

2020

**Facilities Operations
Benchmarking and
Performing Indicators Report**

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University of Missouri - Columbia

Campus profile:

- 23,715 FTE Students
- 6,991,635 gross square feet maintained
- 1 Cogeneration Power Plant
- 2 Substations
- 137,808 feet of Steam and Condensate Pipe and THydra872..02-an00m8FTE

Sightlines Peer

Comparator Institutions:

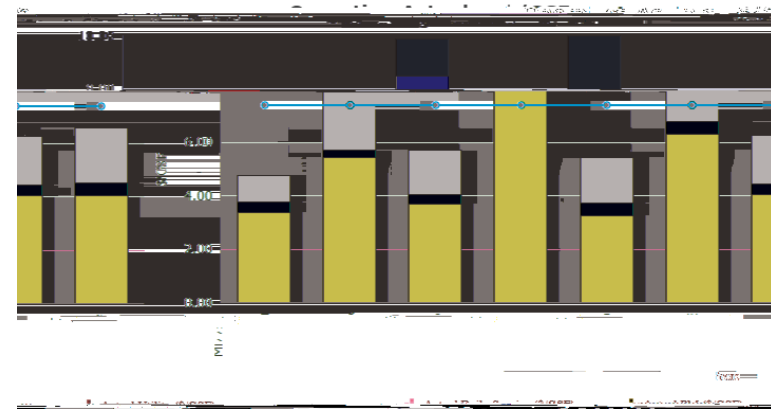
- Northwestern University
- The Pennsylvania State University
- University of Illinois - Urbana/Champaign
- University of Iowa - General Funds
- University of Maryland - College Park
- University of Minnesota - Twin Cities
- University of Wisconsin - Madison

Sightlines Outsourced

Comparator Institutions:

- Chapman University
- Lewis & Clark College
- Nova Southeastern University
- Saint Mary's College of California
- The Catholic University of America
- Widener University

Operating Expense Summary	2016	2017	2018	2019	2020
Total Daily Service	\$23,333,198	\$23,728,078	\$21,394,390	\$21,579,766	\$23,549,822
Planned Maintenance	\$2,788,099	\$2,776,391	\$2,920,809	\$2,762,141	\$2,685,453
Utilities(Electric, Water, Etc.)	\$8,586,202	\$7,690,414	\$8,792,969	\$8,286,592	\$7,459,961
Total	\$34,707,499	\$34,194,883	\$33,108,168	\$32,628,499	\$33,695,236
Cost per GSF	\$5.07	\$4.93	\$4.80	\$4.71	\$4.74



Operating
Actual
Expense

Facilities
Operating
Actuals with
Peer
Comparators

The Facilities Operating Budget Actuals Benchmark analyzes the amount spent each year to operate campus physical assets and the department that maintains them.

- Daily Service: Materials, labor costs, service contracts, office expense, etc. associated with the regular maintenance, cleaning and grounds keeping of the campus.
- Planned Maintenance: Materials, labor costs, service contracts, etc. that enhance or extend the useful life of campus buildings and components. Some examples include changing belts and filters on HVAC equipment, elevator service contracts, sprinkler and fire alarm system testing/maintenance contracts, etc.
- Utilities: The procurement of utility commodities, i.e. natural gas, oil, steam, electricity, water/sewer, etc. NOTE - Utilities costs do not include institutionally held people costs, plant operations or service contracts of utility systems.

Campus
Energy
Consumption

Campus
Energy Unit
Cost

Energy Consumption & Expense Summary	2016	2017	2018	2019	2020
MMBTU Used	981,203	949,983	1,040,999	1,026,065	1,032,104
Cost	\$8,409,932	\$8,534,857	\$8,684,034	\$7,916,077	\$6,812,300
Cost/MMBTU	\$8.57	\$8.98	\$8.34	\$7.71	\$6.60
BTU/GSF	136,704	131,937	151,597	150,613	122,867

Peer
Comparators
Energy
Consumption

Peer Energy
Unit Cost

- Energy Consumption (BTU/GSF): The sum of fossil and electric BTU's per square foot the campus consumes each year. Energy consumption is influenced by many factors including region/climate, type of institution, technical complexity, utility systems, campus backlog, etc.
- Energy Total Unit Cost (\$/MMBTU): The composite cost for an MMBTU of energy; includes electricity and all fossil fuels. Region and type of utility system (centralized, independent, co-generation, etc.) greatly influence unit cost.

Campus - Custodial Sta

Campus
Custodial
Sta ^ ng

Campus - Custodial Materials Performance Indicators

Campus
Custodial
Materials

Campus
Custodial
Materials \$/GSF

Campus
Sightline Peer
Comparators

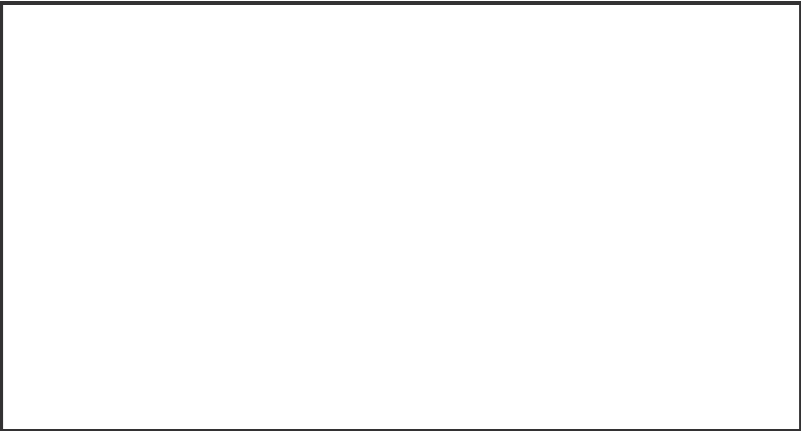
Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

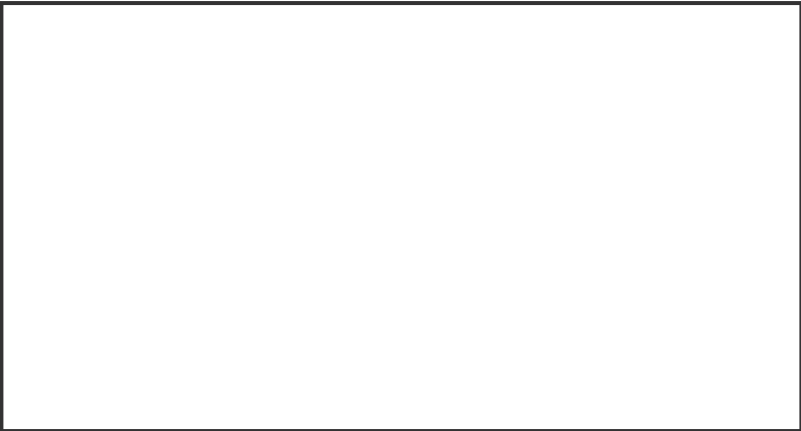
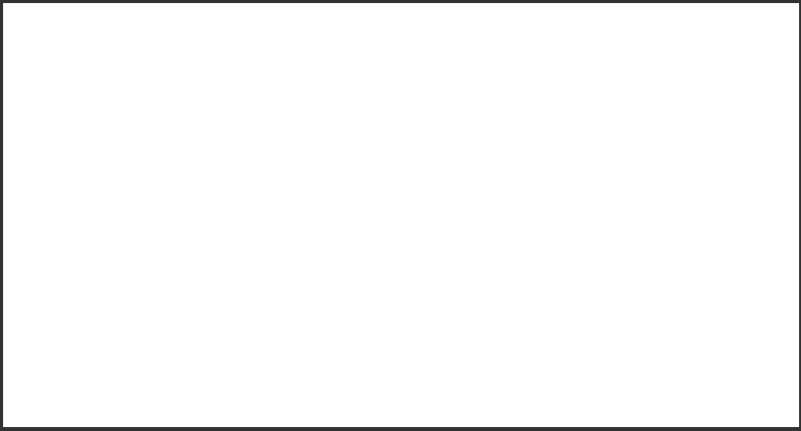
Campus - Grounds Sta ^ ng/Supervisor Performance Indicators

Campus
Custodial
Sta ^ ng



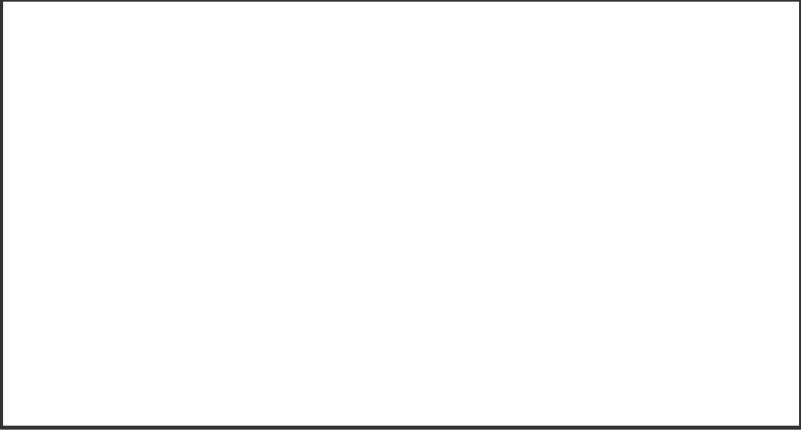
Campus
Custodial
Supervisor
Sta ^ ng

Campus
Sightline Peer
Comparators



Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators

Campus - Grounds Materials Performance Indicators

Campus
Grounds
Materials

Campus
Grounds
Materials \$/GSF

Campus
Sightline Peer
Comparators

Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

Campus
Custodial
Sta

Campus - Maintenance Materials Performance Indicators

Campus Maintenance Materials		
Campus Sightline Peer Comparators		
Facility Operations Outsourced Peer Comparators		

Campus Materials \$/GSF

Sightline Peer Comparators

Facility Operations Outsourced Peer Comparators

MU - Campus Service Impressions with Peer Comparators

Exterior
Inspection

General Repair/
Impression

Cleanliness
Inspection

Grounds
Inspection

Sightlines offers a campus inspection as a service to provide an independent judgement of campus appearance gained by an inspection of a representative sample of campus buildings and grounds. The inspection rates are on a scale of 0-5, with 0 being the lowest and 5 being the best score possible.

