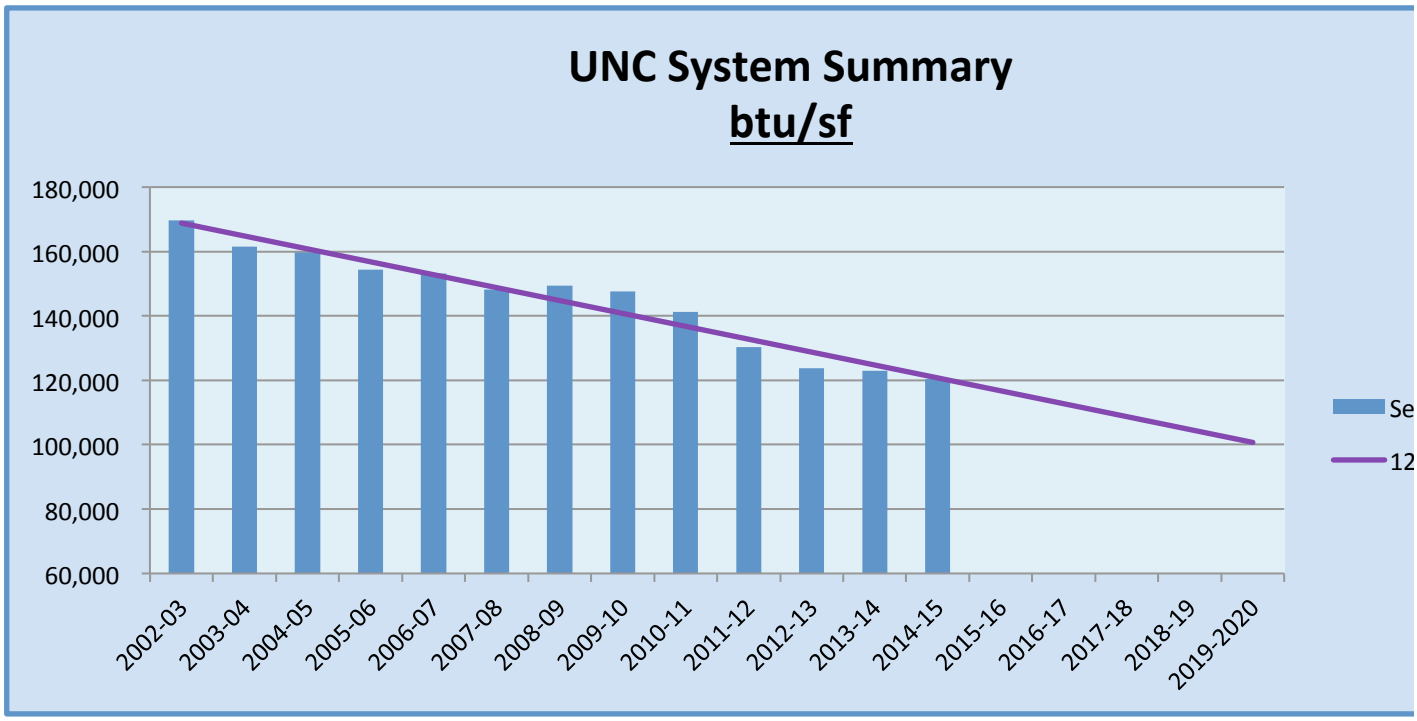


UNC System Summary

Energy Btu/sf Evaluation 2003-2015 & Trend Through 2020

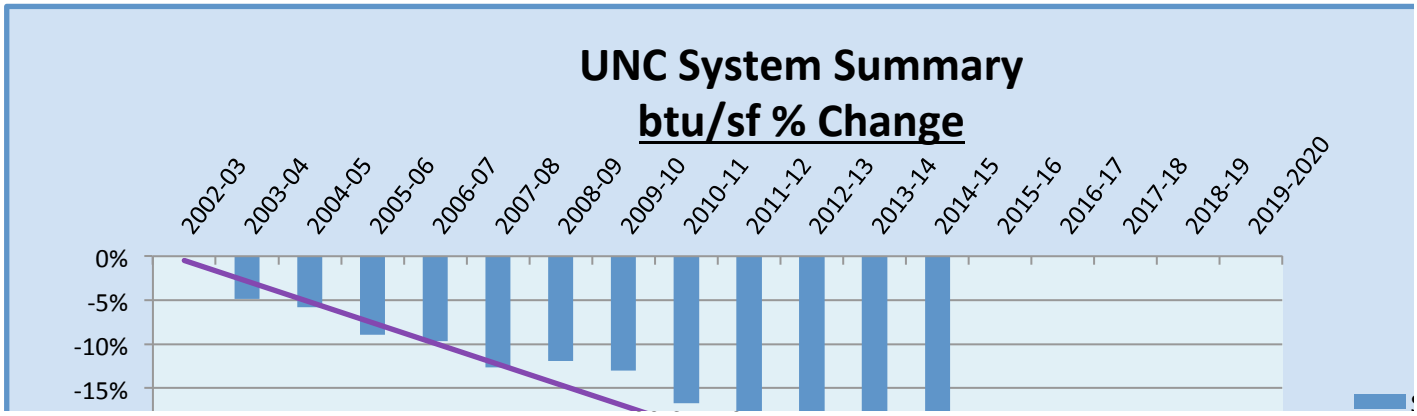
UNC System Energy Btu/sf

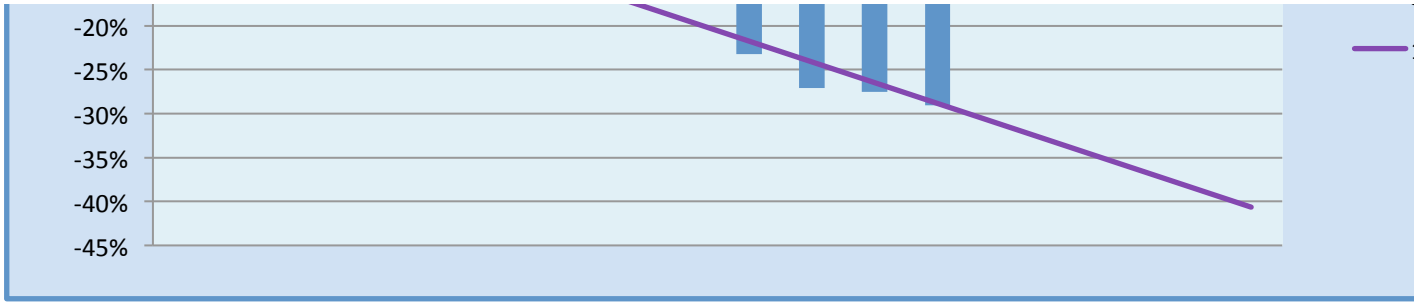
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
169,641	161,422	159,774	154,418	153,235	148,154	149,352	147,583
