

Sightlines, LLC

FY11 Facilities MB&A Presentation

Kansas State University

February 22, 2012

Presented by: Nate Pramuk and Emily Morris

Sightlines



University of Illinois at Urbana-Champaign
The University of Maine
University of Maine at Augusta
University of Maine at Farmington
University of Maine at Machias
University of Maine at Presque Isle
University of Maine at Fort Kent
University of Maryland
University of Massachusetts Amherst
University of Massachusetts Boston
University of Massachusetts Dartmouth
University of Massachusetts Lowell
University of Michigan
University of Minnesota
University of Missouri
University of Missouri - Kansas City
University of Missouri - St. Louis
University of New Hampshire
University of New Haven
University of Notre Dame
University of Oregon
University of Pennsylvania
University of Portland
University of Redlands
The University of Rhode Island, Narragansett Bay
The University of Rhode Island, Feinstein Providence
The University of Rhode Island, Kingston
University of Rochester
University of San Diego
University of San Francisco
University of St. Thomas (TX)
University of Southern Maine
University of Toledo
University of Vermont
Upper Iowa University
Utica College
Vassar College
Virginia Commonwealth University
Virginia Department of General Services
Wagner College
Wellesley College
Wesleyan University
West Chester University of Pennsylvania
West Virginia University
Western Oregon University
Wheaton College (MA)

Common vocabulary, consistent methodology, credibility through benchmarking



- 2

A vocabulary for measurement

The Return on Physical Assets – ROPASM



Sightlines

The annual investment needed to ensure buildings will properly perform and reach their useful life

"Keep-Up Costs"

Annual
Stewardship



The accumulated backlog of repair and modernization needs and the definition of resource capacity to correct them.

"Catch-Up Costs"

Asset
Reinvestment



The effectiveness of the facilities operating budget, staffing, supervision, and energy management

Operational
Effectiveness



The measure of service process and the maintenance quality of space and systems

Service



Asset Value Change

Operations Success

Peer group for benchmarking

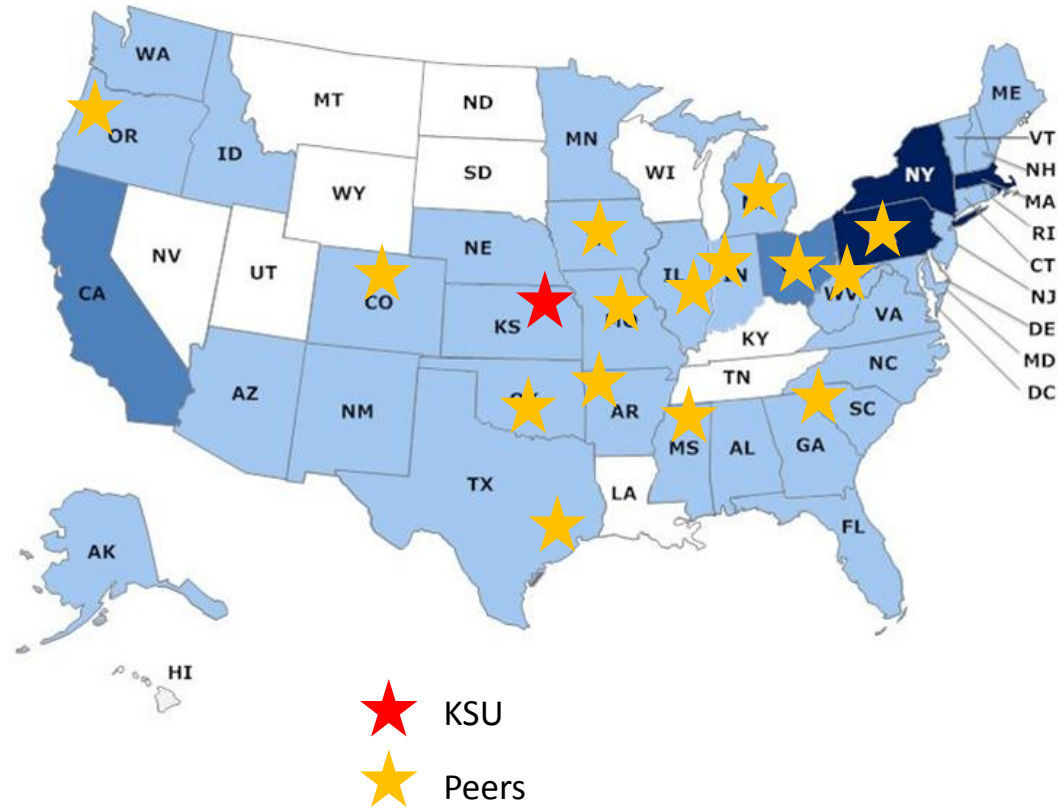
Peers selected based on campus size, complexity, age, program



Sightlines

Institution	Big 12	Land-grant Institutions*
Clemson University		✓
Iowa State University	✓	✓
Michigan State University		✓
Oregon State University		✓
Purdue University		✓
Texas A&M University	✓	✓
The Ohio State University		✓
The Pennsylvania State University		✓
The University of Mississippi		✓
The University of Oklahoma	✓	
University of Arkansas		✓
University of Colorado		
University of Illinois		✓
University of Missouri	✓	
West Virginia University		✓

*Land-grant Institutions as designated by the state legislature. www.aplu.org





Age of Space

With no record of major renovations done on campus, 90% of space is now over 25 years old, a critical age in a buildings lifecycle.

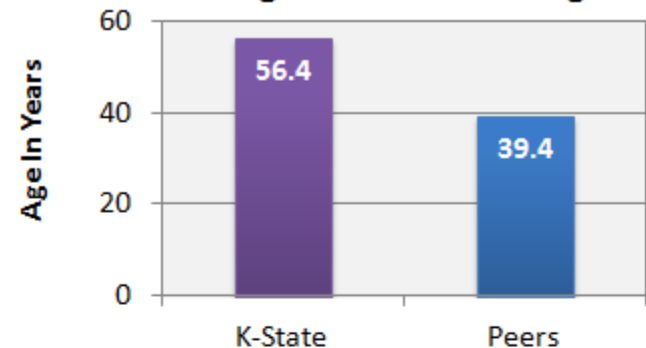
Capital Investment

Total capital investment has increased significantly over time. Spending has been concentrated on Envelope/Mechanical types of projects leaving limited funding for Space/Programming types of projects.

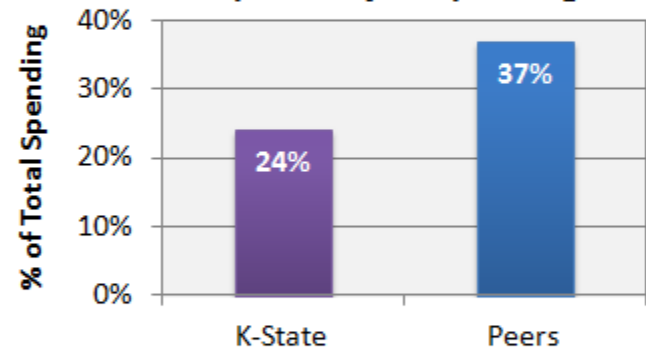
Operations Profile

While total daily operating costs are near the peer average, K-State is spending more on utilities leaving less funding for daily service and Planned Maintenance work. Despite limited funding, operations is providing results comparable to peer institutions.

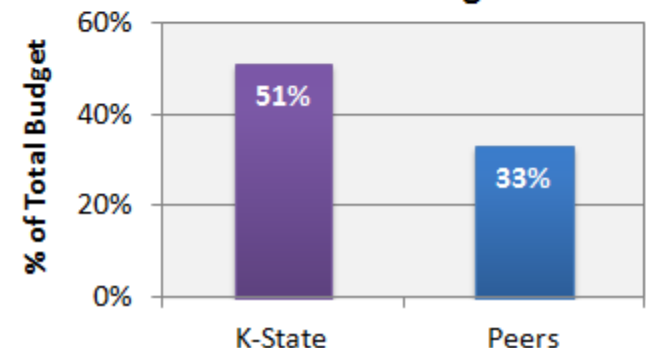
Weighted Renovation Age



Space Project Spending



Utilities Budget



Space Profile



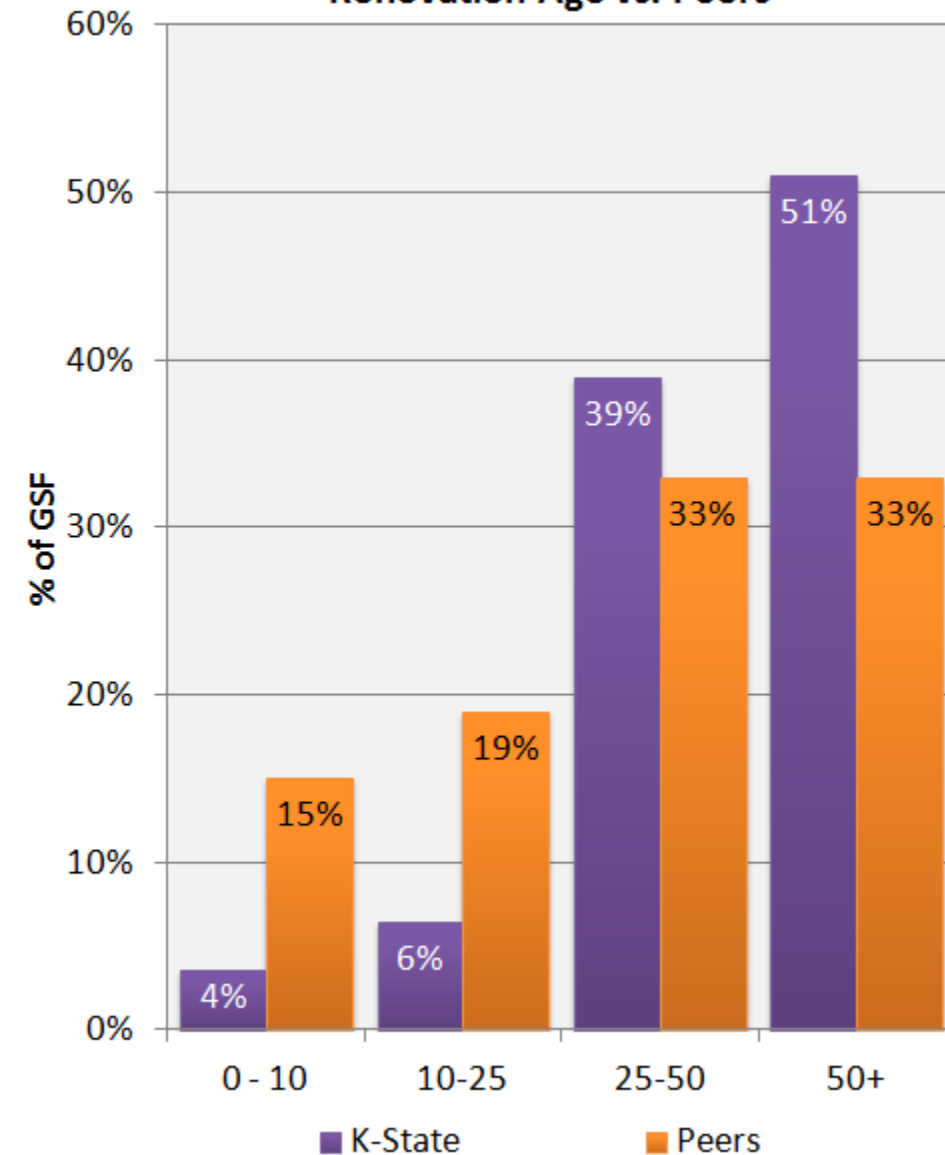
90% of space is over 25 years old

K-State has oldest age profile of peer group

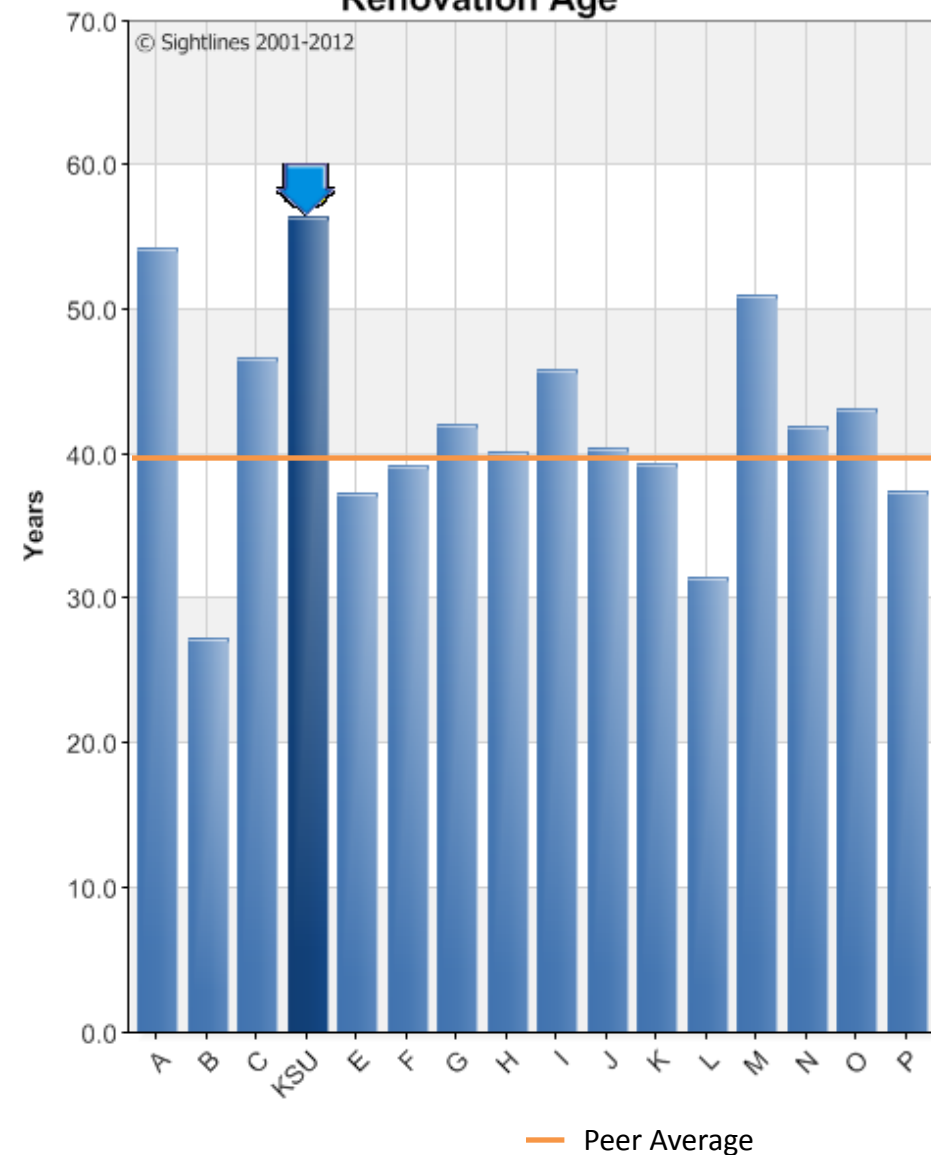


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Renovation Age vs. Peers



Renovation Age



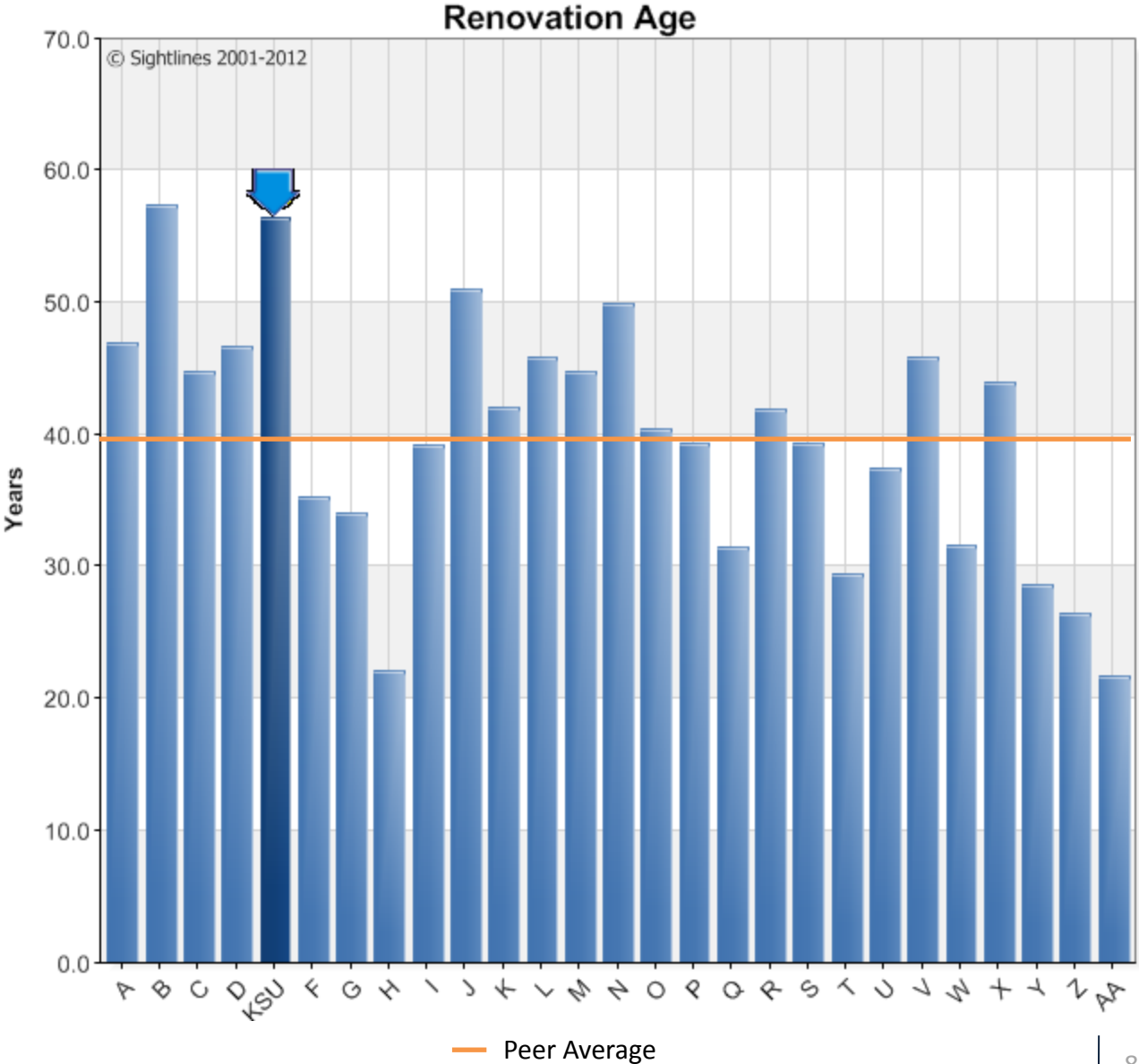
K-State 2025 – How does K-State compare?