- Exterior Inspection (%) – An inspection to evaluate the condition of building envelopes/exteriors, rated on a scale of 0-4. This inspection includes exterior doorways, siding, pointing, roofs, windows, etc.
- General Repair/Impression (%) – An independent judgment of campus general repair/impression gained by an inspection of a representative sample of campus buildings, on a scale of 0-4. Space is inspected to.
- Cleanliness Inspection (%)– An independent judgment of campus cleanliness gained by an inspection of a representative sample of campus buildings, rated on a scale of 0-4. Space is inspected to determine if it is free from dirt, debris, and stocked with the proper paper products in restrooms, etc.
- Grounds Inspection (%) - An evaluation of grounds appearance including plantings, turf, textures, and walkways, rated on a scale of 0-4.

University of Missouri - Kansas City

Campus Profile

- 10,301 FTE Students
- 3,024,898 gross square feet maintained
- 15,000 feet of Steam and Condensate Pipe and Tunnels
- 1 Main Boiler Plant
- 5 Individual Boiler Plants
- 16,000 feet of Chilled Water Pipe
- 1 Main Chiller Plant
- 1 Small Chiller Plant
- 4 Individual Chiller Plants
- 24,405 feet of Domestic Water Piping
- 24,080 feet of Sewer Piping
- 16,000 feet of Electrical Distribution
- 155,200 feet of Data Conduit
- 170,000 feet of Fiber Optic Cable
- 150,500 feet of Copper OSP Cable

Sightlines Peer

Comparator Institutions:

- Indiana Univ. Purdue Univ. - Indianapolis
- The University of Alabama at Birmingham
- University of Arkansas
- University of Central Florida
- University of Missouri - St. Louis
- Virginia Commonwealth University
- Washburn University
- Wayne State University

Sightlines Outsourced

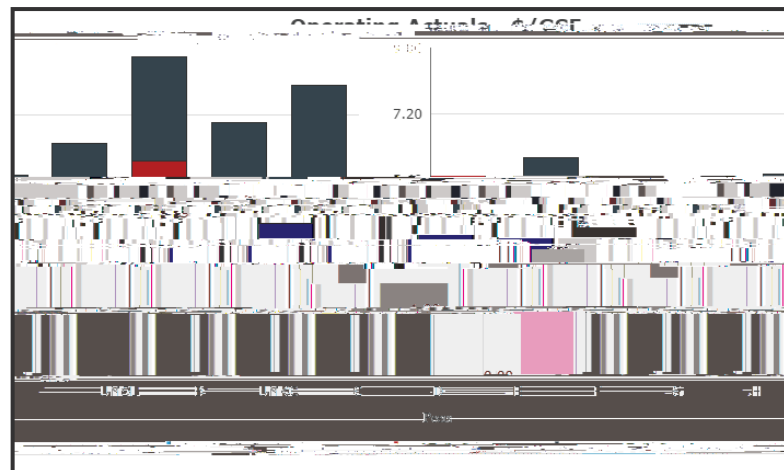
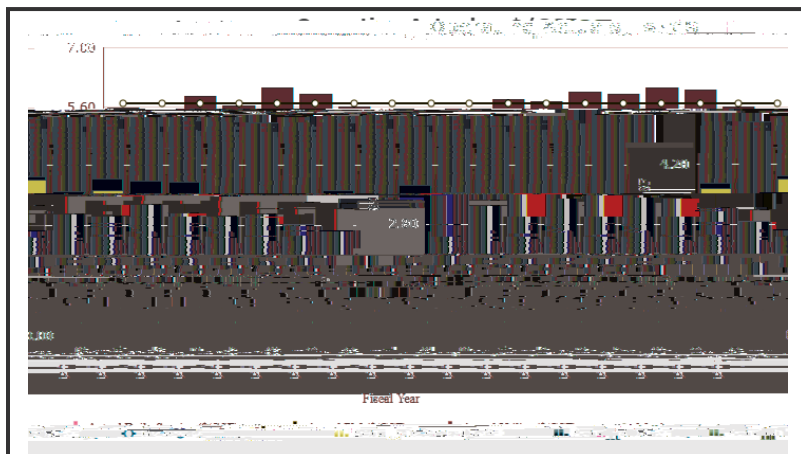
Comparator Institutions:

- Chapman University
- Lewis & Clark College
- Nova Southeastern University
- Saint Mary's College of California
- The Catholic University of America
- Widener University

UMKC - Operating Expense Summary

Operating Expense Summary	2016	2017	2018	2019	2020
Total Daily Service	\$9,353,770	\$9,113,488	\$9,220,579	\$8,450,770	\$8,001,122
Planned Maintenance	1,408,590	1,535,603	1,470,603	1,574,640	1,635,137
Utilities(Electric, Water, Etc.)	6,996,473	7,617,757	7,465,549	6,891,869	6,978,951
Total	\$17,758,833	\$18,266,848	\$18,156,573	\$16,917,279	\$16,615,210
Cost per GSF	\$5.87	\$6.04	\$6.00	\$5.60	\$5.50

Operating
Actual
Expense



Facilities
Operating
Actuals with
Peer
Comparators

The Facilities Operating Budget Actuals Benchmark analyzes the amount spent each year to operate campus physical assets and the department that maintains them.

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- Utilities: The procurement of utility commodities, i.e. natural gas, oil, steam, electricity, water/sewer, etc. NOTE - Utilities costs do not include institutionally held people costs, plant operations or service contracts of utility systems.

Campus
Energy
Consumption

Campus
Energy Unit
Cost

Peer
Comparators
Energy
Consumption

Peer Energy
Unit Cost

Campus - Custodial Sta ^ ng/Supervisor Performance Indicators

Campus
Custodial
Sta ^ ng

Campus
Custodial
Supervisor
Sta ^ ng

Campus
Sightline Peer
Comparators

Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

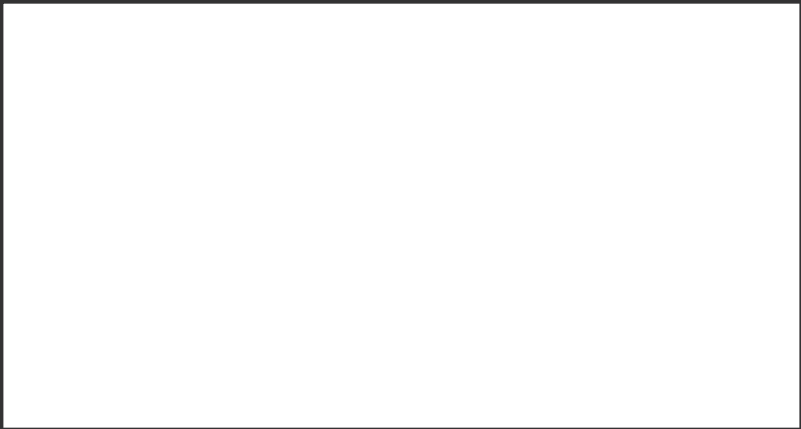
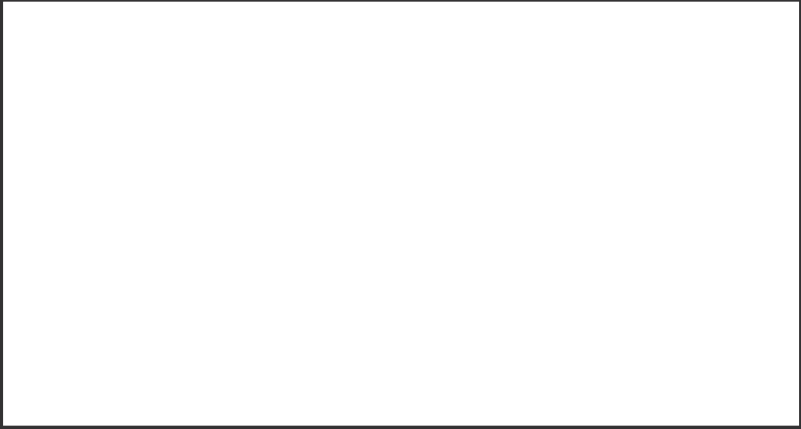
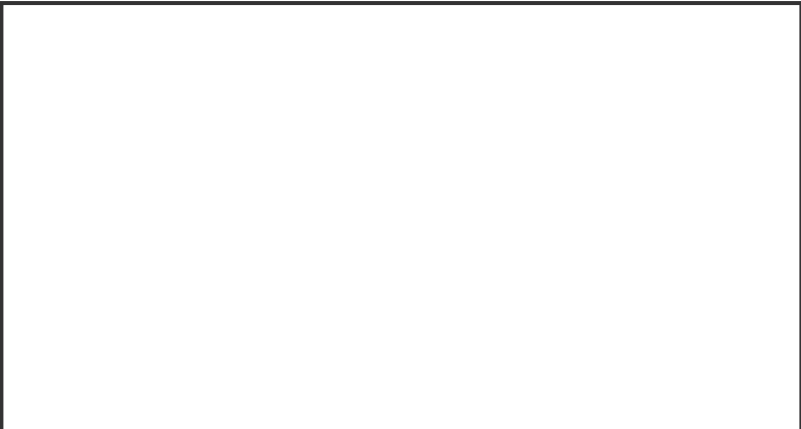
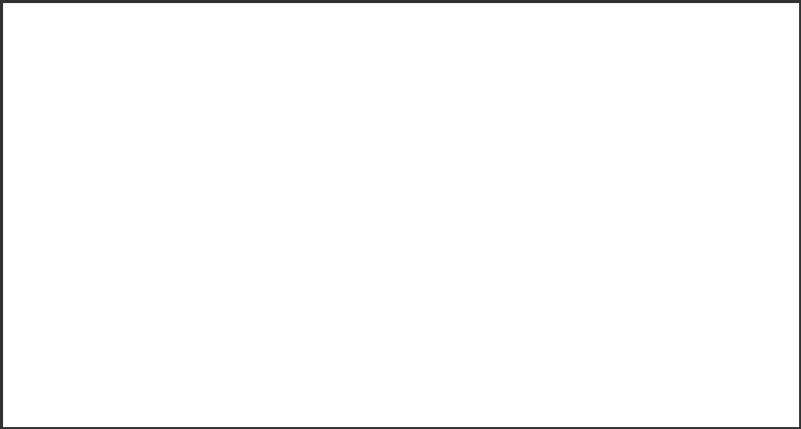
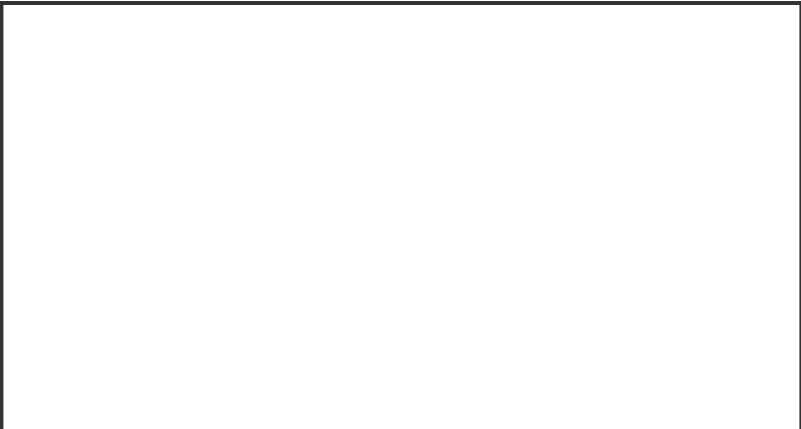
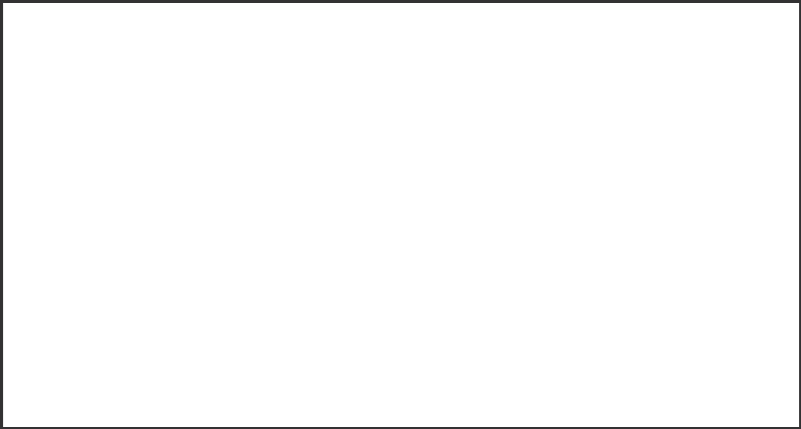
Facility
Operations
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Peer
Comparators

