Administrative Leadership Meeting

Tuesday, Sept. 9, 2014

Chancellor Randy Woodson

Upcoming ALM Topics

- Nov. 11
  Report Card on Strategic Plan
  (Titmus Theatre)

- Jan. 13, 2015
  Advancement Update
  (Titmus Theatre)

Fall 2014 Enrollment

(All numbers preliminary until final reports)

- New freshman class has 4,375 students
  - Mean SAT = 1241
  - Mean HS GPA = 4.44
  - In top 10% of HS class = 51.4%
- New master's students = 2,146
- New doctoral students = 674
- Total enrollment 33,991

US News Rankings 2015 Edition

(Released Tuesday, September 9, 2014)

- NC State national ranking 95th
  - up 6 places overall from last year
  - Public ranking 43rd, up 4 places from last year
- 14th in peer group, up from 15th last year
- Undergraduate Engineering ranked 31st
- Great Schools, Great Prices ranked 46th
- Best Colleges for Veterans ranked 18th
- On the list for graduates with least debt
  - 57% of graduates with debt, average $19,530

New Indoor Practice Facility

- A full 120-yard football field
- Four sprint lanes down the full length of the field
- Additional training and conditioning space beyond both end zones
- A viewing platform at the 50-yard line
- Remote-controlled video cameras

State Budget

- $1,000 salary increases for SPA employees
- No funding for EPA salary increases
  - Provides campus-level salary adjustment flexibility
- 5 non-expiring bonus days

State Budget

- $2.4 million in additional management flexibility reductions to the UNC System
- •$3 million for Game-Changing Research investments including pharmacoengineering.
- •$4.8 million to provide in-state tuition to military veterans and their dependents.
- •$30 million for building repairs and renovations for all state government (UNC System receives 40%= $12 million).

State Budget

- Directs BOG to consider reducing centers and institutes by $15 million
- Requires university system appropriate $29 million to support the NC Research Campus in Kannapolis.
- Transfers of Camp Sertoma 4-H Camp from NC State to the Department of Environment and Natural Resources.
- UNC System employees may enroll in 3 courses free of charge
- Repeals Chancellor's authority to approve maintenance projects up to $1 million.
- Leasing Authority for property or space in any building on Centennial Campus extended to 99 years without approval from the Council of State.

Questions?

Navigating Space Management: Challenges, Actions and Opportunities

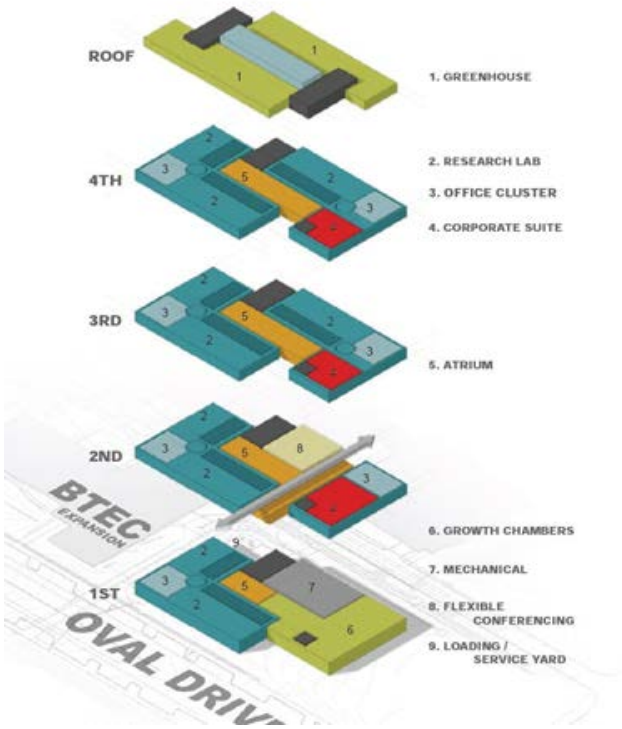
Steven Arndt, Associate Vice Chancellor for Facilities
Lisa Johnson, University Architect

Space Management: Challenges, Actions and Opportunities

- Intro/Background
- Current Space Utilization
- Past Initiatives Status
- New Initiatives
- Challenges

Why all the emphasis on Space Utilization and Management?

- Costly Resource
- Budgetary Constraints
- Growth Pressures
- Space Management Challenges
- Increased Accountability
- Utilization Opportunities



Space: A Costly Resource

Annual Cost of Space is Significant

OFFICE & CLASSROOM MAINTENANCE & OPERATING COST		
	2011	2014
Cost per ASF	$13.30 / ASF	$13.80 / ASF
Typical Office Annual Cost	$1,860	$1,930
Mid-Size Classroom Annual Cost	$8,650	$8,970

RESEARCH SPACE MAINTENANCE & OPERATING COST		
	2011	2014
Cost per ASF	$19.70 / ASF	$20.10 / ASF
Mid-Size Research Lab	$17,730	$18,090

(Includes utilities, maintenance & equipment startup costs. Excludes deferred maintenance cost. Numbers are rounded to nearest ten.)

Source: NC State University, Facilities Budget Office

New Construction is Expensive

Total Project Cost (escalated to 2014)

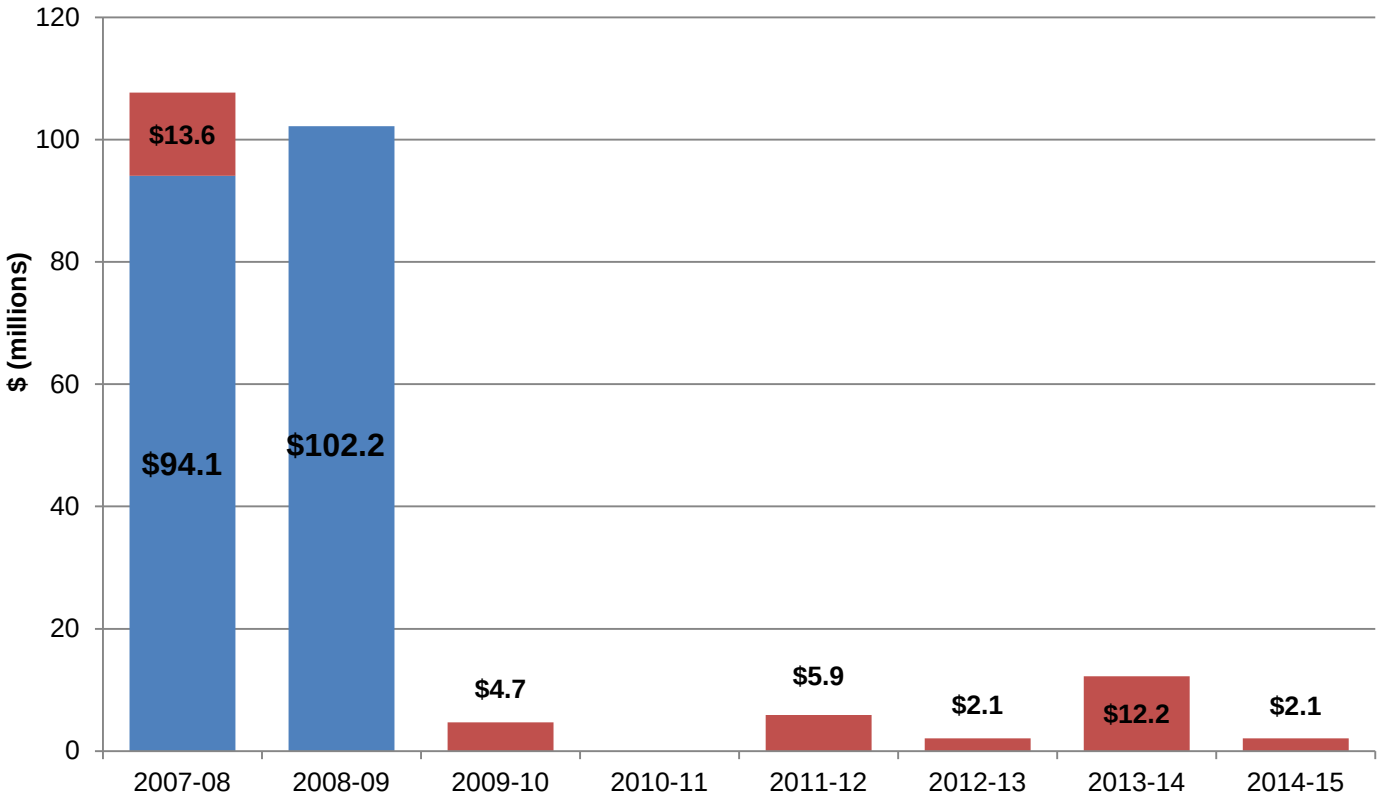
- SAS Hall $304/GSF
- EB III $360/GSF
- Hunt Library $498/GSF
- Terry Center $561/GSF

*Excluding infrastructure

Economic Constraints

Source: IndyWeek.com

State Capital Funding: 2008-Present



Renovation & Repair

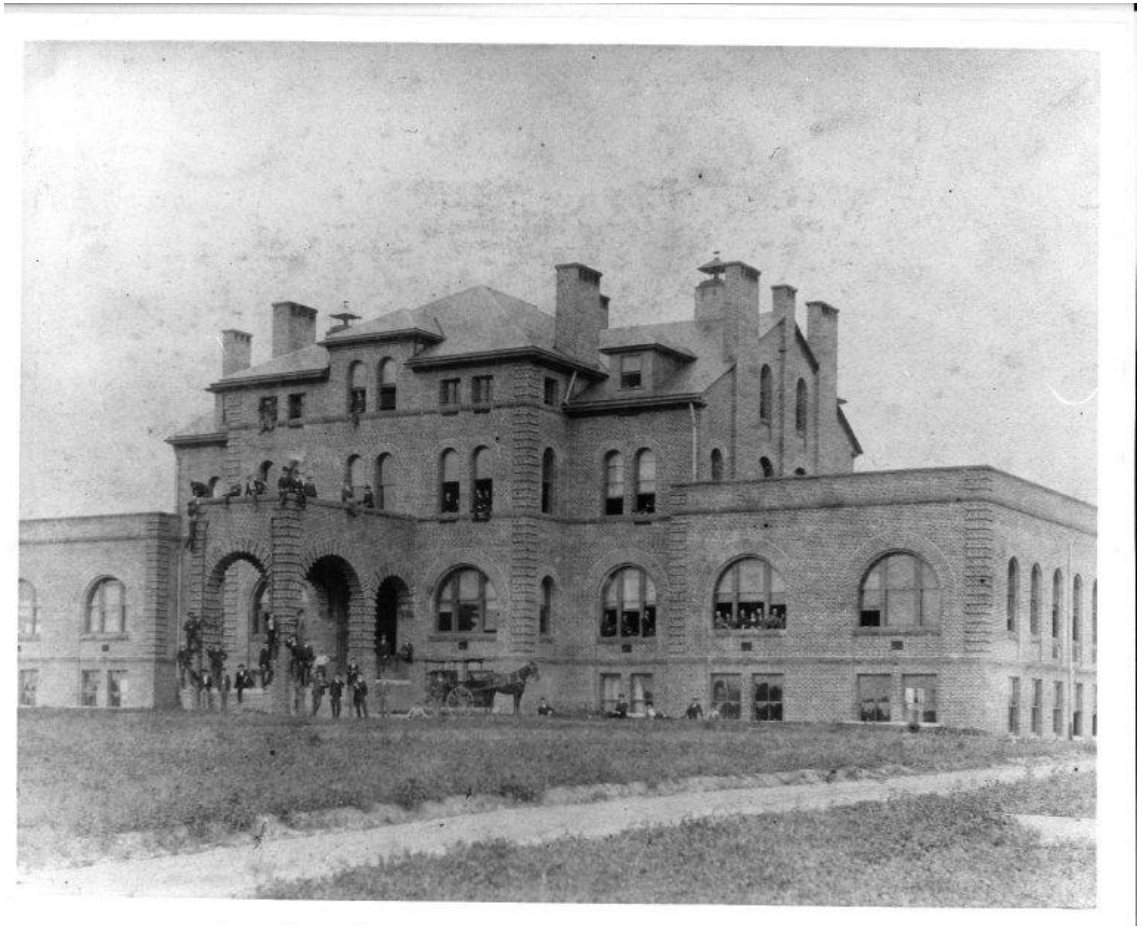
New Construction

- Hunt Library
- 4H Camp Improvements
- Terry Companion Animal Hospital
- Engineering Building III

