

# IMPROVING SPACE UTILIZATION

*Administrative Leadership Meeting  
May 10, 2011*

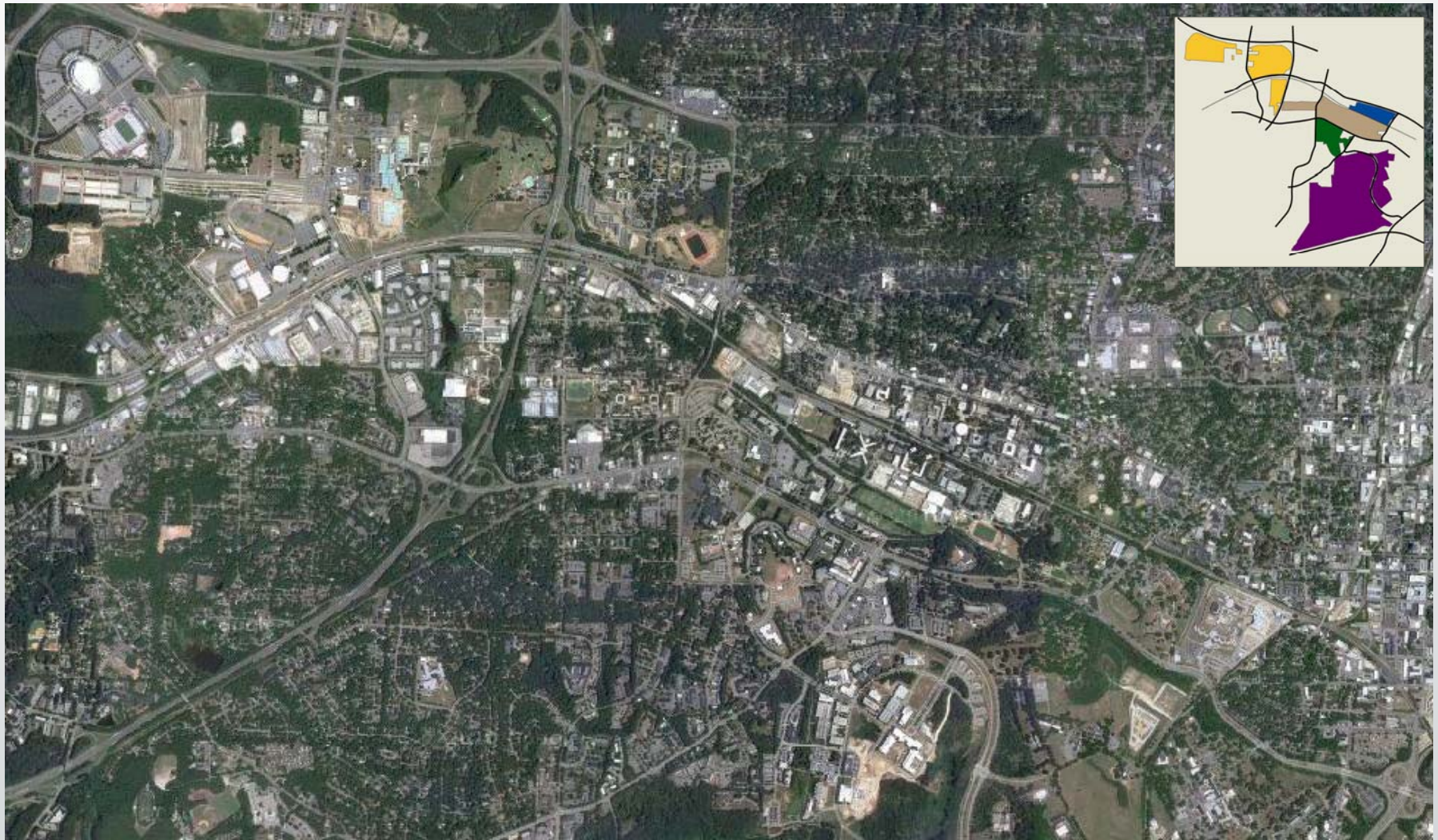
Warwick Arden  
Provost and Executive Vice Chancellor