Age compared to top 50 research institutions within Sightlines’ database



Sightlines

- Clemson University
- Florida State University
- Georgia Institute of Technology
- Indiana University
- IUPUI
- Iowa State University
- Michigan State University
- Purdue University
- Rutgers University
- Temple University
- Texas A&M University
- The Ohio State University
- The Pennsylvania State University
- The University of Alabama
- The University of Arizona
- University of California Irvine
- University of Colorado - Boulder
- University of Illinois - Chicago
- University of Illinois - Urbana/Champaign
- University of Maryland
- University of Massachusetts Amherst
- University of Michigan
- University of Minnesota
- University of Missouri
- University of Oregon
- University of Vermont
- Virginia Commonwealth University

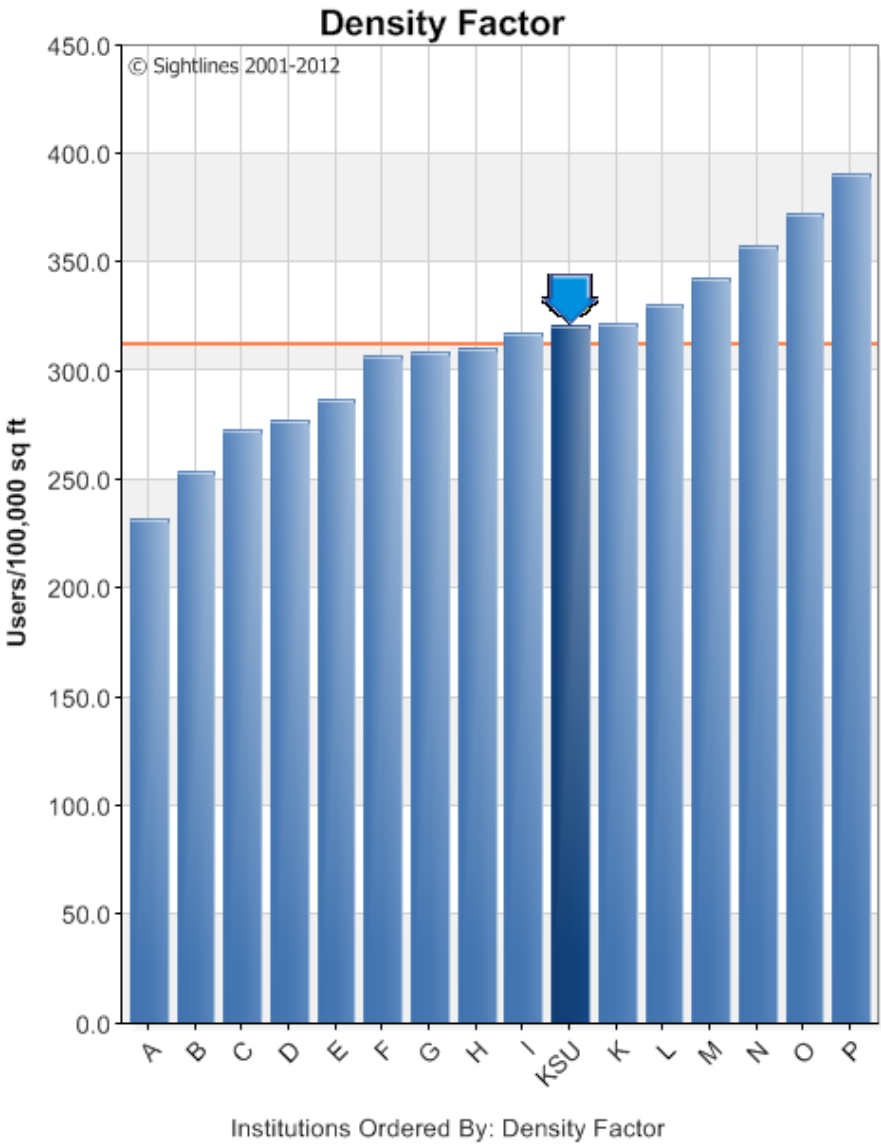


Measuring the volume of people on campus

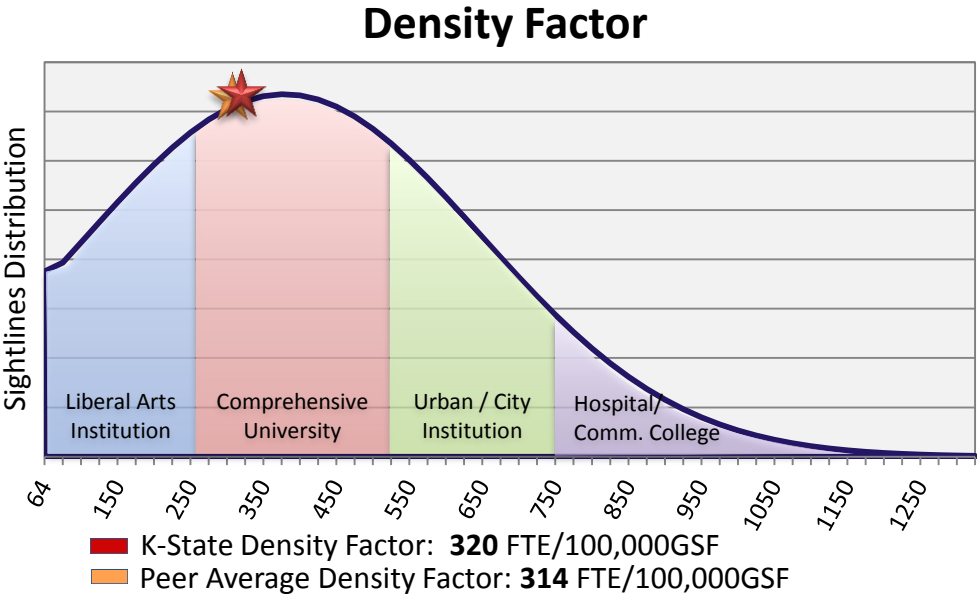
Usage level of campus similar to peers



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Peer Average



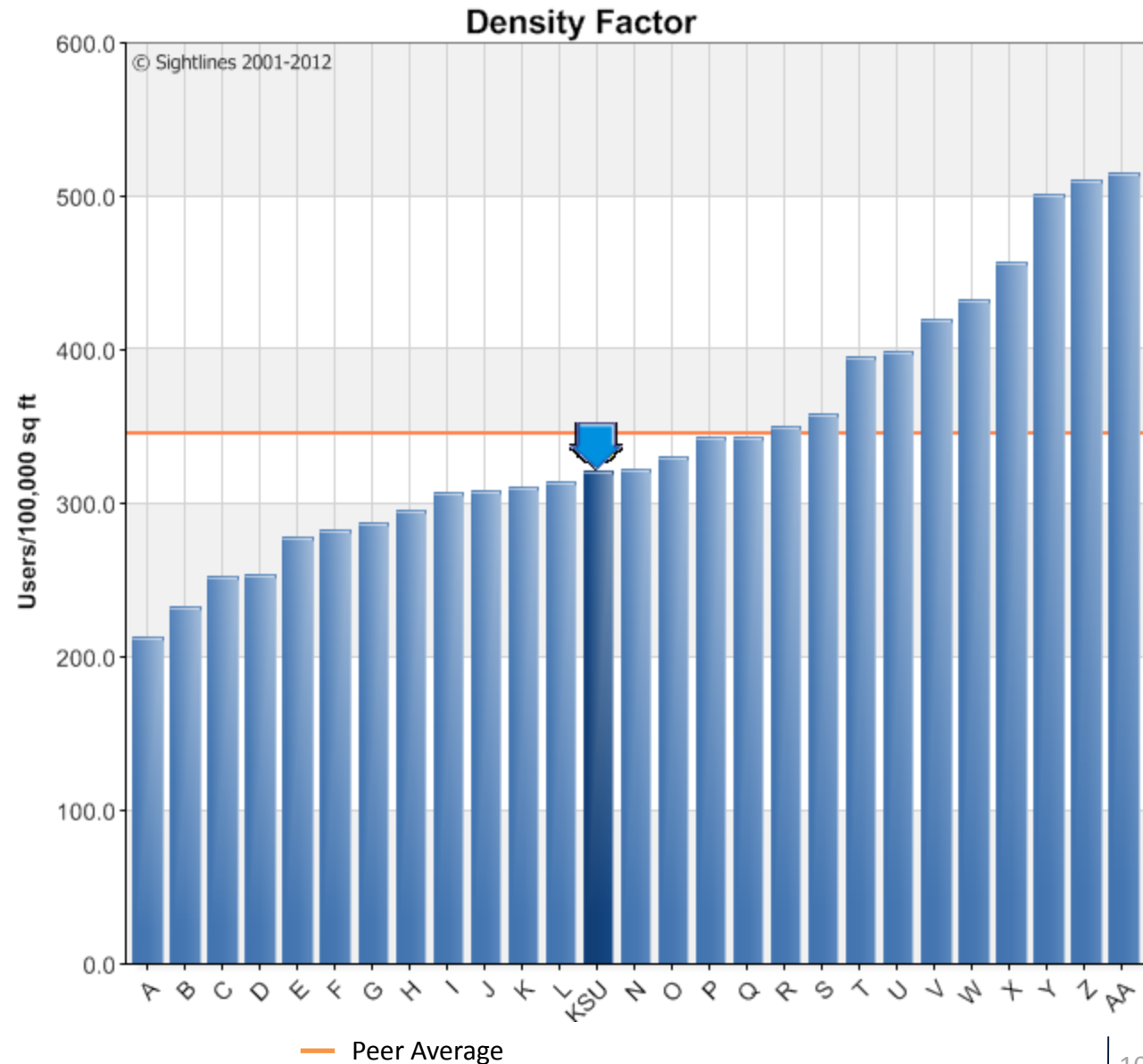
K-State 2025 – How does K-State compare?

Density compared to top 50 research institutions within Sightlines' database



Sightlines

Clemson University
Florida State University
Georgia Institute of Technology
Indiana University
IUPUI
Iowa State University
Michigan State University
Purdue University
Rutgers University
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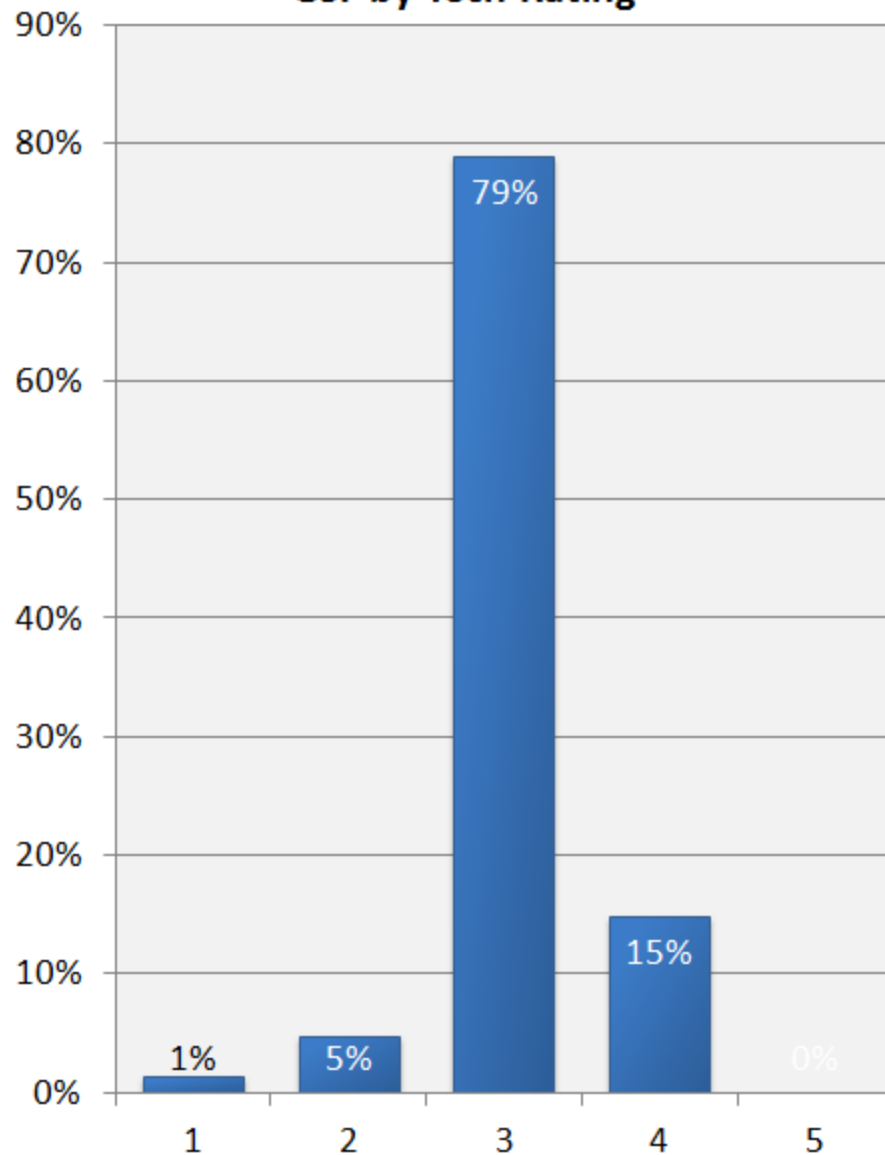
Technical complexity of campus is 3.08 in FY2011

K-State is less technically complex than peers

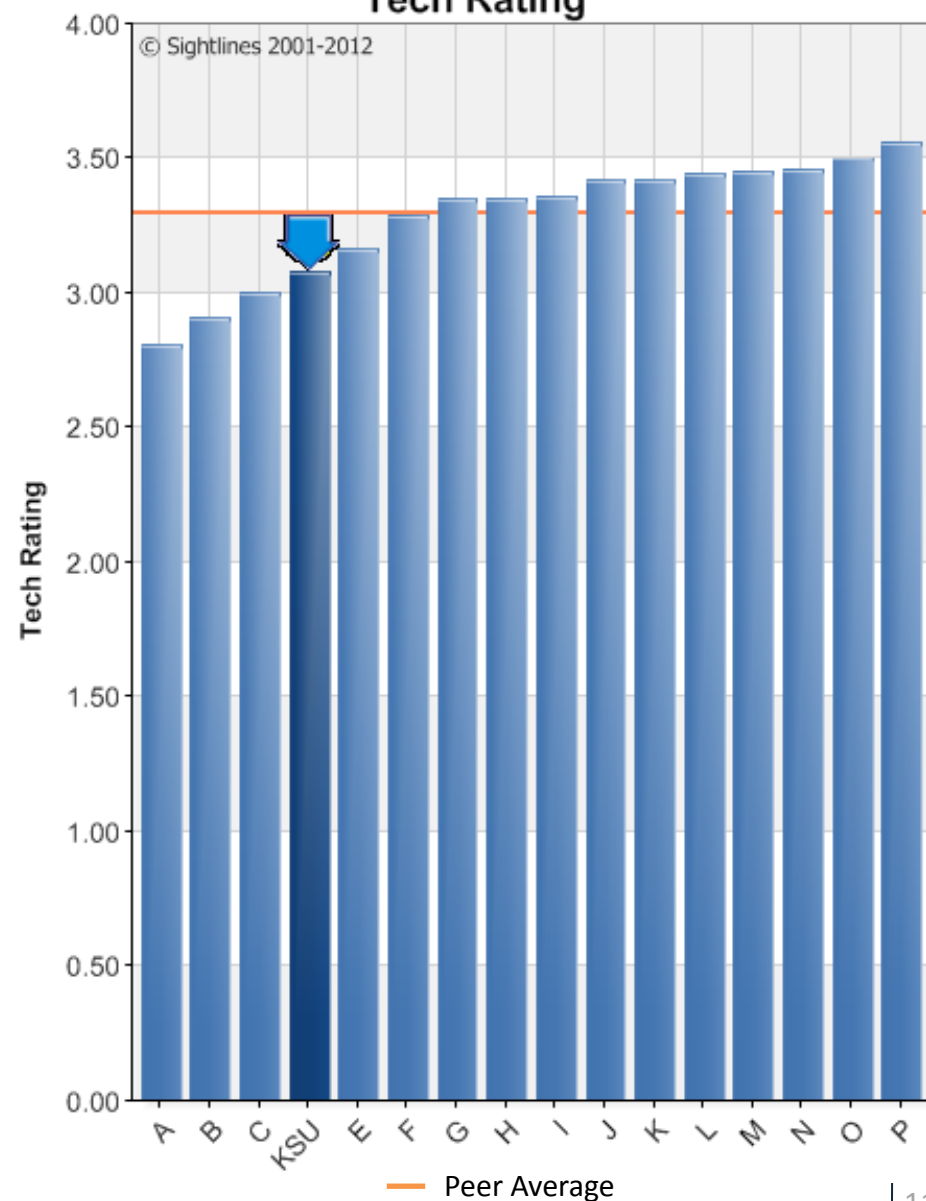


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GSF by Tech Rating



Tech Rating



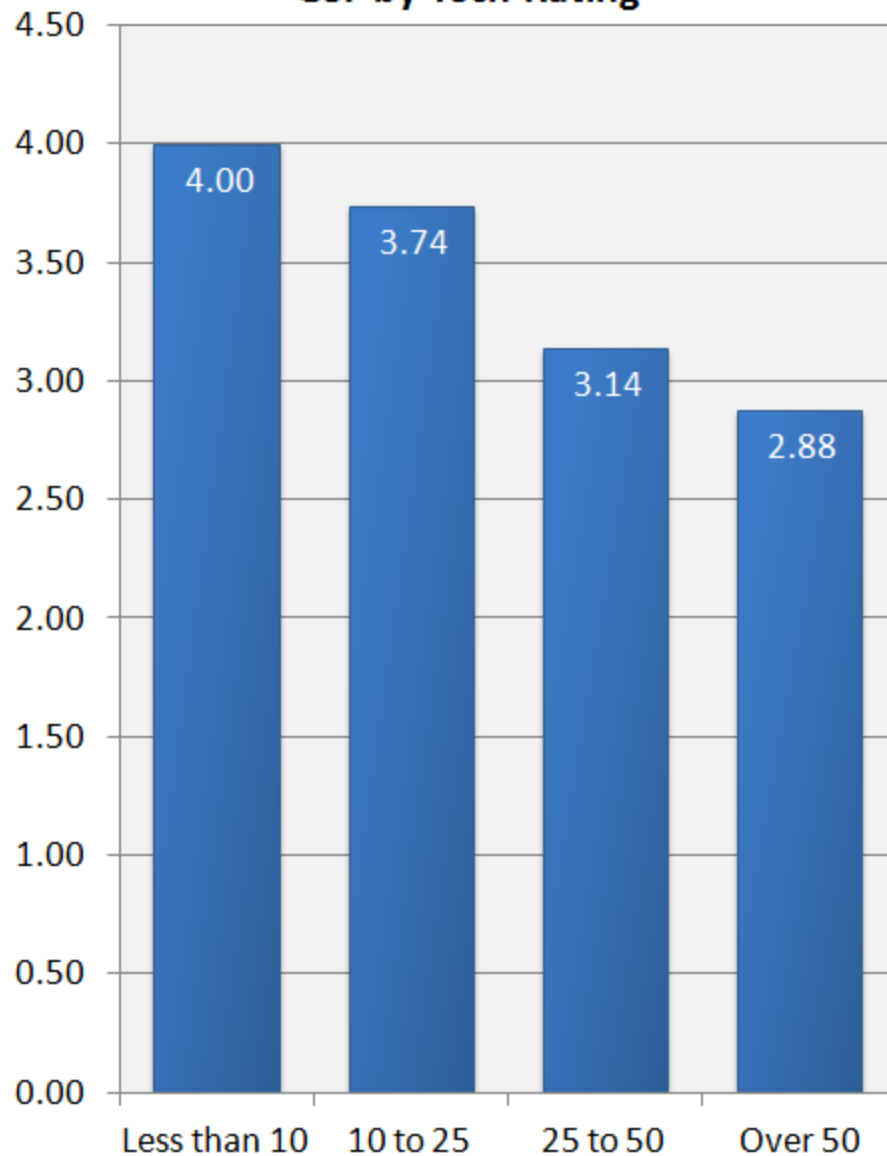
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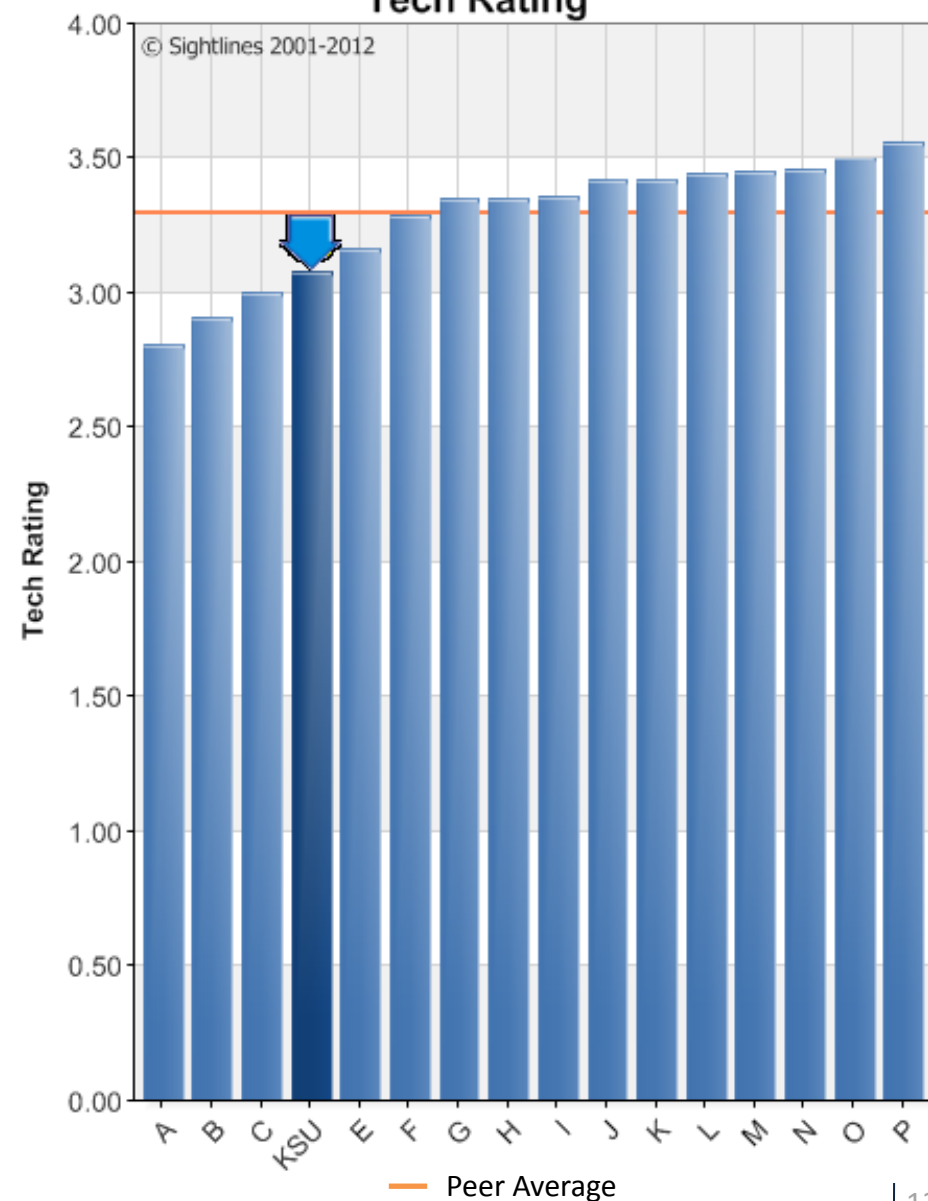