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
130,266	123,665	122,926	120,407				



UNC System Energy Btu/sf % Change

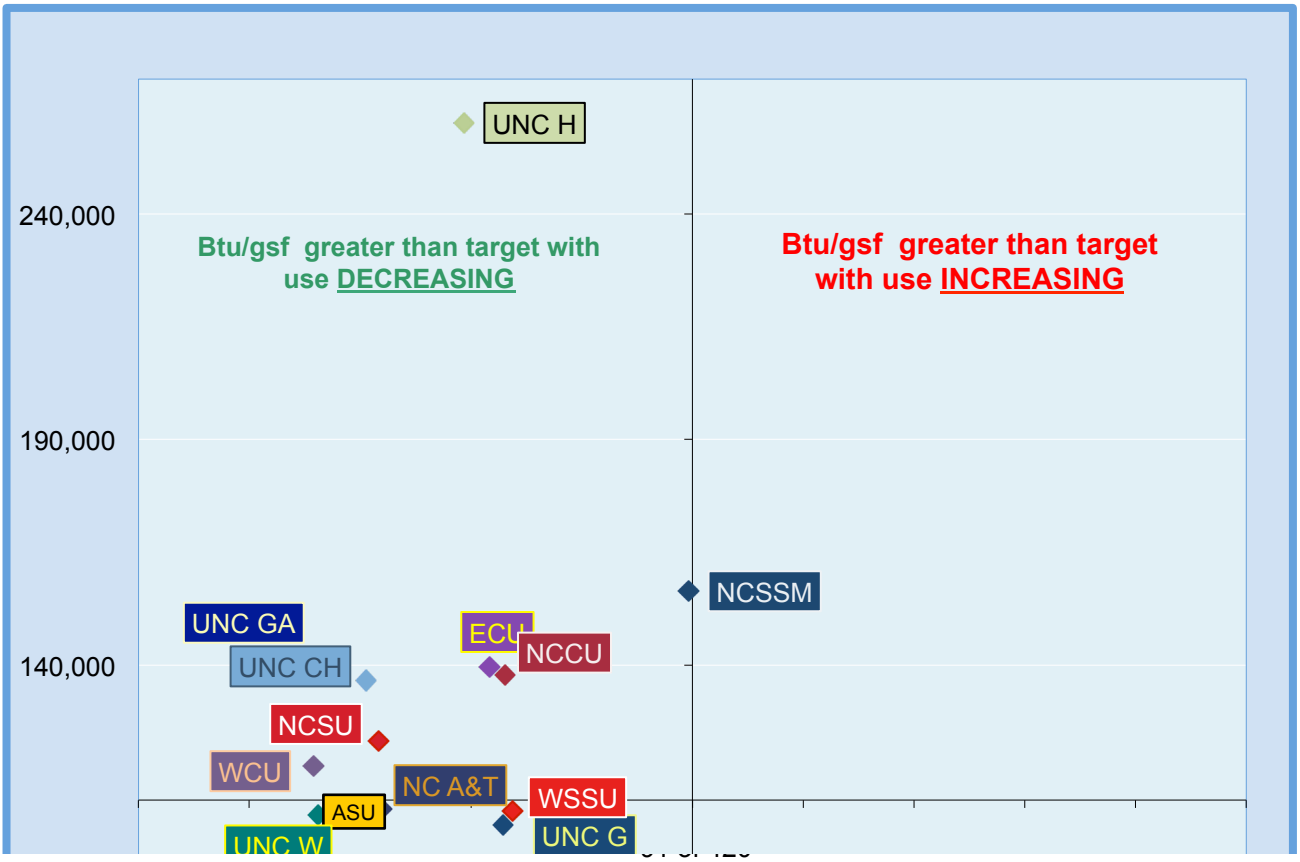
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	-5%	-6%	-9%	-10%	-13%	-12%	-13%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
-23%	-27%	-28%	-29%				