Charles Leffler  
Vice Chancellor of Finance and Business

Terri Lomax  
Vice Chancellor for Research and Innovation



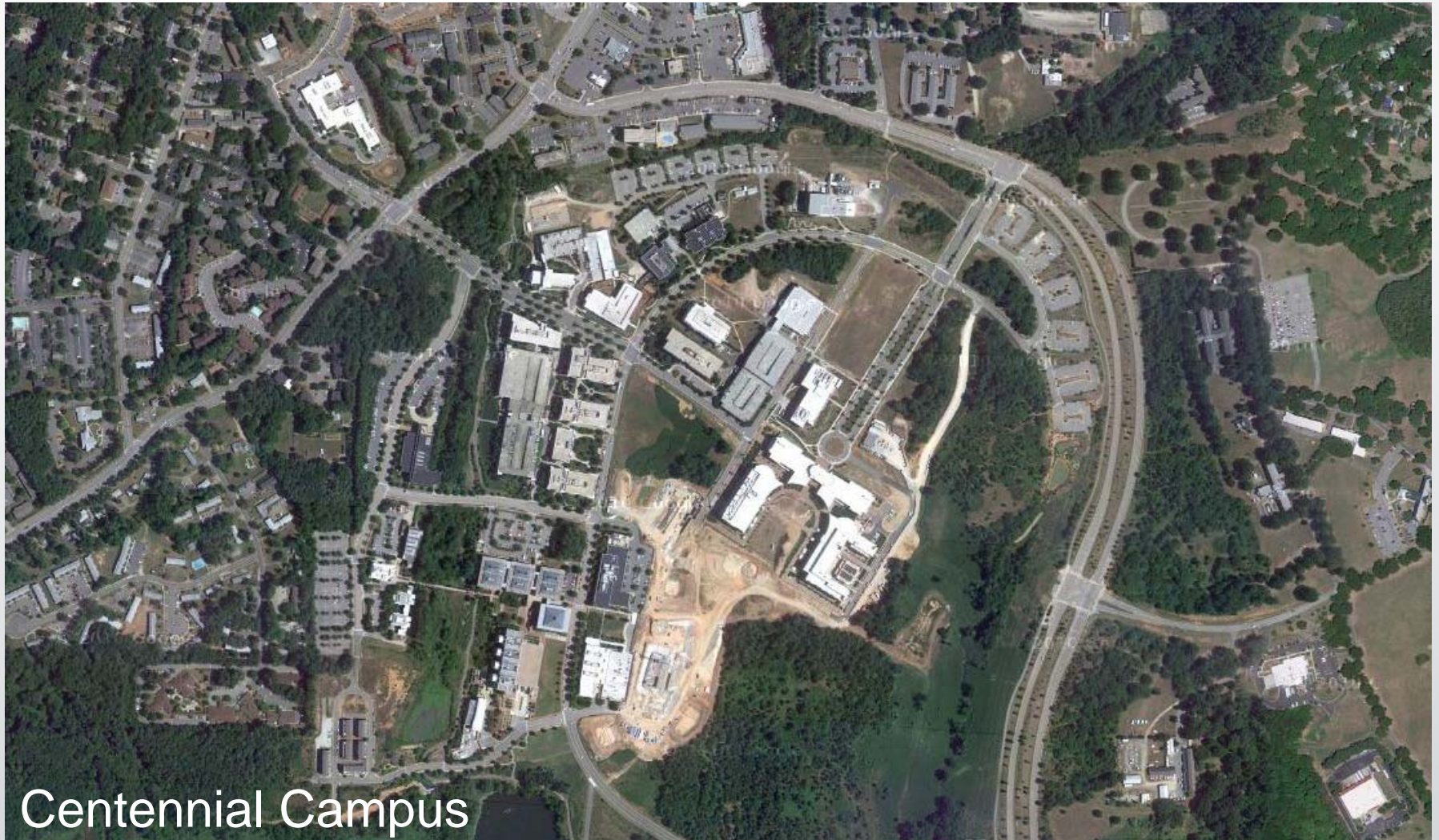
# View of Campus



[www.google.com/maps](http://www.google.com/maps)



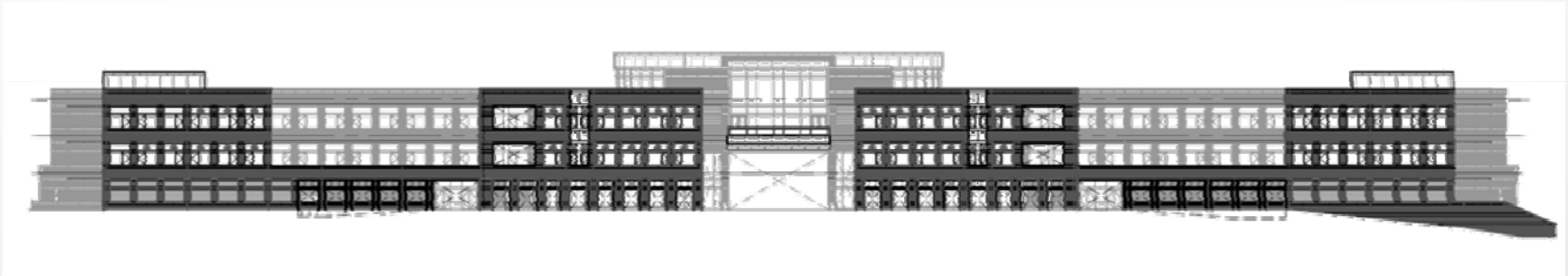
# View of Campus



Centennial Campus

[www.google.com/maps](http://www.google.com/maps)

# Building Space Data

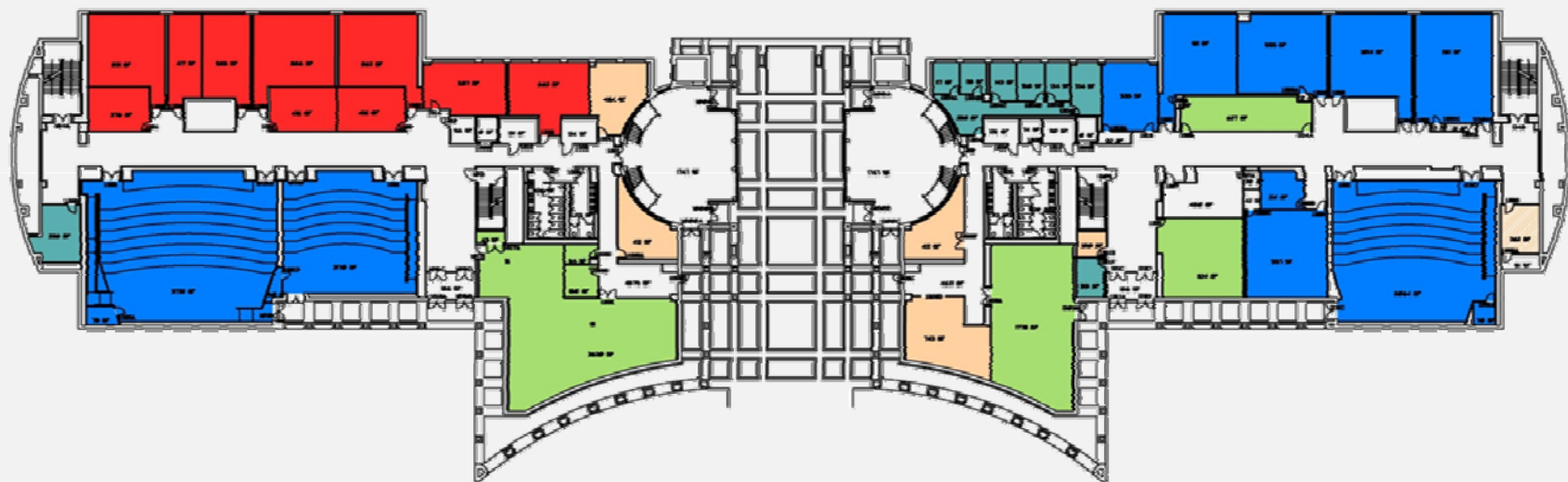


# Building Space Data

Roof		
3 <sup>rd</sup> Floor		
2 <sup>nd</sup> Floor		
1 <sup>st</sup> Floor		
Basement		



# Building Space Data



## LEGEND

Classrooms	Research
Teaching Labs	Special Use
Open Labs	General Use
Study / Library	Support
Office	Health Care

# Drivers to Improve Space Utilization

- **Constrained Resources**
- **Enrollment Growth / Graduate Program Growth**
- **Research Growth** (Including Interdisciplinary Activities)
- **Increased Accountability**
- **Sustainability Initiatives**

# Space Planning Process

- **University Space Committee**
  - Guiding Principles
  - Space Request
  - Local Space Committees
- **Space Analysis Updated**
  - Every 3 to 4 Years
  - Collaborative Effort
  - Interactive Process
  - Space Standards



Photograph: E. Funkhouser



# Capital Project Plan

- **Rolling 6-year Capital Plan**
- **Capital Projects List informed by College Space Analysis**
- **Current space deficits, future growth, space condition and university initiatives considered**
- **Facility Condition Assessment Program**
- **Appropriated vs Auxiliary Space**

