USG Space Utilization Initiative

USG Facilities Officers Conference

25 October 2012

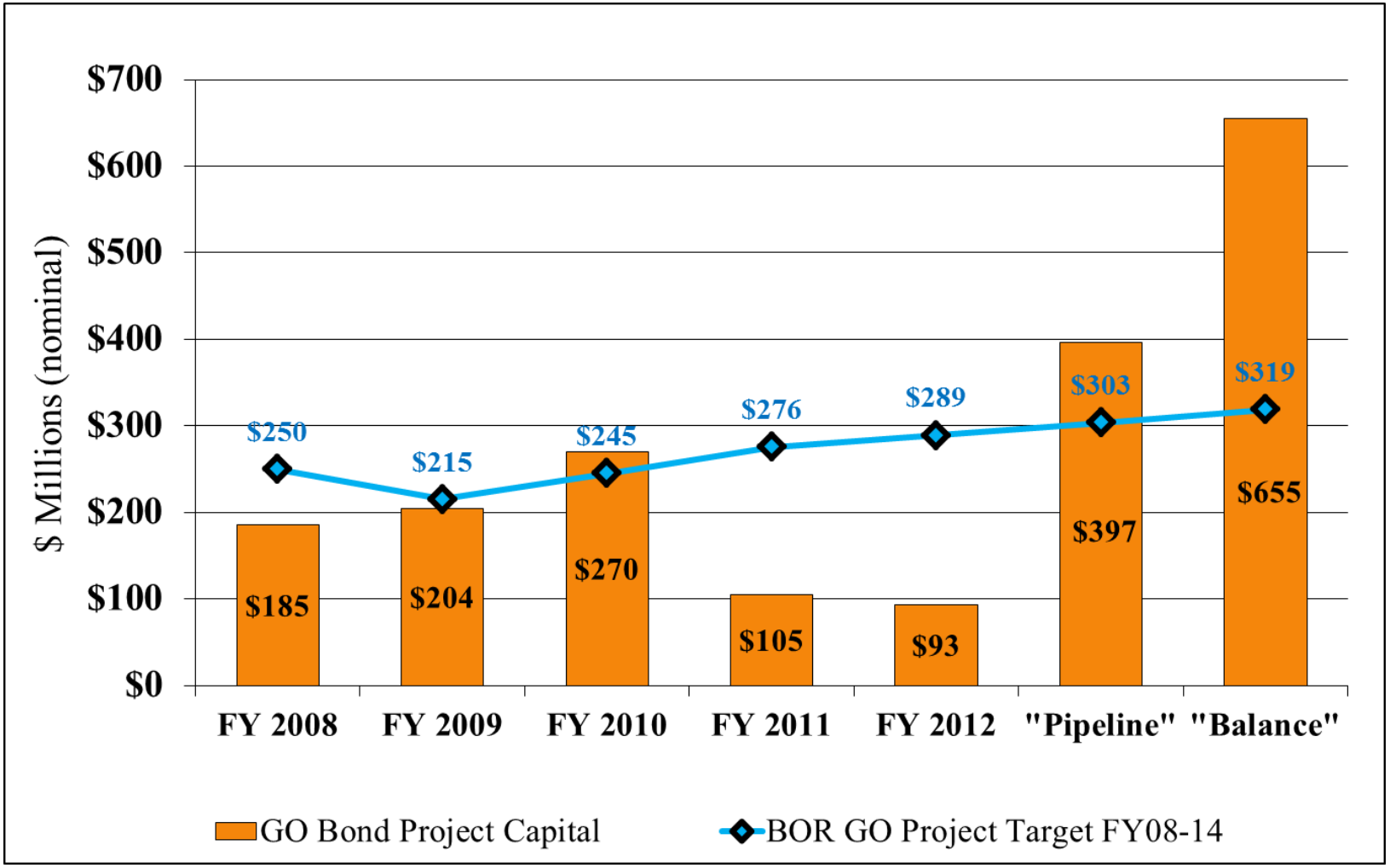
"Creating a more educated Georgia"

Agenda

1. Why focus on space utilization?
2. How we got here
3. What we've done and what we've learned
4. What's next?
   - Phase II
   - Facilities Technology
5. Questions and Discussion

Why Focus on Utilization?

USG Capital Improvement Program Status, June 2011



Why Focus on Utilization?

"In this new environment, the major challenge is not building capacity: it is first to ensure the existing capacity is used as efficiently and effectively as possible. Accordingly we must ensure that we are utilizing our entire space well before new buildings are approved."