Sightlines

GSF by Tech Rating



Tech Rating



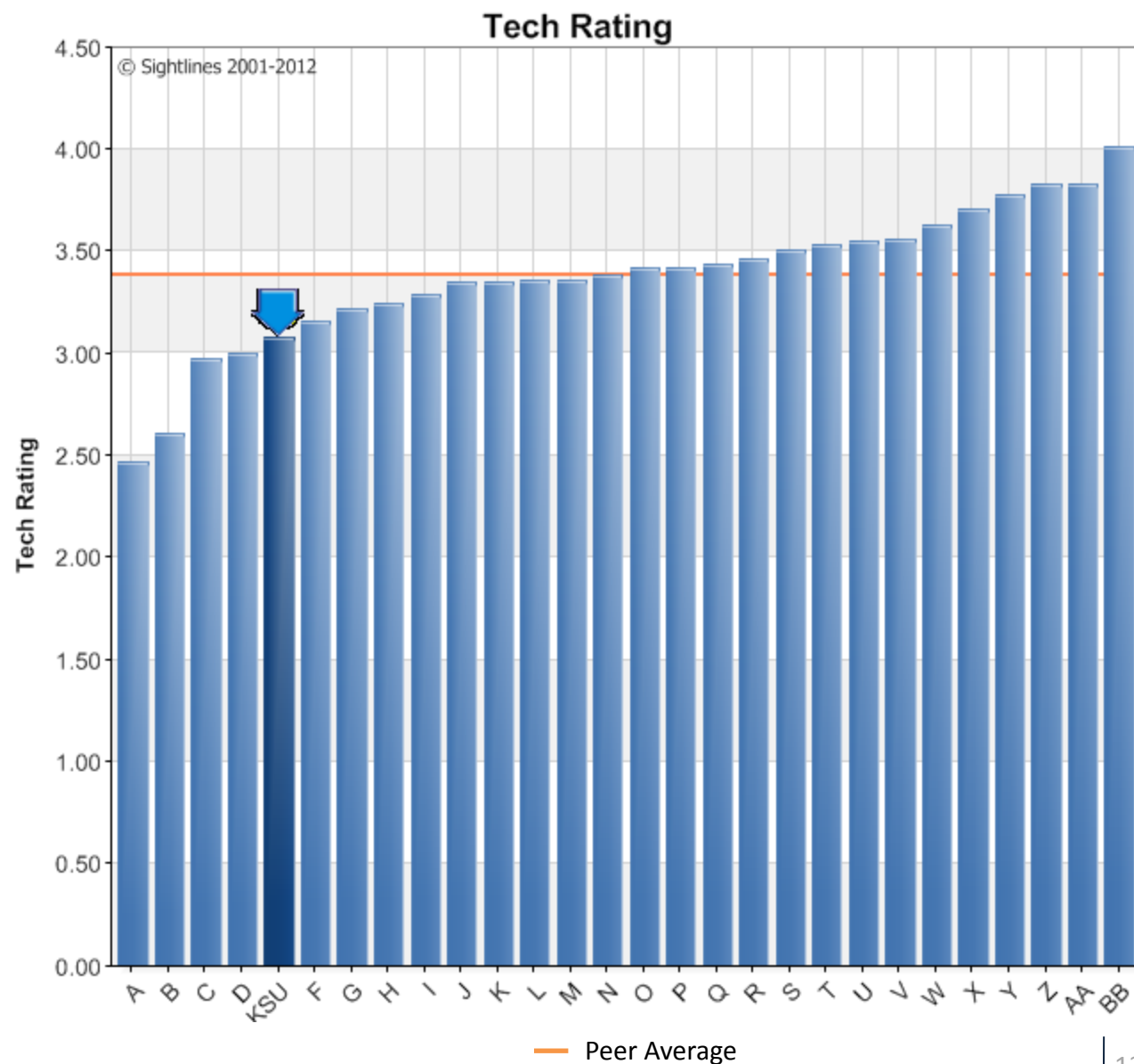
K-State 2025 – How does K-State compare?

Tech rating compared to top 50 research institutions within Sightlines' database



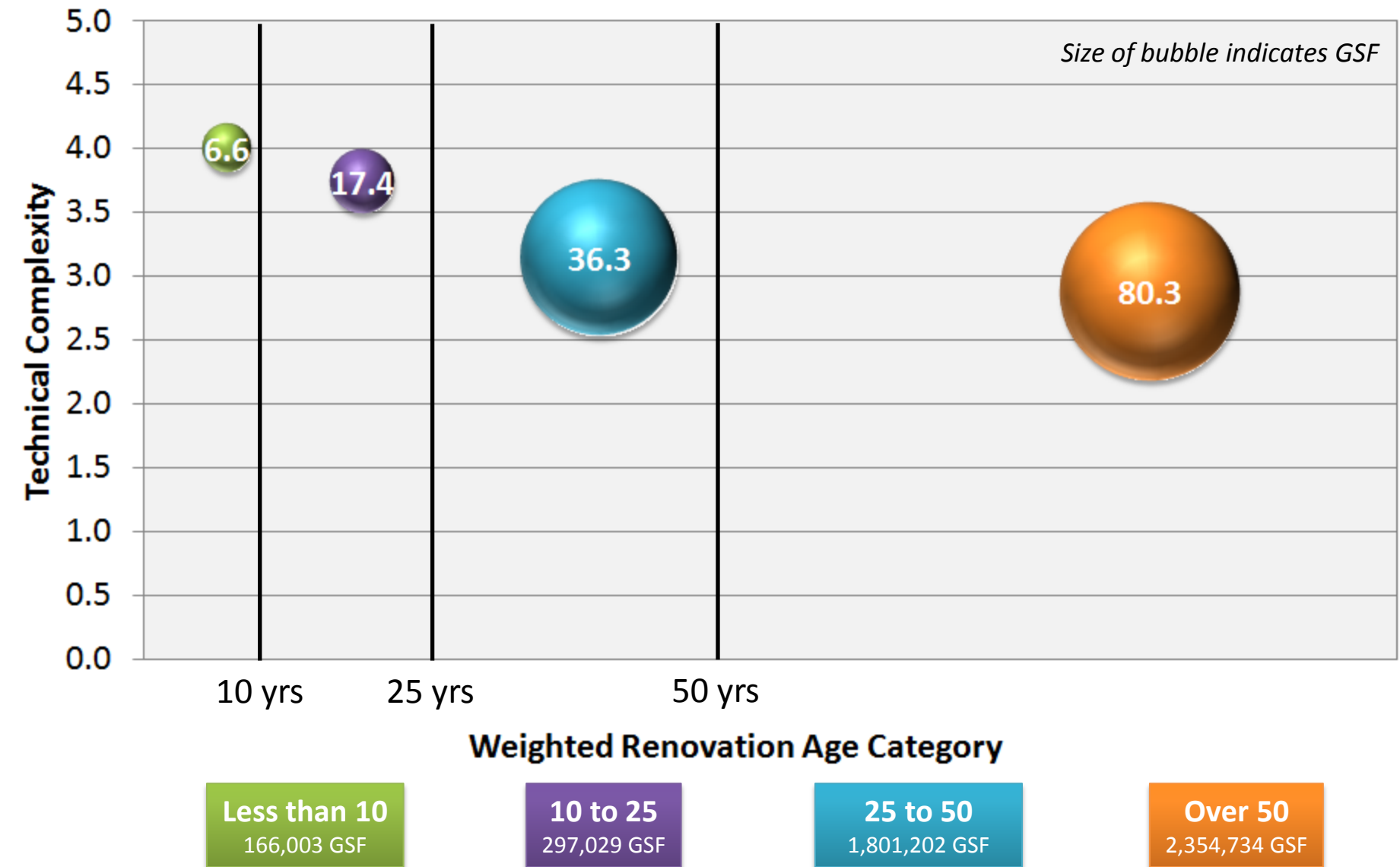
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University of Michigan
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University of Missouri
University of Oregon
University of Vermont
Virginia Commonwealth University





Profile Characteristics by Age Category



Capital Profile



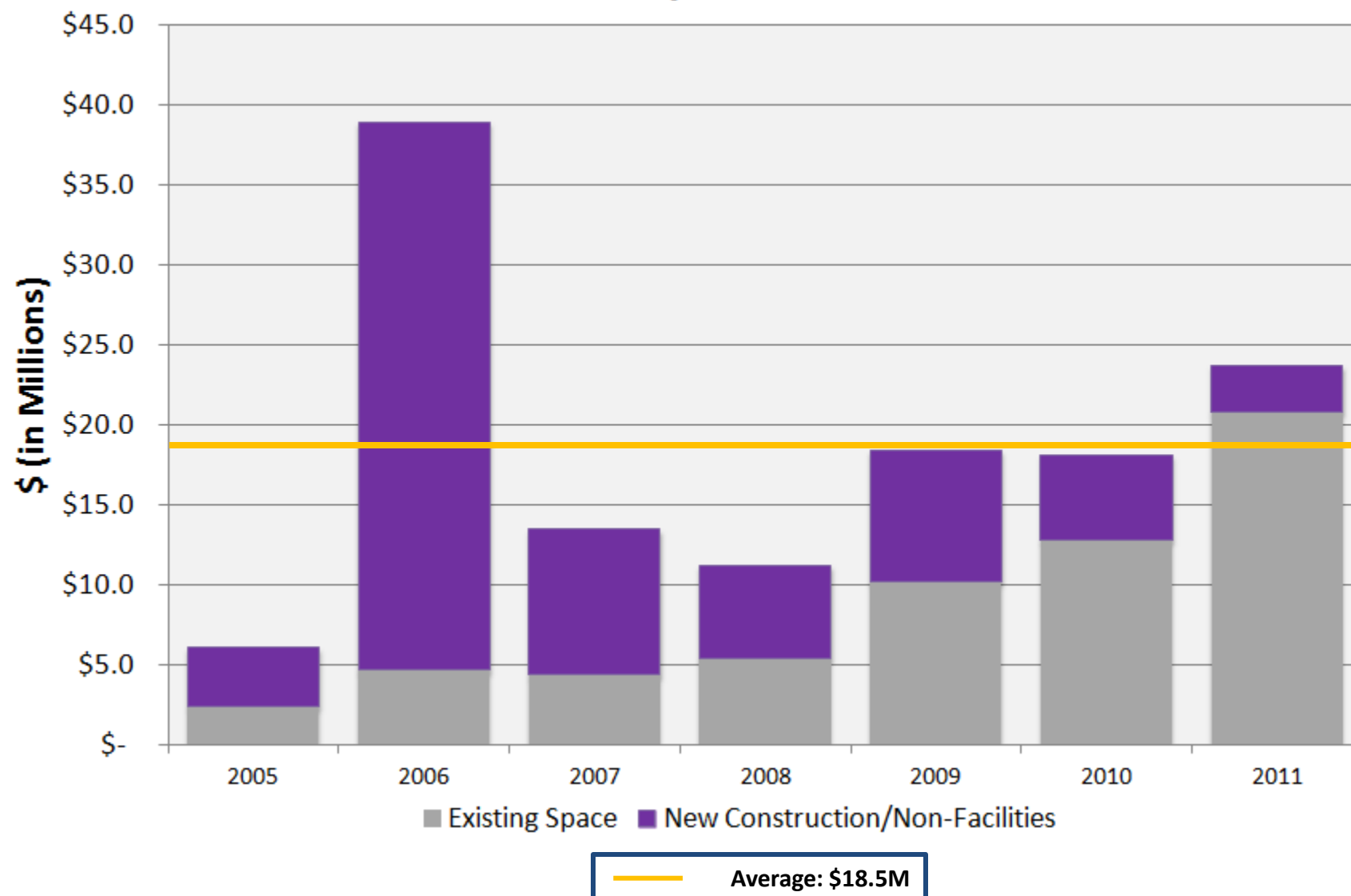
Capital investment — existing vs. new space

Increase in investment into existing space since FY05



Sightlines

Total Capital Investment



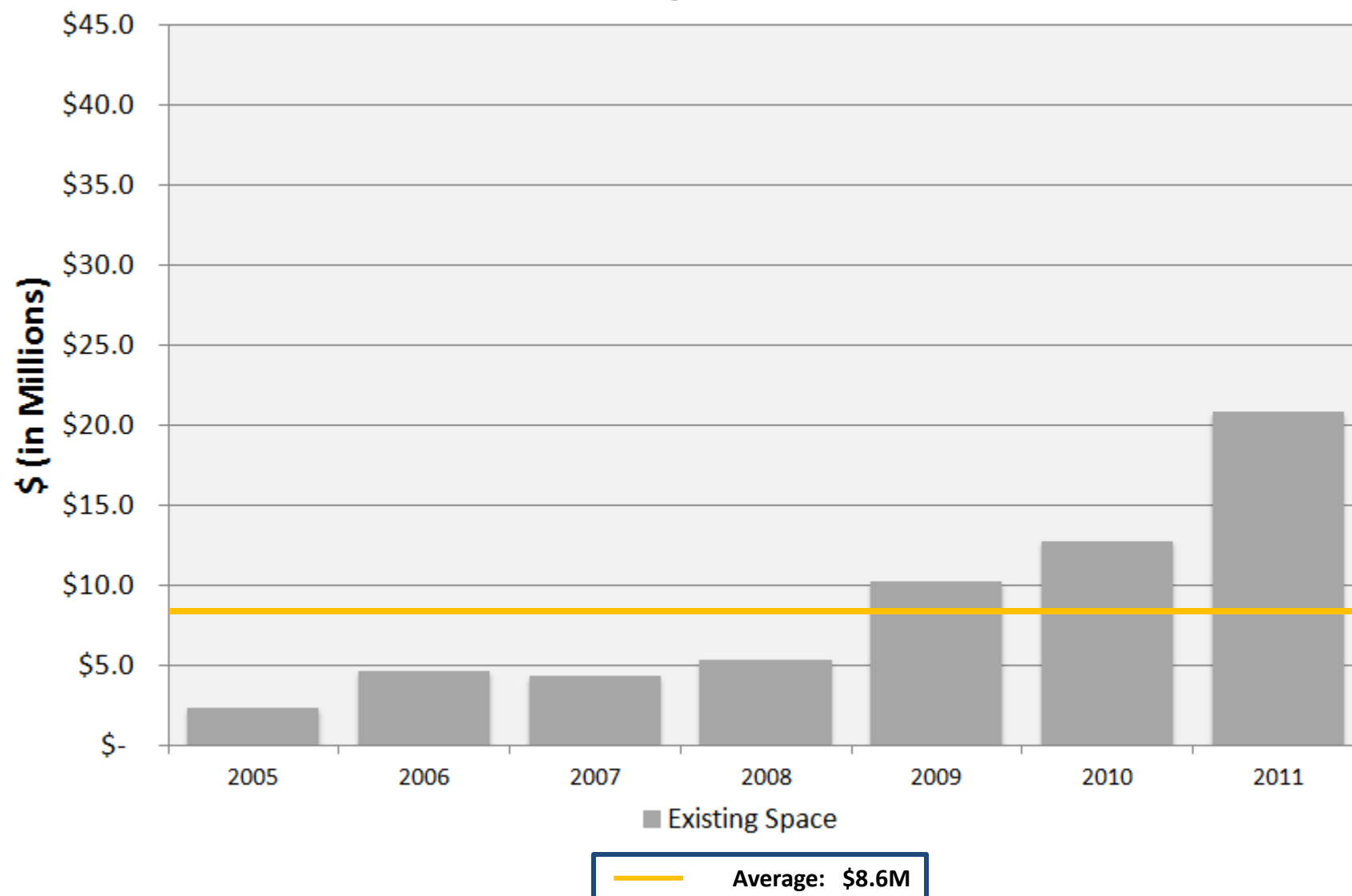
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Sightlines

Total Capital Investment

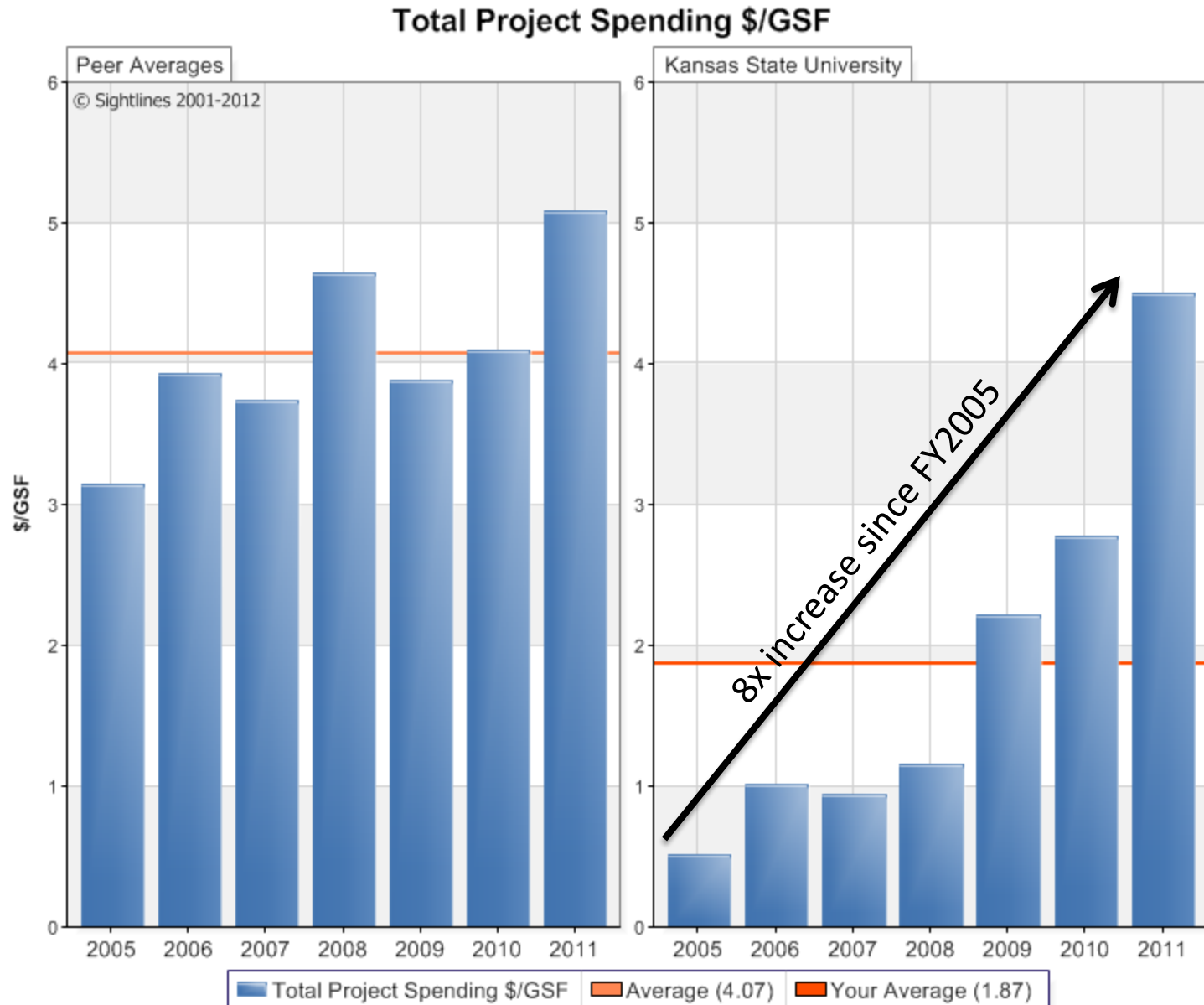


Total project investment vs. peers

Increase in spending has brought K-State to peer average in FY11



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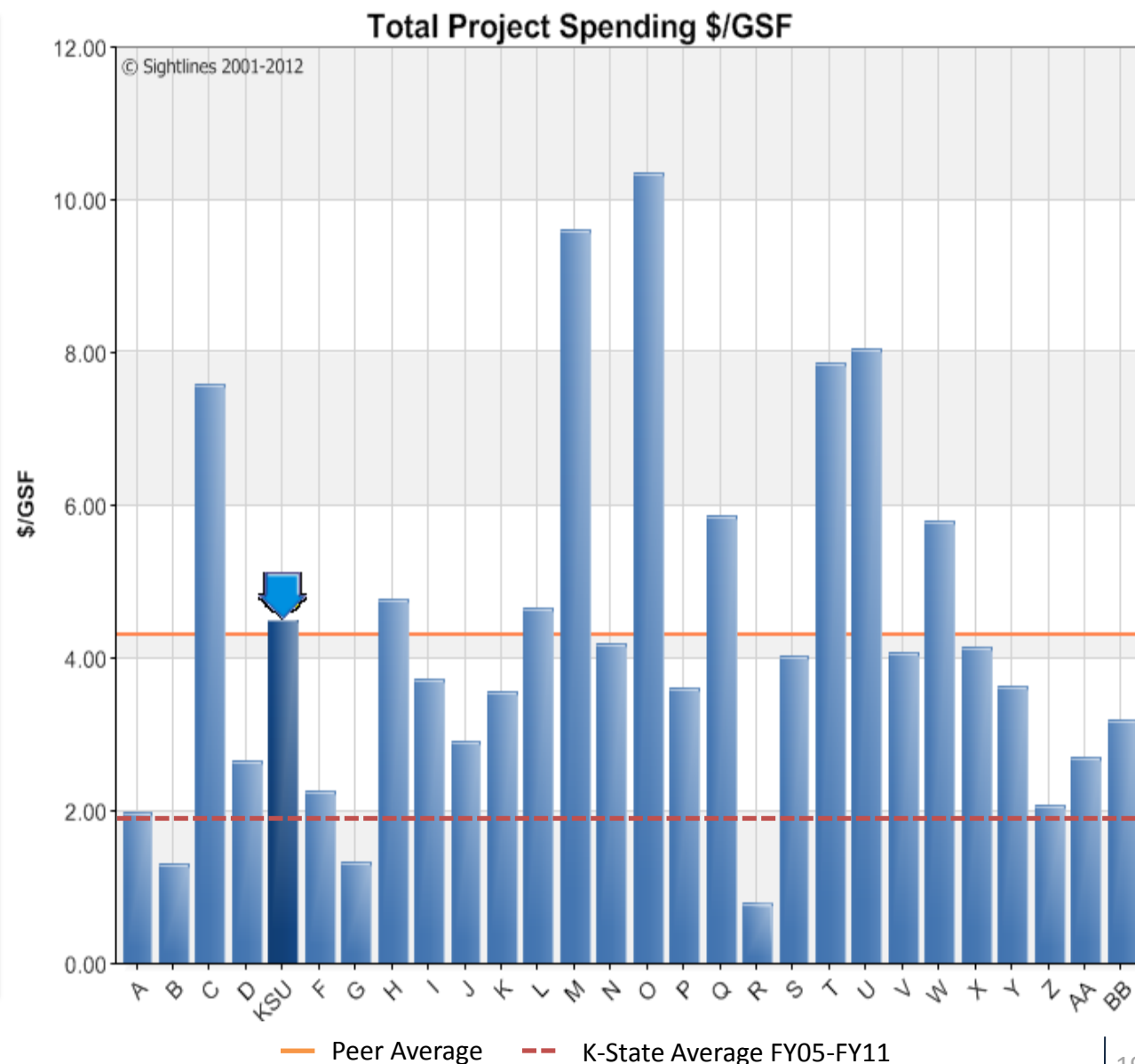
K-State 2025 – How does K-State compare?