Campus - Custodial Materials Performance Indicators

Campus
Custodial
Materials

Campus

Campus - Grounds Sta ^ ng/Supervisor Performance Indicators



Campus
Custodial
Sta ^ ng

Campus
Custodial
Supervisor
Sta ^ ng

Campus
Sightline Peer
Comparators

Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

Campus - Maintenance Sta ^ ng/Supervisor Performance Indicators

Campus
Custodial
Sta ^ ng

Campus
Sightline Peer
Comparators

page 13

Campus - Maintenance Materials Performance Indicators

Campus Maintenance Materials		
Campus Sightline Peer Comparators		
Facility Operations Outsourced Peer Comparators		

Campus
Materials \$/GSF

Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

Sightlines Outsourced
Comparator Institutions:

- Chapman University
- Lewis & Clark College
- Nova Southeastern University

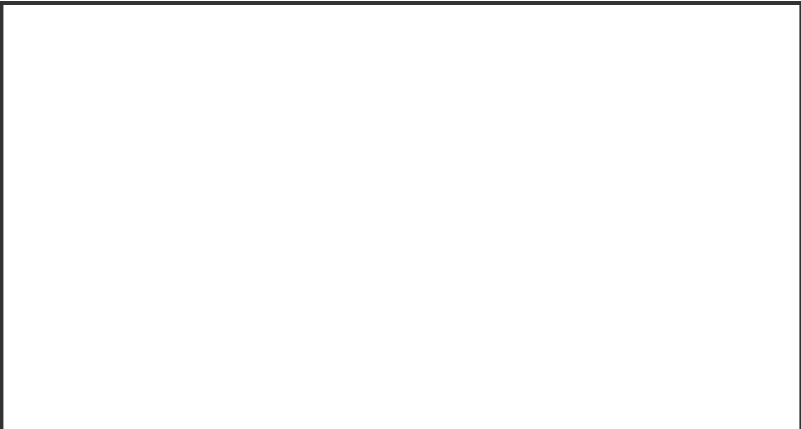
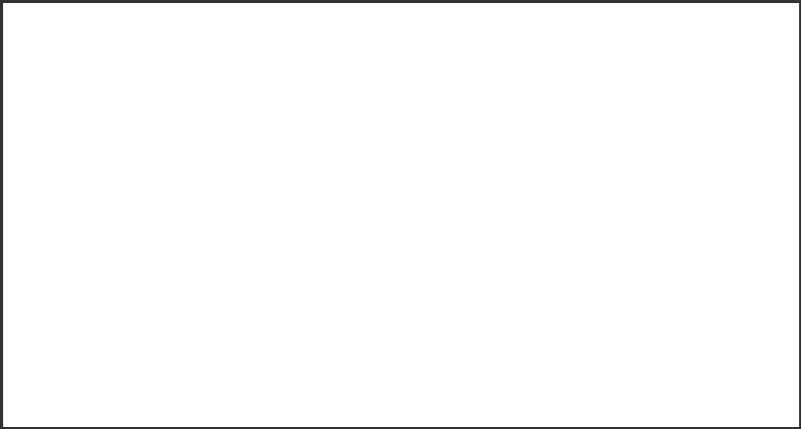
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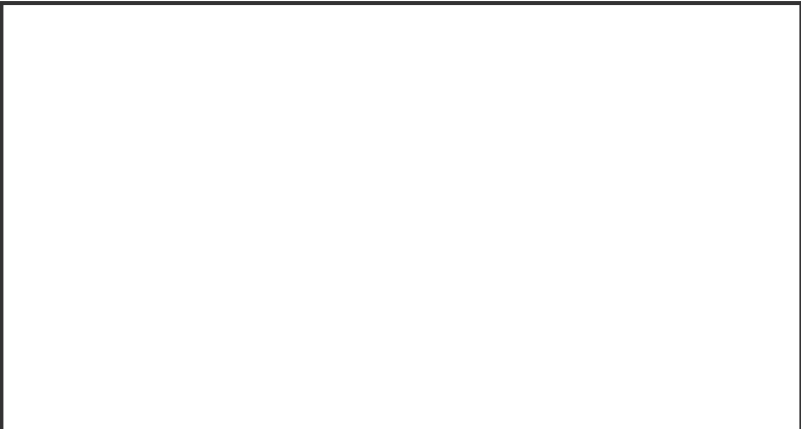
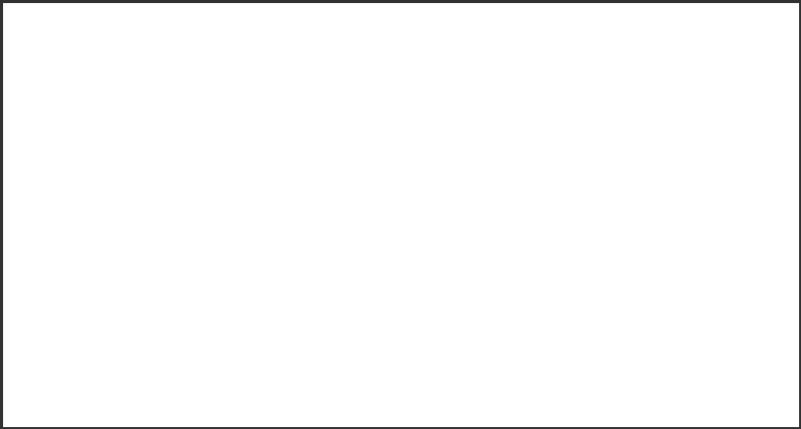
Campus - Custodial Sta ^ ng/Supervisor Performance Indicators