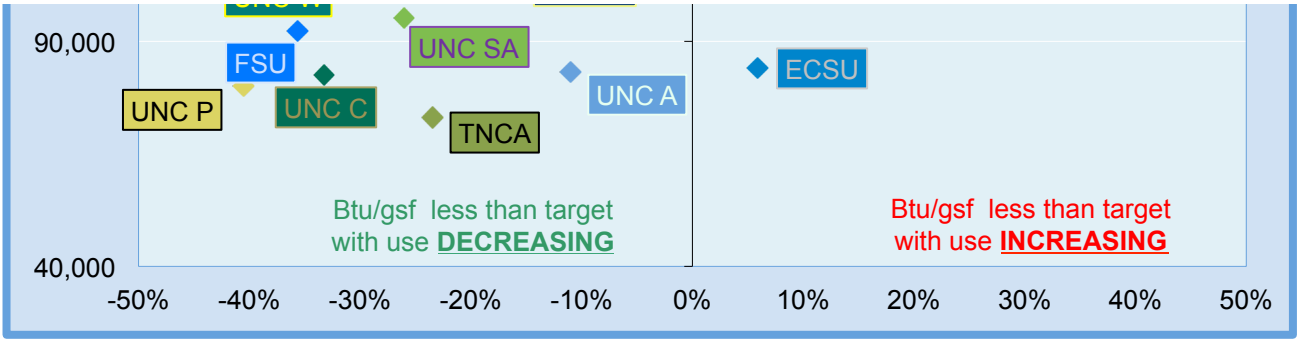




UNC System Summary

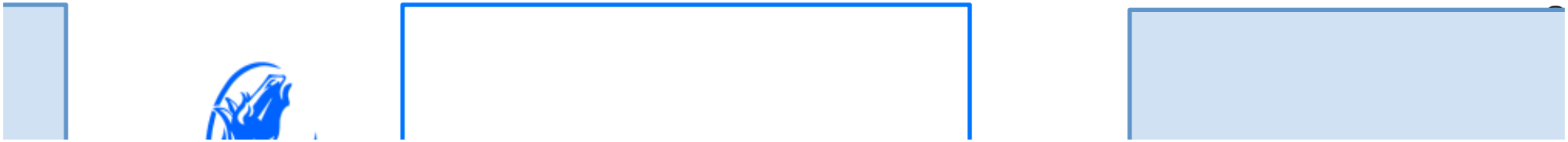
Btu/gsf and % Reduction




90,000
40,000
FSU
UNC SA
UNC P
UNC C
UNC A
ECSU
TNCA
Btu/gsf less than target
with use DECREASING
Btu/gsf less than target
with use INCREASING
-50%
-40%
-30%
-20%
-10%
0%
10%
20%
30%
40%
50%

Total Utility $
$ 2,516,932

Total Utility $
$ 231,264,670



2010-11
$ 14.56
2019-20

/mmbtu

2 Year Trend

2010-11
19%
2019-20

btu %change

r Trend

2010-11
132,485
2019-20

btu/sf

12 Year Trend

2010-11
-7%
2019-20

/sf %change

/ear Trend

2010-11
$ 18.90
2019-2020

mmbtu

Year Trend

2010-11
46%
2019-2020

tu %change

r Trend

2010-11
141,239
2019-2020

ries1

Year Trend

2010-11
-17%
2019-2020

Series1

12 Year Trend