Chancellor Henry "Hank" Huckaby
to Board of Regents
14 September 2011

Phase I Scope

Participatory Pilot Study

- 6 diverse institutions:

  ABAC, Clayton, Columbus, GPC, SSU, SPSU

- 2 expert consultants:

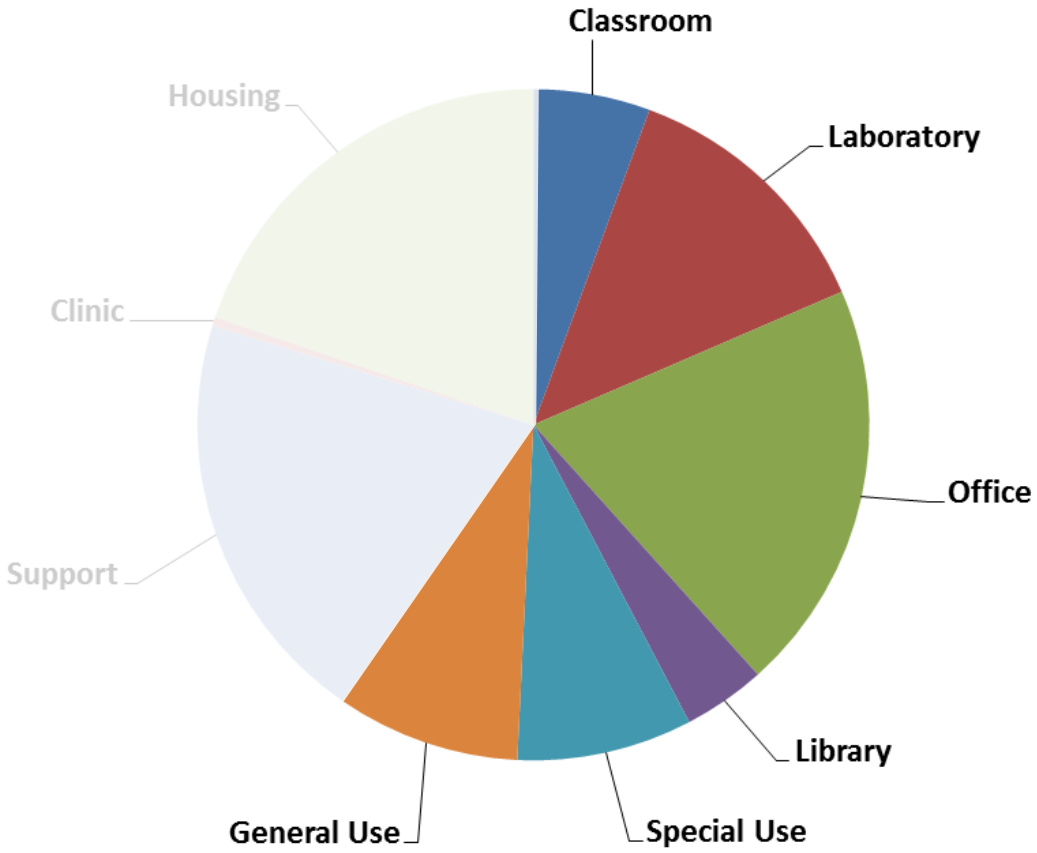
  Paulien & Associates, Sasaki Associates

- Working group:

  Pilot institutions, consultants, system office

- Primary tasks:
  - Assess existing pilot institution space utilization
  - Develop uniform approach to utilization data and assessment

Why Focus on Utilization?



System Space Overview

58 m Total Assignable SF
(owned and leased)

Six key room types = 60%

Classroom + Lab = 10.9 m

Office = 11.7 m

	Classroom	Lab	Office	Library	Special	General
ASF	3.3 m	7.6 m	11.7 m	2.3 m	4.9 m	5.2 m

Why Focus on Utilization?

- Traditional normative space planning and needs assessment models are not effective
- New thinking needed to overcome constraints
  - Public sector/state government issues
  - Higher education issues
- We can no longer afford the “new construction first, all else later” approach to capital investment

