

UNIVERSITY OF REGINA'S UTILITY PORTFOLIO

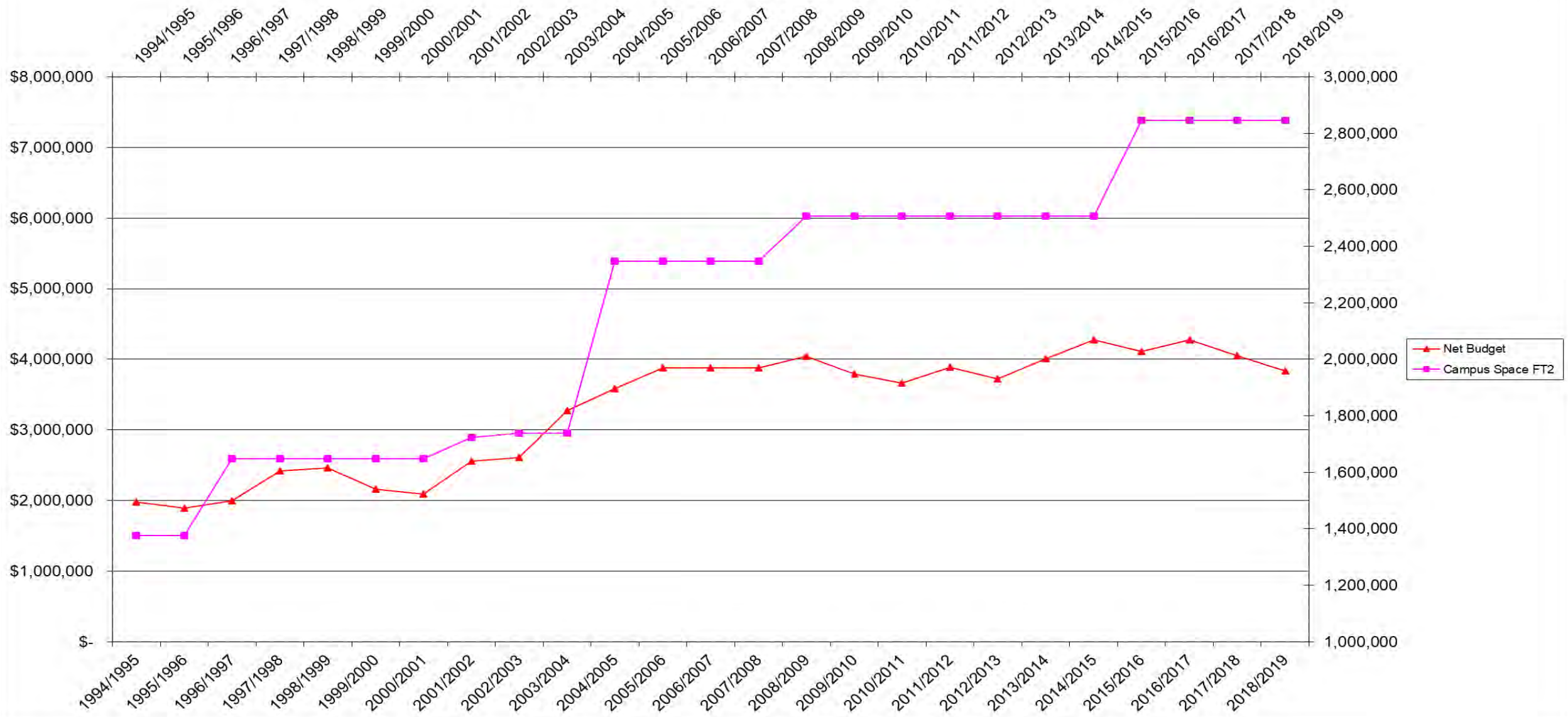
**Emmet Boyle – Director of Maintenance &
Utilities**

IAU SDG#12 Conference May 6, 2019

- ▶ The University's net utility budget for FY 19/20 is \$3.5 million
 - ▶ 68% electrical, 16% natural gas, 16% water
 - ▶ In future years, we will spend more on water than natural gas!
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- ▶ The University's net utility budget for FY 07/08 was \$3.8 million
 - ▶ 55% electrical, 37% natural gas, 8% water