Campus
Custodial
Sta ^ ng



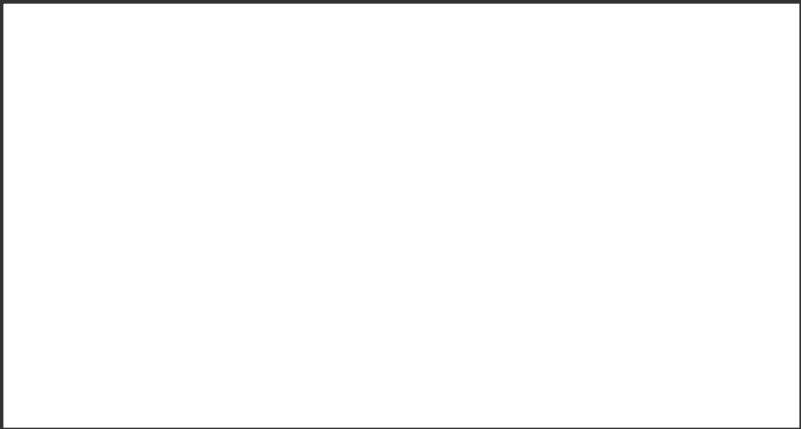
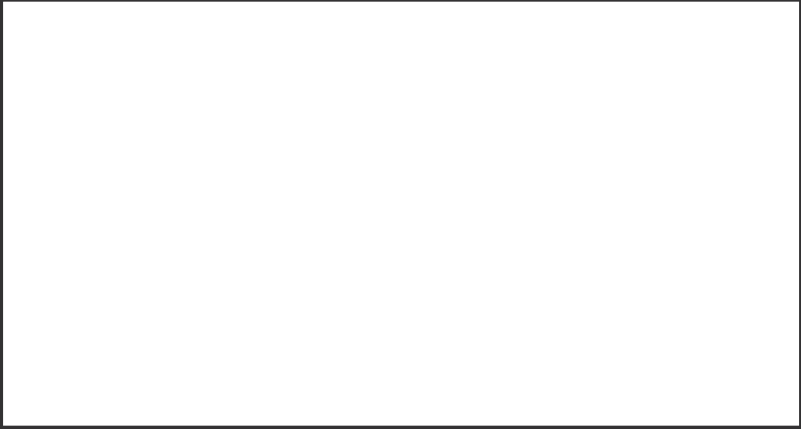
Campus
Custodial
Supervisor
Sta ^ ng

Campus
Sightline Peer
Comparators



Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators

Campus - Custodial Materials Performance Indicators

Campus
Custodial
Materials

Campus
Custodial
Materials \$/GSF

Campus
Sightline Peer
Comparators

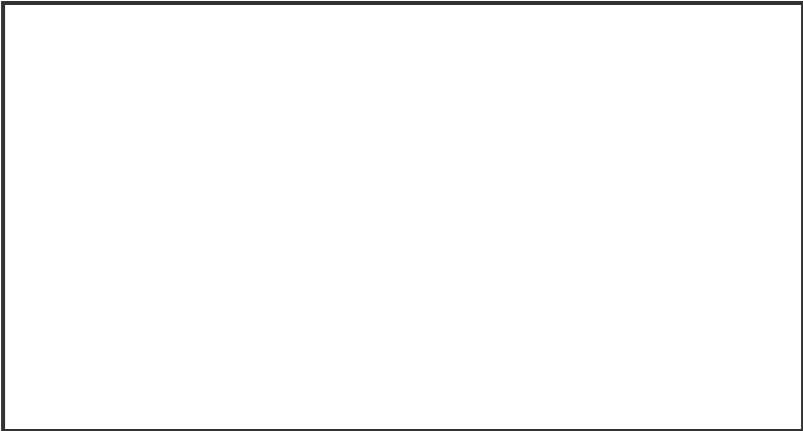
Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators

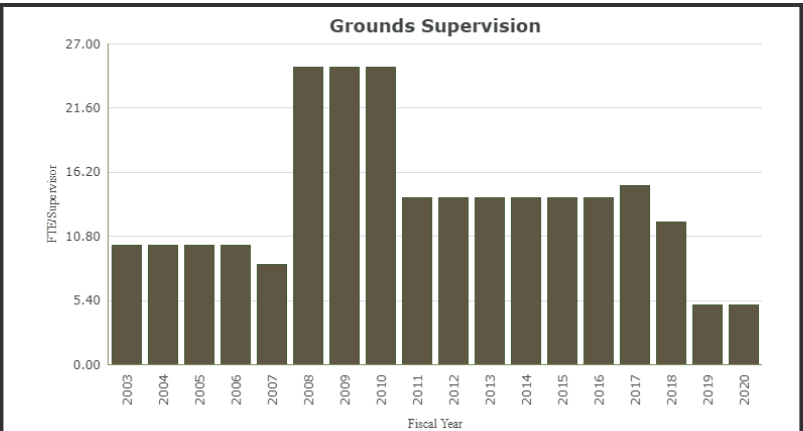
Facility
Operations
Outsourced
Peer
Comparators

Campus - Grounds Sta ^ ng/Supervisor Performance Indicators

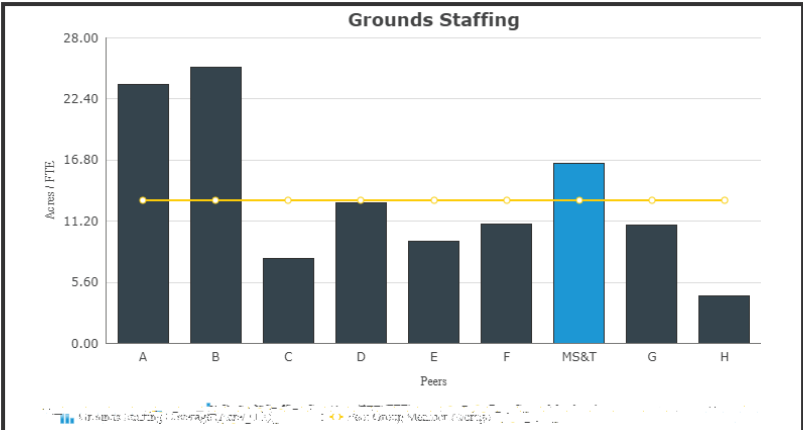
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Custodial
Sta ^ ng



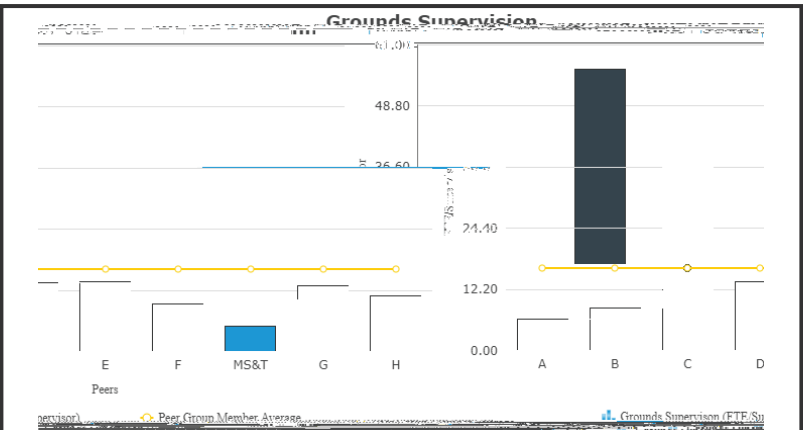
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Custodial
Supervisor
Sta ^ ng



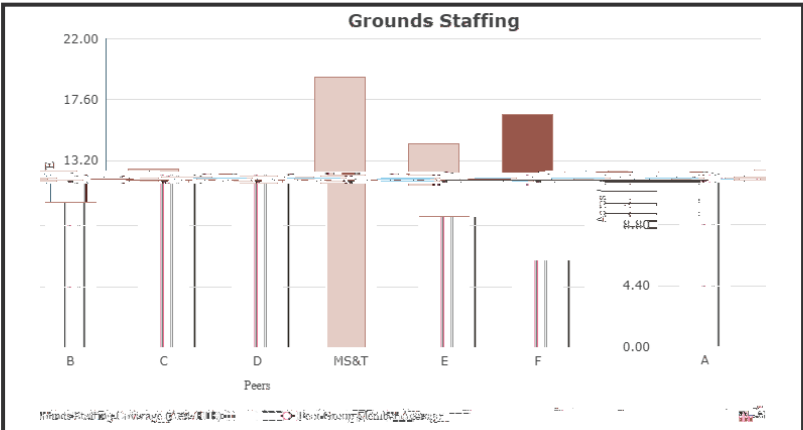
Campus
Sightline Peer
Comparators



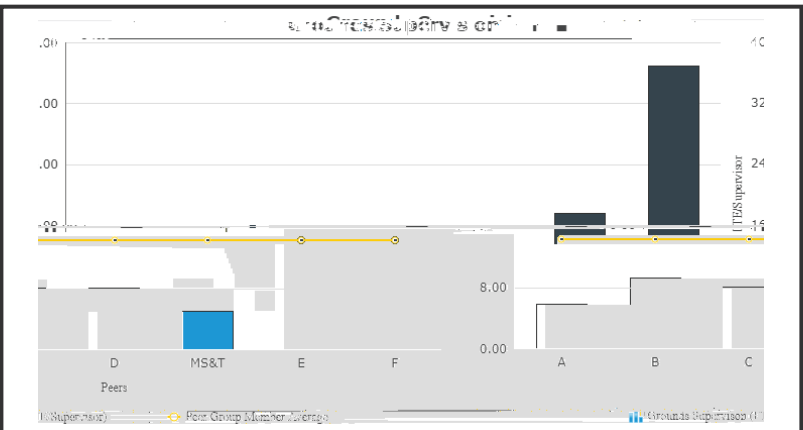
Sightline Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators