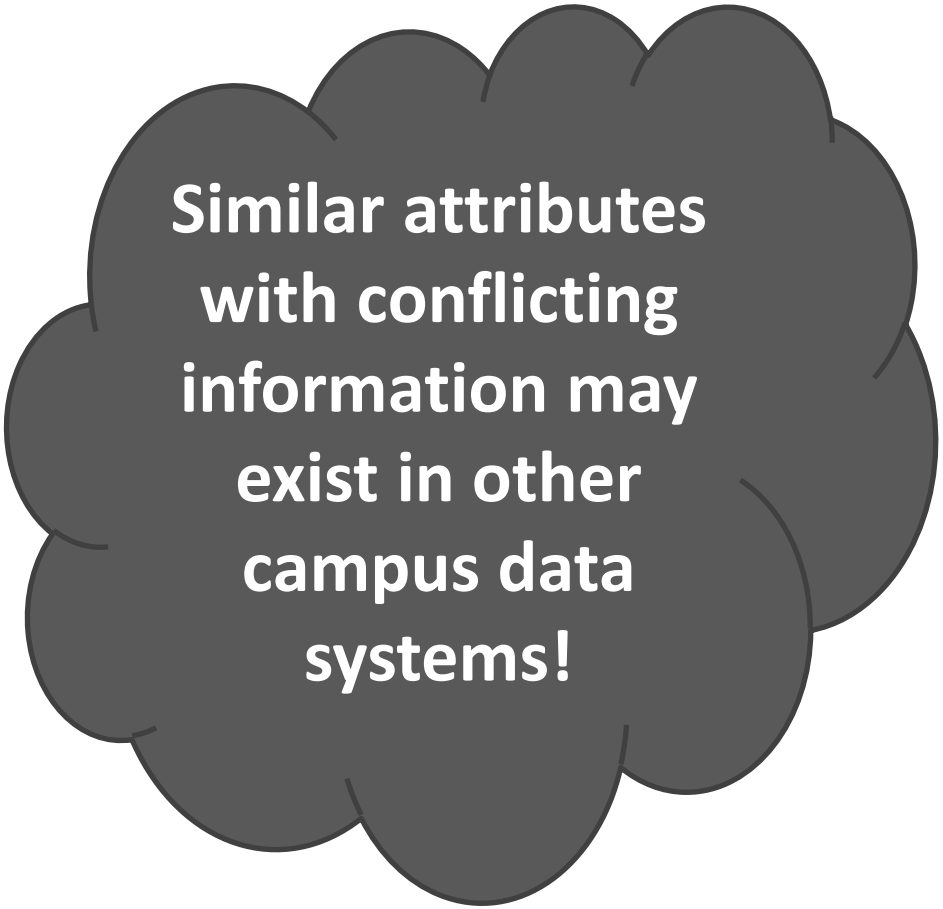
Phase I – Key Observations

1. We need better data to accurately assess space utilization
   - Pilot institutions had difficulty providing valid data
     - Space – rooms and buildings
     - Space users - courses, events, and people
   - Most campuses will need significant validation
   - Pilot approach shaped solutions
   - Immediate priority – validating space data

Space Validation

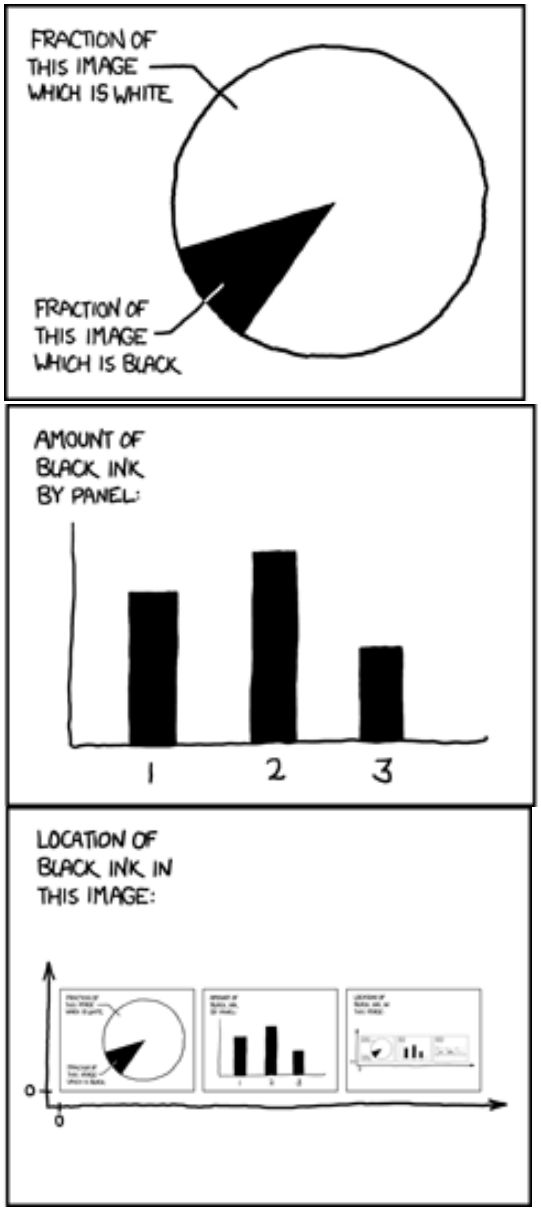
System Facilities Data

- 28 building attributes
- 7 room attributes
  - Room Number
  - Room Description
  - Room Area
  - Room Use Code
  - Number of Stations
  - Program Class
  - CIP (Classification of Instructional Program)