Project spending compared to top 50 research institutions in Sightlines' database



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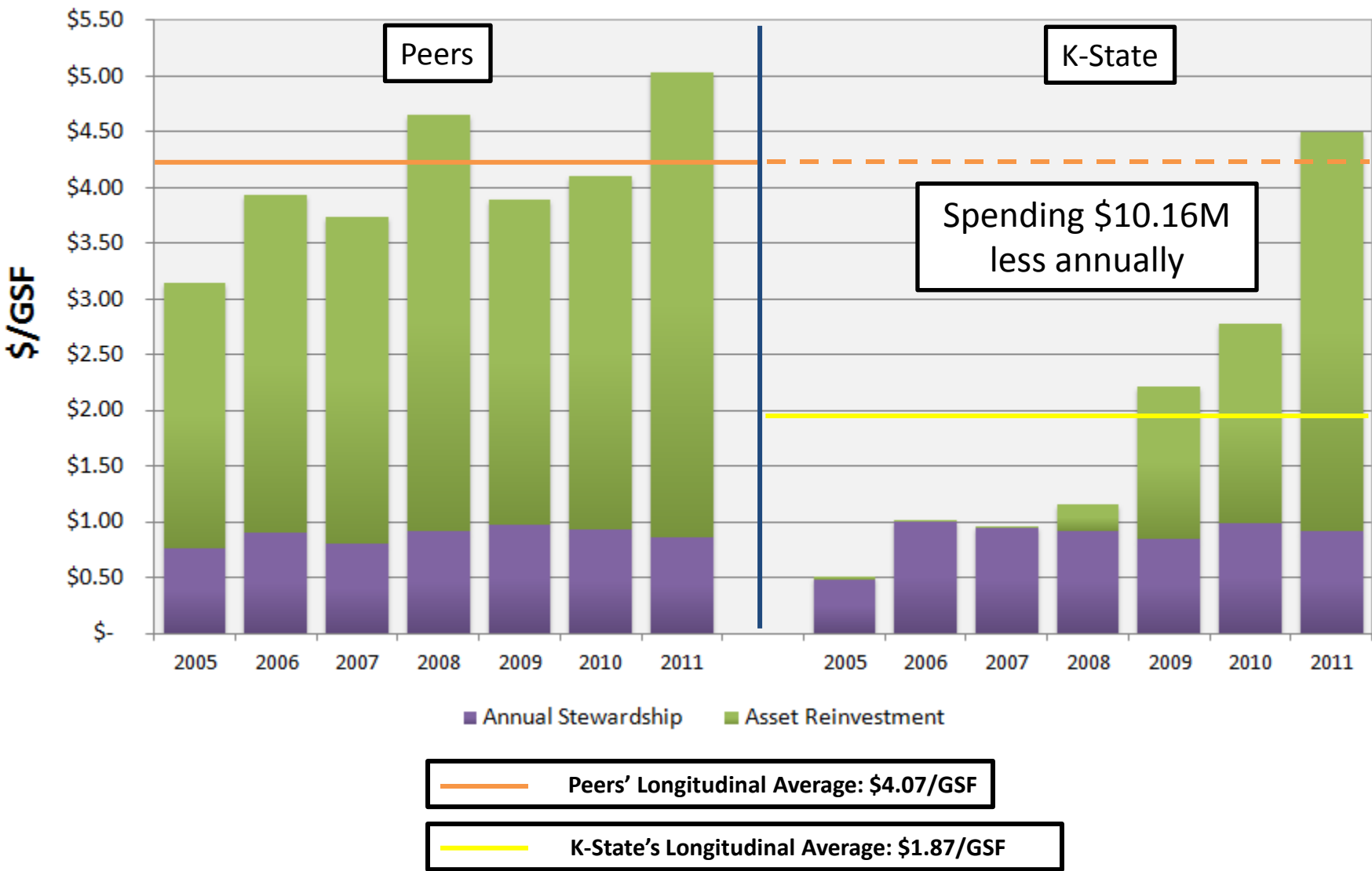
Investment in existing space over time

Less one-time capital historically, recurring funds are similar to peers



Sightlines

Total Project Spending



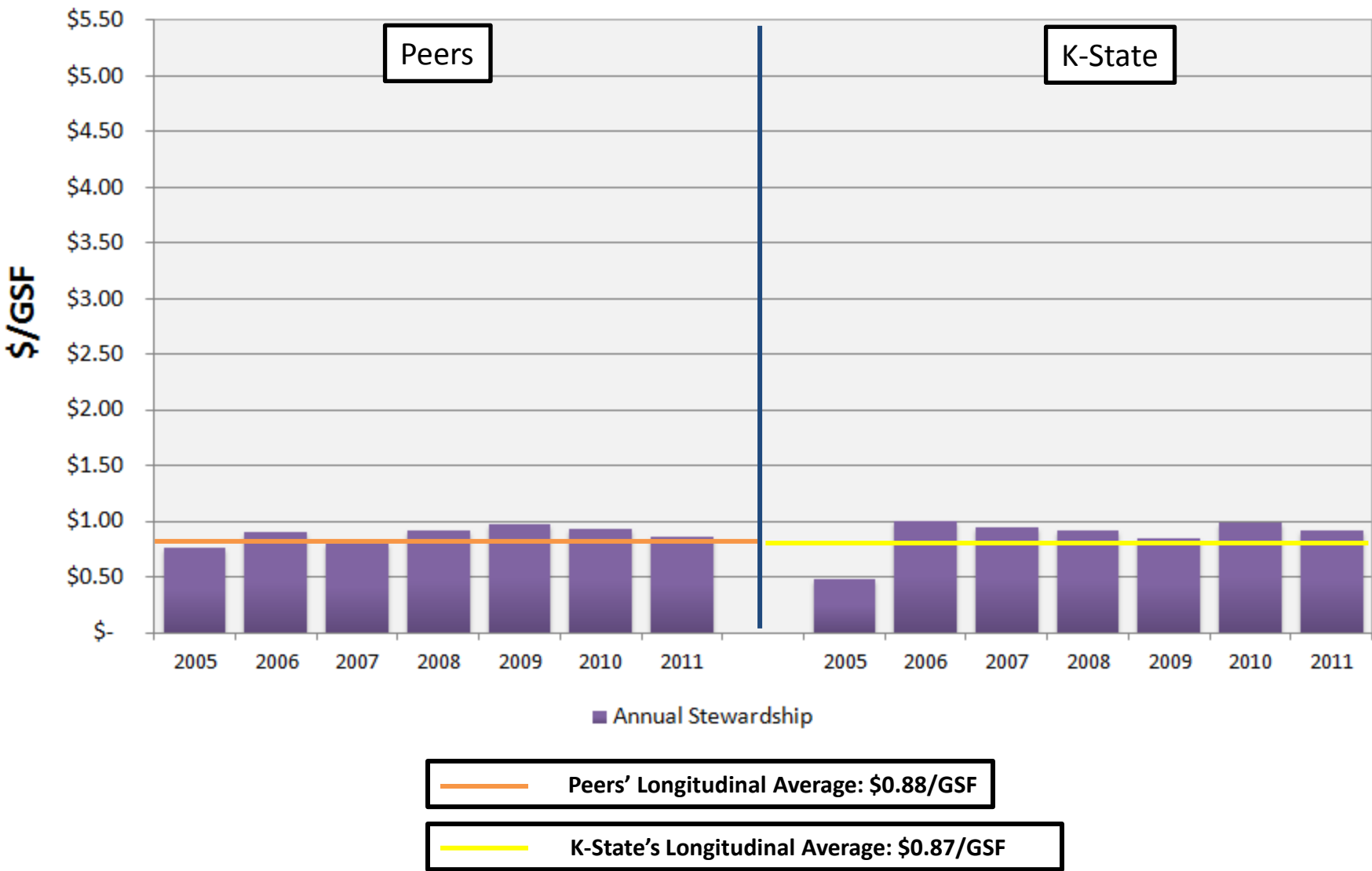
Investment in existing space over time

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Total Project Spending



Defining stewardship investment targets

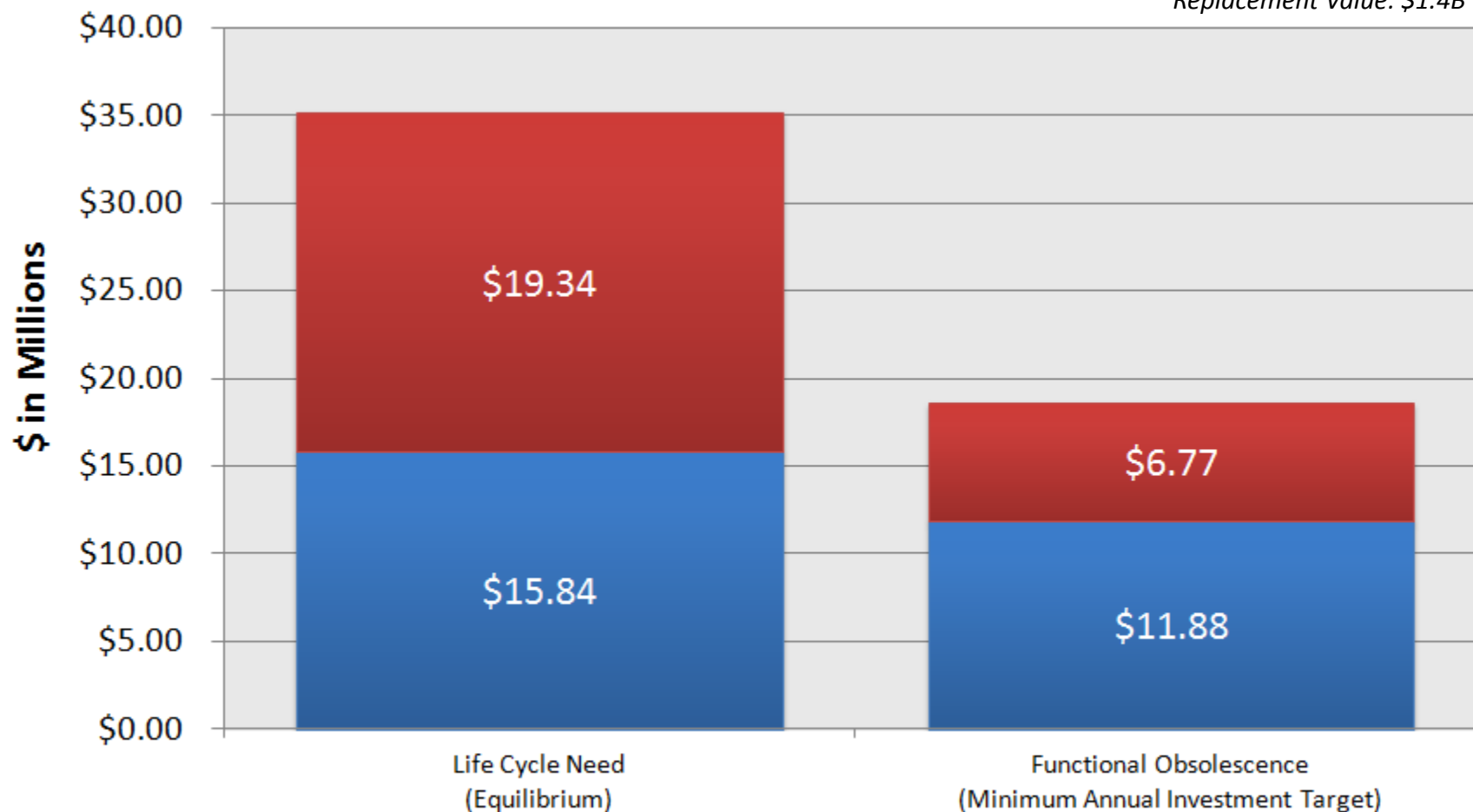
What is the annual investment need to sustain campus value?