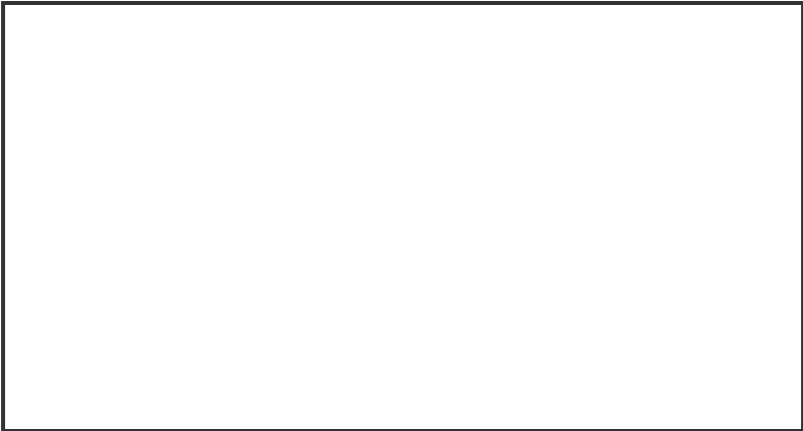


Facility
Operations
Outsourced
Peer
Comparators

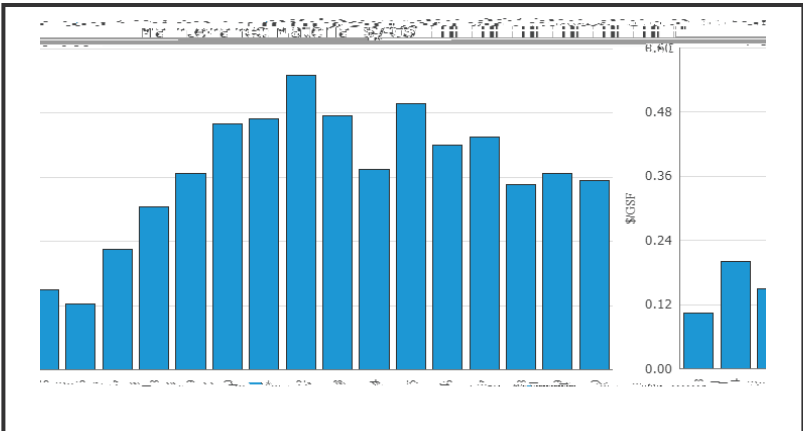


Campus - Maintenance Materials Performance Indicators

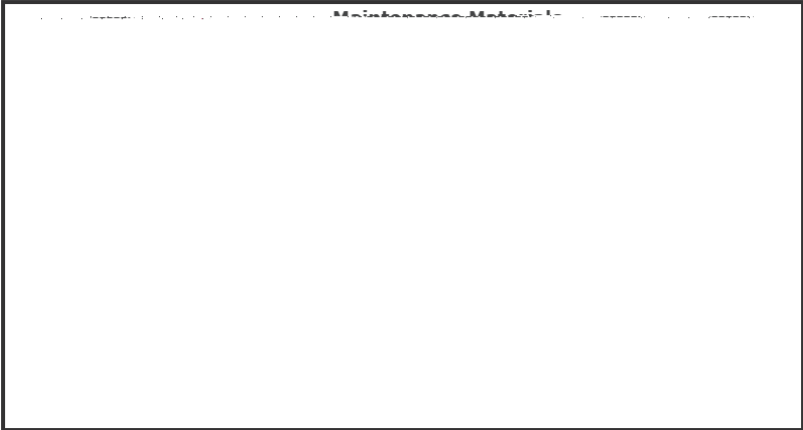
Campus
Maintenance
Materials



Campus
Materials \$/GSF



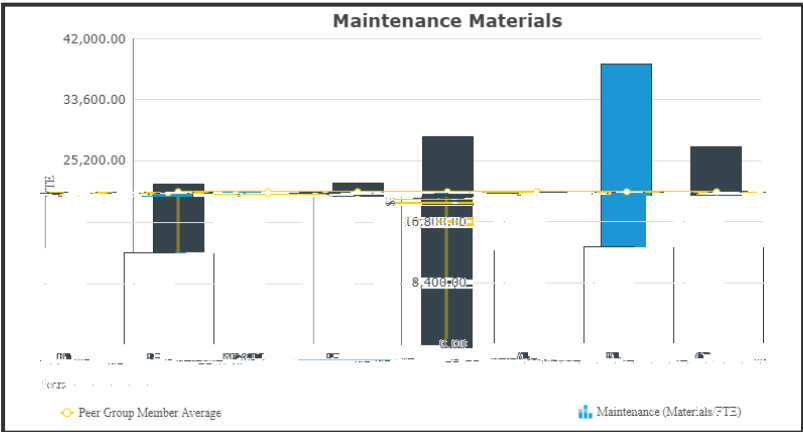
Campus
Sightline Peer
Comparators



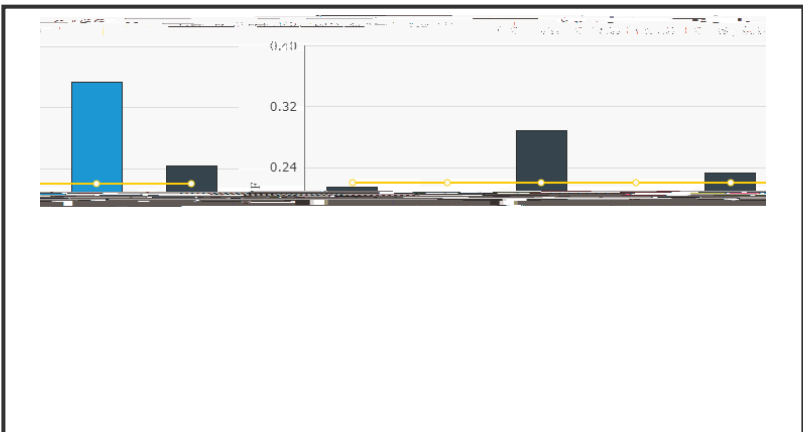
Sightline Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators



Exterior
Inspection

Cleanliness
Inspection

General Repair/
Impression

Grounds
Inspection

University of Missouri - St. Louis

Campus Profile

- 7,013 FTE students
- 2,771,404 gross square feet maintained
- 53,000 feet of Domestic Water Distribution
- 14,000 feet of Domestic Water Plant Fire Water
- 10,000 feet of Chilled Water Distribution
- 65,000 feet of Storm Sewer
- 32,000 feet of Sanitary Sewer
- 45,000 feet of Electric Distribution
- 59,000 feet of Data Distribution
- 25,000 feet of Video Distribution
- 23,000 feet of Telephone Distribution
- 1 Electric Substation
- 24,000 feet of Natural Gas Distribution

Sightlines Peer

Comparator Institutions:

- Bloomsburg University of PA
- Edinboro University of PA
- Jackson State University - E&G
- Kutztown University of PA
- Millersville University of PA
- Missouri University of Science and Technology
- Portland State University - E&G
- University of Massachusetts - Dartmouth
- University of Missouri - Kansas City
- West Chester University of PA

Sightlines Outsourced

Comparator Institutions:

- Chapman University
- Drew University
- Jackson State University
- Lewis & Clark College
- Nova Southeastern University
- Saint Mary's College of California
- The Catholic University of America
- Widener University

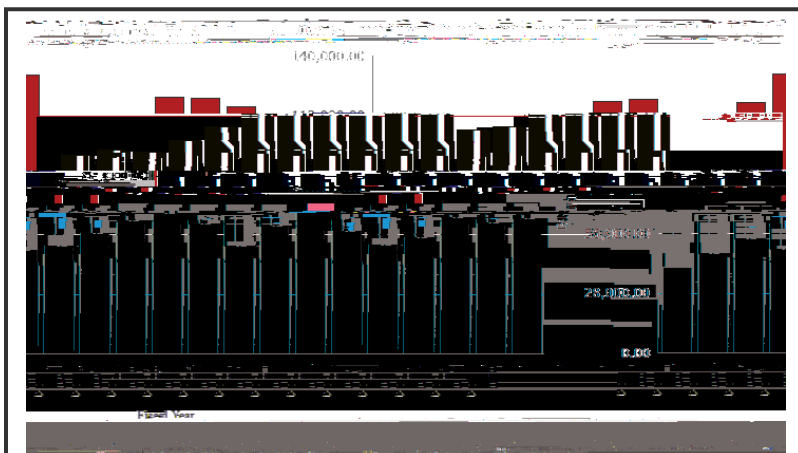
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UMSL - Energy Consumption & Expense Summary

Energy Consumption & Expense Summary	2016	2017	2018	2019	2020
MMBTU Used	293,663	326,058	338,111	338,291	324,795
Cost	\$4,127,322	\$3,802,972	\$3,792,884	\$3,794,196	\$3,328,460
Cost/MMBTU	\$14.05	\$11.66	\$11.22	\$11.22	\$10.25
BTU/GSF	107,041	113,004	120,818	120,524	116,263