Space Validation

- Most Critical Room Attributes
  - Room Number (Unique ID)
  - Room Use Code
  - Room size in ASF
  - Station Count (where applicable)
  - CIP Code (where applicable)
- Space Data Sources
  - Tabular Data
  - Floor Plans
  - Buildings (physical reality)

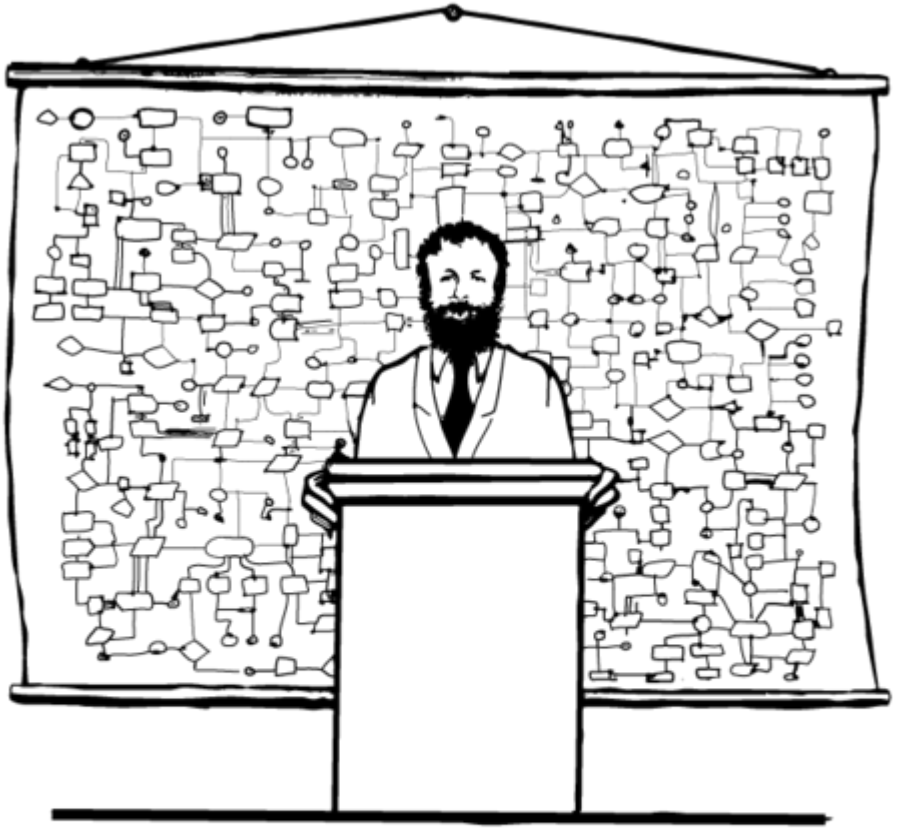


3 Distinct Steps

- Validate data
  - Confirm key building attributes and all room attributes
  - Identify and rectify inconsistencies between data systems
- Enter and edit validated data in institution source system
  - Banner
  - 3rd party application
- Submit Data for Fall 2012 to system office via new Facilities Inventory Data Collection (FIDC)
  - Midterm Collection (9- 16 November 2012)
  - End of Term Collection (8-15 January 2013)

Room Use Coding Changes – Fall 2012

- Changes are incremental
- 2 codes with new descriptions
- 8 codes discontinued and mapped to 11 new codes
- Changes improve accuracy and relevance
- Changes support new overlay taxonomy



"Now that you have an overview of the system, we're ready for a little more detail"