FY2014-15 Funding pending bond sale

Source: NC State University, Facilities Division

Growth Pressures



Growth - High Priority Actions

- Growing faculty **350 T/TT**
- Keeping and replacing faculty **50 per year**
- Increasing student enrollment **2660**
- Increasing postdocs **150**
- Adding academic advisers **40**
- New Living and Learning Villages **4**

By 2020

Source: NC State University, Provost's Office

Space Management Challenges

Source: AcademicImpressions.com

Space Management Challenges

- Underutilized Space
- Remold cultural attitude, i.e. …it's my space!
- Space stewardship vs. ownership

Increased Accountability

http://www.northcarolina.edu/apps/bog/members.htm

UNC-BOG Efficiency & Effectiveness Metrics

Operating Metrics

1. Education and Related spending per degree*
2. UNC Compliance Index (UNC FIT)*
3. Support Spending per Student
4. **Space Utilization: Average weekly use of student stations**
5. Financial Stability: Private Fundraising Index

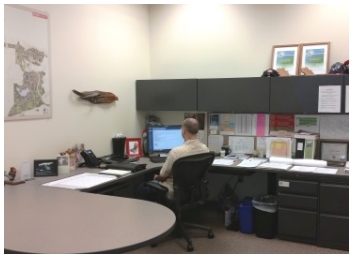
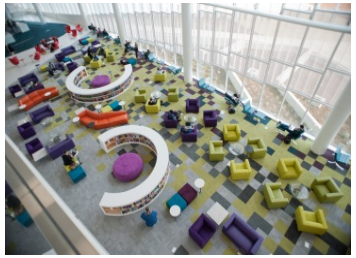
Academic Metrics

1. Six-Year Graduation Rate*
2. Freshman-to-Sophomore Retention Rate*
3. Degrees Granted to Pell Grant Recipients*
4. Degree Efficiency*
5. Attempted Hours to Degree

* Metrics currently in use

Source: 7-8-2014 ALM Presentation

Space Standards

UNC-GA Space Standards

- Classrooms
- Class labs
- Office
- Library space

NC State Space Standards

- Research space
- Design studio standard

Recurring Efficiency Themes

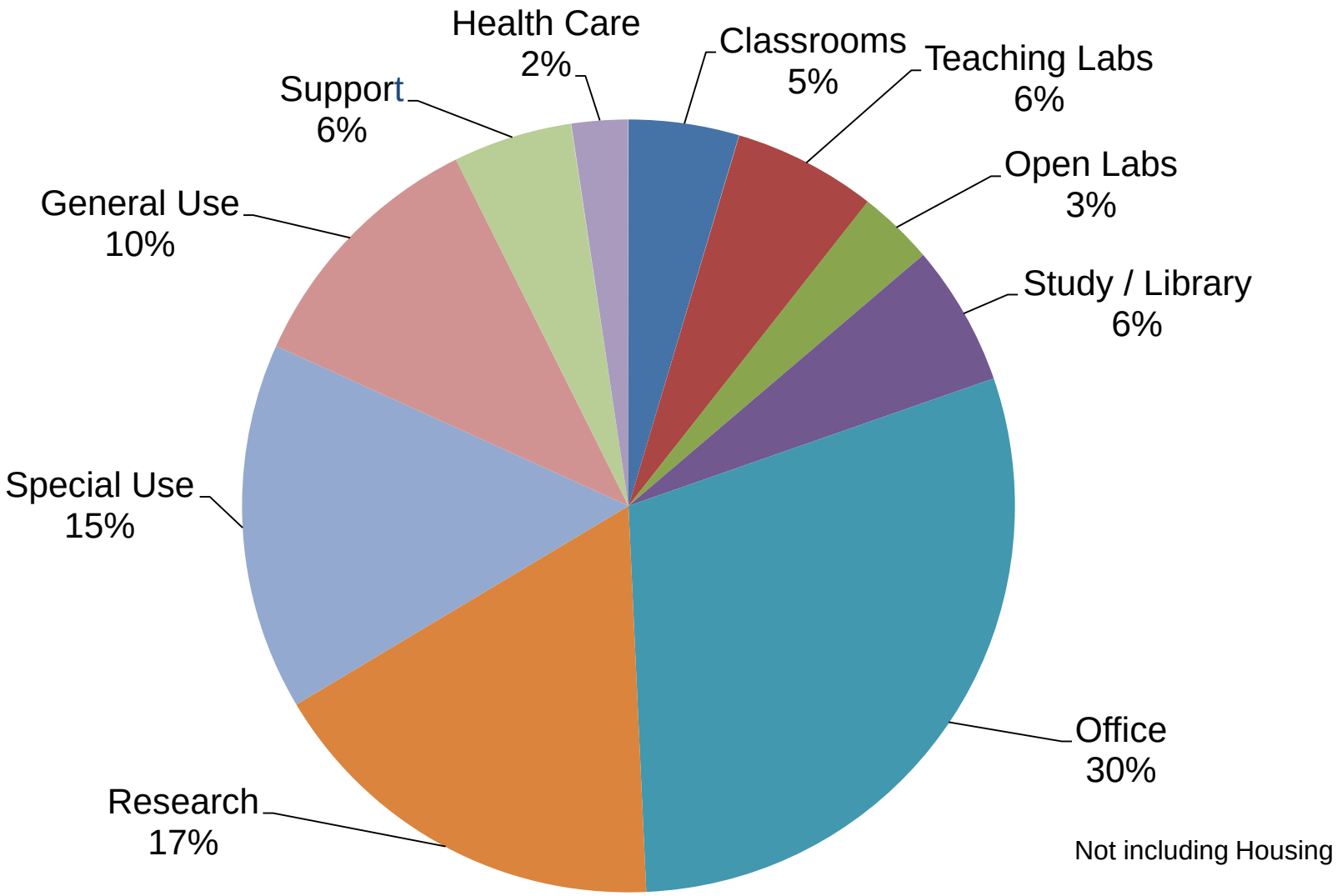
- Purchasing Efficiencies
- Eliminate Redundancies / Create Shared Services
- Consolidate IT Infrastructure
- Implement Enterprise Systems (PeopleSoft)
- Focus on Energy Reduction
- **Improve Space Management**
- **Apply Metrics to Most Everything**

Source: 7-8-2014 ALM Presentation

Utilization Opportunities

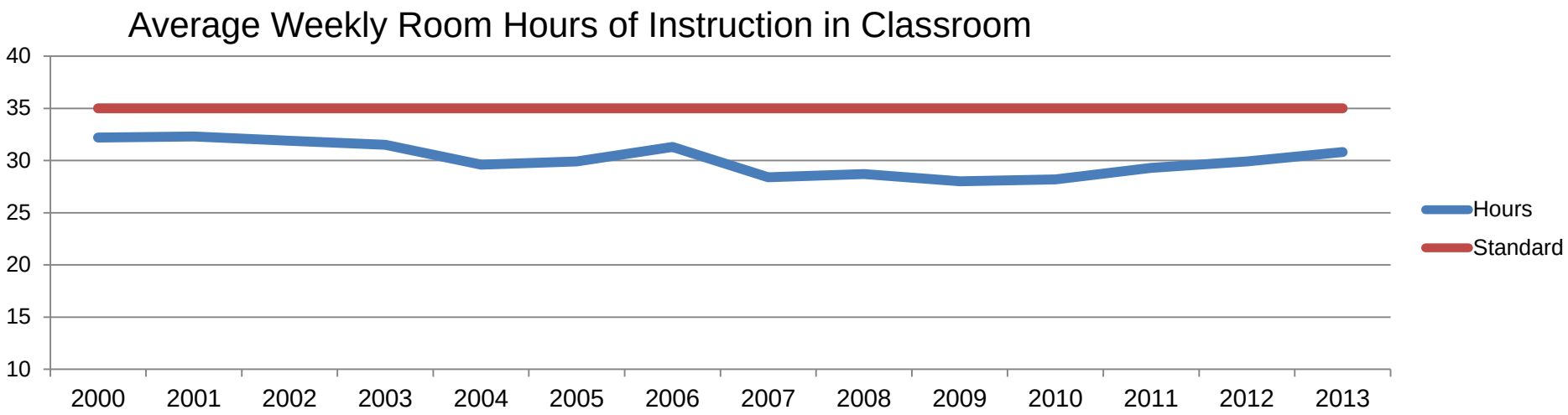
Source: University System of Georgia Space Utilization Study – Sasaki Associates, Inc.