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FY2011 Stewardship Targets

Replacement Value: \$1.4B



Total \$: \$35.18M

\$18.65M

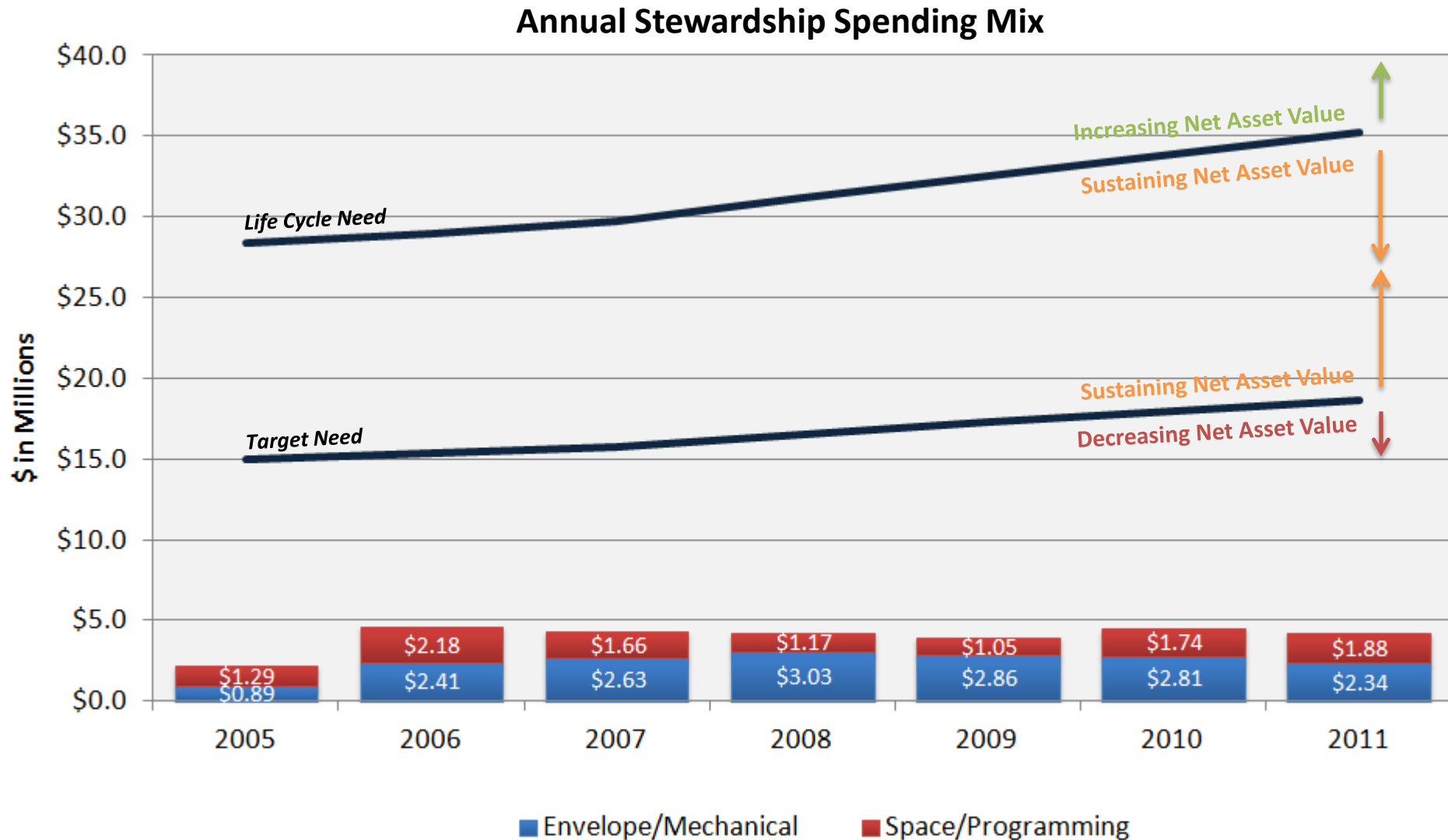
■ Envelope/Mechanical ■ Space/Program

Investing 24% of target on average

61% of funding goes to Envelope/Mechanical projects



Sightlines



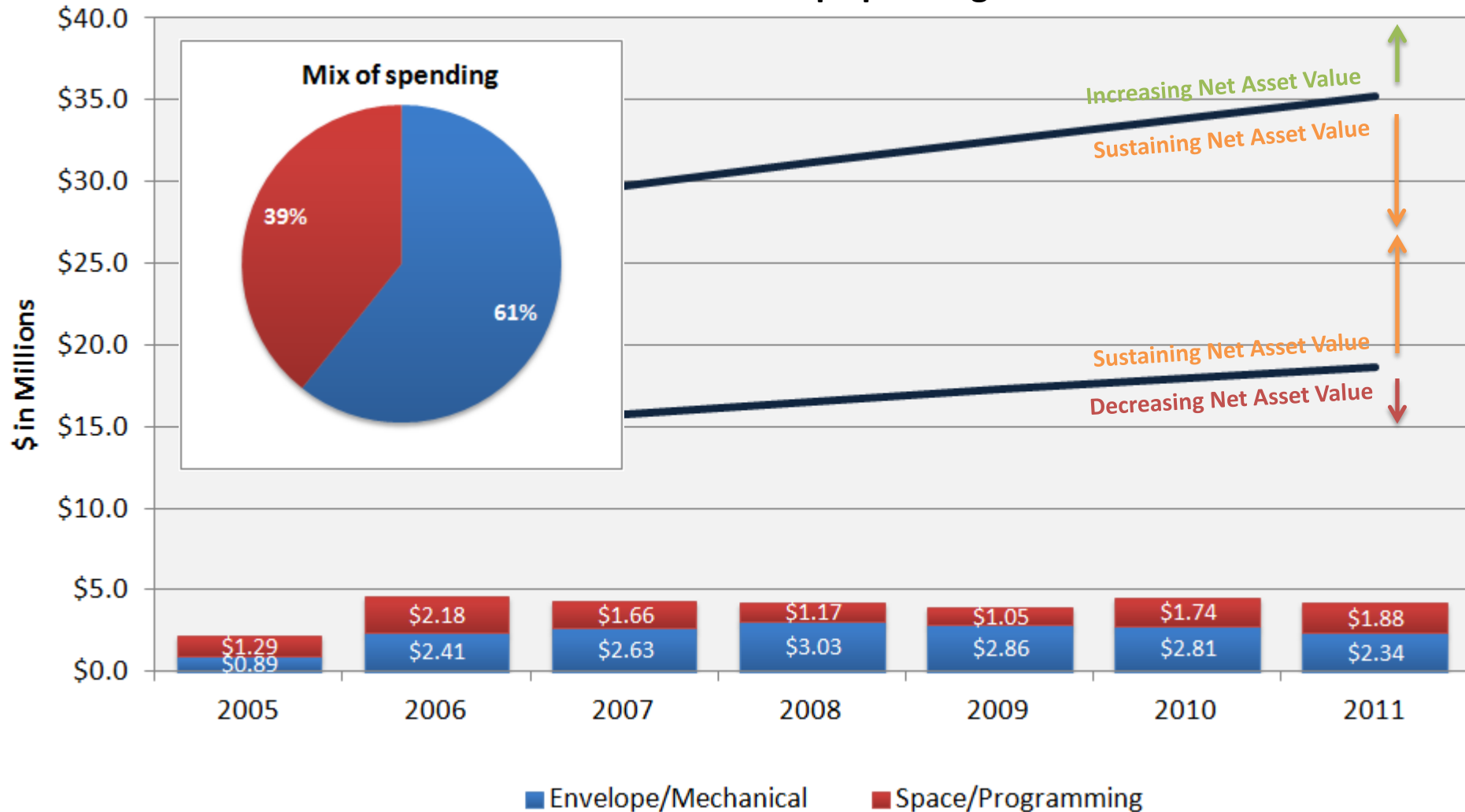
Investing 24% of target on average

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Sightlines

Annual Stewardship Spending Mix



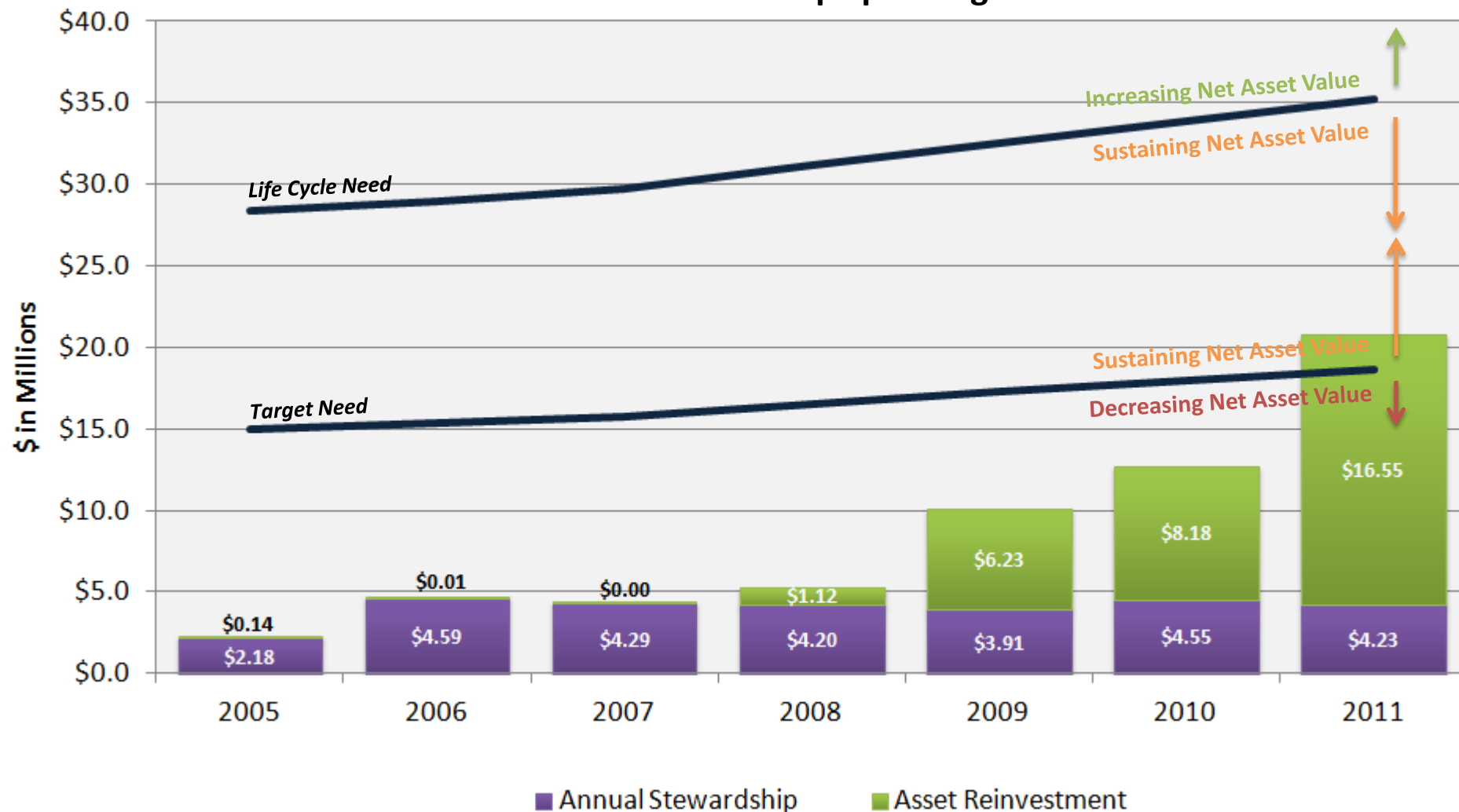
Total capital investment vs. target

One-time capital hits target for first time in FY11



Sightlines

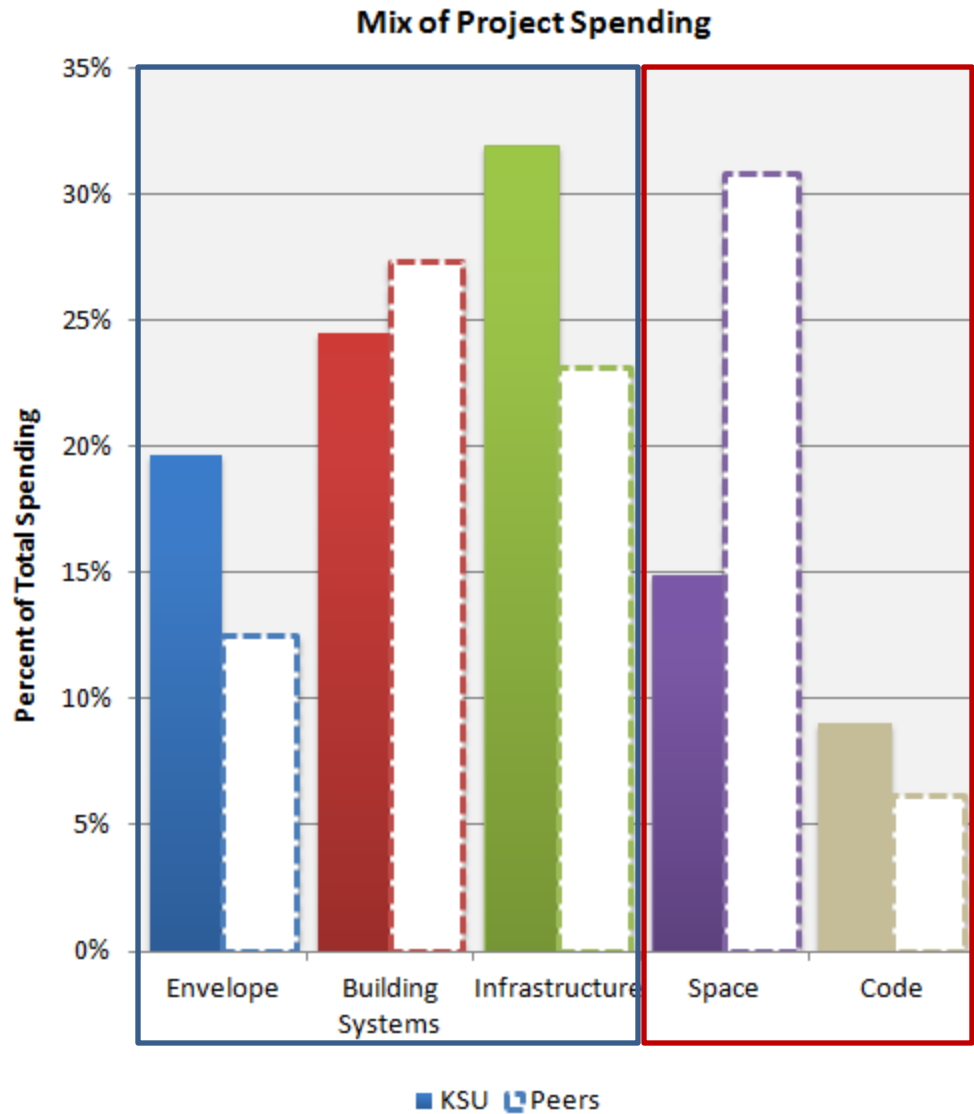
Annual Stewardship Spending Mix



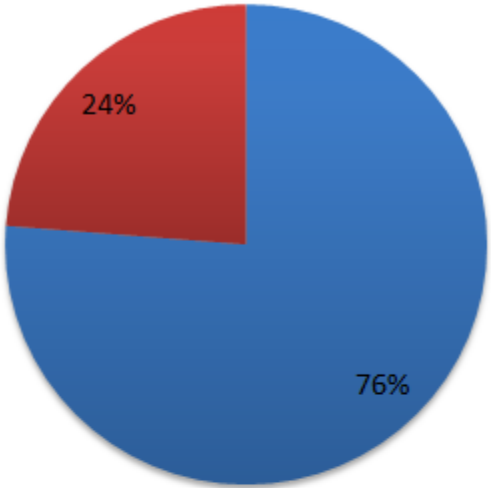
Includes one-time capital into existing space

Focusing on the mix of spending at K-State

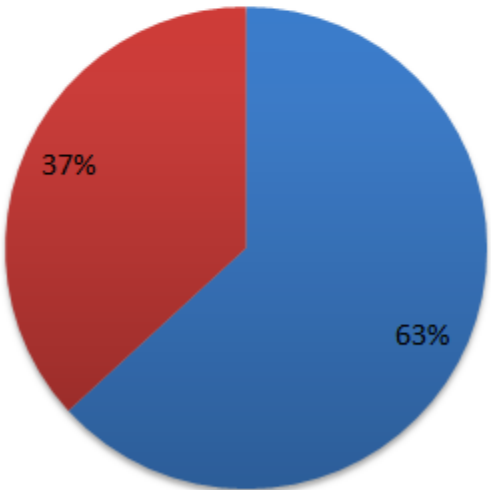
Concentration on envelope/mechanical projects leaves 24% for space/code needs



KSU Total Project Spending Mix



Peers Total Project Spending Mix



■ Envelope/Mechanical ■ Space/Programming

Includes all money spent in existing space since FY2005

Large average room capacity

Average room capacity is 58.4 seats

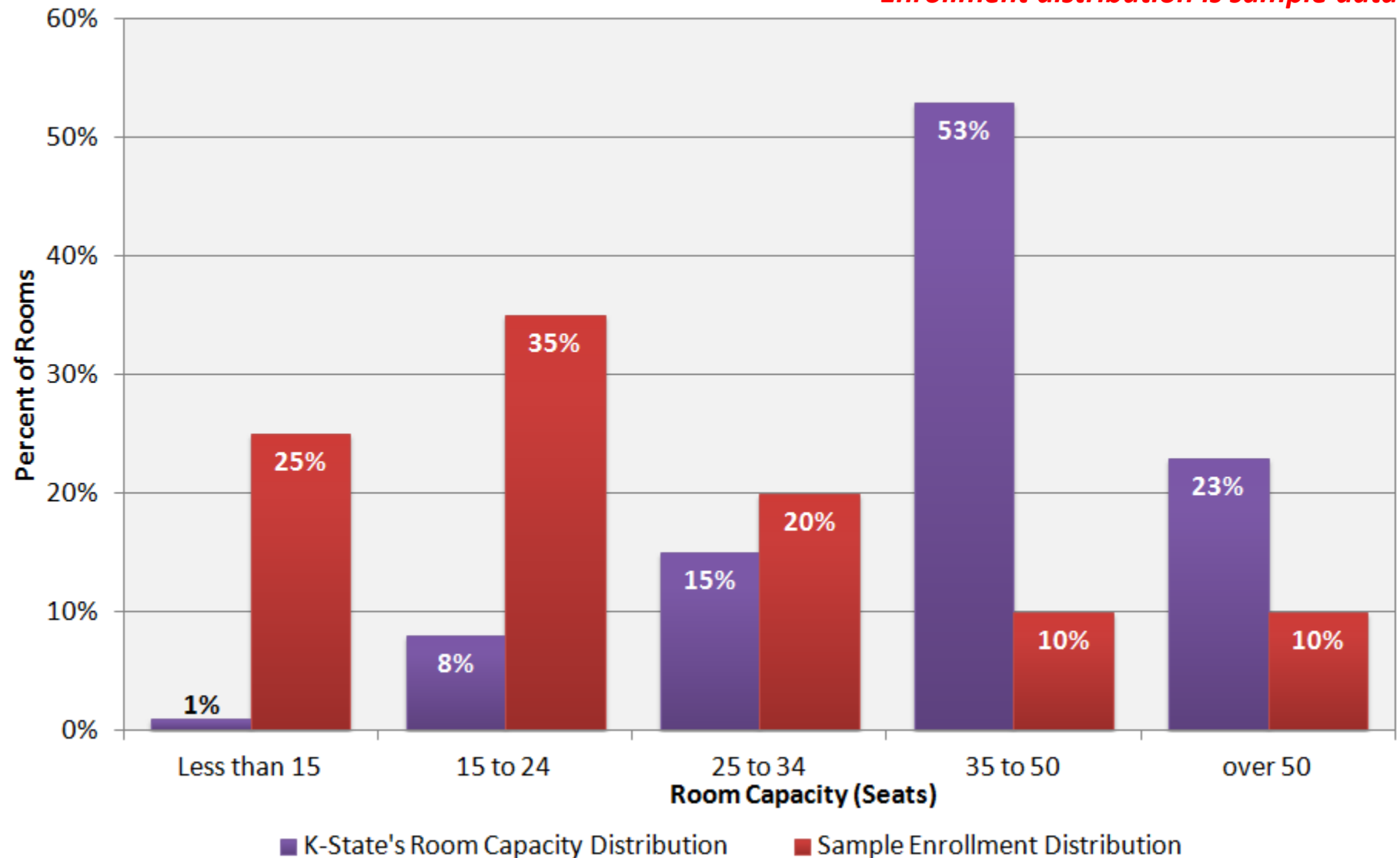


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Enrollment Distribution vs. Room Capacities

For General Classrooms

Enrollment distribution is sample data



Room capacities from General Use Classroom Inventory

Influence of technology on classroom utilization

Classrooms with more technology are more highly utilized

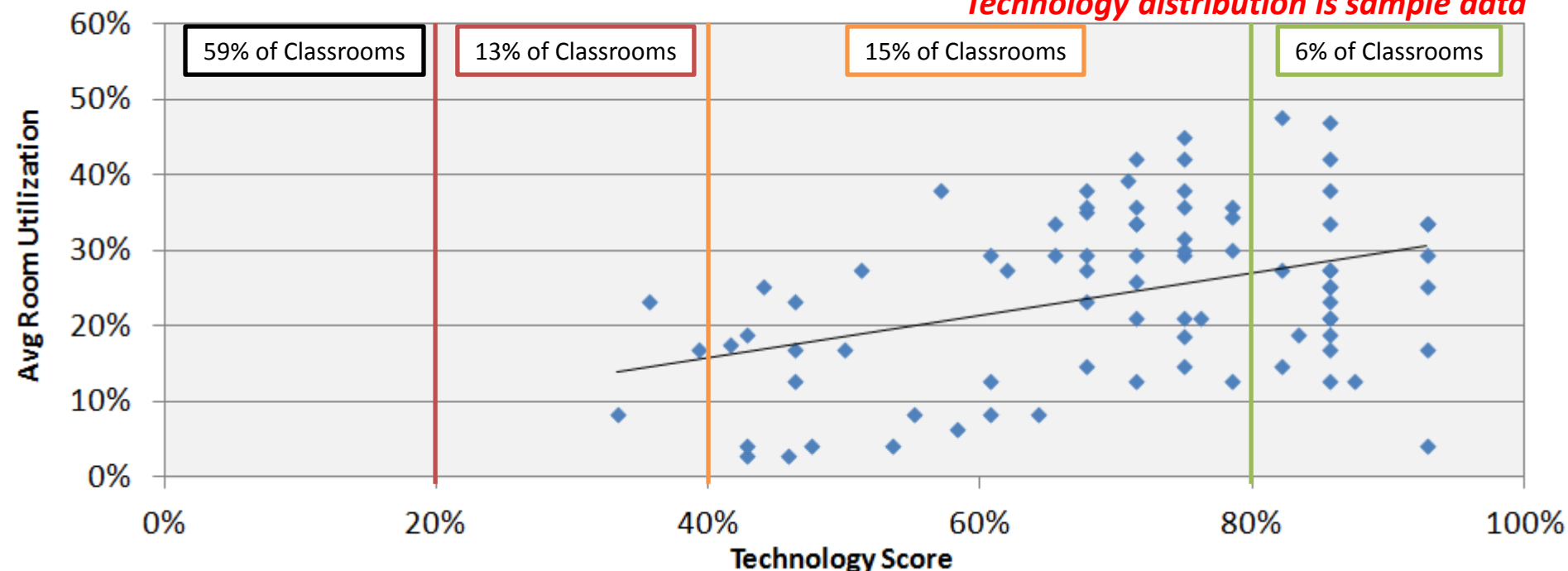


Sightlines

Classroom Technology

For General Classrooms

Technology distribution is sample data



* (20% - 40%)

Basic Technology classrooms are rooms with a place to plug a laptop and LCD projector or other display. Video, Internet and audio connections provided.

** (40% - 80%)

Common Technology classrooms are rooms equipped with an LCD projector, or plasma screen display, computer, VCR/DVD player, sound system, document camera, and Internet connection.

*** (Over 80%)

Expanded Technology classrooms are rooms with the common technology which have additional capabilities that include some combination of one or more of the following: Video Conferencing equipment, Video or audio capturing equipment, Enhanced interactive technologies

Asset Reinvestment Backlog

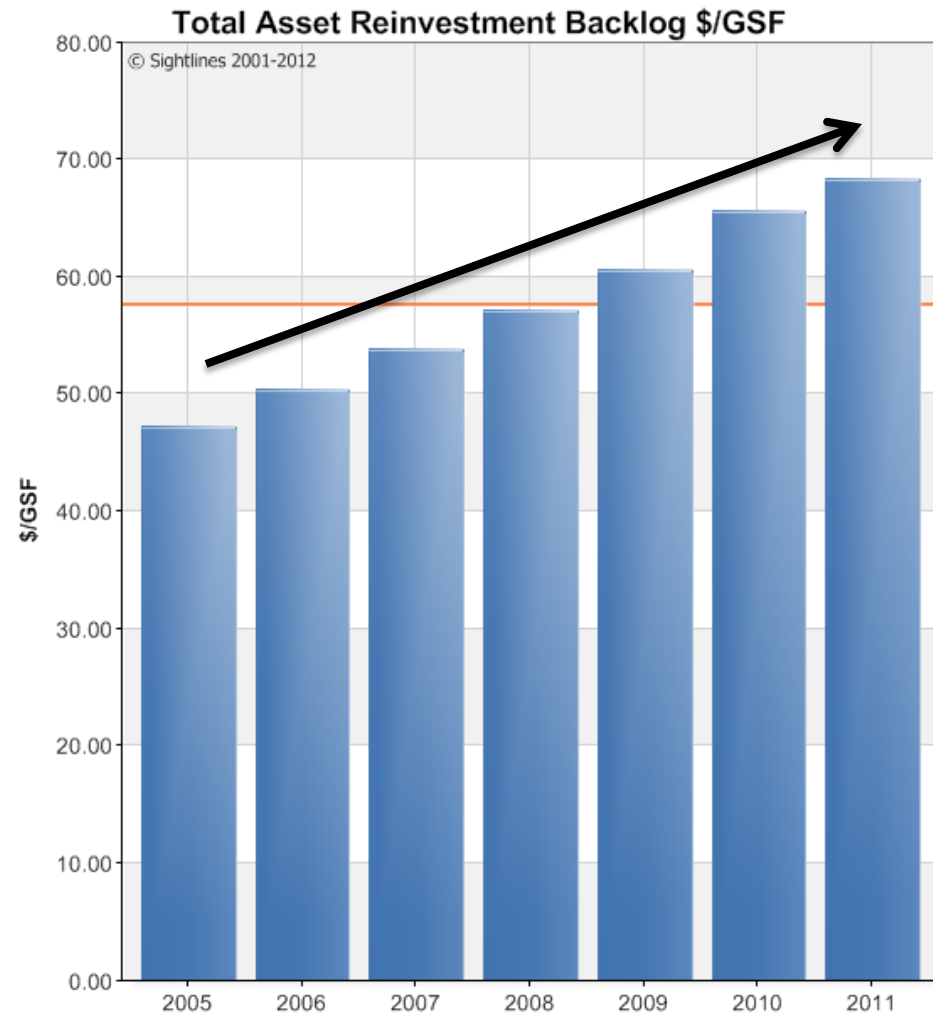
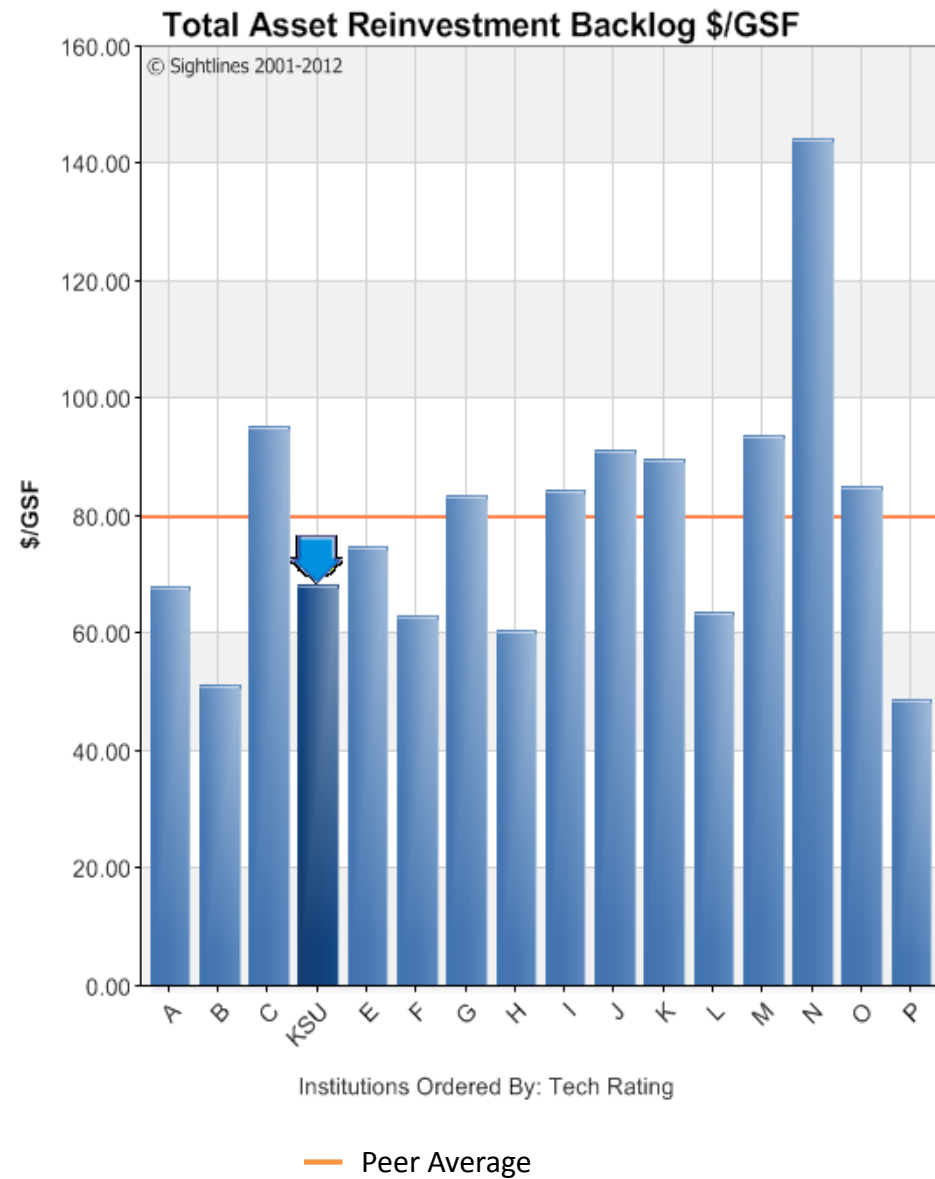