Campus
Energy
Consumption



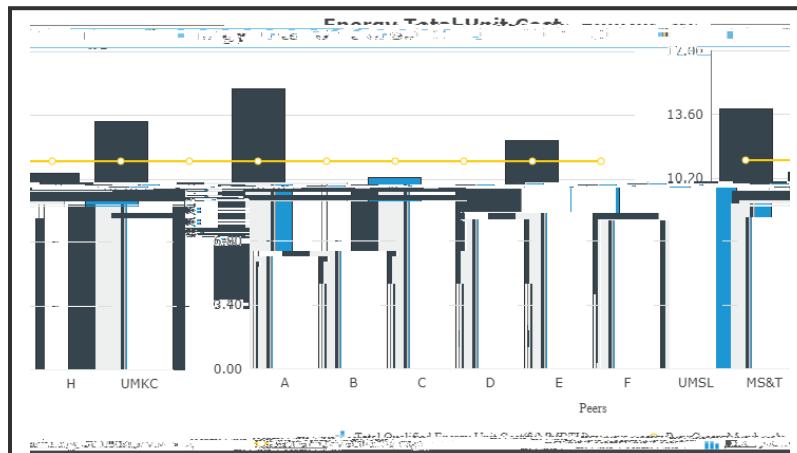
Campus
Energy Unit
Cost



Peer
Comparators
Energy
Consumption



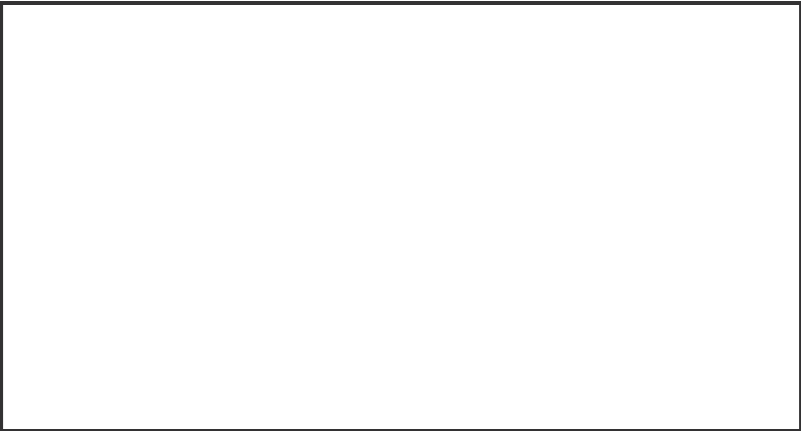
Peer Energy
Unit Cost



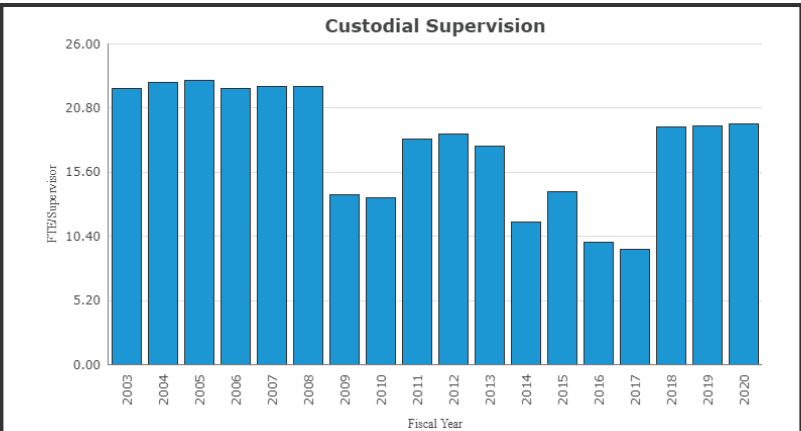
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- Energy Total Unit Cost (\$/MMBTU): The composite cost for an MMBTU of energy; includes electricity and all fossil fuels. Region and type of utility system (centralized, independent, co-generation, etc.) greatly influence unit cost.

Campus - Custodial Sta ^ ng/Supervisor Performance Indicators

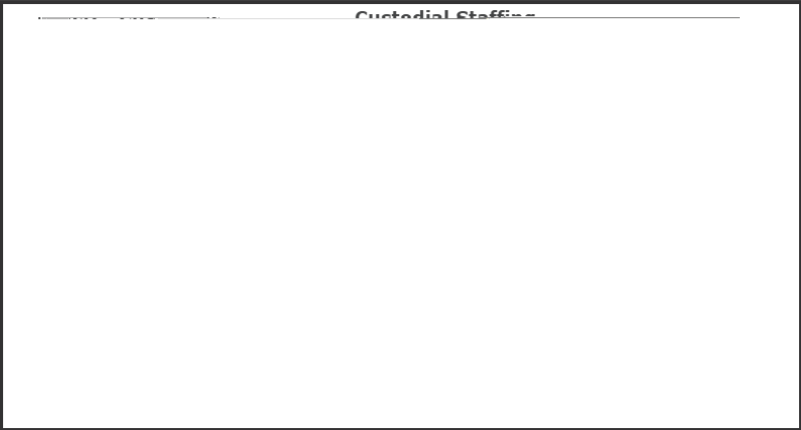
Campus
Custodial
Sta ^ ng



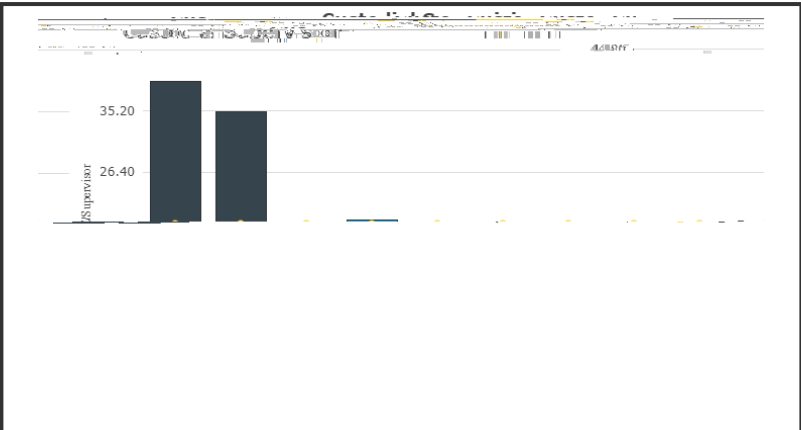
Campus
Custodial
Supervisor
Sta ^ ng



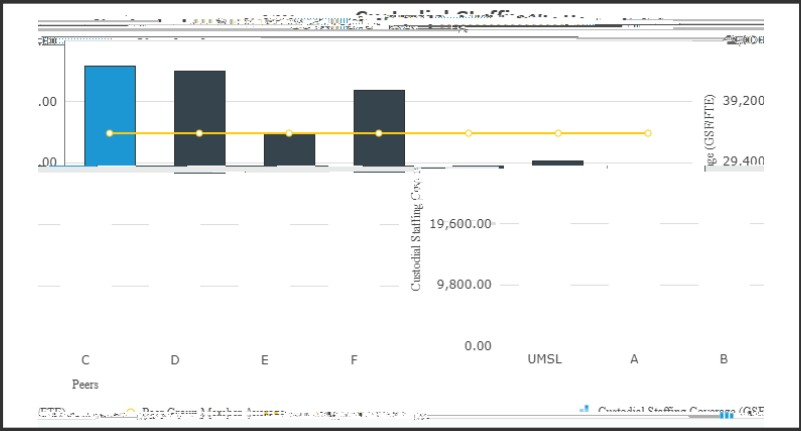
Campus
Sightline Peer
Comparators



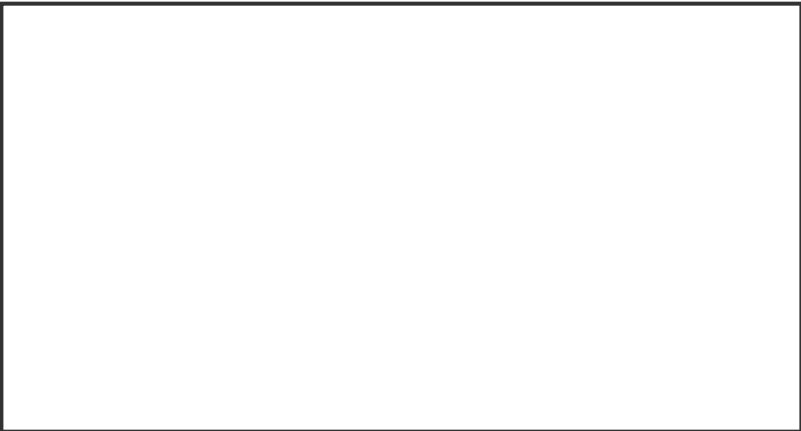
Sightline Peer
Comparators



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Facility
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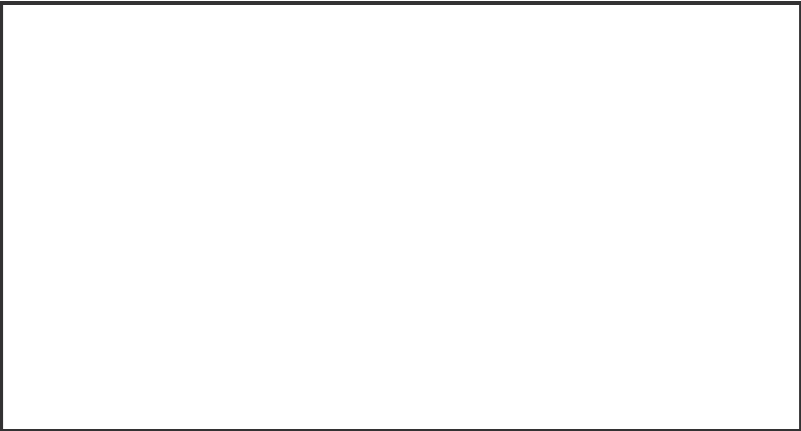
Campus - Custodial Materials Performance Indicators