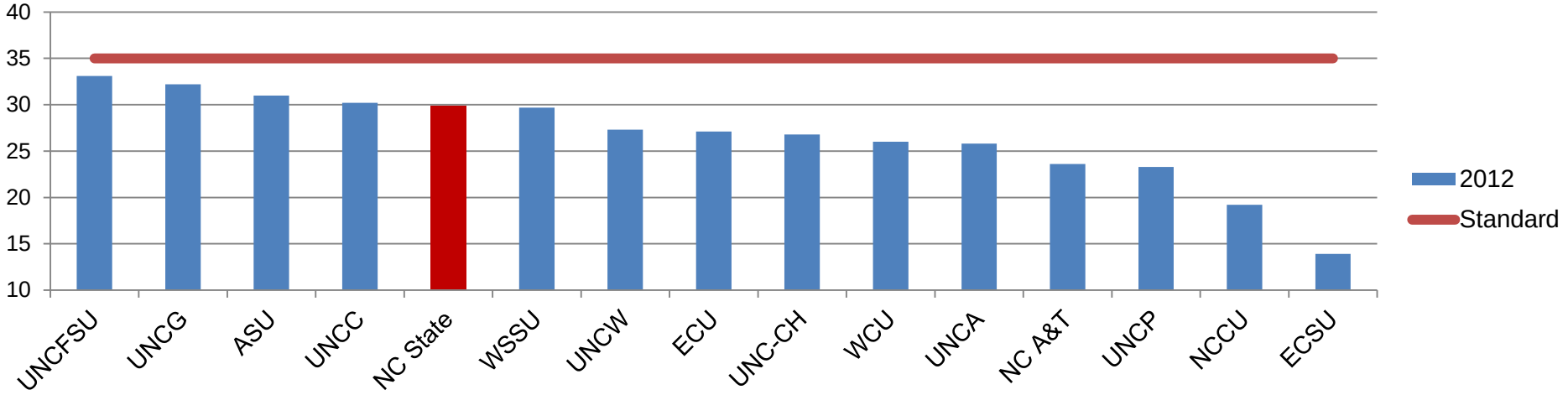
Current Space Inventory



Source: NC State University, Office of the University Architect

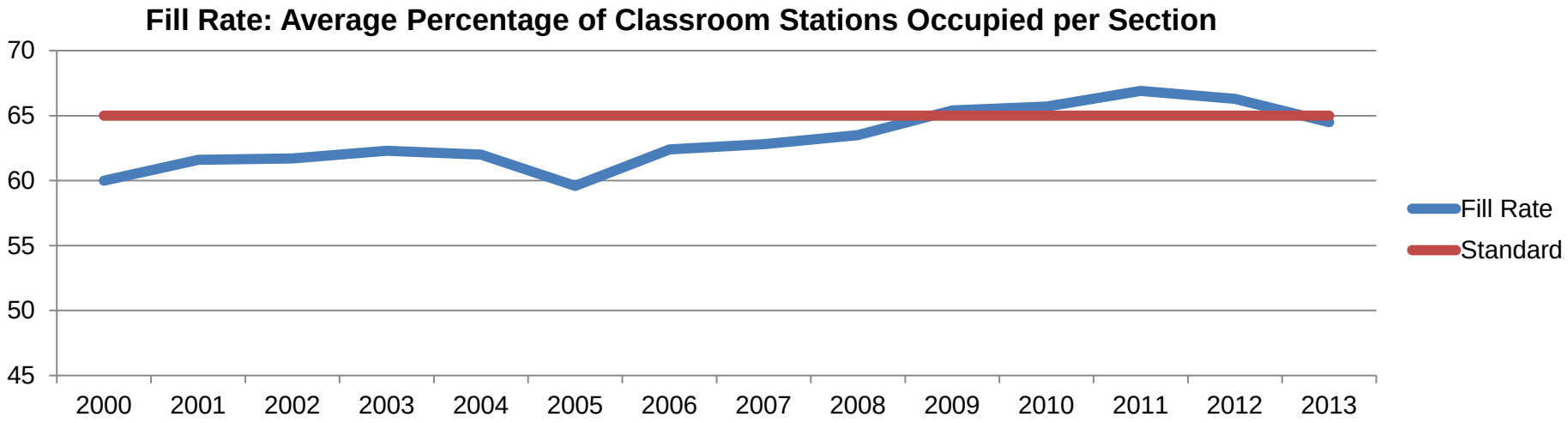
Classroom Utilization Hours

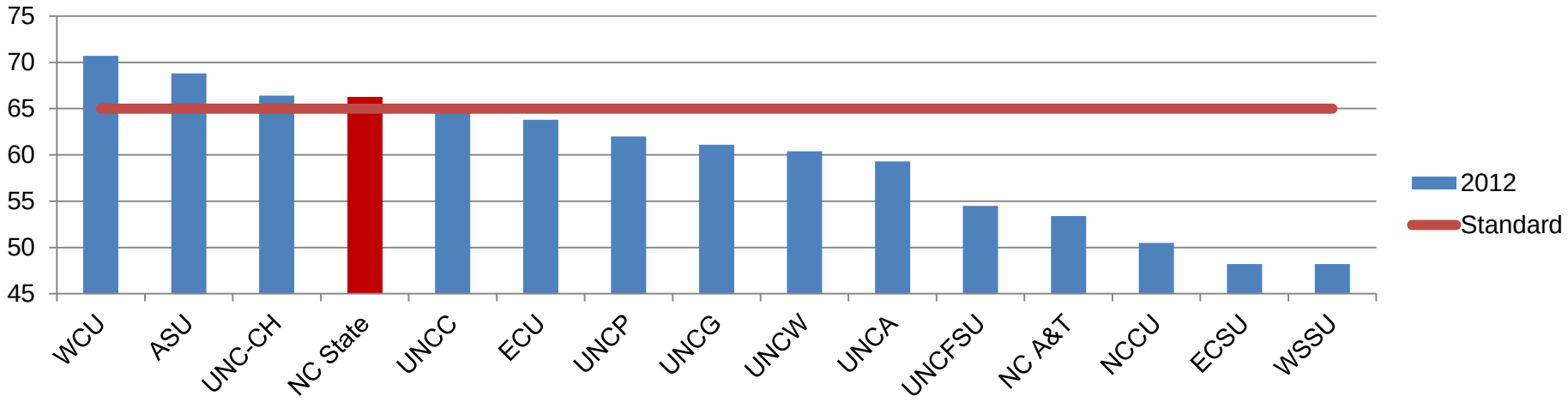




Source: State of North Carolina Higher Education Comprehensive Planning Program, *Facilities Inventory and Utilization Study*

Classroom Utilization Occupancy





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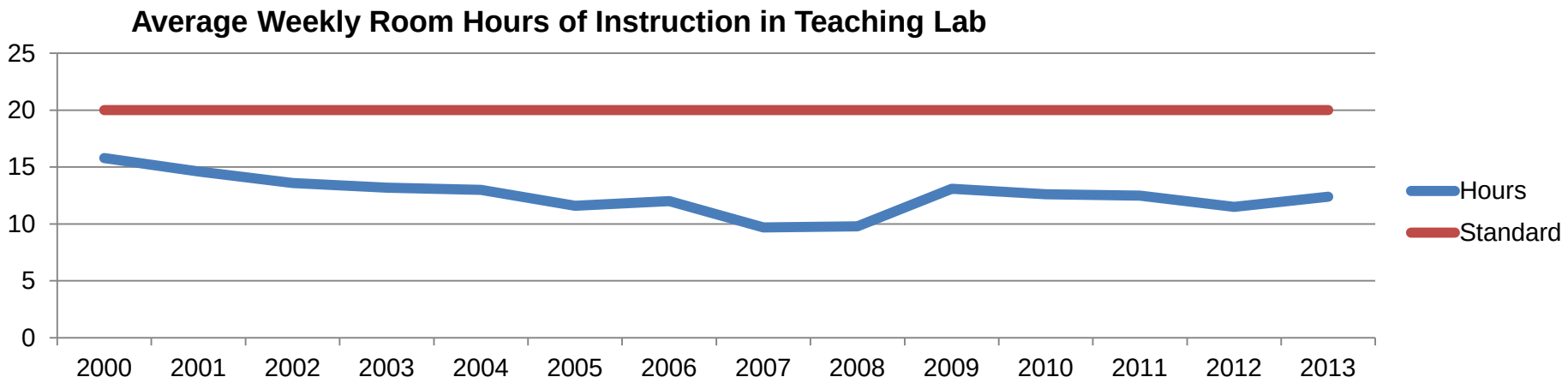
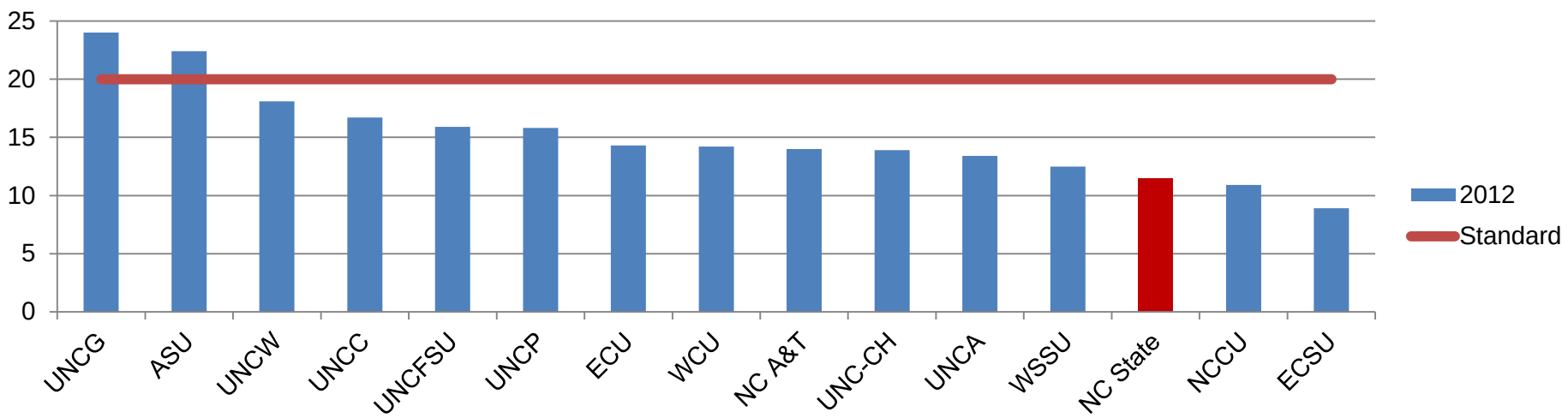
Teaching Lab Utilization Hours