Asset reinvestment backlog

Based on internal deferred maintenance report



Sightlines



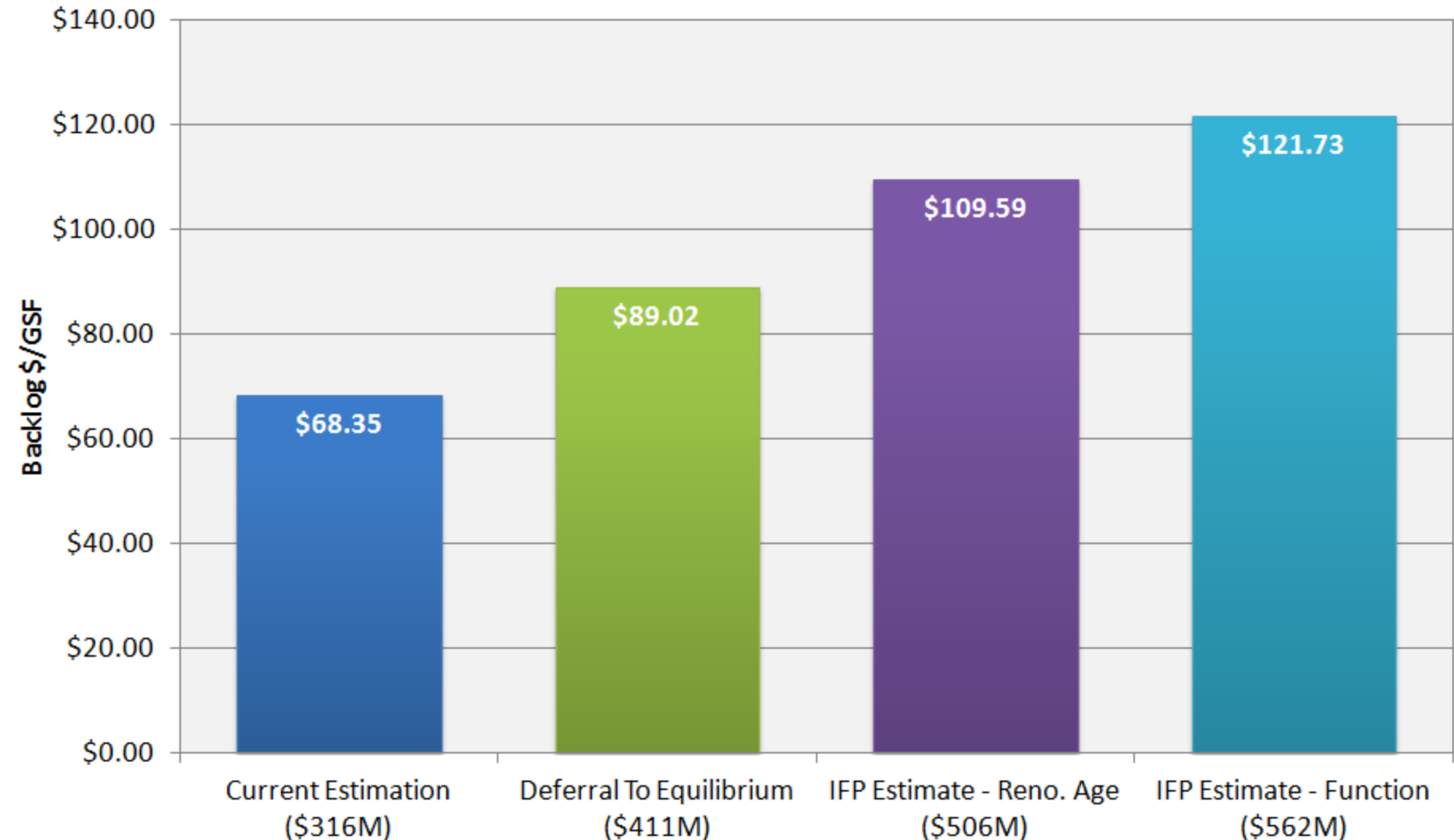
Asset reinvestment backlog

Estimations based on maintenance deferral, age, and function



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Estimated Asset Reinvestment Backlog



Operational Performance

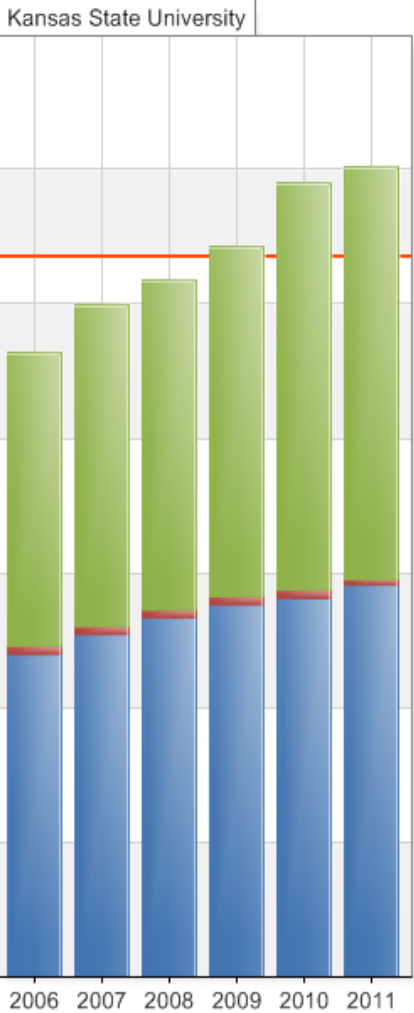
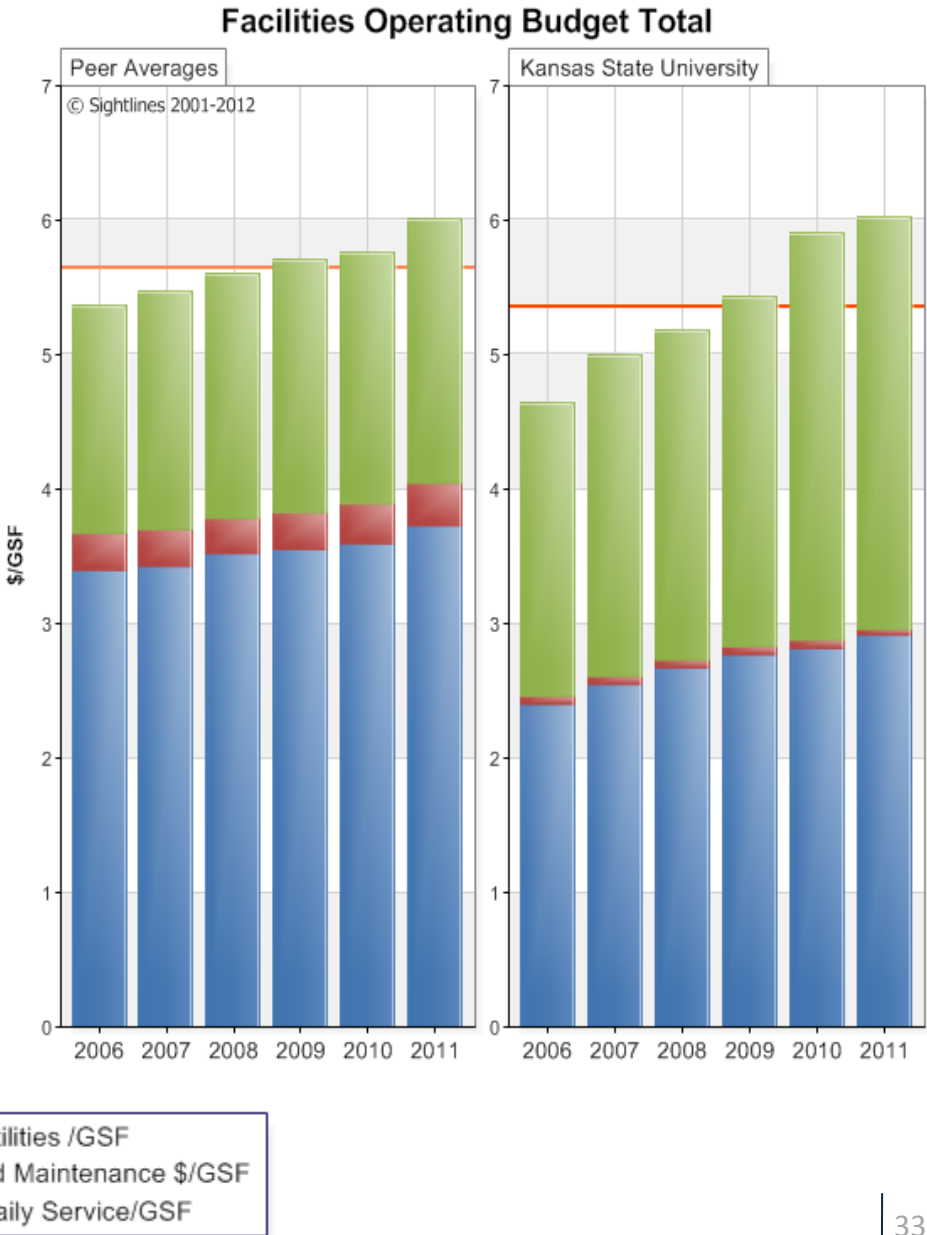


Facilities operating budget compared to peers

Total budget is similar to peers, daily service and PM are below peer average



Sightlines



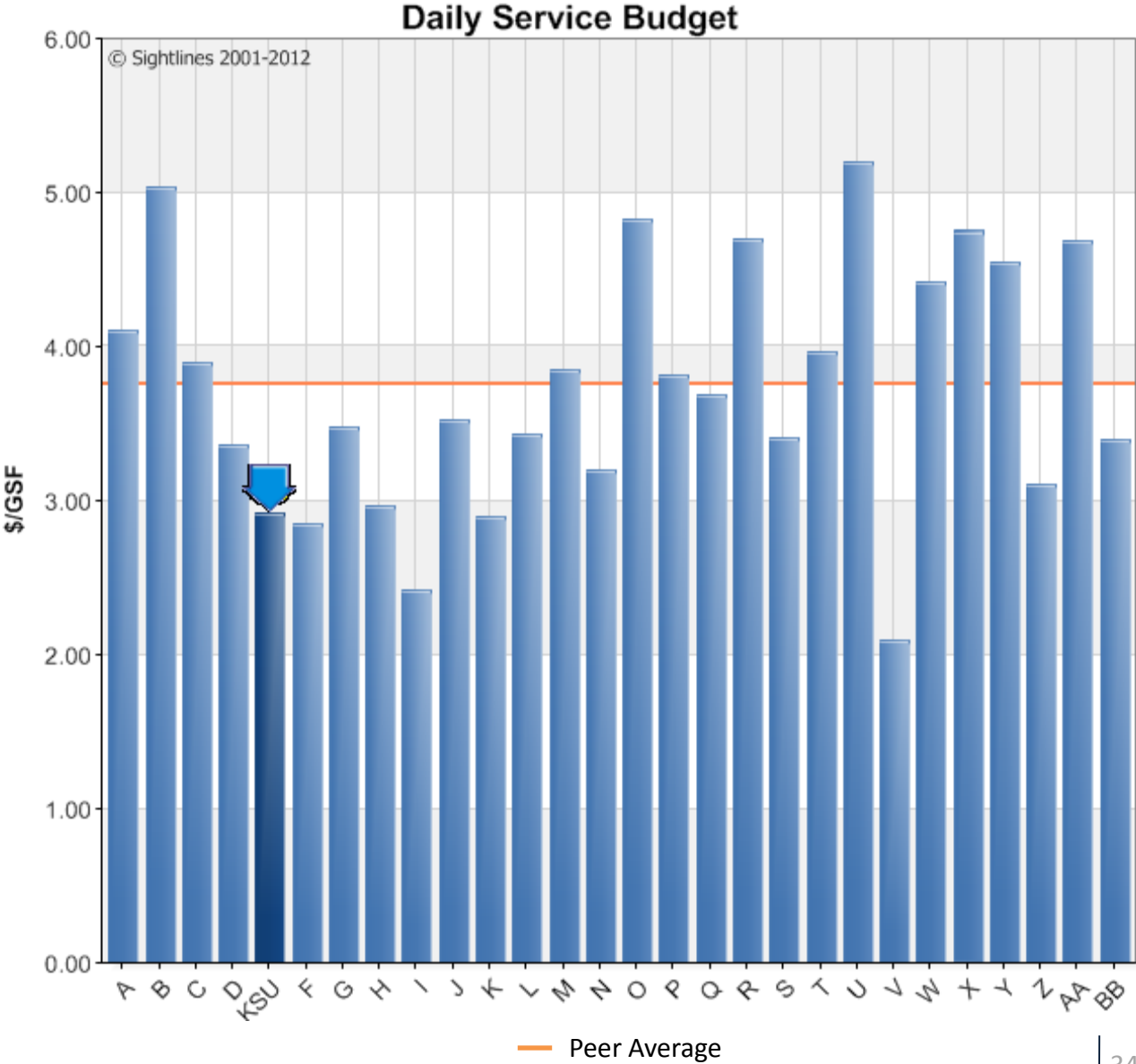
K-State 2025 – How does K-State compare?

Daily Service budget compared to top 50 research institutions in Sightlines'



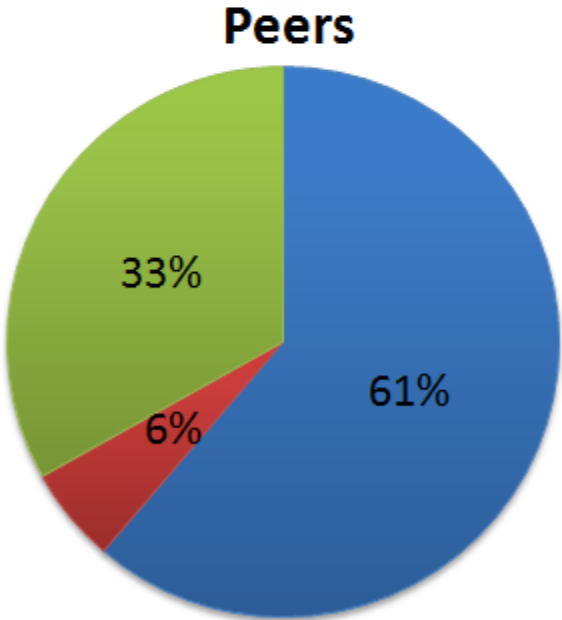
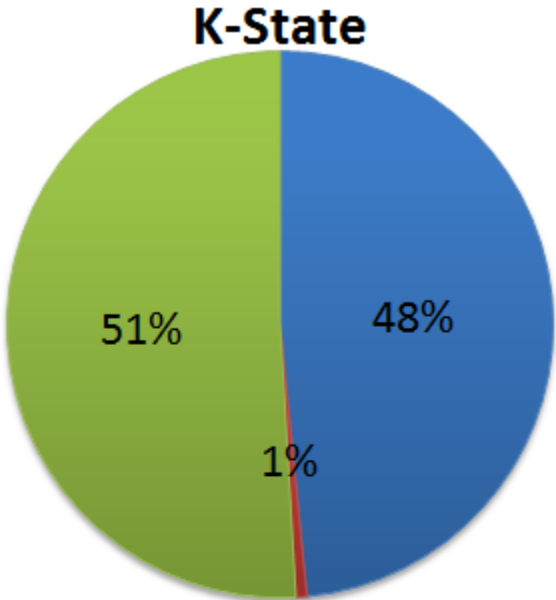
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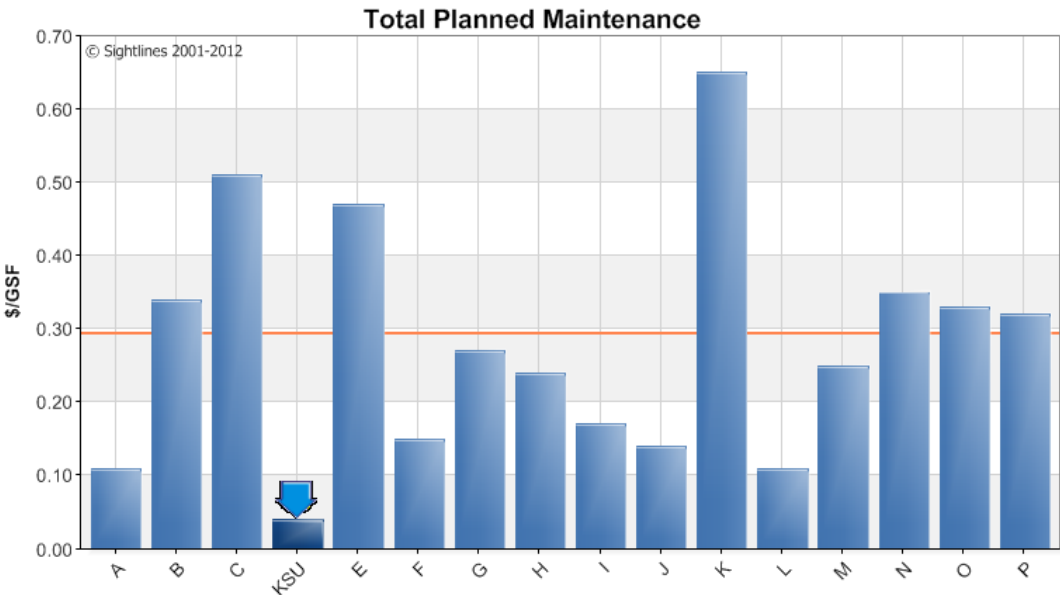
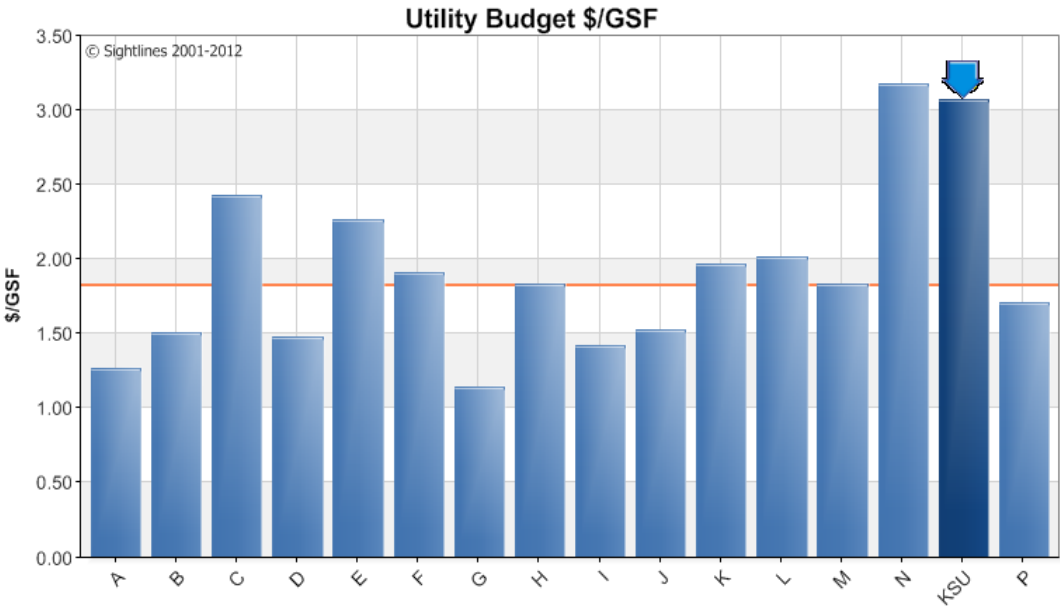