Campus
Custodial
Materials

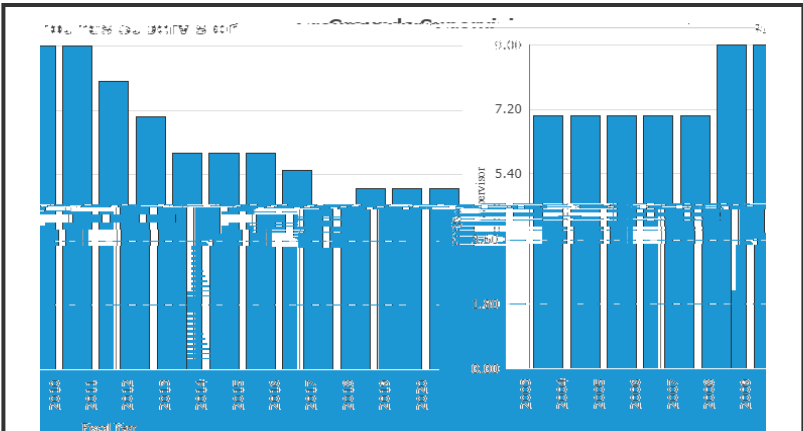
Campus

Campus - Grounds Sta ^ ng/Supervisor Performance Indicators

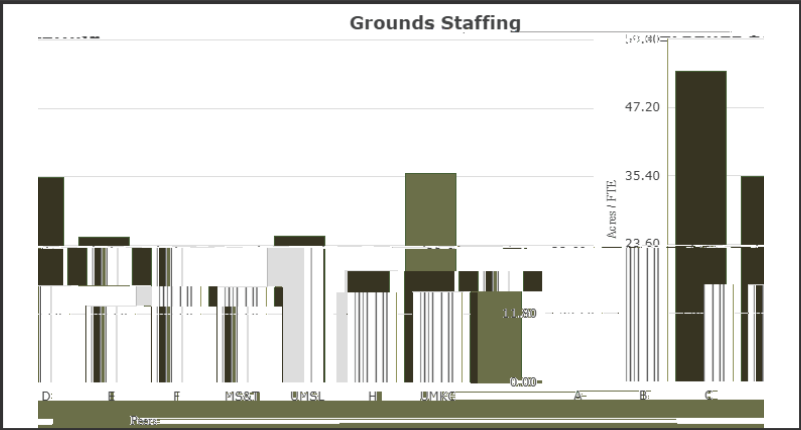
Campus
Custodial
Sta ^ ng



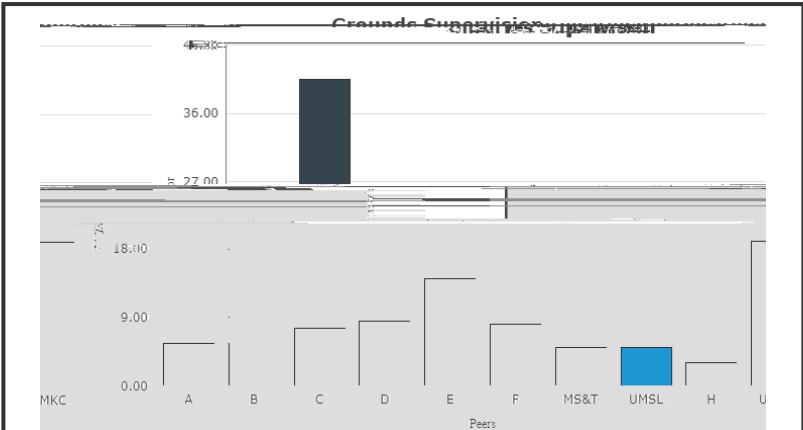
Campus
Custodial
Supervisor
Sta ^ ng



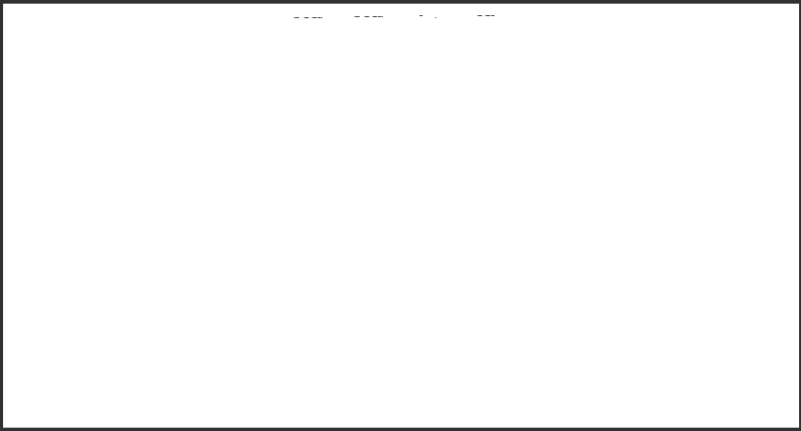
Campus
Sightline Peer
Comparators



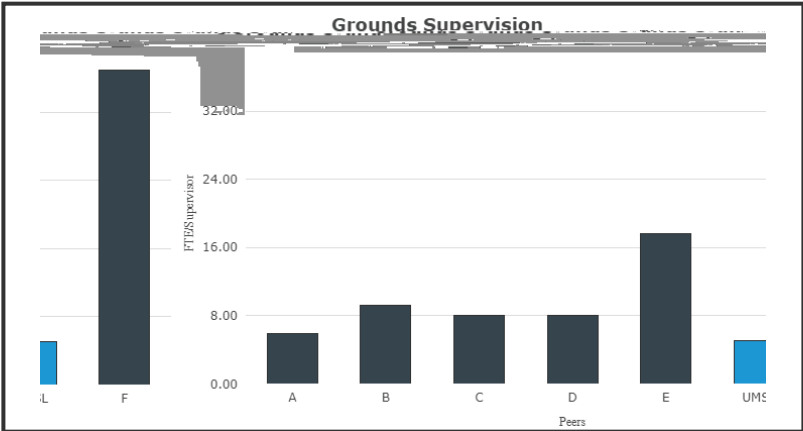
Sightline Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators

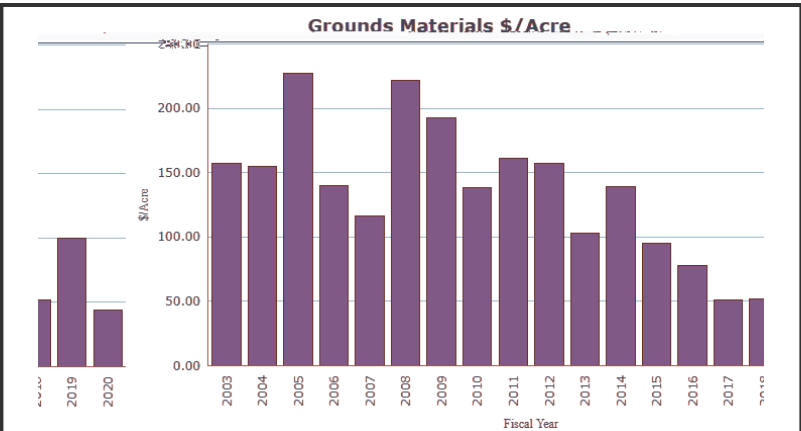
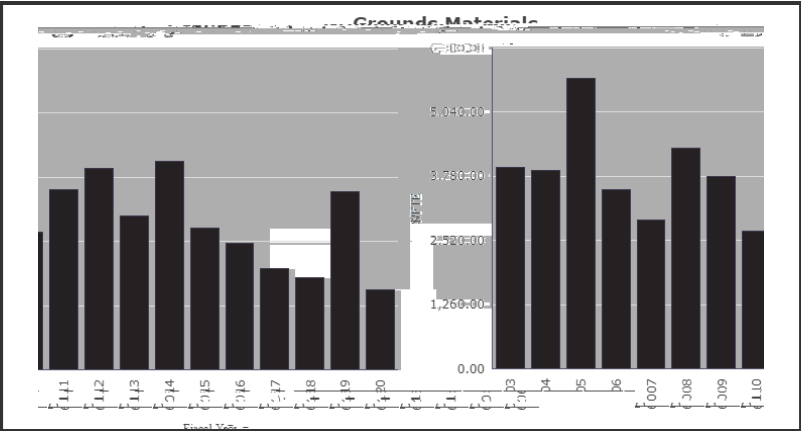


Facility
Operations
Outsourced
Peer
Comparators



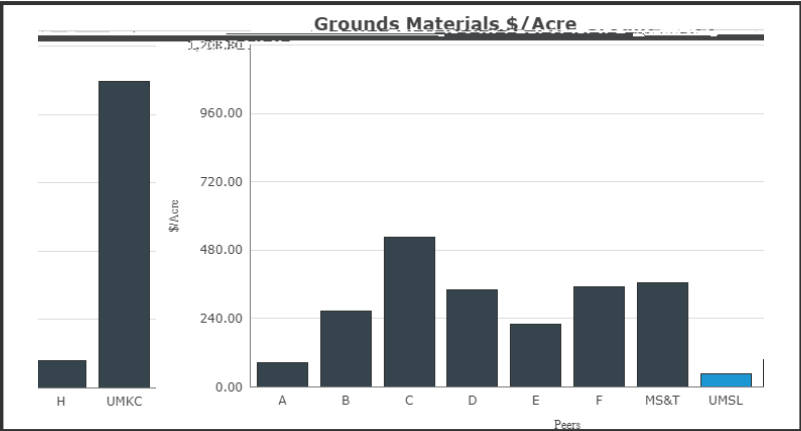
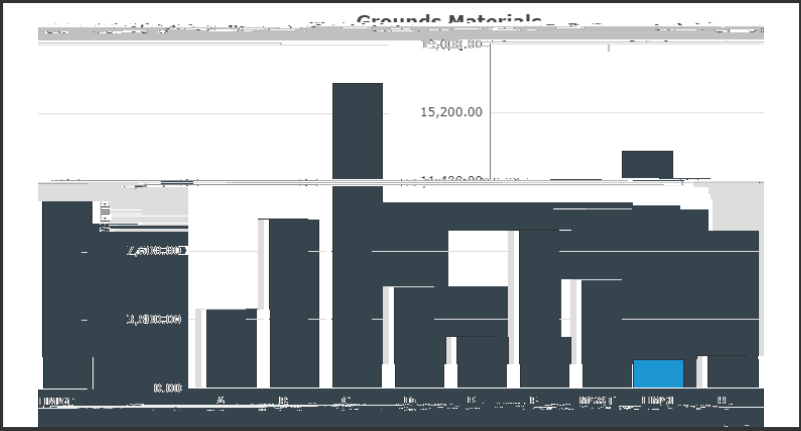
Campus - Grounds Materials Performance Indicators