Room Use Coding Change Example

Scheduled Labs

210 Dx Learning Classroom

211 Specialized Classroom

212 Class Lab – lab only

New Scheduled Labs

211 Discipline Class Lab

212 Computer Classroom

213 Dx Learning Classroom

Open Labs

220 Special Class Lab

230 Individual Study Lab

New Open Labs

221 Discipline Open Lab

222 Testing/Services Lab

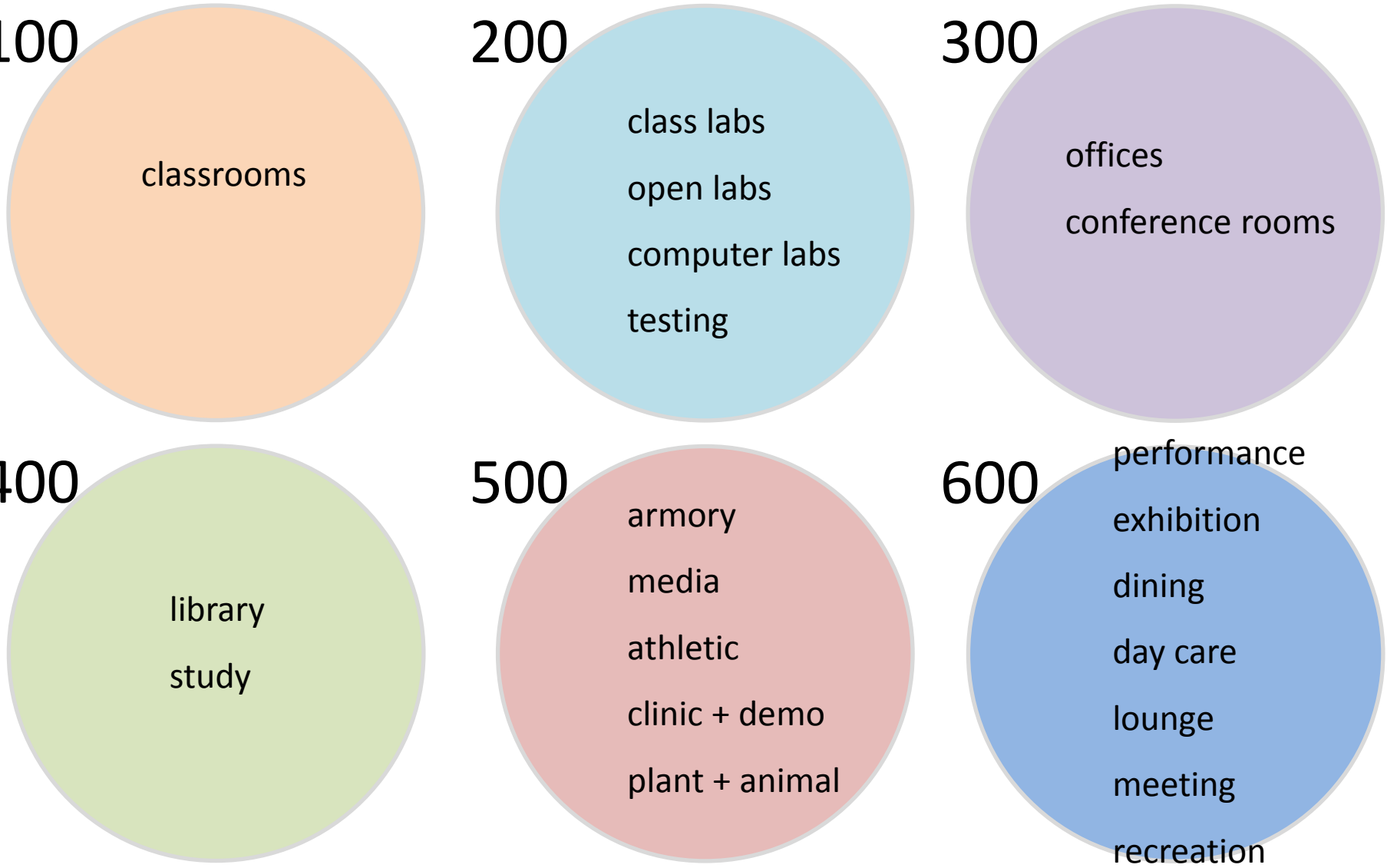
411 Open Computing Lab

412 Learning Support Lab

Phase I – Key Observations

2. Space utilization varies widely
   - Between institutions, campuses, even buildings on the same campus
   - Goals
     - Metrics for consistent, relevant comparison
     - Target values and ranges within metrics

FICM Room Use Code Taxonomy



New Room Use Taxonomy

classrooms

teaching labs

computer labs

testing

meeting

offices

conference rooms

other

armory

media

athletic

performance

exhibition

dining

day care

p + e

social / study

library

study

special instr.

clinic + demo

plant + animal

sport + rec.