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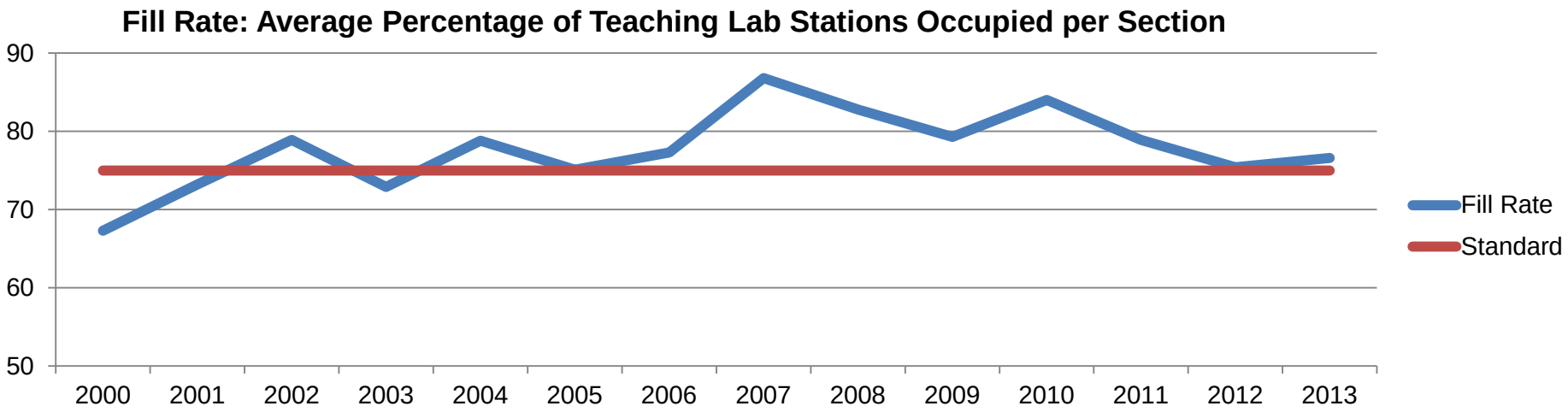
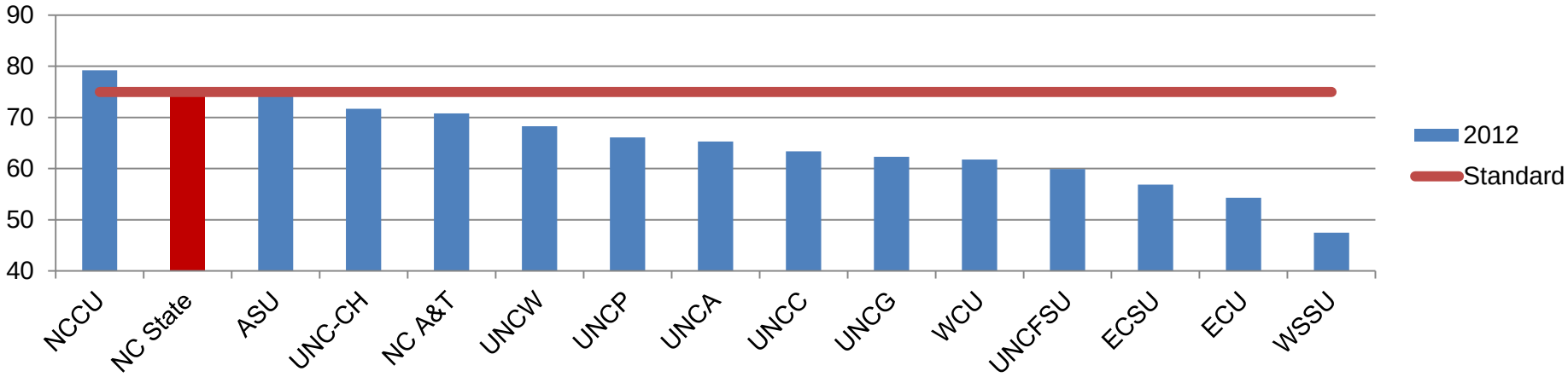
Teaching Lab Utilization Occupancy





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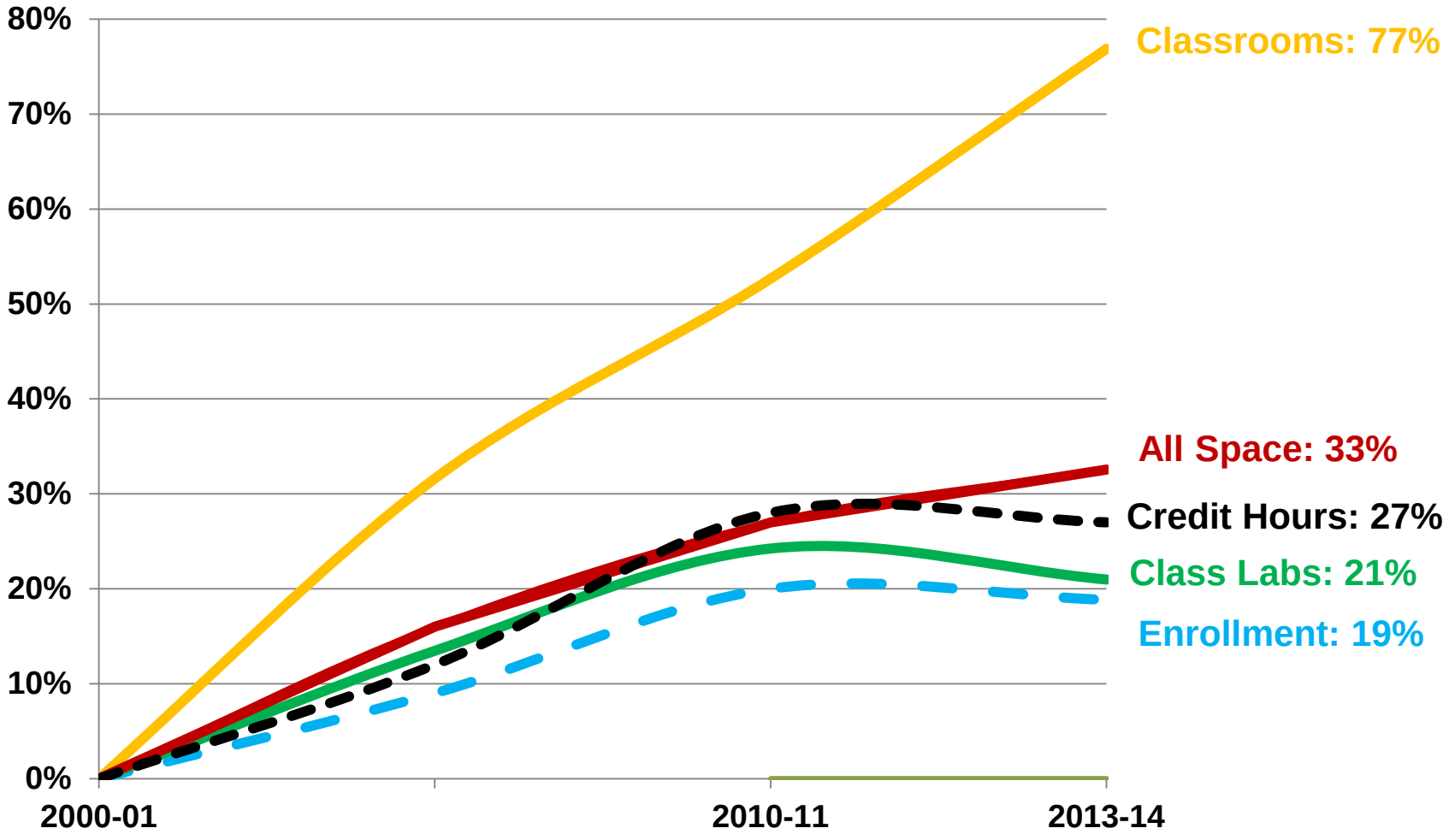
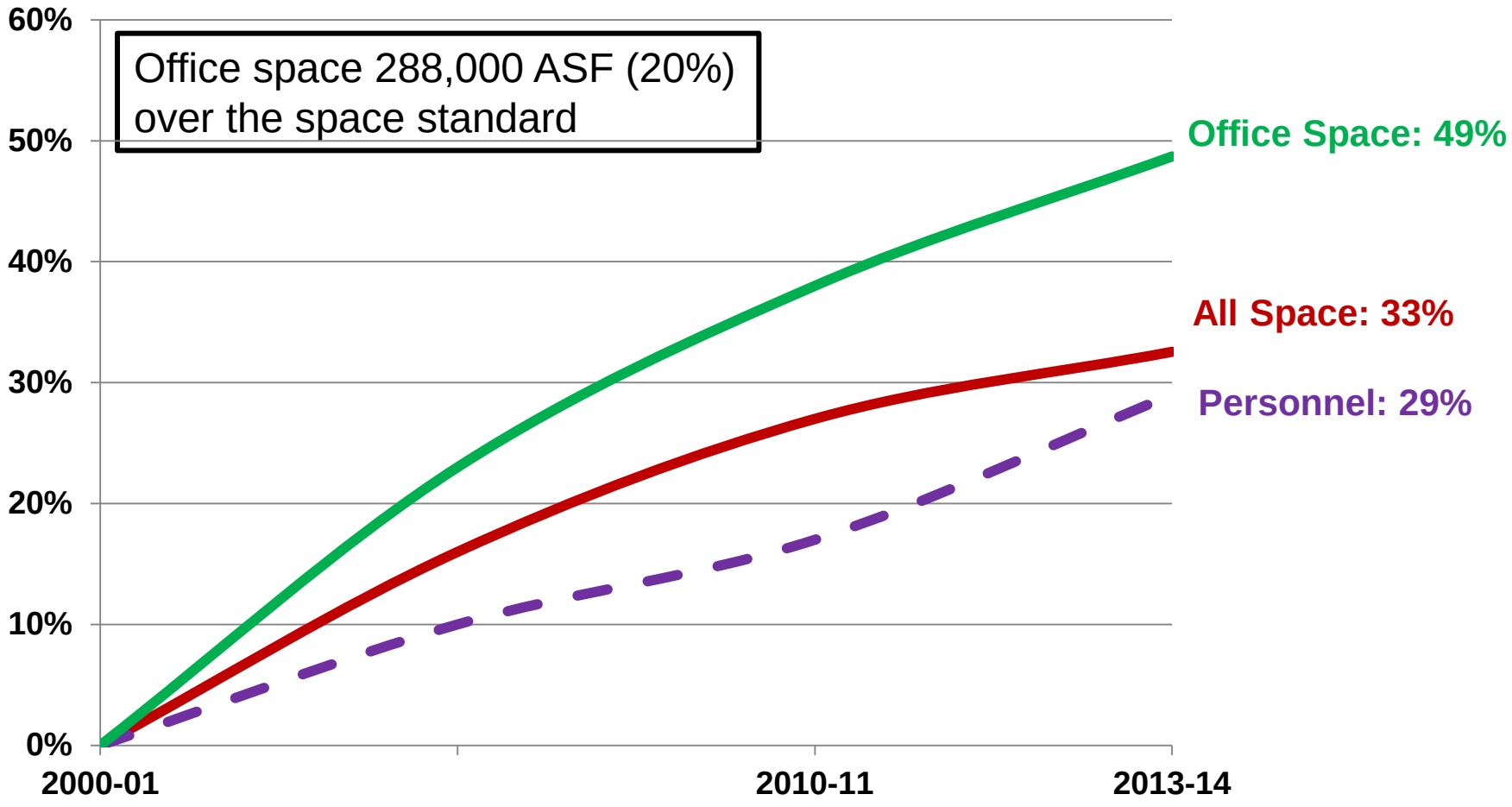
Space Growth Over Time - Teaching