Budget mix compared to peers

Saving on energy can bolster Planned Maintenance funding



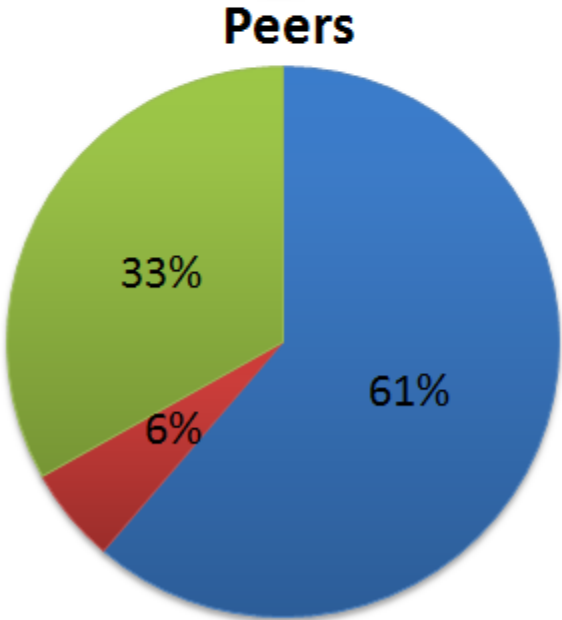
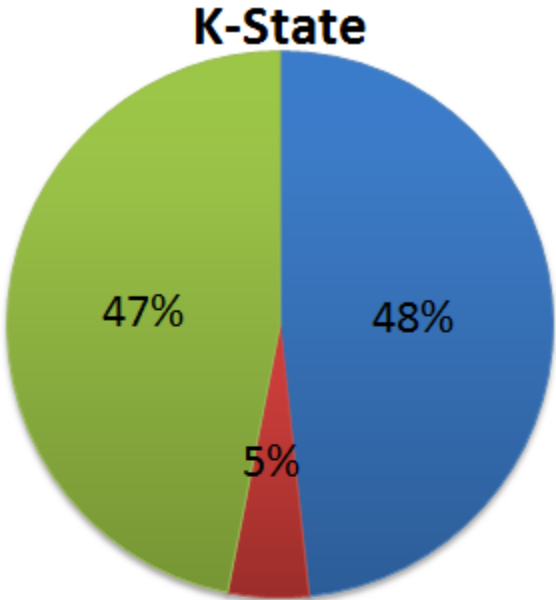
■ Daily Service ■ PM ■ Utilities



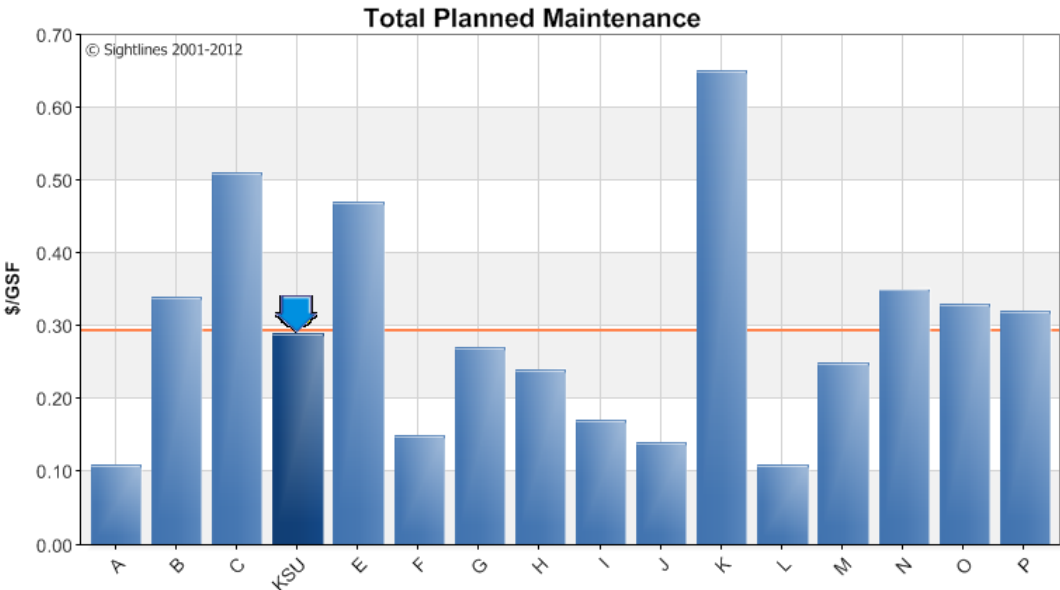
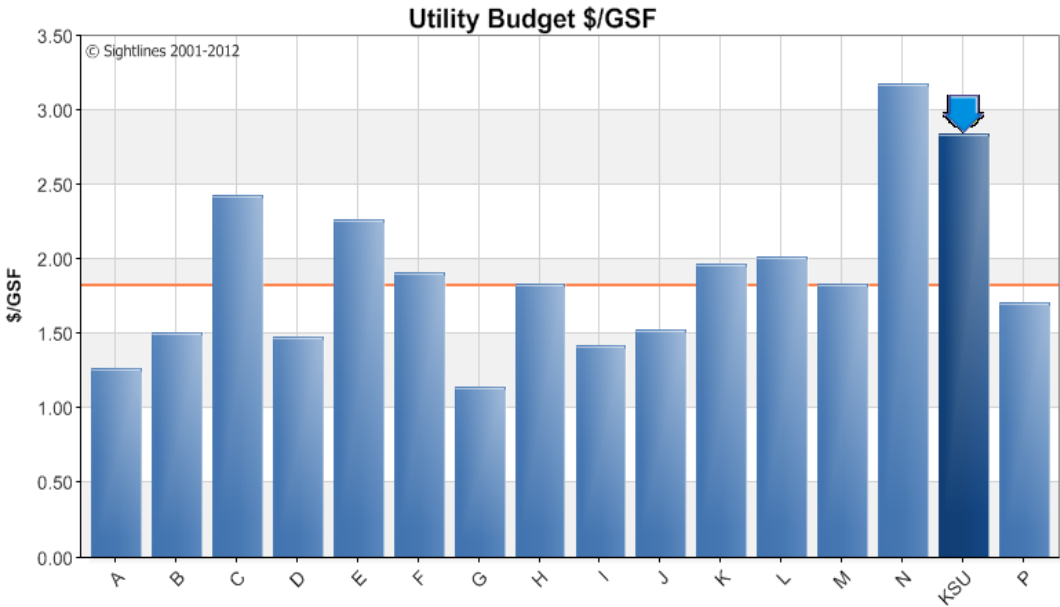
— Peer Average

Budget mix compared to peers

Saving on energy can bolster Planned Maintenance funding



■ Daily Service ■ PM ■ Utilities



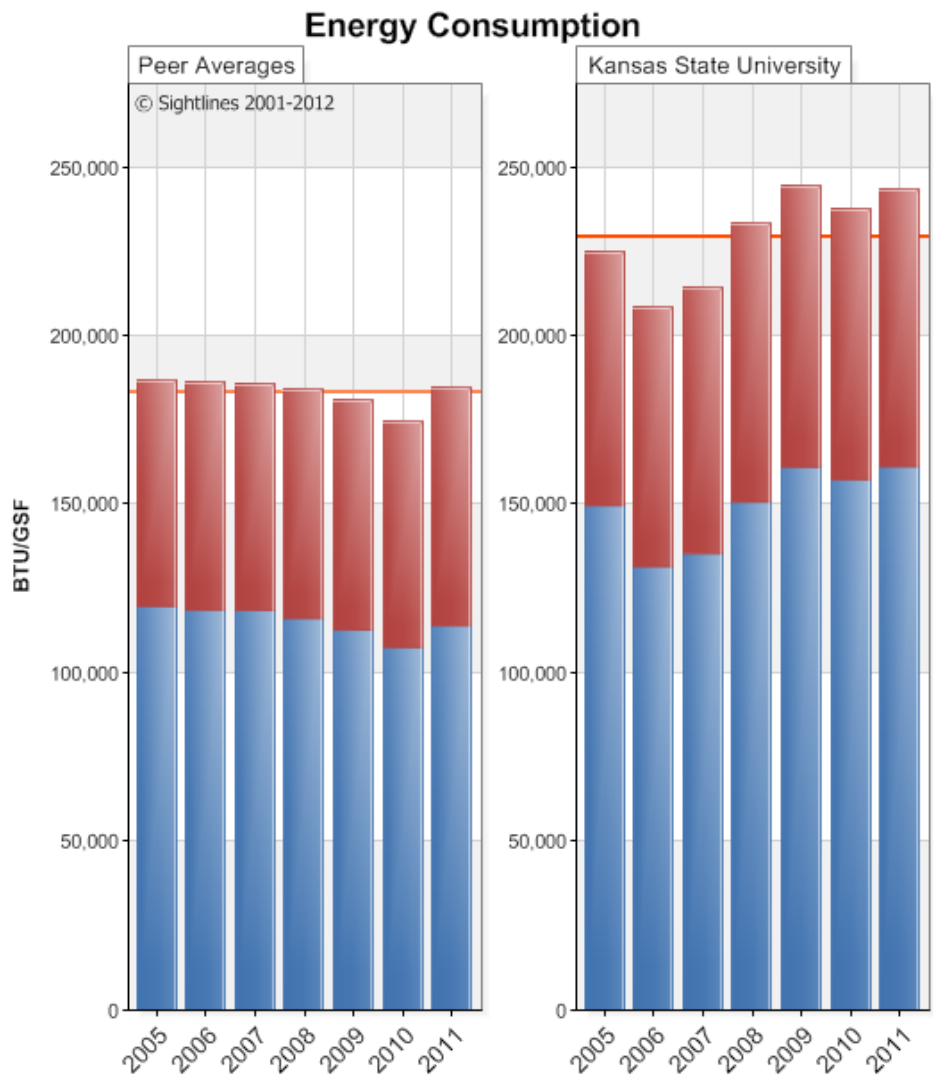
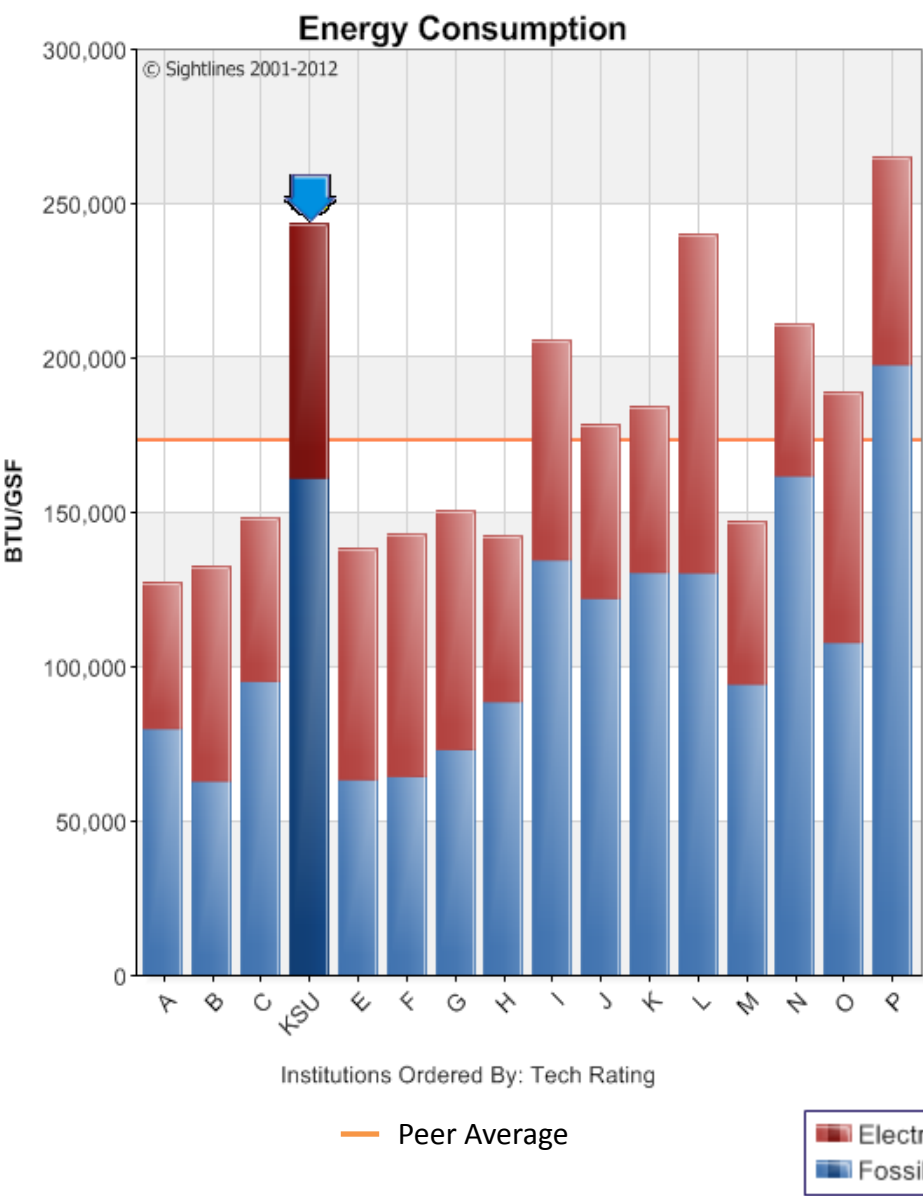
— Peer Average

Energy consumption vs. peers

Higher consumption than peers historically, concentrated in fossil fuels



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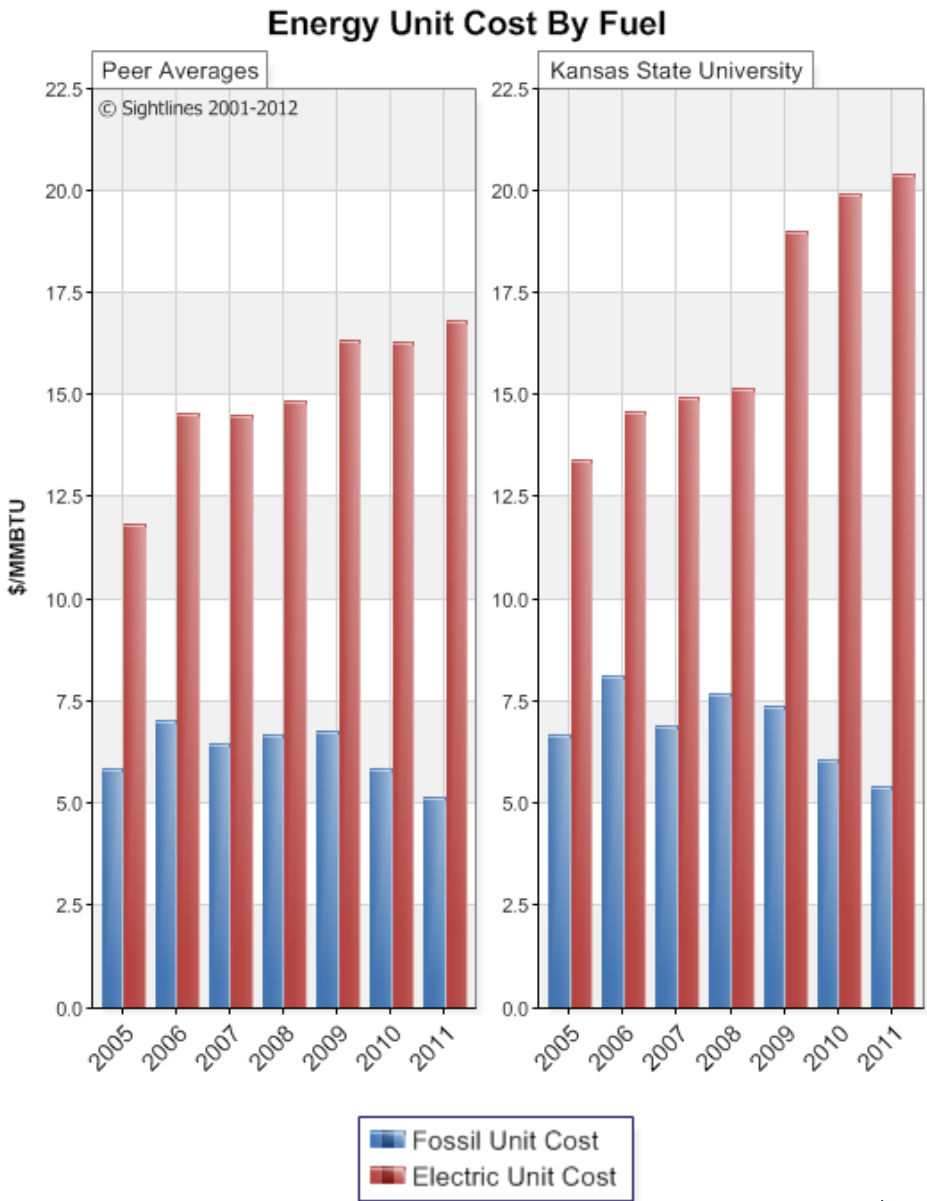
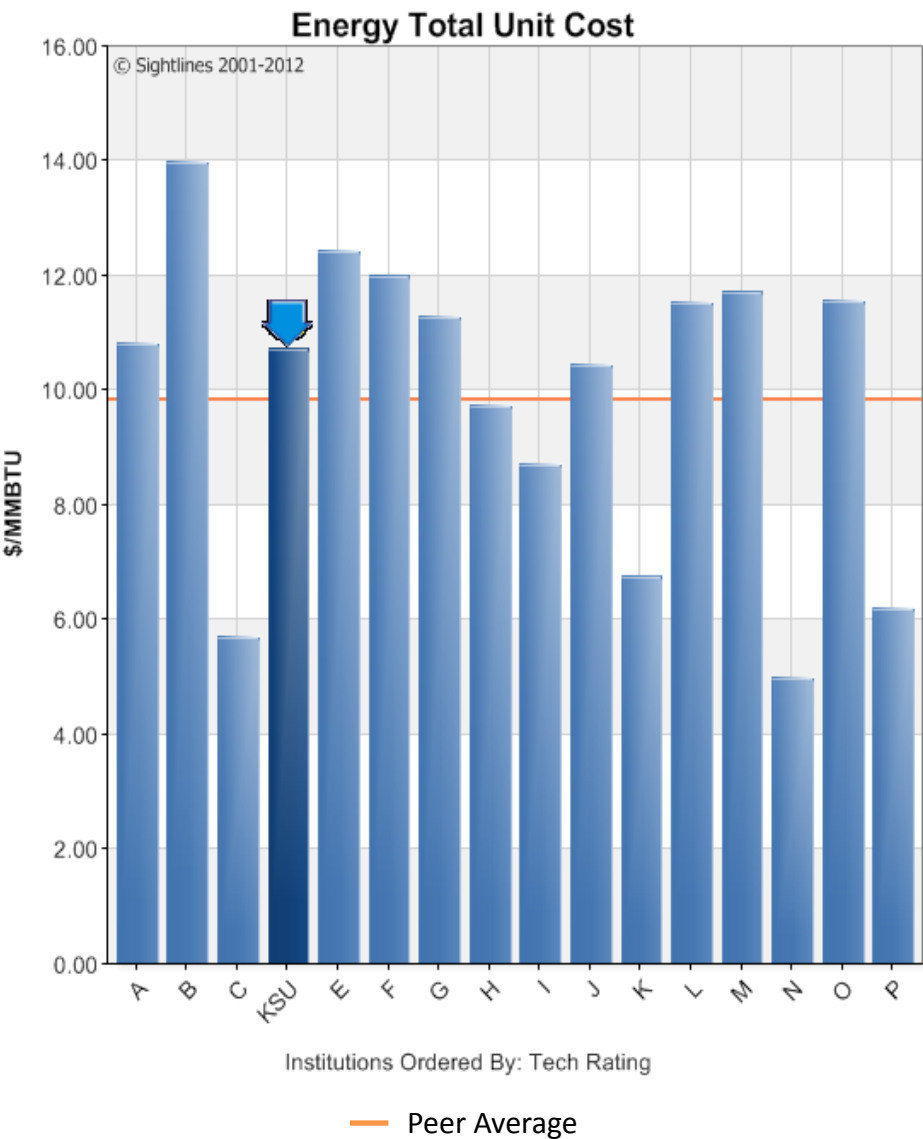


Energy cost similar to peers levels

Fossil costs are decreasing while electric costs are higher and increasing



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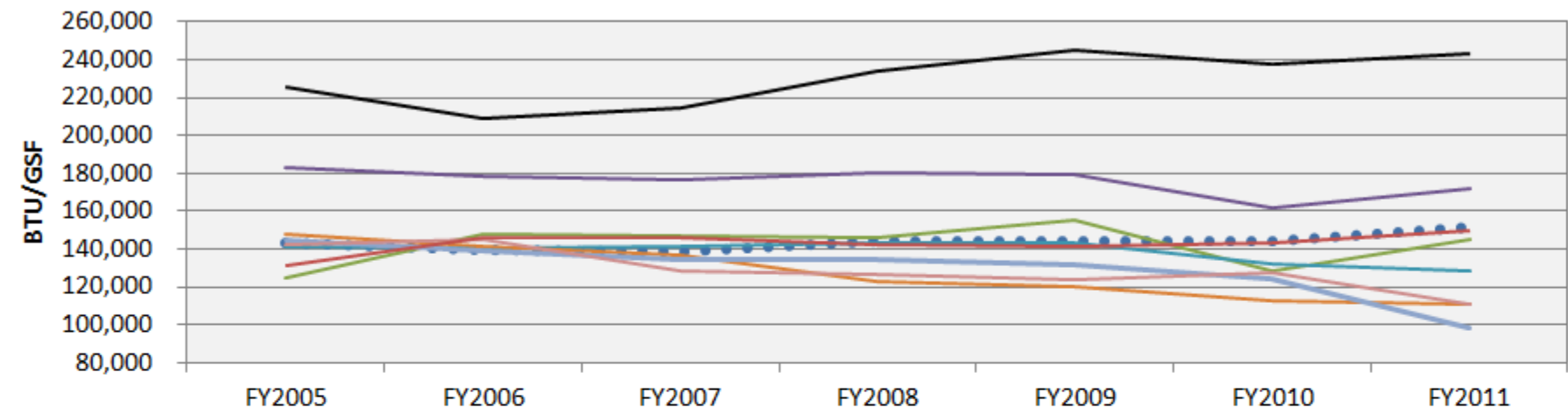
Energy cost and consumption by region