lounge

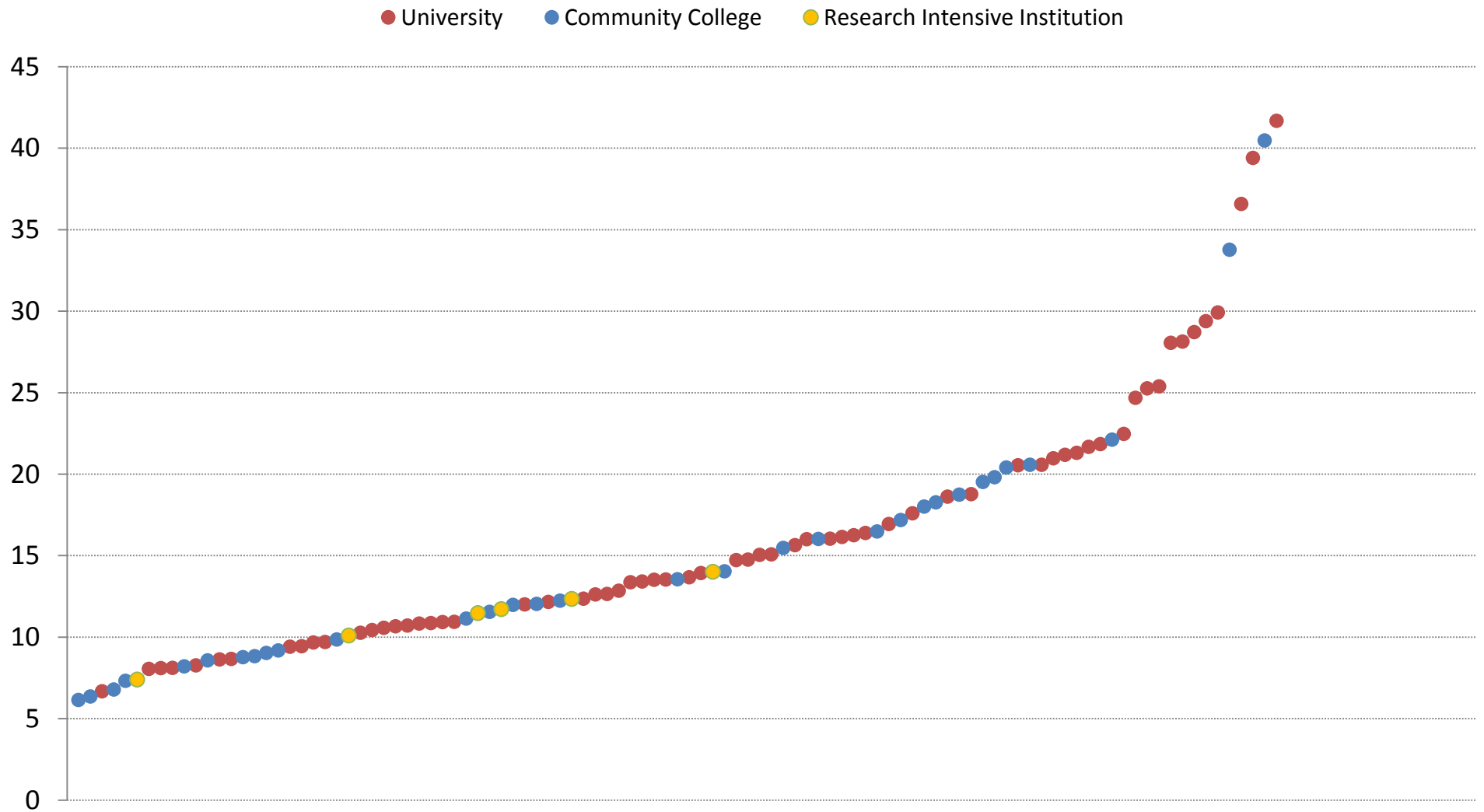
meeting

recreation

New Metrics

Classroom	NEW
Classroom Service	% of classroom
Discipline Class Lab	Individual – Hours of use / station occupancy
Discipline Class Lab Service	% of class lab space
Discipline Open Lab	
Special Instruction	NEW
Performance/Exhibit	
Office	NEW
Office Service	% of office space
Social/Study	NEW
Testing/Services Lab	Total ASF
Meeting	ASF/CrHr
Dining	ASF/CrHr
Merchandising	ASF/CrHr
Other	ASF/CrHr