SOME FINANCIAL CONTEXT

U. of R. Historical Utility Budget



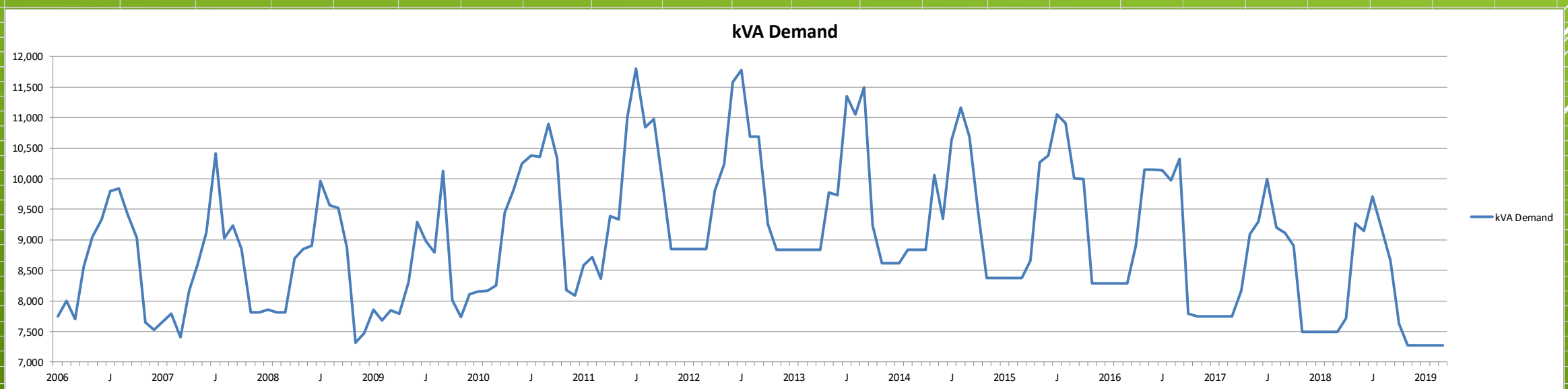
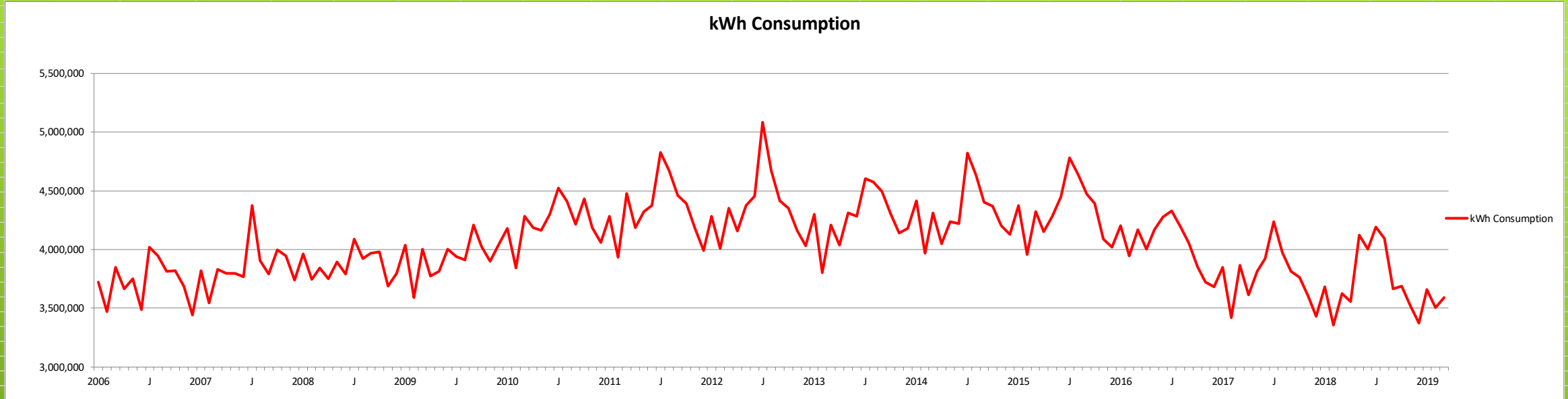
CAMPUS GROWTH & NET UTILITY BUDGET