Classrooms are 5% and Class Labs are 6% of total space inventory

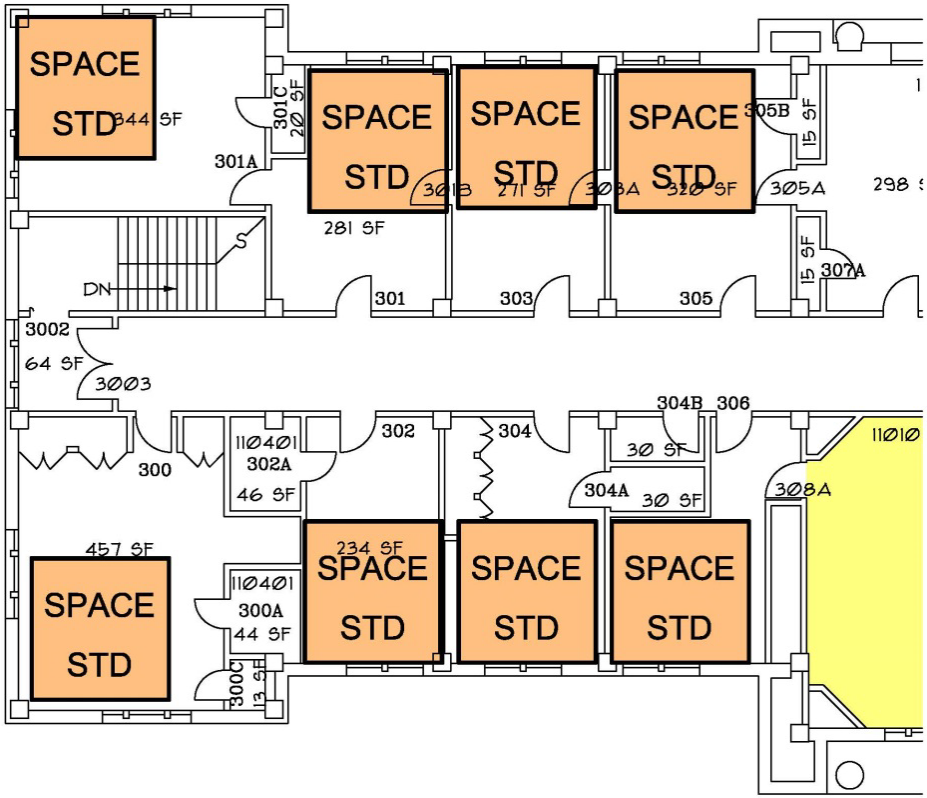
Space Growth Over Time - Office



Office space includes conference rooms and office support spaces

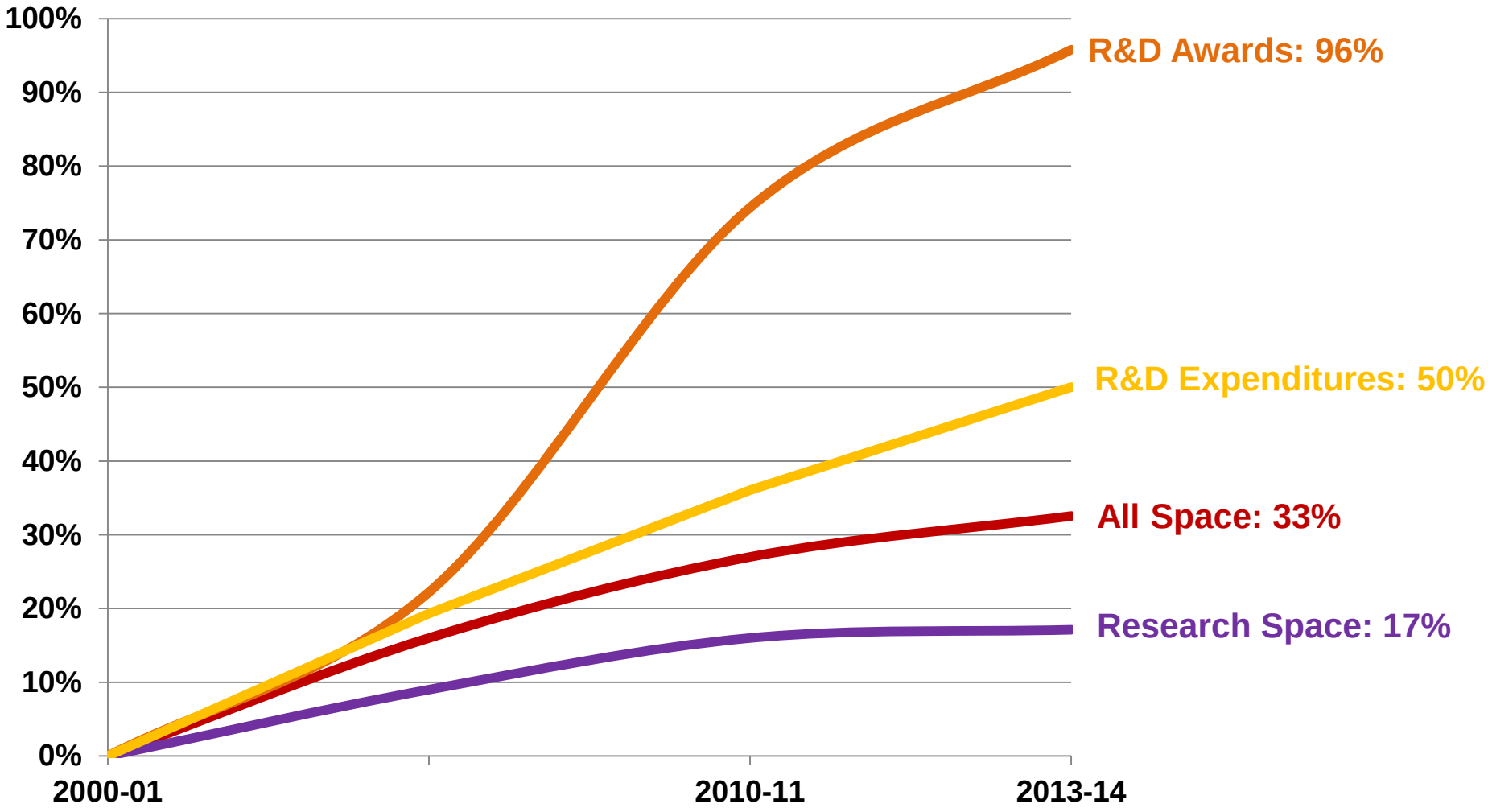
Office Space Utilization Issues

- Office sizes exceed space standard
- Facility Condition
- Offices used for other purposes
- Multiple offices

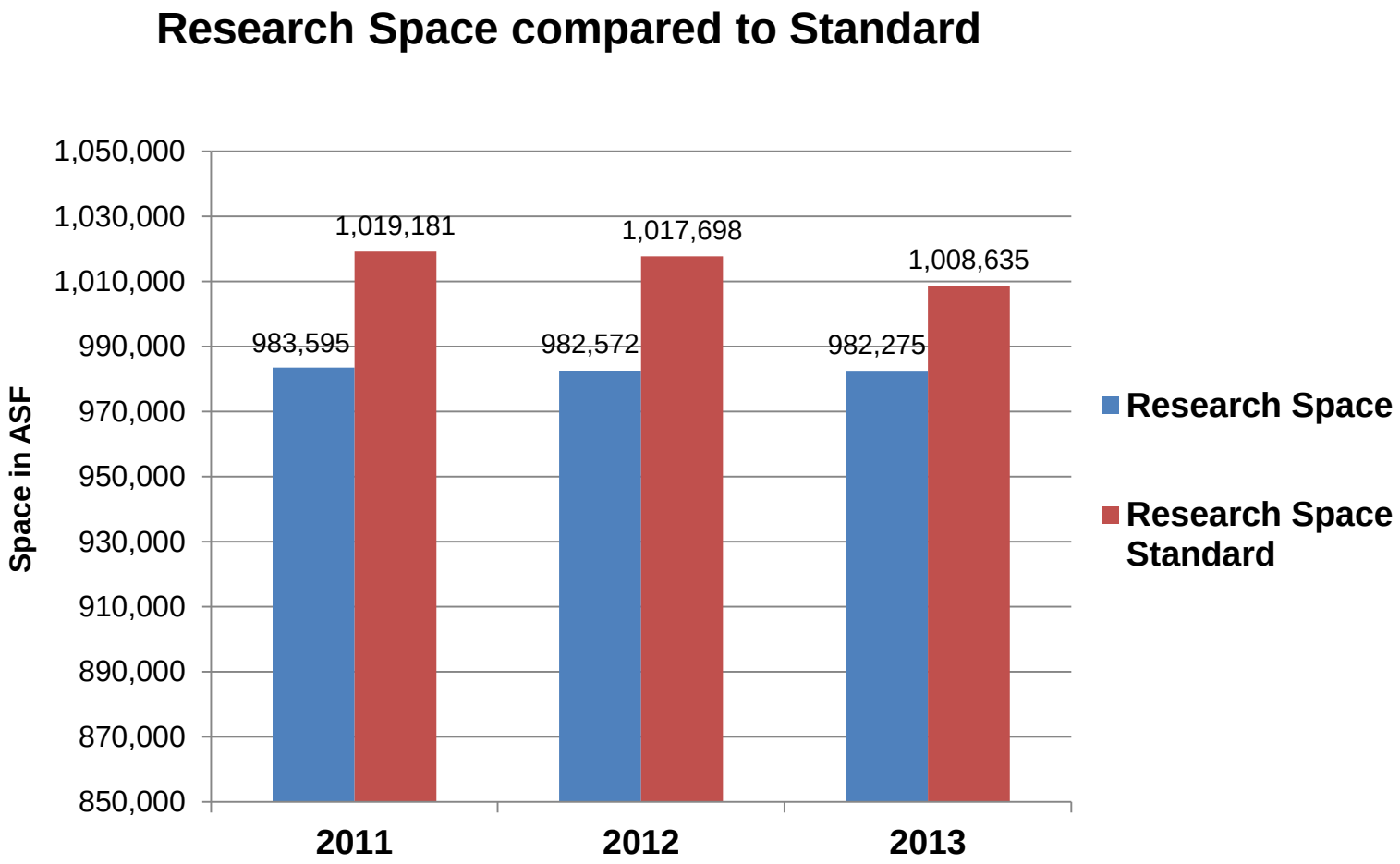


Ricks Hall 3rd Floor

Space Growth Over Time - Research



Research Space



	2011	2012	2013
Deficit:	**-3.5%**	**-3.4%**	**-2.6%**

Recap of Challenges

- Space cost
- Funding reductions
- Growth
- Metrics
- Increased Scrutiny
- Utilization

Source: www.hardykika.blogspot.com

The Perfect Storm?