K-State has highest consumption

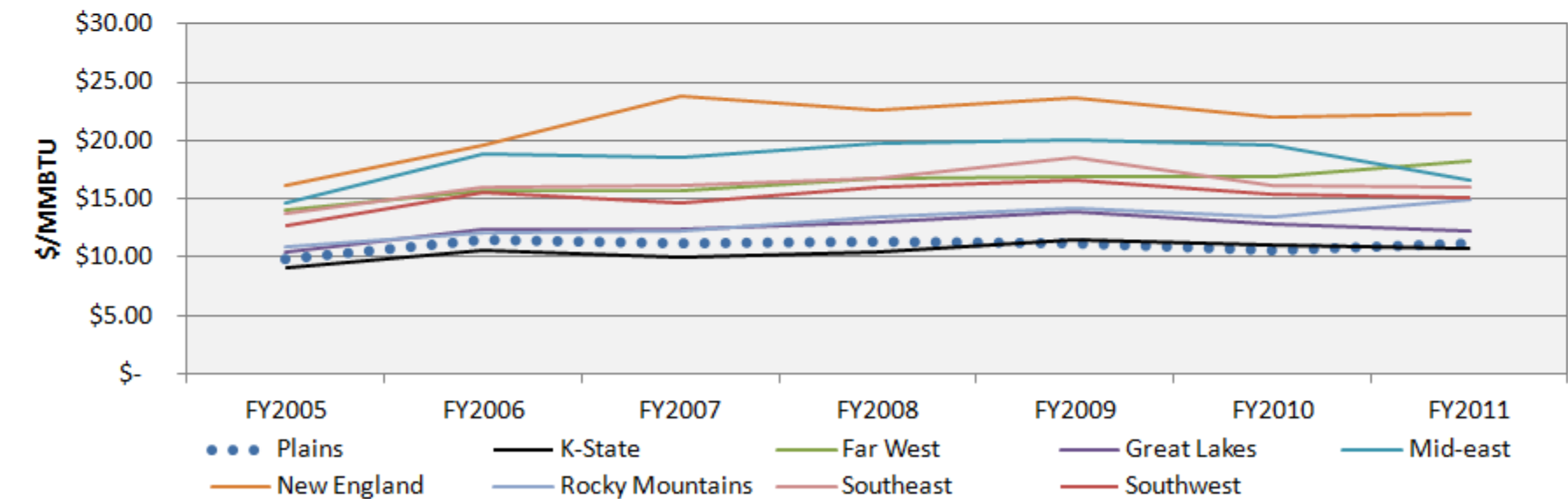


Sightlines

Historic Energy Consumption



Historic Energy Cost

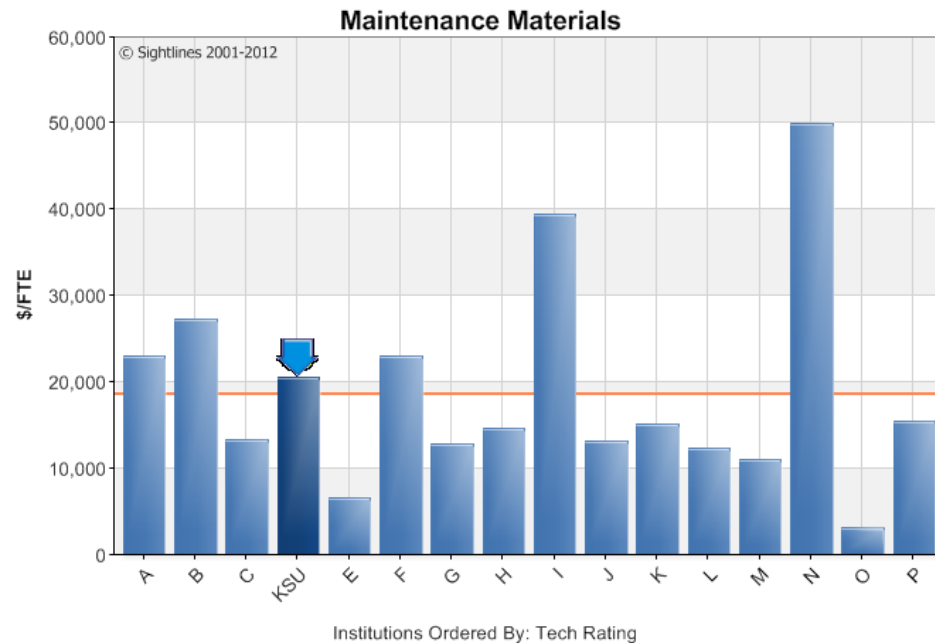
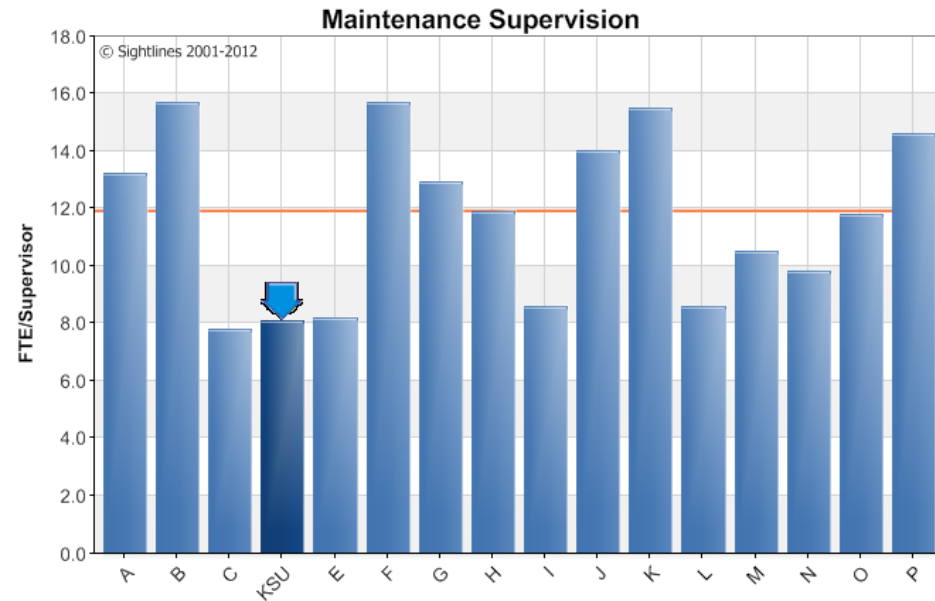
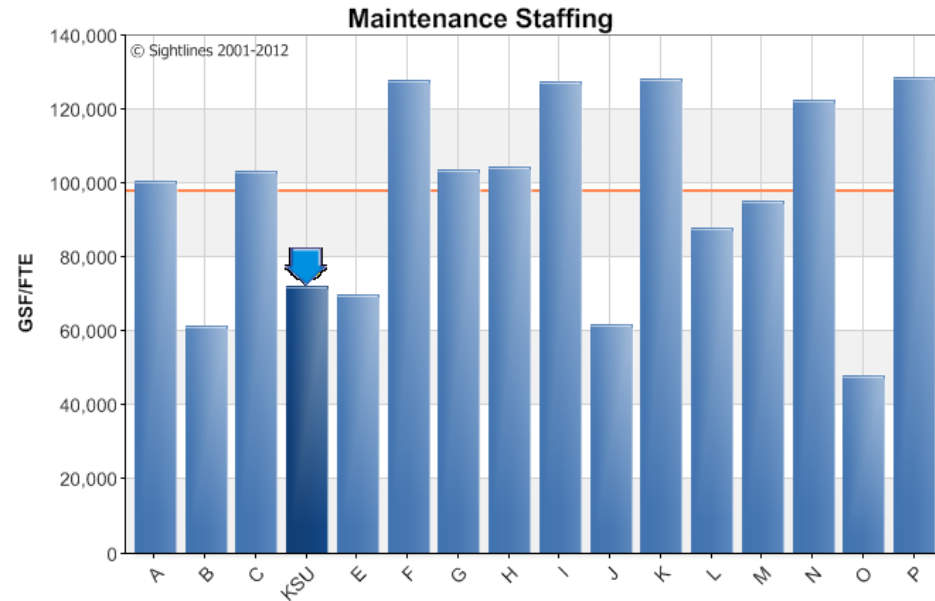


Maintenance operations

Maintenance trades performance impacted by campus age profile



Sightlines



	K-State	Peers	Database
GSF/FTE	72,115	97,890	88,999
FTE/Supervisor	8.1	11.9	11.8
\$/FTE	\$20,493	\$18,696	\$18,709
General Repair/Impression	3.7	3.8	3.9
Exterior Inspection Score	3.8	3.9	3.9

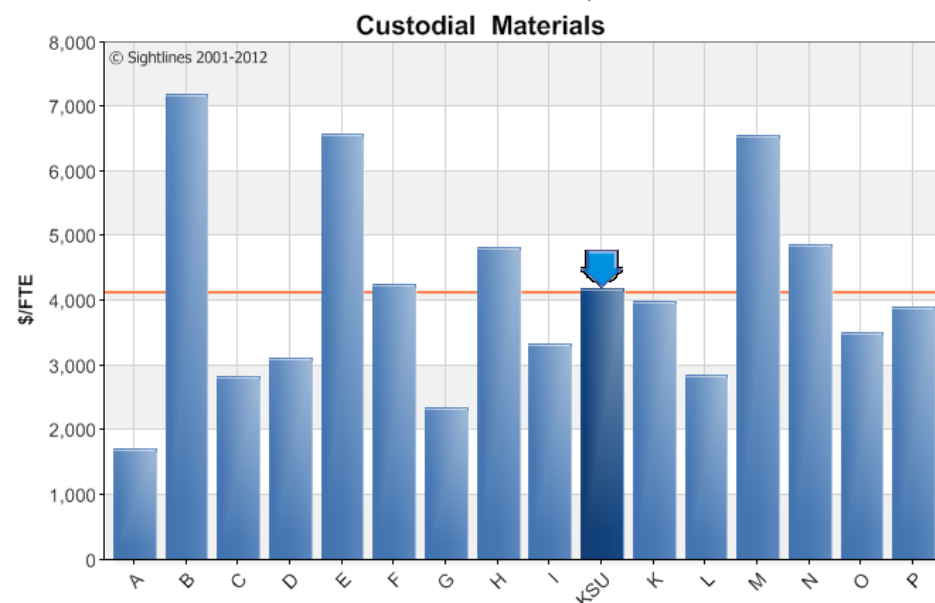
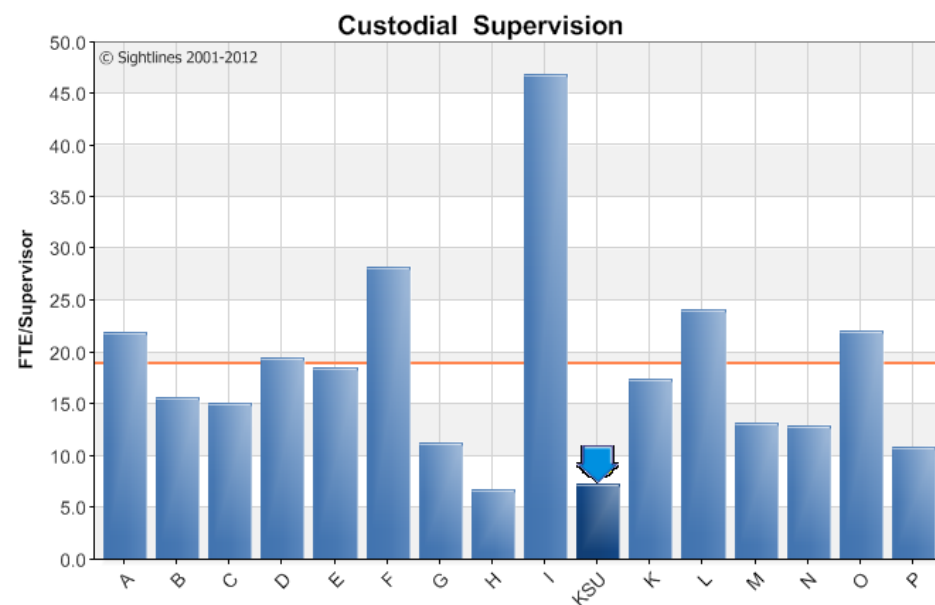
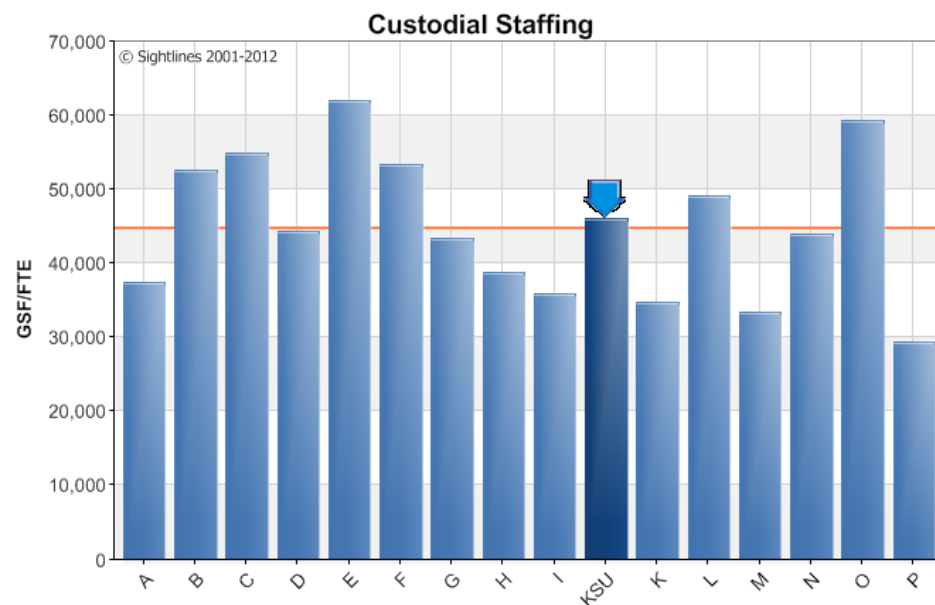
— Peer Average

Custodial operations

Above average supervision leads to higher inspection scores



Sightlines



	K-State	Peers	Database
GSF/FTE	46,094	44,792	33,284
FTE/Supervisor	7.3	18.9	17.9
\$/GSF	\$4,194	\$4,126	\$3,998
Cleanliness Inspection Score	4.3	4.1	4.2

Peer Average

Institutions Ordered By: Density Factor

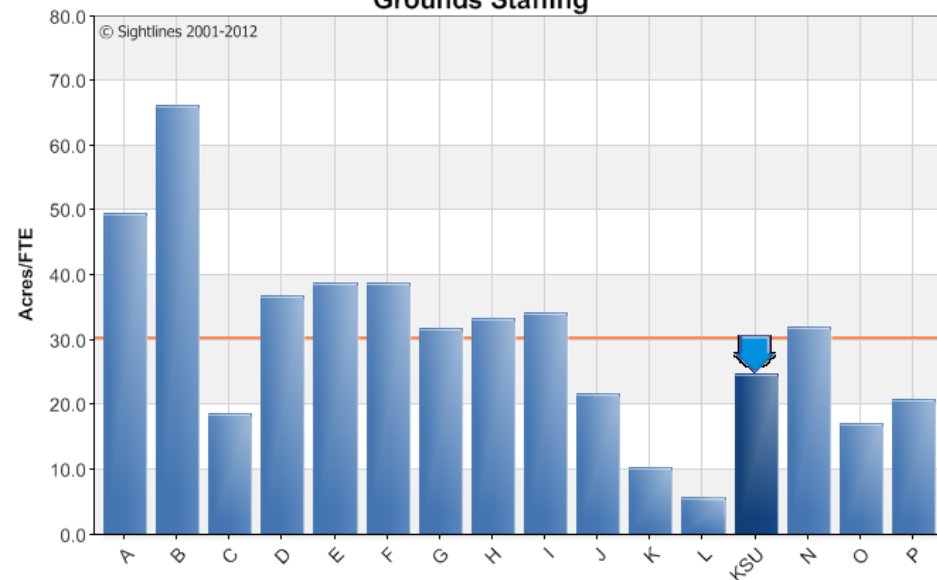
Grounds operations

Grounds department returning superior results with similar materials

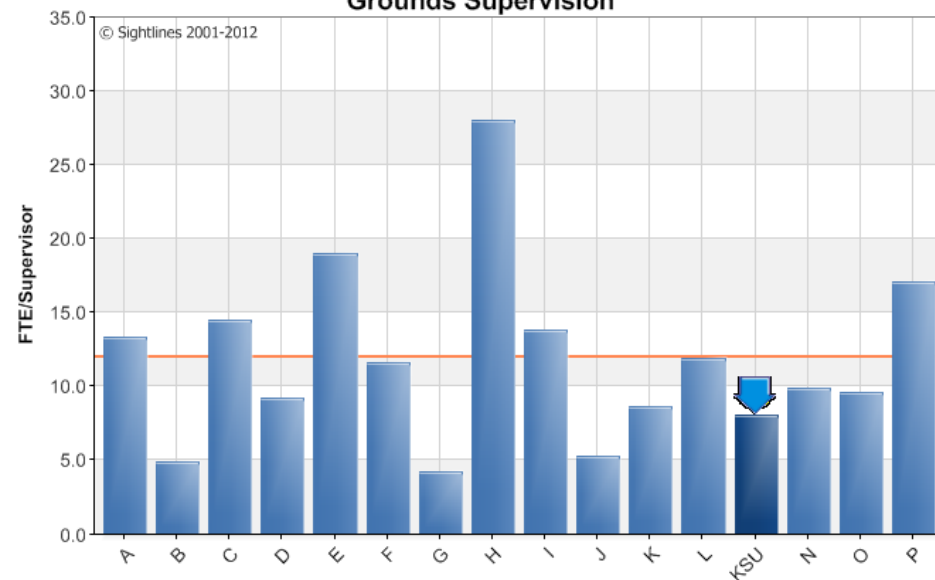


Sightlines

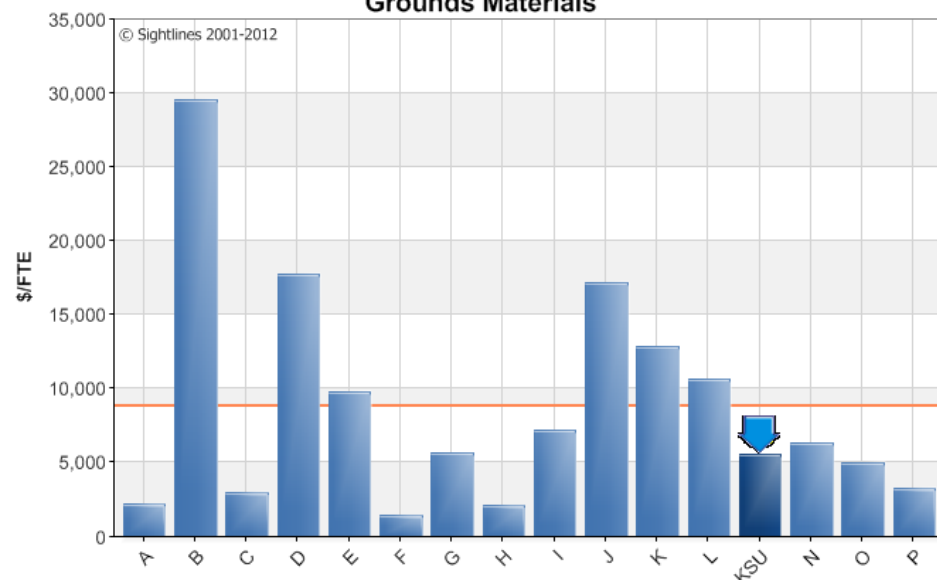
Grounds Staffing



Grounds Supervision



Grounds Materials



Institutions Ordered By: Grounds Intensity

	K-State	Peers	Database
Acres/FTE	24.8	30.4	22.2
FTE/Supervisor	8.1	12.1	11.9
\$/FTE	\$5,517	\$8,914	\$9,529
Grounds Inspection Score	4.3	4.0	4.0

— Peer Average

Concluding Comments





Core Observations

Campus profile:

- Kansas State is older than peer institutions. This age profile creates increased demands on capital and operational resources
- Kansas State is similarly old when comparing to top 50 research institutions in Sightlines' database. Addressing modernization issues across campus may be influential in meeting "K-State 2025" goals.

Capital profile:

- With limited funding and an aging campus, it is important to invest in envelope/mechanical types of projects that will extend the lives of your buildings.
- While large investments have addressed envelope/mechanical needs there has been limited investment to address space/programming need. Because of this limited historic investment, K-State may be suffering from a misalignment of available space on campus and programmatic demands.

Operational profile:

- Facilities services is often doing more with less resources than peers. While achieving favorable results effectiveness is impacted by the age of campus and limited daily service and Planned Maintenance resources. Work to reduce energy consumption and reallocate any released budget dollars toward Planned Maintenance investments.

Questions and Discussion