# Space Standards



Photograph: C. Williford

- **UNC System Standards**
  - NC State Specific
- **Classifying Space**
  - Occupant
  - Higher Ed Coding
- **Data as a Tool**

*“Facilities are built and maintained to create a unified community that is comfortable and aesthetically pleasing and nurtures a fertile exchange of ideas across academic and administrative disciplines.”*

*A Campus of Neighborhoods and Paths: NC State University Physical Master Plan*



# **Myth:** **It's MY space and I must protect it**

- **Cultural attitude toward space**
- **Colleges/Units are stewards of university space**
- **The most sustainable building is the one not built**



*Photograph: [www.eyefetch.com/image.aspx?ID=330175](http://www.eyefetch.com/image.aspx?ID=330175)*

# Myth: Occupancy = Fully Utilized Space



*Photograph: L. Moore*

**Often Office and Research space is underutilized  
due to condition or remote location.**



# Myth: Utilized = Fully Occupied Space



*Photograph: L. Moore*

**Space may be occupied and still underutilized.**

# Myth: Space is FREE



**The cost of space is not just construction.  
It also includes ongoing operations and  
maintenance.**

*Source: Phil Rouble, "Successful Space Management – Algonquin's Experience/  
Experiments! <http://www.philrouble.ca/space-management> (accessed 12/8/2010).*

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# Annual Cost of Space is Significant

## OFFICE & CLASSROOM MAINTENANCE & OPERATING COST \$15 / ASF

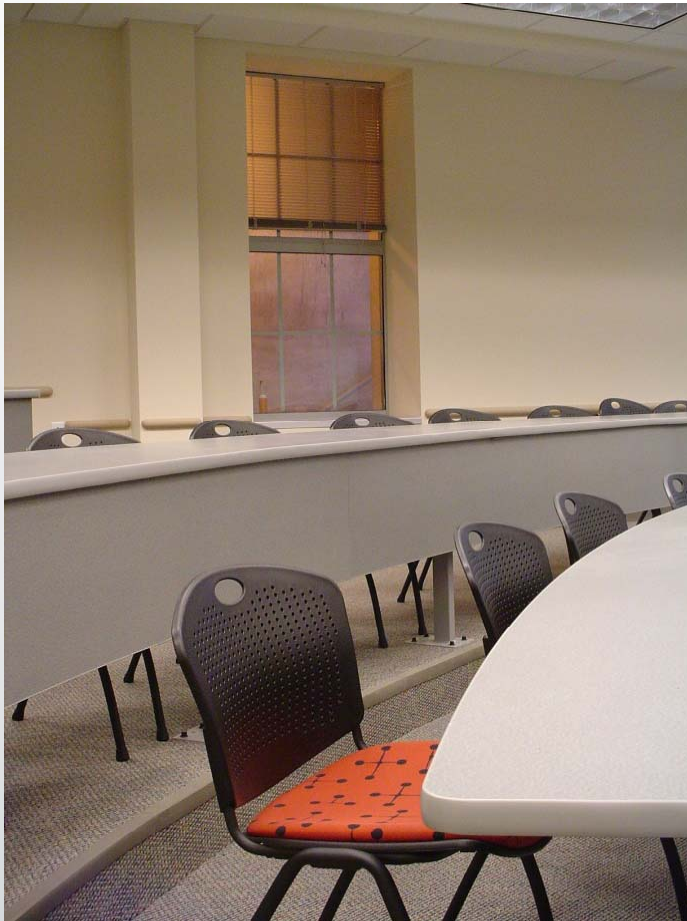
Typical Office Annual Cost	<b>\$2,100</b>
Mid-Size Classroom Annual Cost	<b>\$9,750</b>

## RESEARCH SPACE MAINTENANCE & OPERATING COST \$18 / ASF

Mid-Size Research Lab	<b>\$16,200</b>
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(Includes utilities and maintenance cost;  
Excludes deferred maintenance cost)

# Myth: There are not enough classrooms

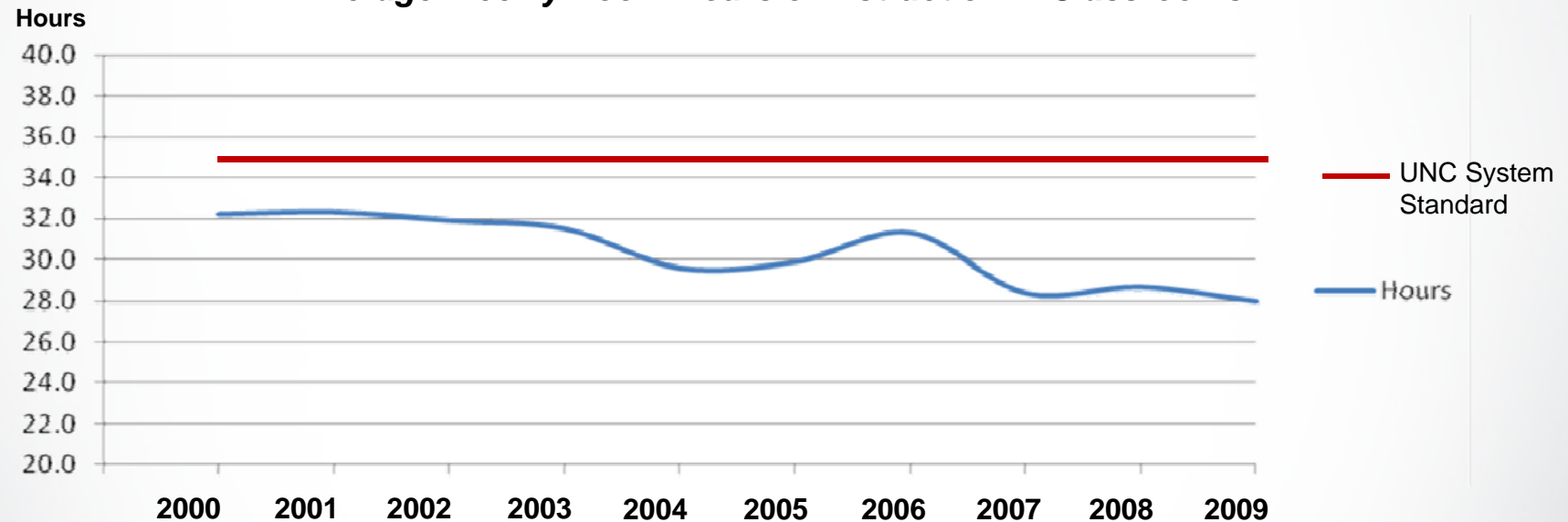


Photograph: R. Yaeger

- Not meeting the UNC-System standard of 35 hours per week
- Factors:
  - Scheduling
  - Classroom Size
  - Technology