The Path Forward

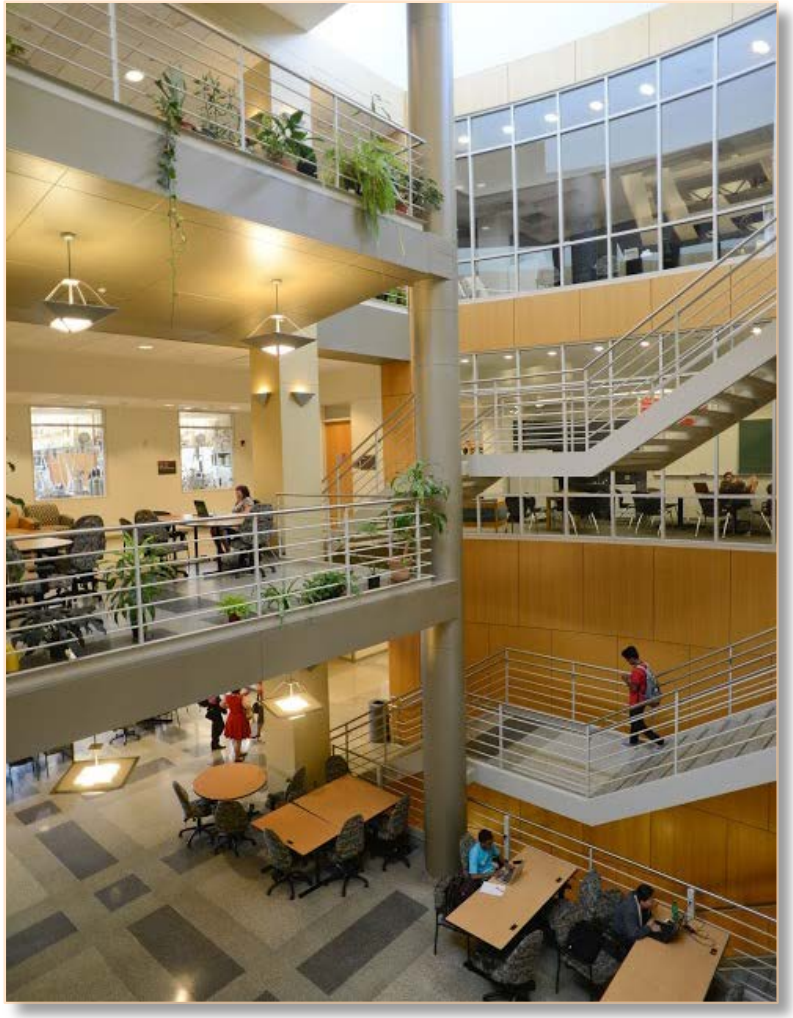
Source: www.betheleverett.org/

Status on Efforts since 2011

1. **Initiate College Space Analysis**
2. Re-alignment & Strategic Plans Influence Space Allocations
3. Re-evaluate Research Space Standard
4. Connect Grant & Start-Up needs with Space
5. Decrease Lease Space
6. Review Rental Rate Structure
7. Repurpose Space

Source: 5-11-2011 ALM Presentation

1. College Space Analysis



Process:

- Every 3 to 4 years
- Last update: fall 2012

Space Projections:

Current Space

- Space standards /college space
- Compare to existing inventory
- Deficits and overages

Future Space Needs

- Projections
- Space standards
- College space needs by space type

College Space Analysis

Space Allocation Plan

	2011 Base Year Space Needs			
	a Current Space Available	% of Total ASF	b Current Space Need	c Current % Space Need Met a/b
CALS	1,000,240	28.7%	893,869	112%
COD	106,495	3.1%	126,225	84%
CED	78,416	2.2%	87,740	89%
COE	695,838	20.0%	598,008	116%
CNR	139,209	4.0%	154,462	90%
CHASS	133,075	3.8%	178,234	75%
COS	435,256	12.5%	432,526	101%
COT	202,453	5.8%	185,227	109%
CVM	386,845	11.1%	402,763	96%
PCOM	53,672	1.5%	53,071	101%
"110" Classrooms	255,977	7.3%	252,138	102%
TOTAL	3,487,476	100%	3,364,262	104%

New update to begin spring 2015 using fall 2014 base year data

Capital Plan: Top 10 Projects

Project	New	Renovated
1. Engineering Building Oval	136,000	
2. Science Commons Building	52,000	
3. Broughton Hall Renovation & Addition	45,000	45,000
4. Dabney Hall Renovation		81,000
5. Page Hall Renovation		18,600
6. Mann Hall Renovation & Addition	4,500	55,000
7. Plant Sciences Research Building	121,700	
8. Gardner Hall Renovation & Addition	15,000	51,000
9. Williams Hall Renovation		78,000
10. Daniels Hall Renovation, Phase II		39,100
Total Assignable Square Feet	**374,200**	**367,700**

College Space Analysis

Space Allocation Plan

	2011 Base Year Space Needs				2020 Future Space Needs / Proposed Space Allocation					
	a Current Space Available	% of Total ASF	b Current Space Need	c Current % Space Need Met a/b	d Projected Need	e Proposed Space Projection	f Total Space Available a+e	% of Total ASF	g % Projected Need Met f/d	h Variance f-d
CALS	1,000,240	28.7%	893,869	**112%**	1,018,416	**0**	1,000,240	28.7%	98%	(18,176)
COD	106,495	3.1%	126,225	**84%**	150,085	**0**	106,495	3.1%	71%	(43,590)
CED	78,416	2.2%	87,740	**89%**	96,720	**0**	78,416	2.2%	81%	(18,304)
COE	695,838	20.0%	598,008	**116%**	716,538	**0**	695,838	20.0%	97%	(20,700))
CNR	139,209	4.0%	154,462	**90%**	175,329	**0**	139,209	4.0%	79%	(36,120)
CHASS	133,075	3.8%	178,234	**75%**	200,049	**0**	133,075	3.8%	67%	(66,974)
COS	435,256	12.5%	432,526	**101%**	498,682	**0**	435,256	12.5%	87%	(63,426)
COT	202,453	5.8%	185,227	**109%**	197,962	**0**	202,453	5.8%	102%	4,491
CVM	386,845	11.1%	402,763	**96%**	438,165	**0**	386,845	11.1%	88%	(51,320)
PCOM	53,672	1.5%	53,071	**101%**	67,865	**0**	53,672	1.5%	79%	(14,193)
"110" Classrooms	255,977	7.3%	252,138	**102%**	263,388	**0**	255,977	7.3%	97%	(7,411)
TOTAL	**3,487,476**	**100%**	**3,364,262**	**104%**	**3,823,200**	**0**	**3,487,476**	**100%**	**91%**	**(335,724)**

New **update** to begin spring 2015 using fall 2014 base year data

Status on Efforts since 2011

1. Initiate College Space Analysis
2. **Re-alignment & Strategic Plans Influence Space Allocations**
3. Re-evaluate Research Space Standard
4. Connect Grant & Start-Up needs with Space
5. Decrease Lease Space
6. Review Rental Rate Structure
7. Repurpose Space

Source: 5-11-2011 ALM Presentation

2. Align Organizational Resources with Strategic Priorities

Progress:

Chancellors Faculty Excellence Program (CFEP)

- **Provost Office/OUA team**
- **44 cluster hire positions identified**
- **33 positions filled**
- **35 renovations / furniture projects completed**

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Source: 5-11-2011 ALM Presentation

3. Re-evaluate Research Space Standard

- Discipline-based research space standard
- Revised in 2012
- Based on the site surveys & institution review

2002 PREVIOUS RESEARCH STANDARD	
Categories	**per Research Unit**
Intensive	Avg of 300 ASF
Moderately Intensive	Avg of 125 ASF
Non – Intensive	Avg of 15 ASF

2012 REVISED RESEARCH STANDARD	
Categories	**per Research Unit**
Highly Intensive	Avg of 225 ASF
Intensive	Avg of 125 ASF
Moderately Intensive	Avg of 60 ASF
Non – Intensive	Avg of 15 ASF

Status on Efforts since 2011

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5. Decrease Lease Space
6. Review Rental Rate Structure
7. Repurpose Space

Source: 5-11-2011 ALM Presentation

4. Connect grant & start-up needs with Space

Source: http://www.internsme.com/blog/settle-in-office

CFEP Hires
Invested in start-up packages and space

Strategic Space Reserves

Connect with space needs early in process

Status on Efforts since 2011

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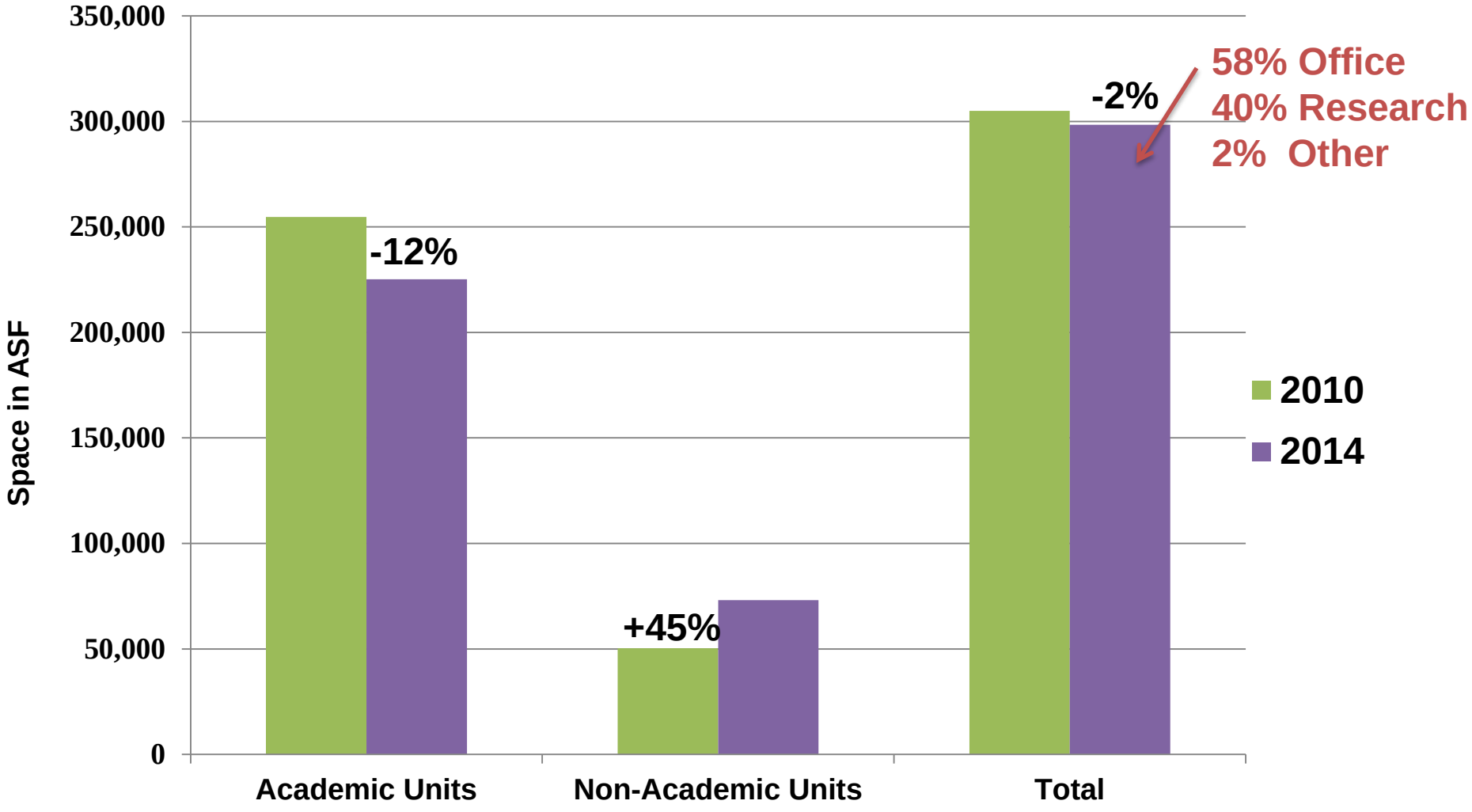
5. **Decrease Lease Space**
6. Review Rental Rate Structure
7. Repurpose Space