University of Regina Campus Space



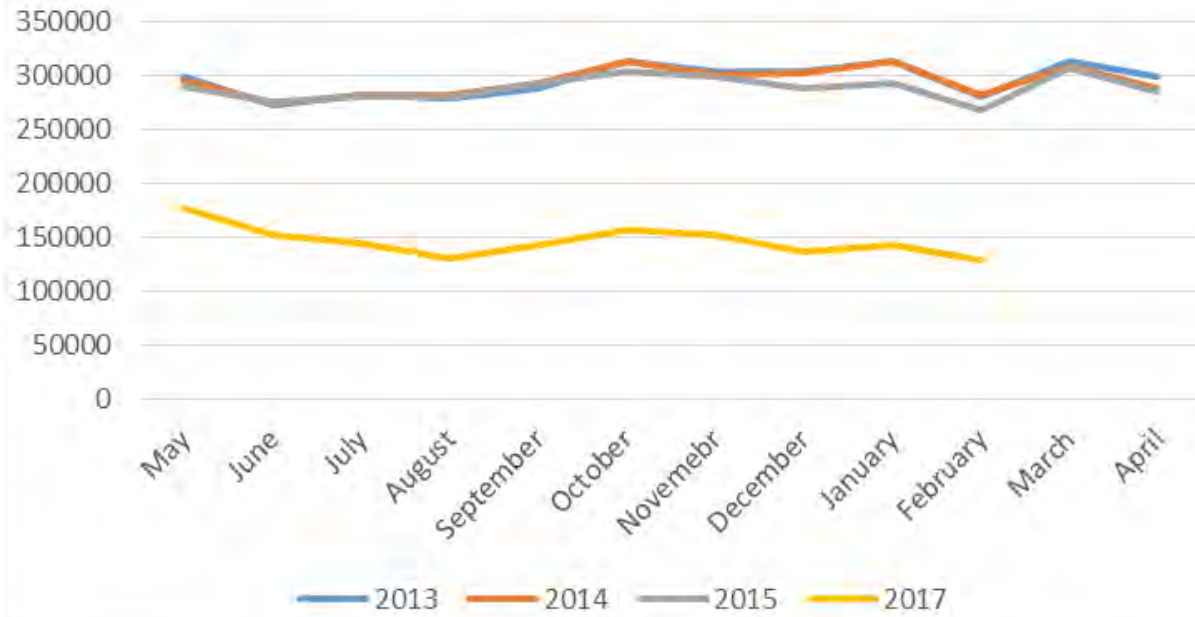
FLAT UTILITY COSTS/SQ FT 27% MORE STUDENTS !

University of Regina 13 Year Trend

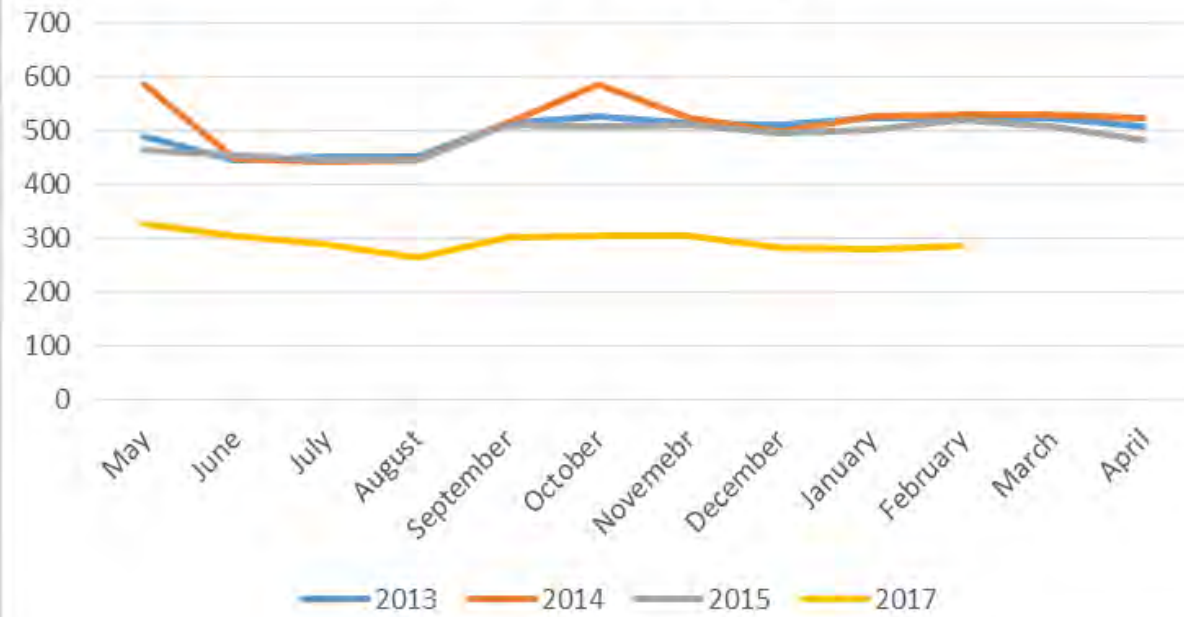


13 YEAR ELECTRICAL TRENDS...WHAT DOES IT MEAN?

Transformer (KWH)



Transformer (KVA)



LABORATORY UPGRADES ~ \$5.6M

- Campus relamping as part of the SaskPower IEOP (18,000 lamps replaced with more efficient types, many LED)
- Upgrades to cooling tower fill, condensor pumps and operating controls
- Kisik Towers utilize in floor cooling- results in higher chilled water return temperature and higher chiller efficiency
- Replacement of several large building chilled water coils
- Greater chilled water delta T from above two projects allows us to operate 3 of 4 compressors - significant electrical demand savings
- Installation of a central compressed air system (four large variable volume compressors replace over 40 reciprocating compressors)
- Speed control on Laboratory main exhaust fans

WHAT HAPPENED? LOTS!

- ▶ EMIS
- ▶ Carbon tax
- ▶ Water costs surpass natural gas
- ▶ CHP renewal

WHAT'S ON THE HORIZON?