# 110 Classroom Utilization

*Average Weekly Room Hours of Instruction in Classrooms*



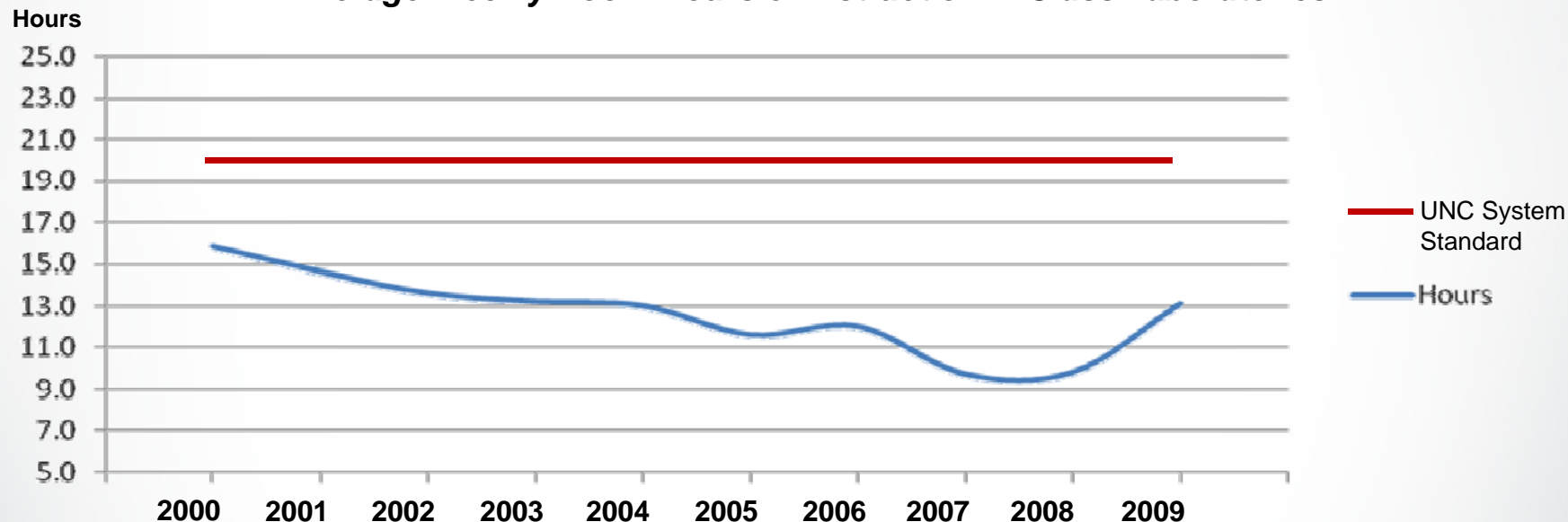
Photograph: L. Moore

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# 210 Teaching Lab Utilization

*Average Weekly Room Hours of Instruction in Class Laboratories*



Photograph: L. Moore

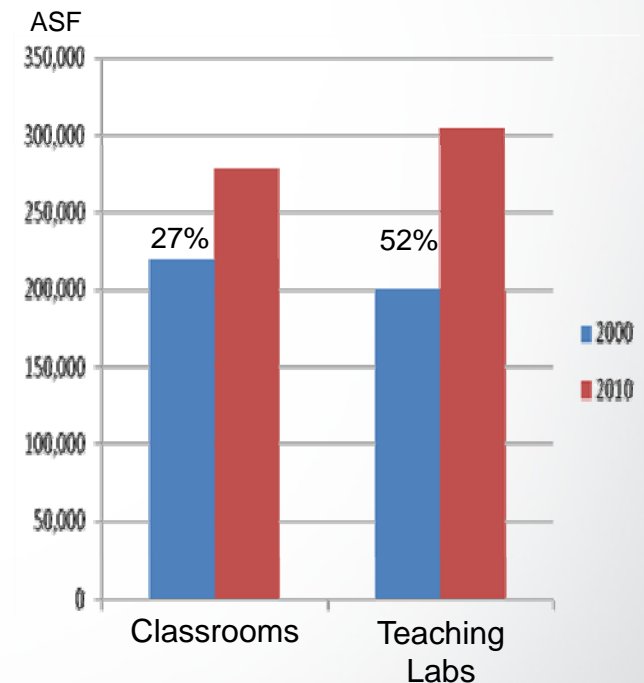
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# Classroom and Teaching Lab Details

## TEACHING SPACE:

**2000 = 15 ASF per student**

**2010 = 18 ASF per student**



# Student Study Space

**Standard:**

**Study seats per student headcount = 20%**

- **In 2010 = 6.9%**
- **With Opening of Hunt Library = 11.8%**
- **With Modification in DH Hill – 13.3%**