Source: 5-11-2011 ALM Presentation

5. Decrease Lease Space SF



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6. **Review Rental Rate Structure**
7. Repurpose Space

Source: 5-11-2011 ALM Presentation

6. Review Rental Rate Structure Centennial Campus

Status

- MOA's aligned with updated F&A rate (58.9% to 63.5%)
- Resulted in overall average rent reduction of **10.1%**
- Individual college reductions varied from 1.3% to 23%
- Effective July 2011
- First year rent savings (FY11-12): **$332,321**

Status on Efforts since 2011

1. Initiate College Space Analysis
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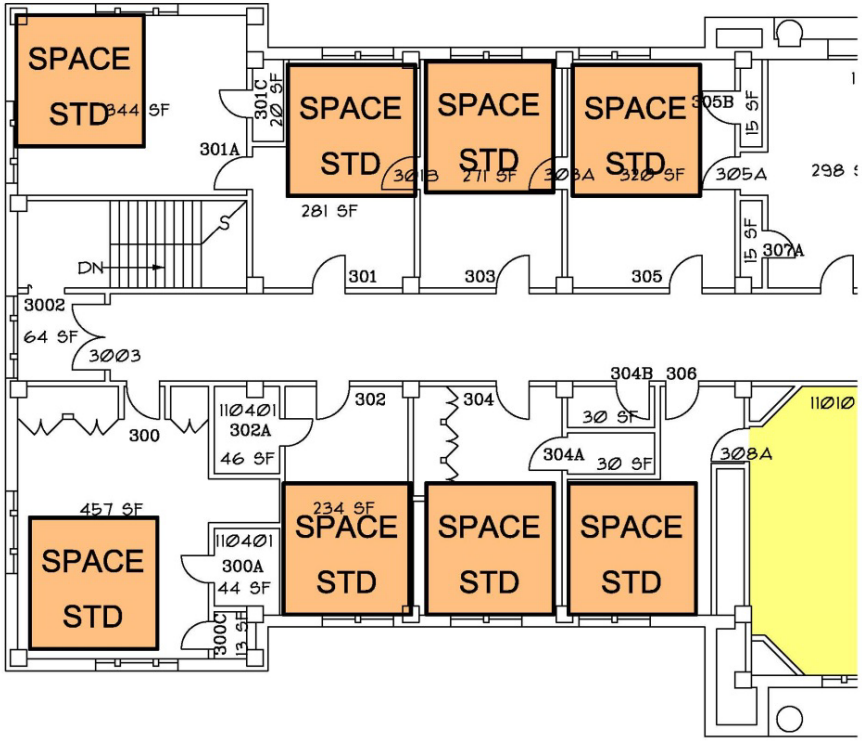
6. Review Rental Rate Structure
7. **Repurpose Space**

Source: 5-11-2011 ALM Presentation

7. Repurpose Space

- Office sizes exceed the space standard
- Poor Facility condition
- CFEP hires

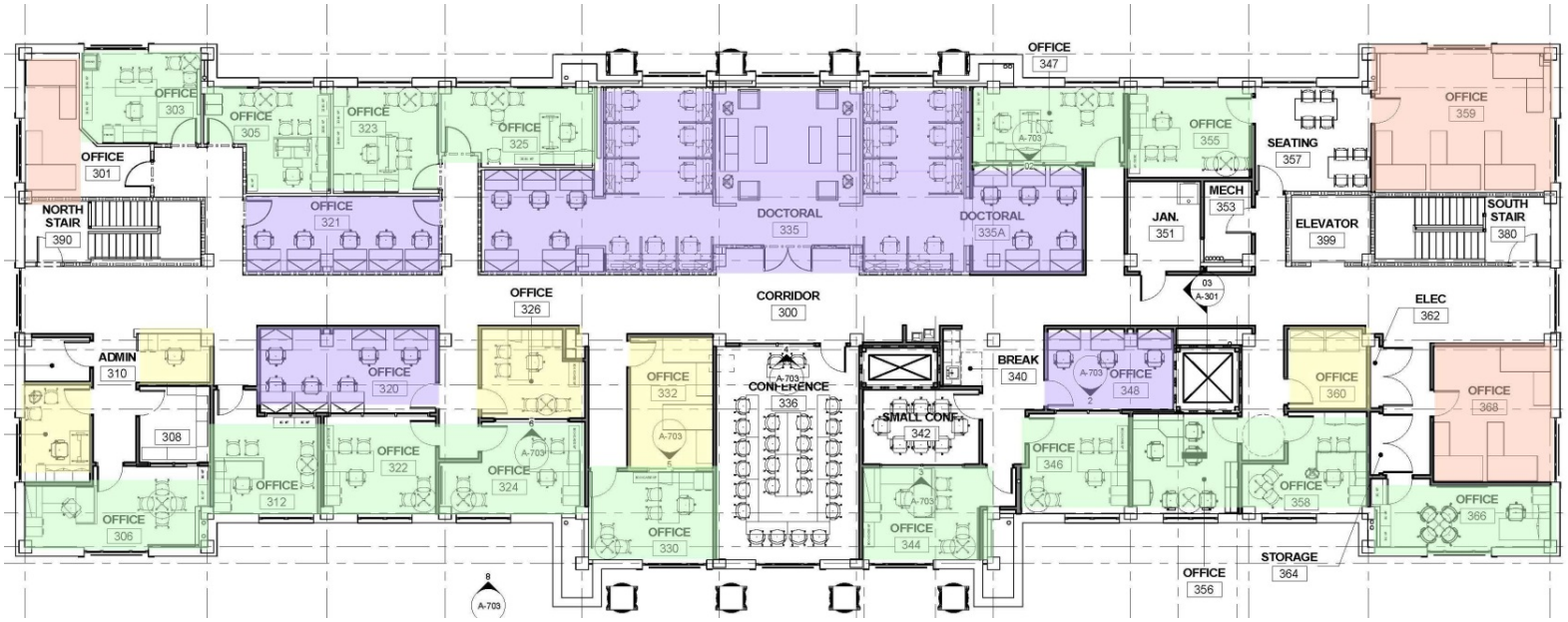


Ricks Hall – Existing 3rd Floor

Repurpose Space

New space layout will provide additional personnel space:

- 6 more faculty offices
- 2 more staff stations
- 16 more Post Doc/Graduate Student stations
- Improved quality of space



Ricks Hall - 3rd Floor Renovation Plan

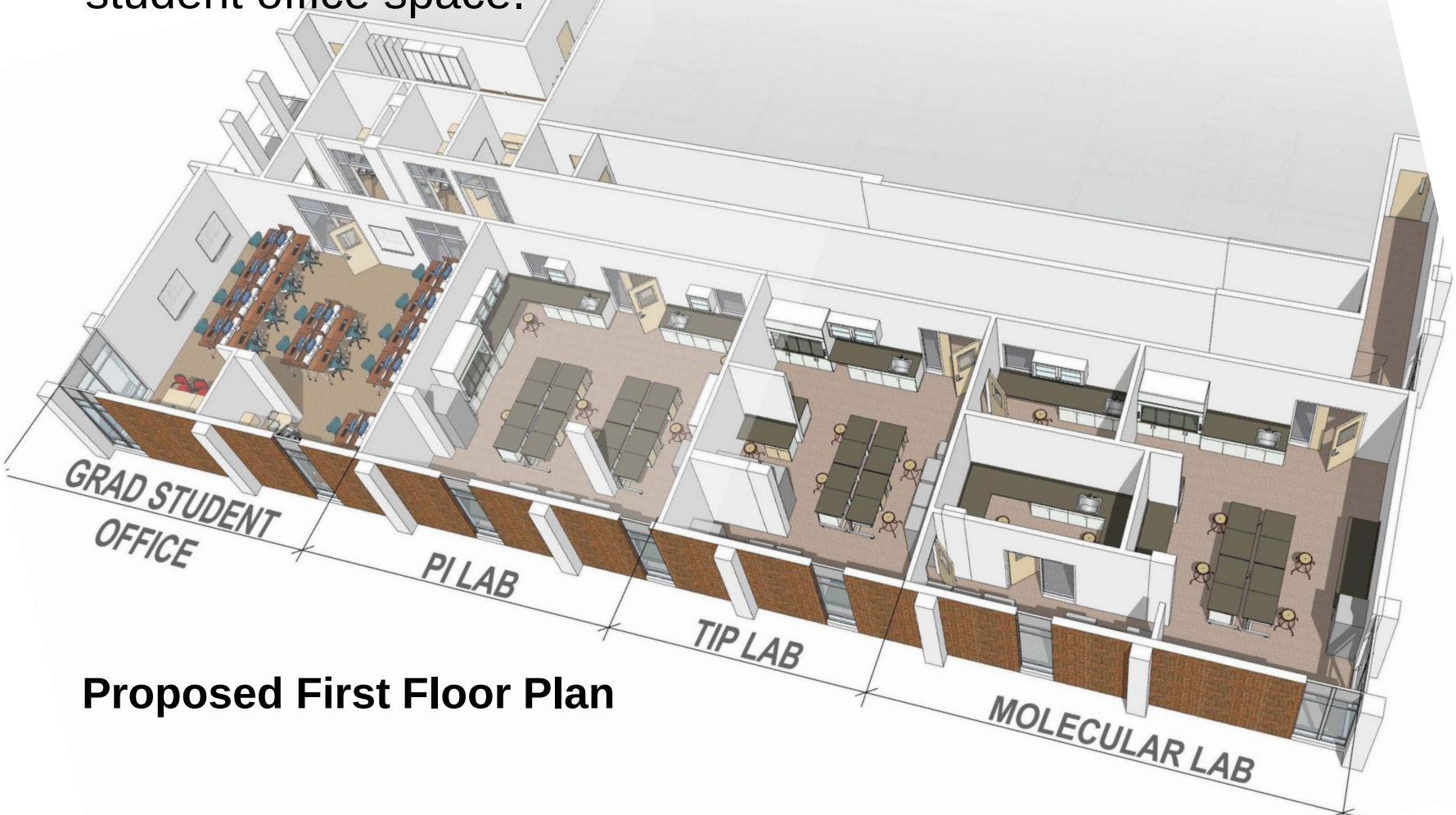
Repurpose Space

Biltmore Hall: Renovate outdated research lab space and...