Campus
Grounds
Materials



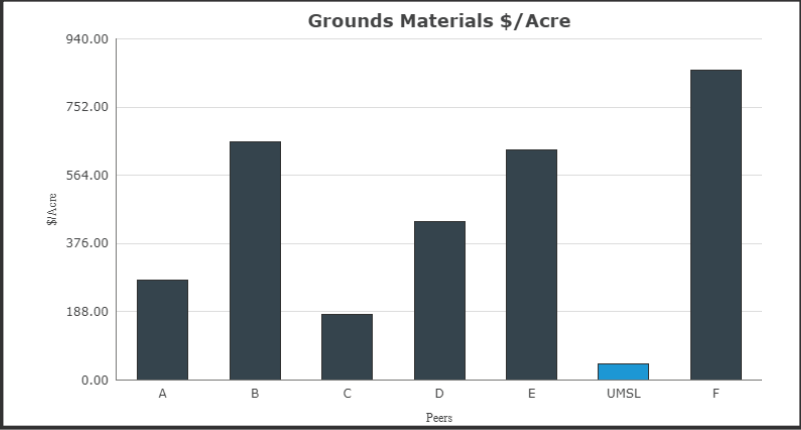
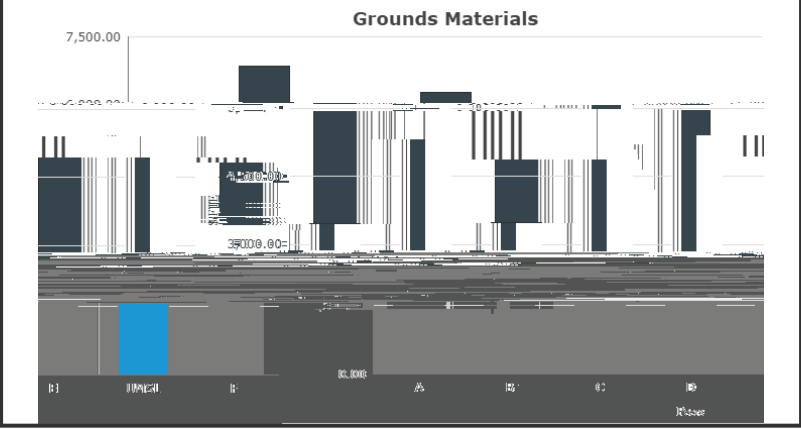
Campus
Grounds
Materials \$/GSF

Campus
Sightline Peer
Comparators



Sightline Peer
Comparators

Facility
Operations
Outsourced
Peer
Comparators



Facility
Operations
Outsourced
Peer
Comparators

Campus - Maintenance Sta ^ ng/Supervisor Performance Indicators

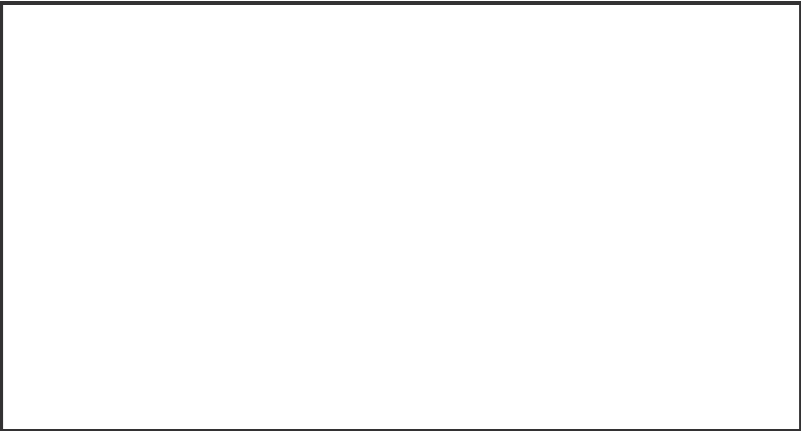
Campus
Custodial
Sta ^ ng

Campus
Sightline Peer
Comparators

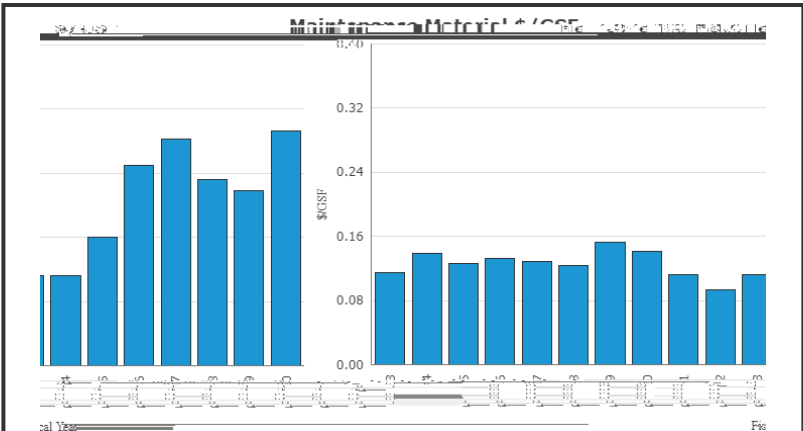
page 13

Campus - Maintenance Materials Performance Indicators

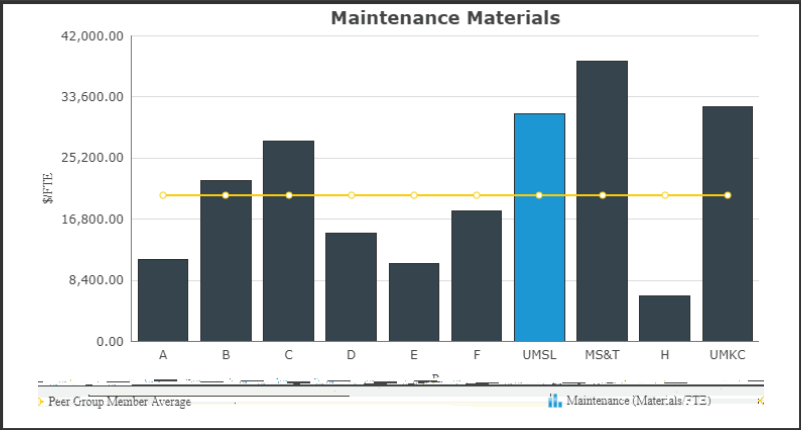
Campus
Maintenance
Materials



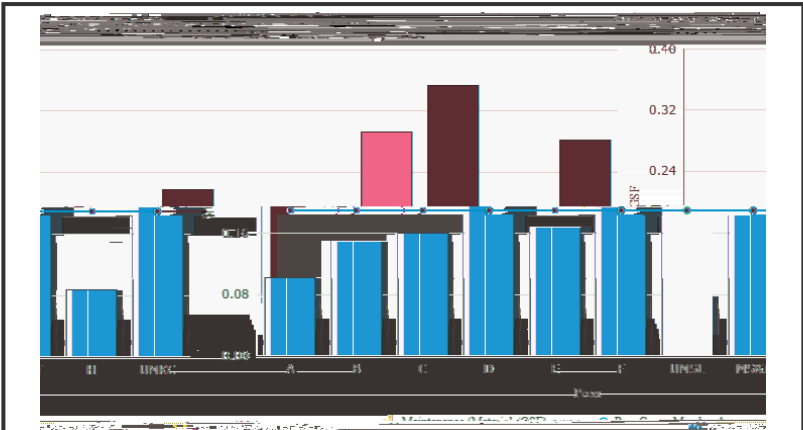
Campus
Materials \$/GSF



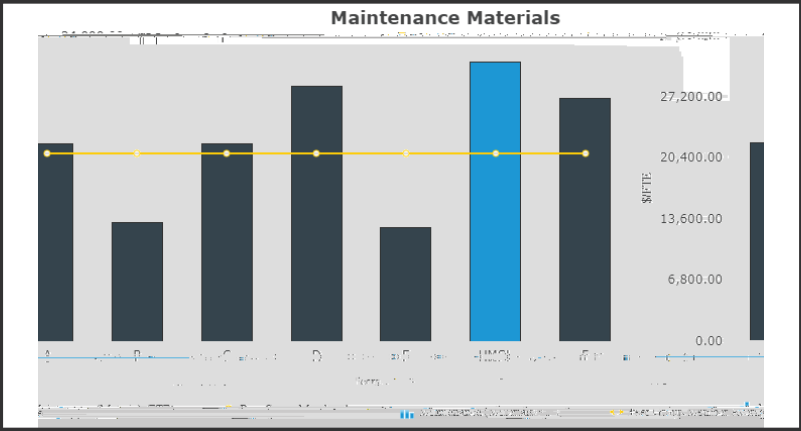
Campus
Sightline Peer
Comparators



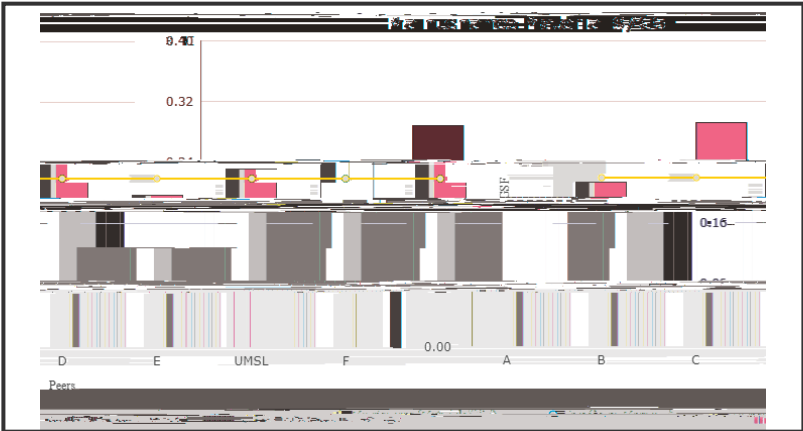
Sightline Peer
Comparators

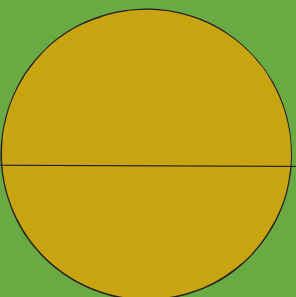


Facility
Operations
Outsourced
Peer
Comparators



Facility
Operations
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