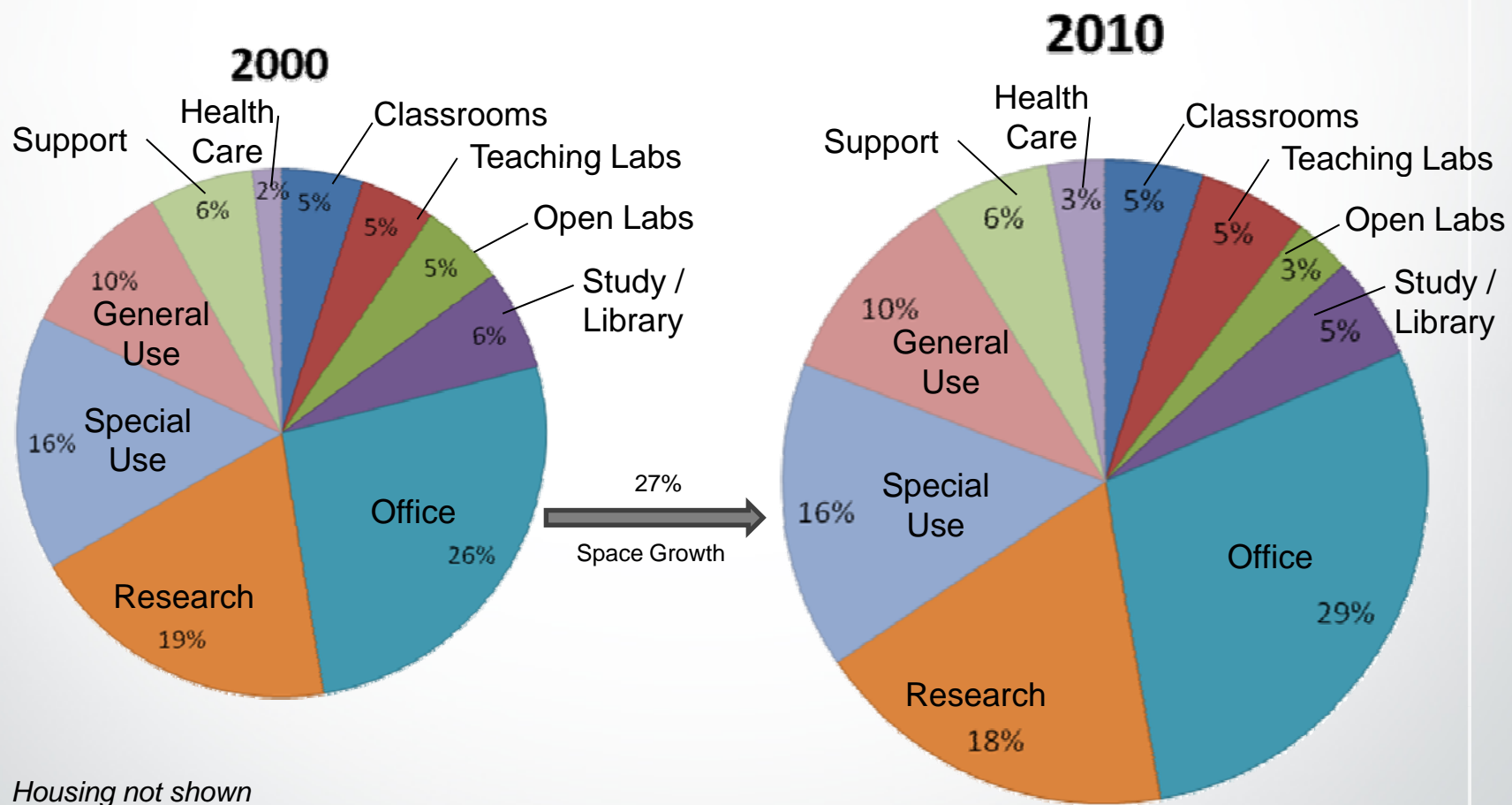


*Photograph: L. Moore*

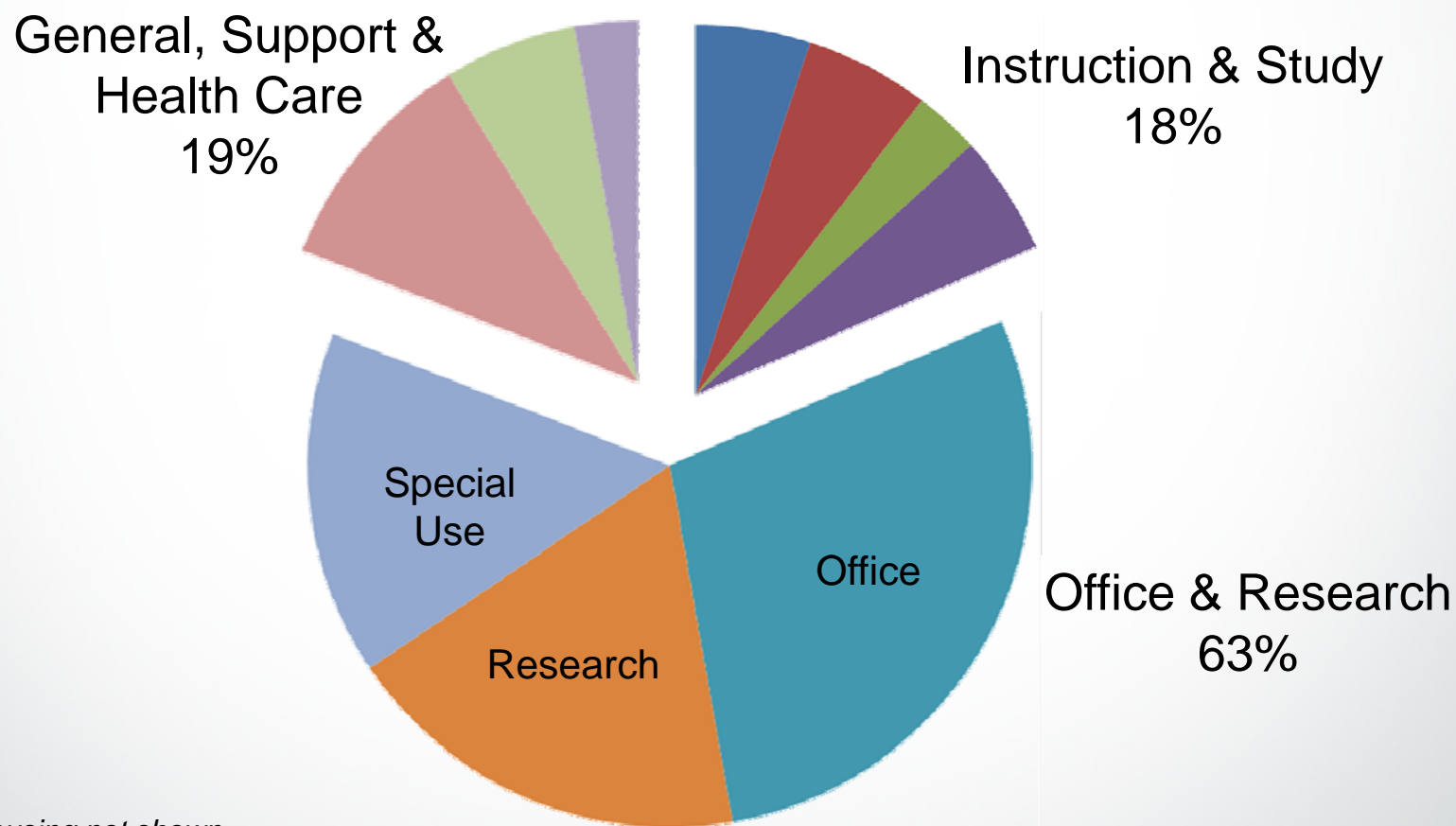
*Sources: NC State UPA Fall 2010 census enrollment and 2012 projected enrollment; Hill Library Space Backfill Plan, September 21, 2009*