Existing Research Labs – First Floor

Repurpose Space

Biltmore Hall: Renovation will provide updated research labs for Tree Improvement Program, future CFEP hire, and graduate student office space.



Proposed First Floor Plan

New Space Management Initiatives

Source: www.waltor.com

New Space Management Initiatives

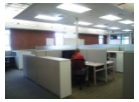
- **University Space Principles Updated**

- New Space Management Software

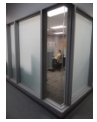
- Tagging People to Space Initiative

- Research Productivity Measures

- Strategic Space Reserve



- Rewarding Innovation and New Ideas



Space Principles Updated

Preferred Space Priorities:

- University Strategic Plan initiatives = highest priority
- Assign all classrooms to R&R
- Hoteling
- Long-term storage off-campus
- 1 office per FT faculty/staff

Source: itservices.stanford.edu/service/workanywhere/hoteltouchdown

New Space Management Initiatives

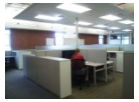
- University Space Principles Updated

- **New Space Management Software**

- Tagging People to Space Initiative

- Research Productivity Measures

- Strategic Space Reserve



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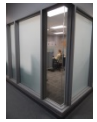


New Space Management Software: FM: Interact

Benefits

- Space data linked to floor plans – streamlines data entry
- Departmental level access and management
- User friendly reporting

Progress:

- Transitioned data for 1,400 buildings and over 40,000 rooms
- Trained 100+ employees to date
- Departments can request access and training

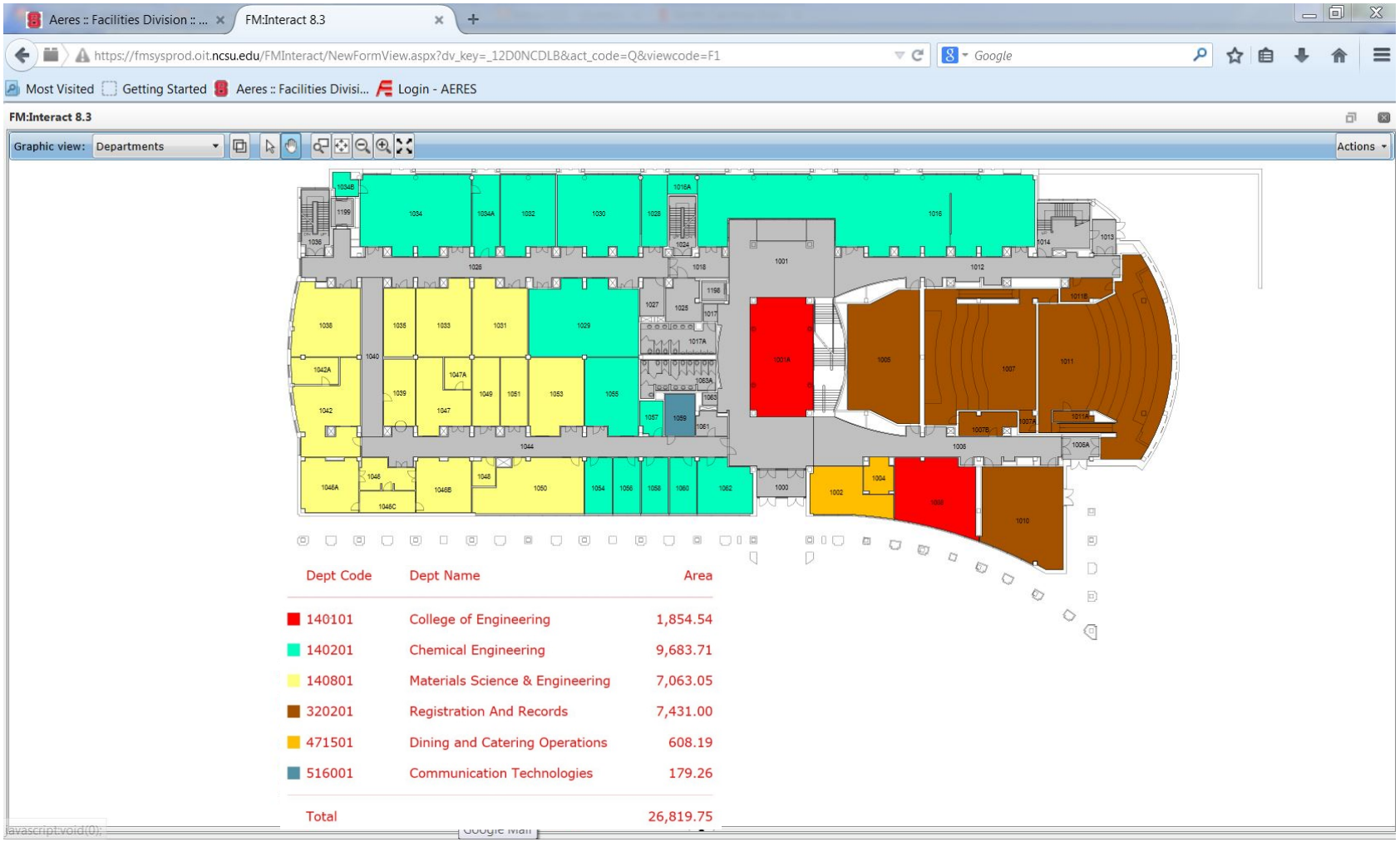
Space Management

SPACE

Buildings
Floors
Rooms
Employees

New Space Management Initiatives

New Space Management Software: FM: Interact



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- **Tagging People to Space Initiative**

- Research Productivity Measures

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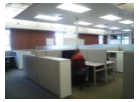

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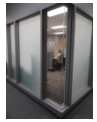


Tagging People to Space

Source: http://search.dilbert.com/comic/Office%20Space

Office Space

Research Space

Software Interfaces

Maintenance of Data

Implementation: Fall 2014

Implementation team: OIT, OUA, HR, ComTech, C&G, OIRP

New Space Management Initiatives

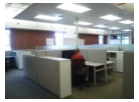
- University Space Principles Updated

- New Space Management Software

- Tagging People to Space Initiative

- **Research Productivity Measures**

- Strategic Space Reserve



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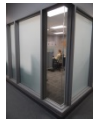
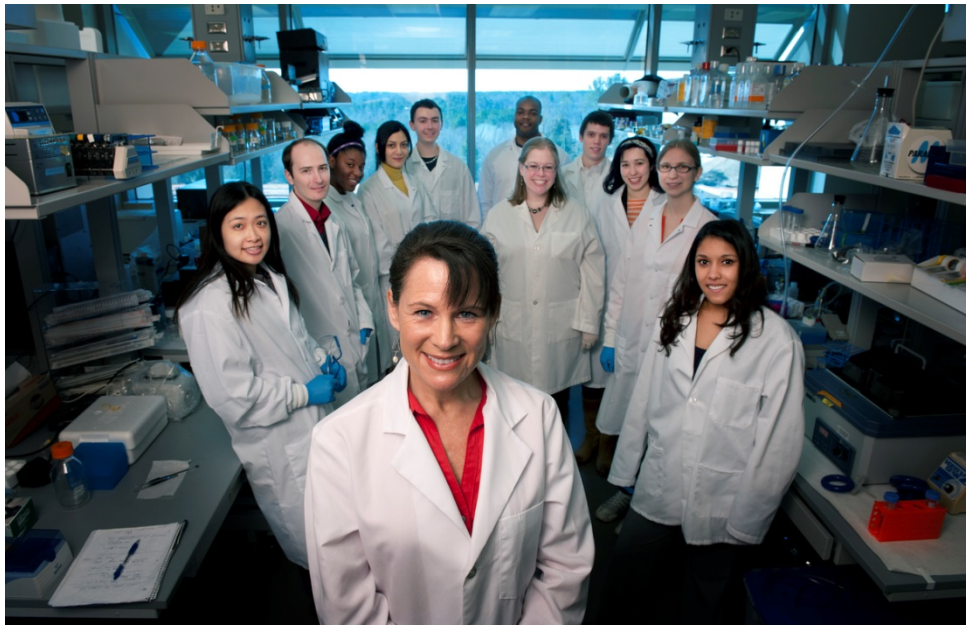


Research Productivity Metrics



Grant Activity

Publications/Exhibits

Strategic Outreach/ Economic Development

Strategic Space Reserves

- Space Committee Request
- College Identified
- % of Space Need Met
- Repurposed space
- Investments

Strategic Space Reserves

Progress:

- Strategic Space Reserves requested: **85,766 ASF**
- Academic Units response: **107,823 ASF** for reassignment, renovation and/or repurposing

Status:

- **Projects Completed: 56,762 ASF**
- **Under Study: 13,035 ASF**
- **Available: 38,026 ASF**

New Space Management Initiatives

- University Space Principles Updated

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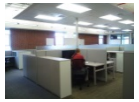

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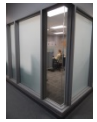

Reward Innovation and New Ideas

Before

SAS Graduate Student Hoteling

- Doubled grad student occupancy: 18 to 36 (total 994 ASF)
- Gained four faculty offices (640 ASF)
- Amenities (36 assignable lockers w/power)

After

Reward Innovation and New Ideas

Industrial Extension Service

- Lease Space: 12,444 SF
- Reviewed space utilization & work style needs
- Extension personnel travel the state
- Solution includes several types of workstations

Research Building IV

Reward Innovation and New Ideas

Industrial Extension Service

- New work-style configuration
- **8,000 ASF** - 36% space reduction
- Added amenities
- Accommodates local and traveling staff

Research Building III

Moving Forward

Source: www.latitude.com

Moving Forward

Goal: Classrooms meet the UNC-GA utilization goal of a campus average of 35 hours per week and 65% fill ratio

Actions:

- Provide consistent technology and support
- Spread courses throughout the day
- Match classroom inventory with changing demands (size, seating type, etc.)
- Balance innovative pedagogy & scheduling efficiency

Moving Forward

Goal: Class Labs meet the UNC-GA utilization goal of 20 hours per week and 75% fill ratio

Actions:

- Require consistent scheduling
- Promote cross-departmental sharing of class labs
- Analyze UNC System Space Standard to verify metrics

Moving Forward

Goal: Reduce the **Office and Support Space** SF per person to more closely align with UNC-GA standard

Actions:

- Identify, analyze, and address underutilized space
- Centralize scheduling of conference rooms
- Change Culture!

Moving Forward

Goal: Develop additional metrics for managing/growing **Research Space**

Actions:

- Develop discipline-specific productivity metrics
- Assign space at the lab bench level
- Further development of a campus-wide strategy for equipment
- Continue to reallocate underutilized space for strategic priorities
- Identify funding for improvements

Questions?

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Lisa Johnson: lhjohns2@ncsu.edu