# Space by Type



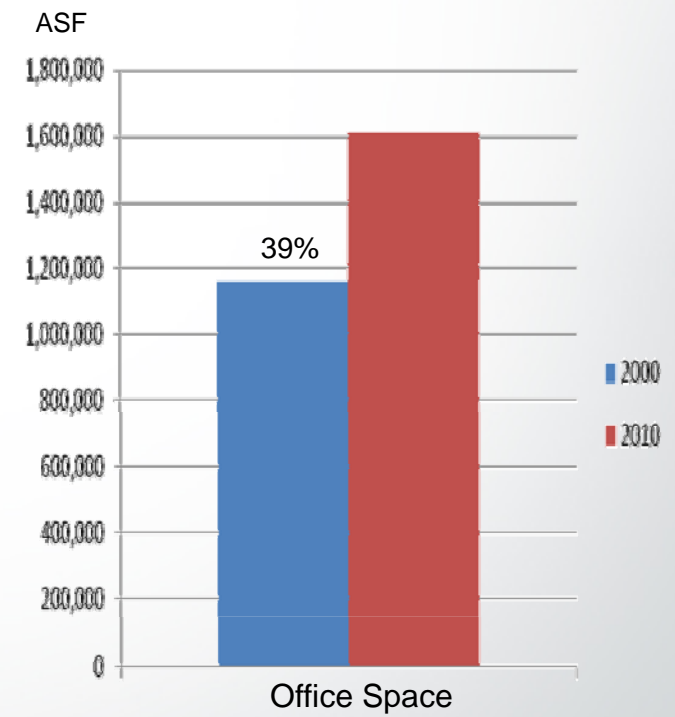
## Space by Type



*Housing not shown*

# Office Space

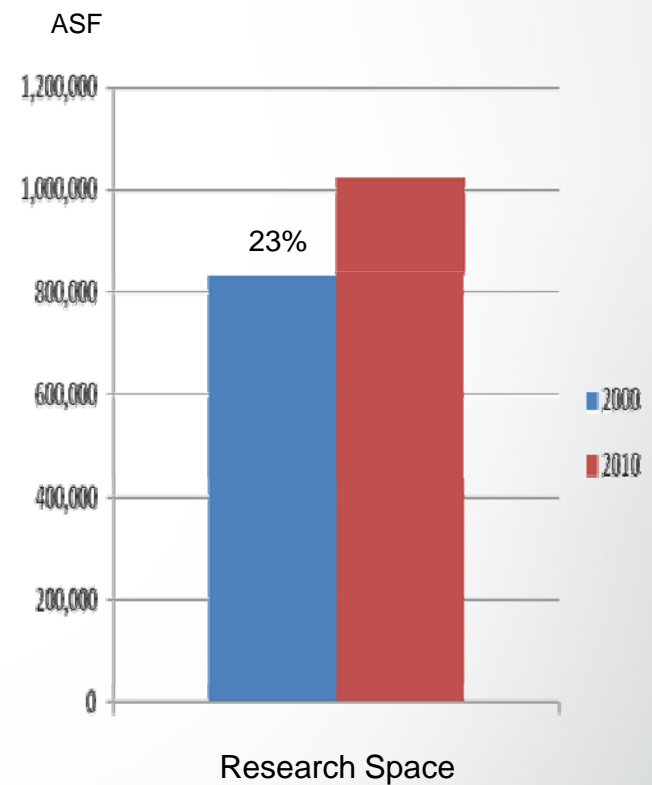
- **SF of Office Space**  
**2000 = 168 ASF per Employee**  
**2010 = 201 ASF per Employee**
- **Office Space Need is Met**  
**Currently at 23% above standard**



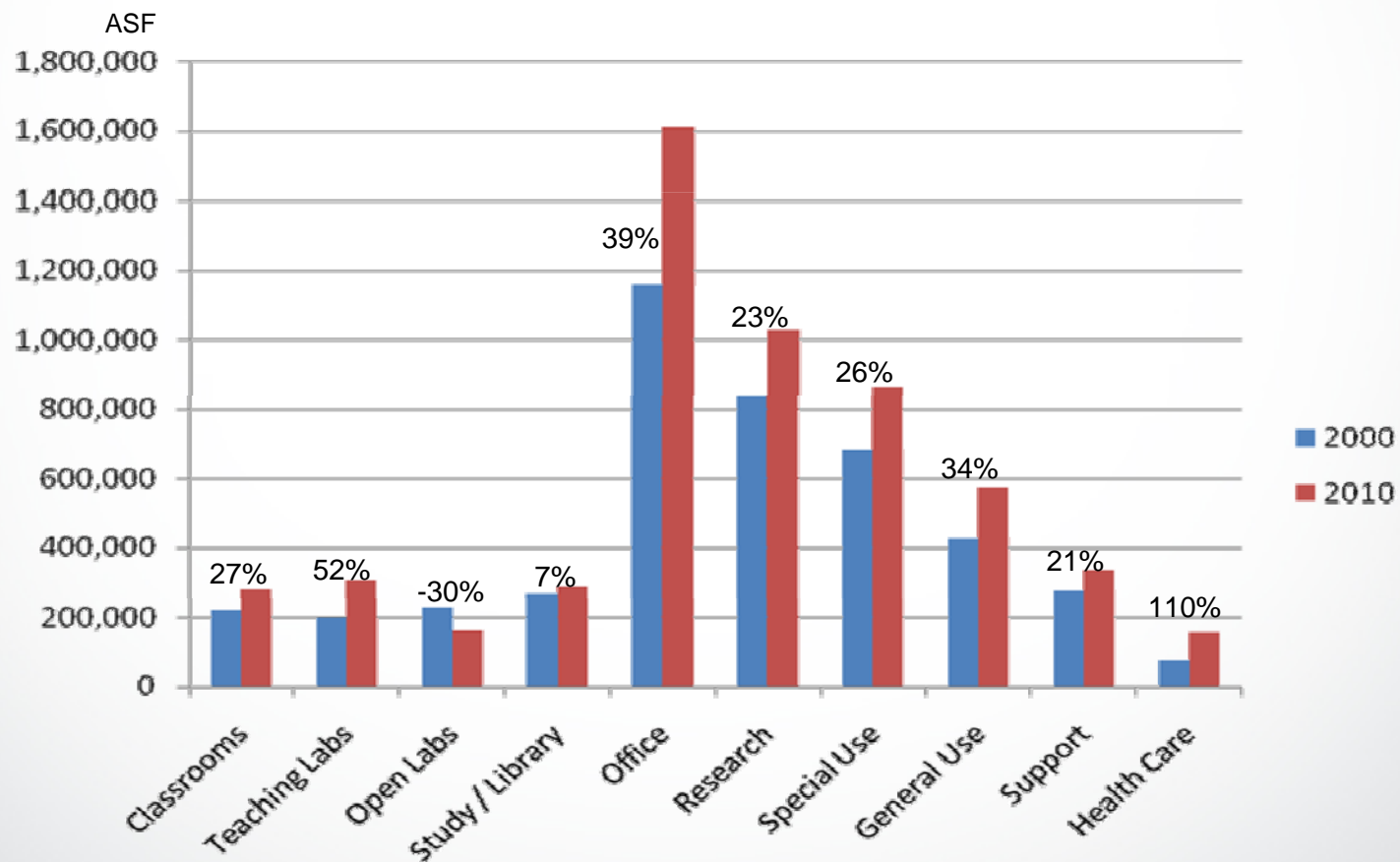


# Research Space

- **10% Growth in Research Faculty & Support Staff**
- **23% Growth in Research Space**
- **132,625 ASF of Research Space used for Service Centers**
- **Service Center Space impacts F&A Funding**

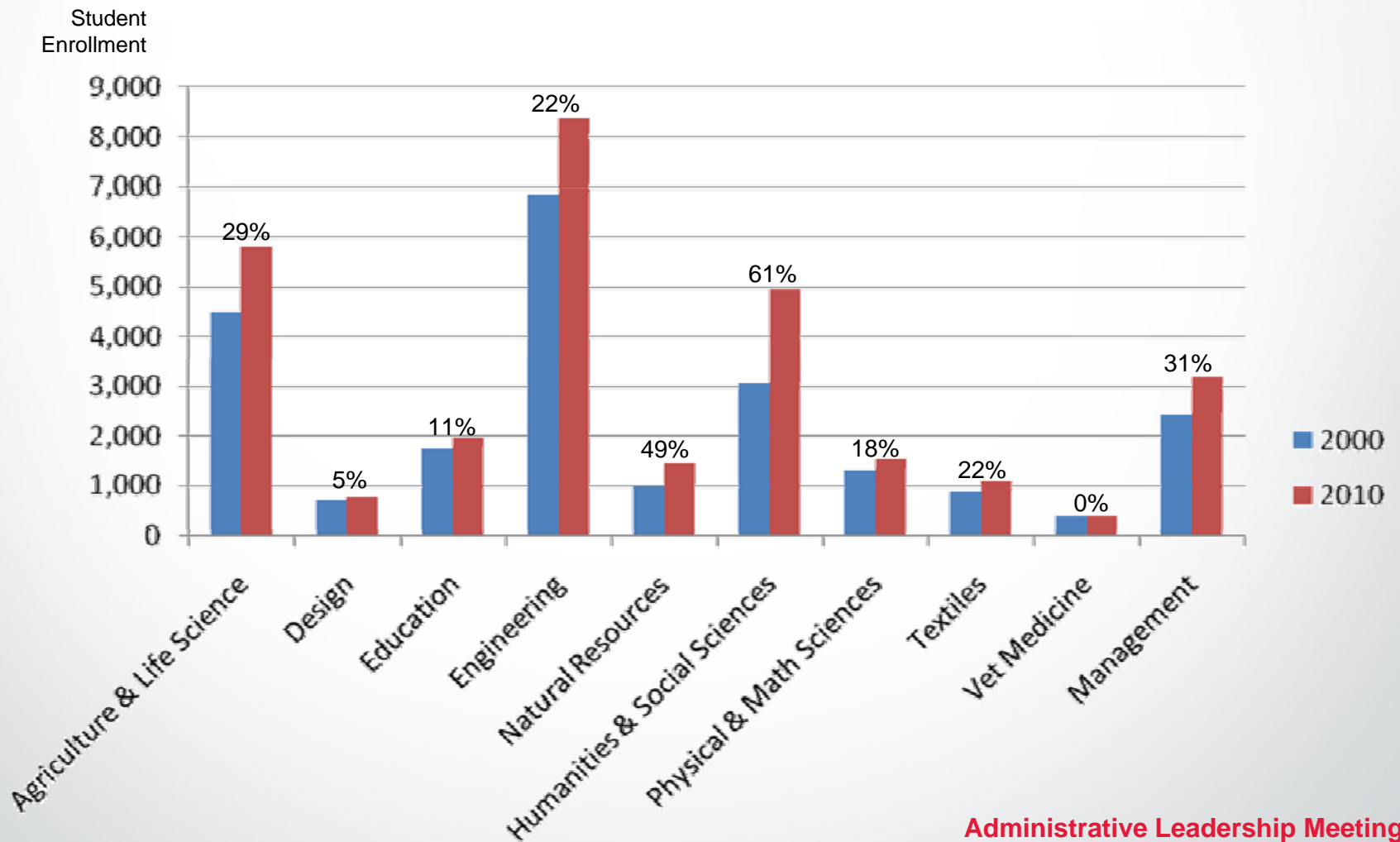


# Change in Space by Type



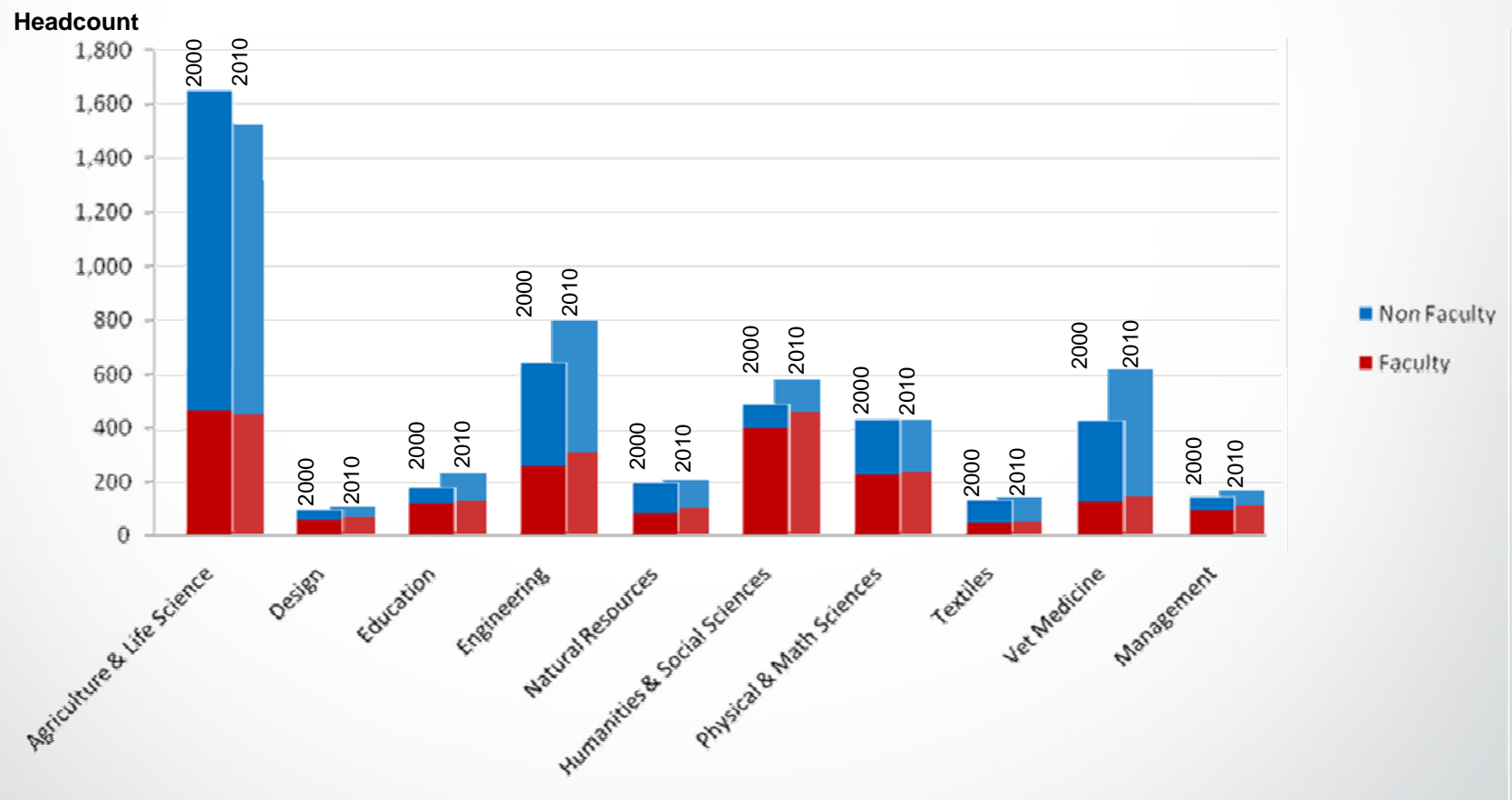
Housing not shown

# Enrollment Change by College

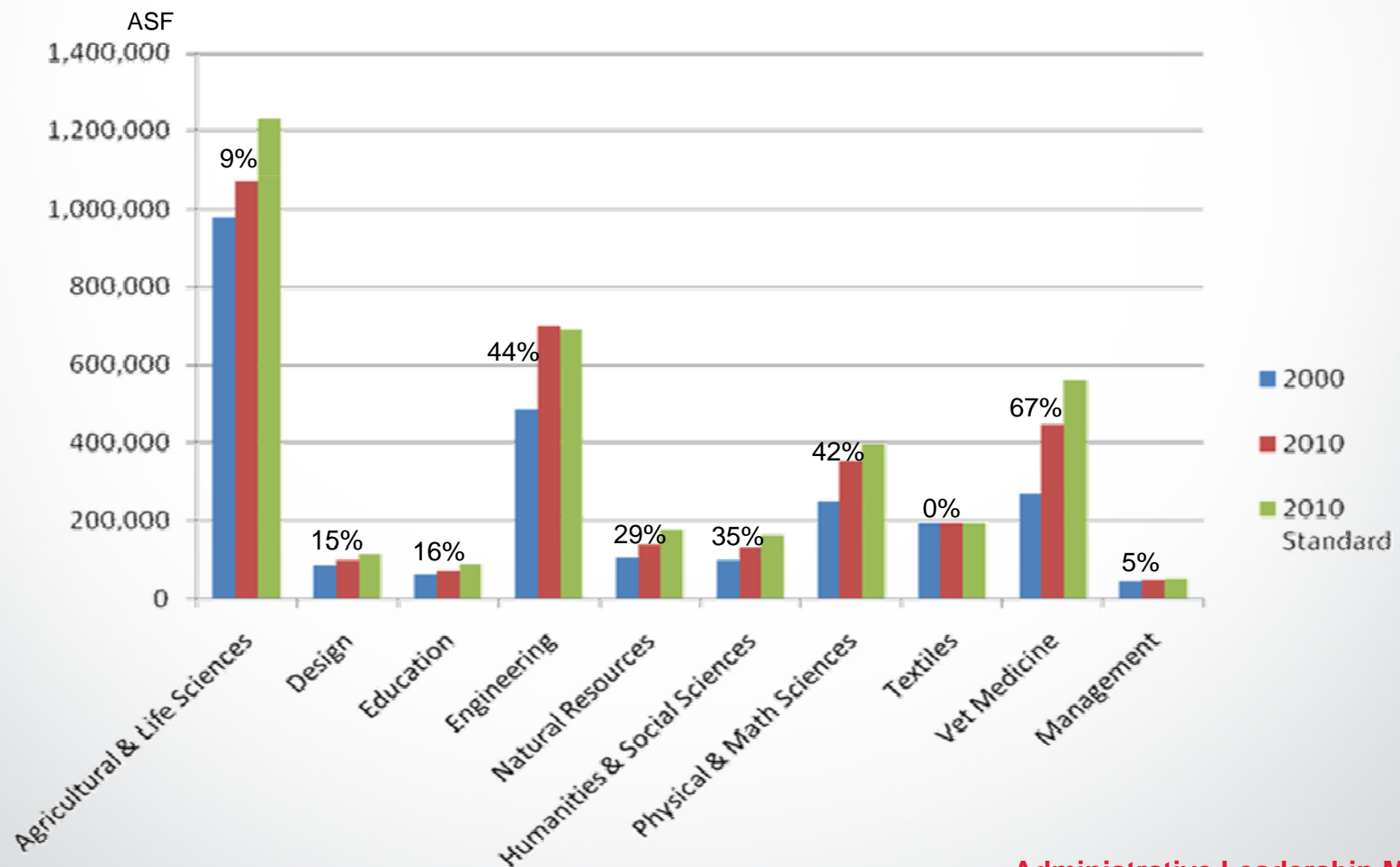




# Change in Employees by College



# Change in Assignable Space by College



# Factors to Improve Space Utilization

- **Actionable Data**
- **Enforceable Space Standards**
- **Redeploying Space**
- **Incentives**

## Types of Incentives

- **Award new space to units that are below standard**
- **Improve space to encourage sharing or shedding**
- **Penalize units for not meeting utilization targets**
- **Account for actual space costs at program level**



## **Future Efforts**

- **Initiate College Space Analysis**
- **Re-alignment & Strategic Plans influence Space Allocations**
- **Re-evaluate Research Space Standard**
- **Connect Grant & Start-Up Packages with Space**
- **Decrease Lease Space**
- **Review Rental Rate Structure**
- **Repurpose Space**



Photograph: L. Moore