Classroom - ASF per student FTE



Classroom Metric Example

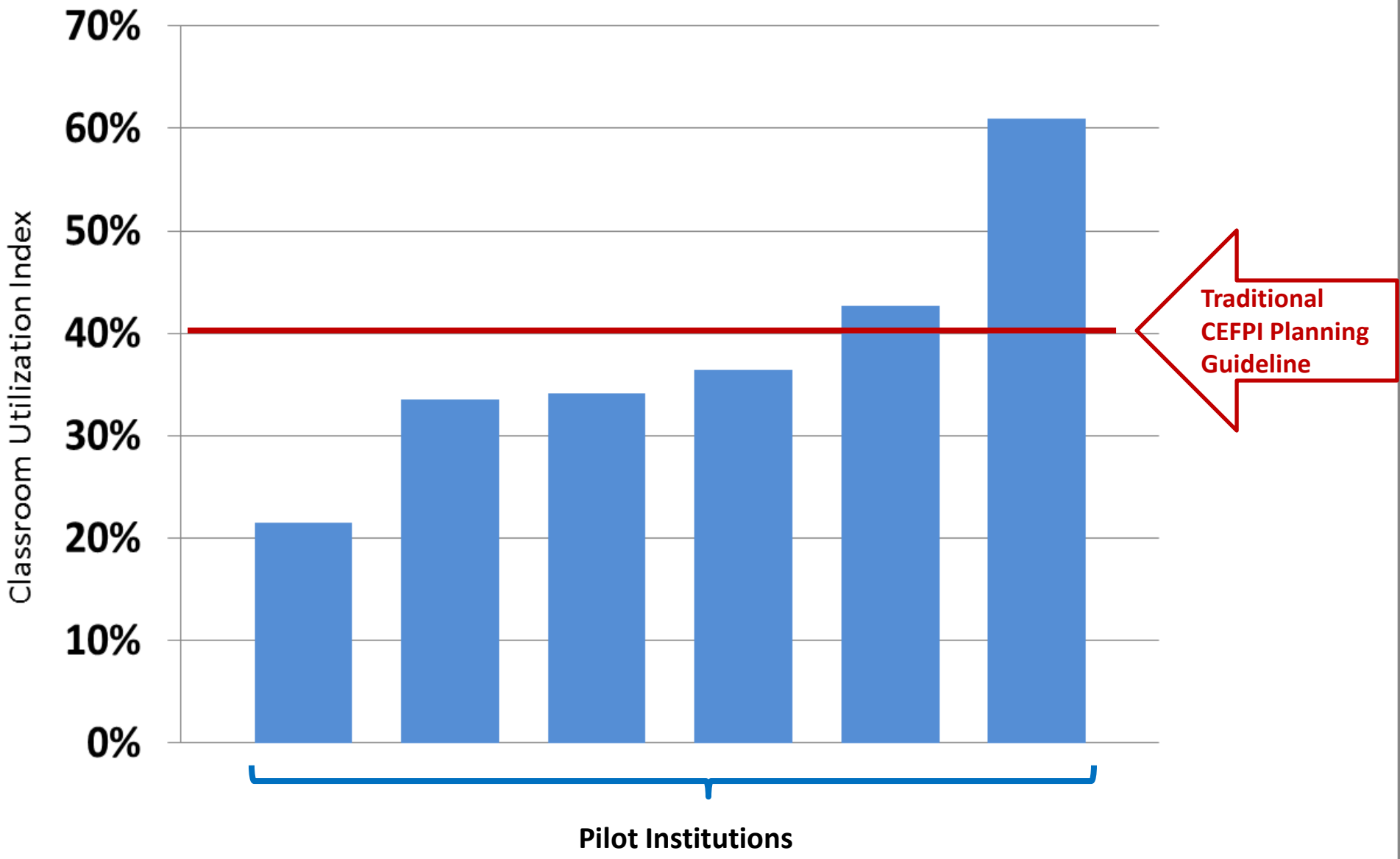
Traditional Analysis:

- Analyze utilization in selected time periods
- Analyze hours and station occupancy separately
- Target: 25 hours per week, 65% seat occupancy

New Method:

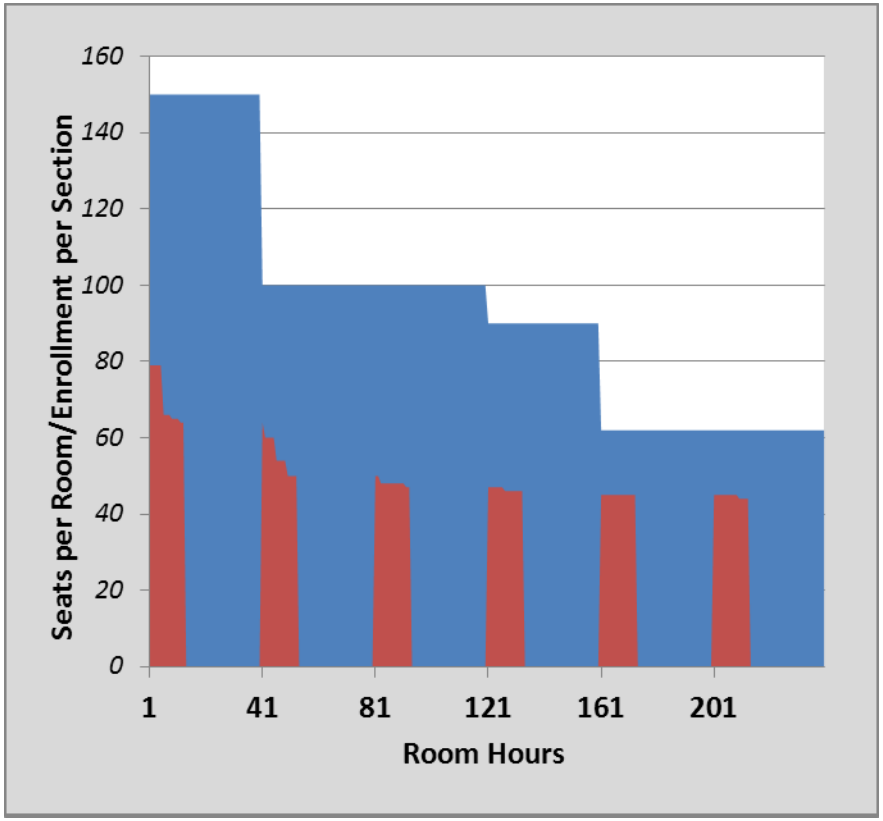
- Analyze all utilization 24/7
- Aggressive “Working Target”:
  - 40 hours per week
  - 100% seat occupancy
- Capture weekly hours of use and station occupancy “fit” in a single number and graphic

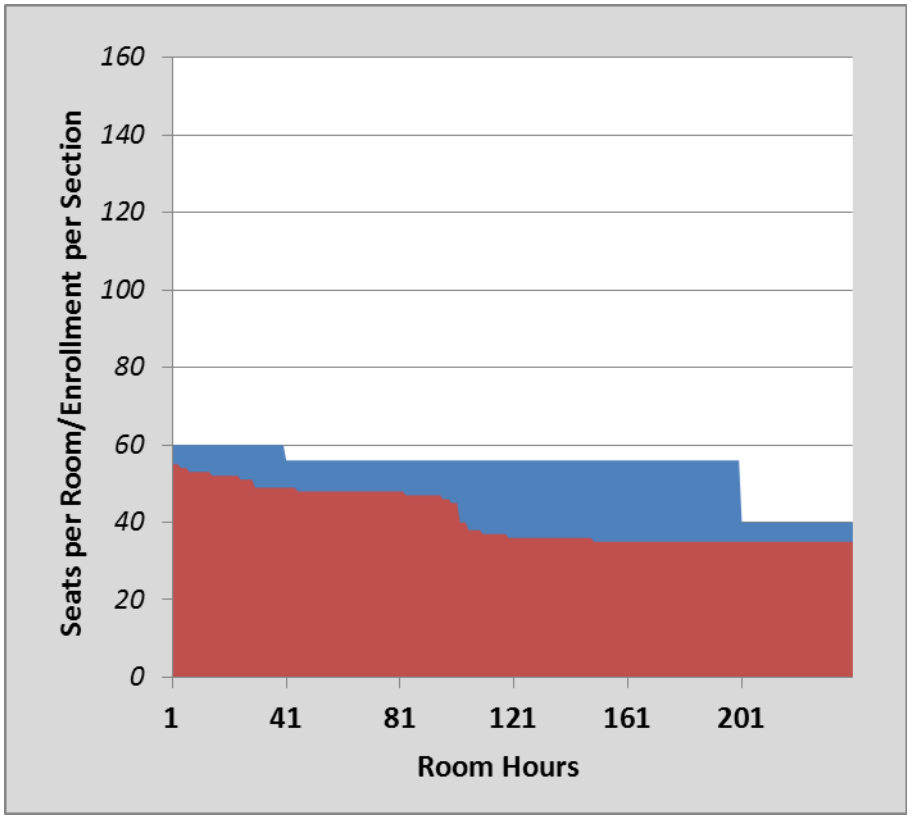
Composite Classroom Utilization - Numeric Metric



CLASSROOMS – NEW METRIC

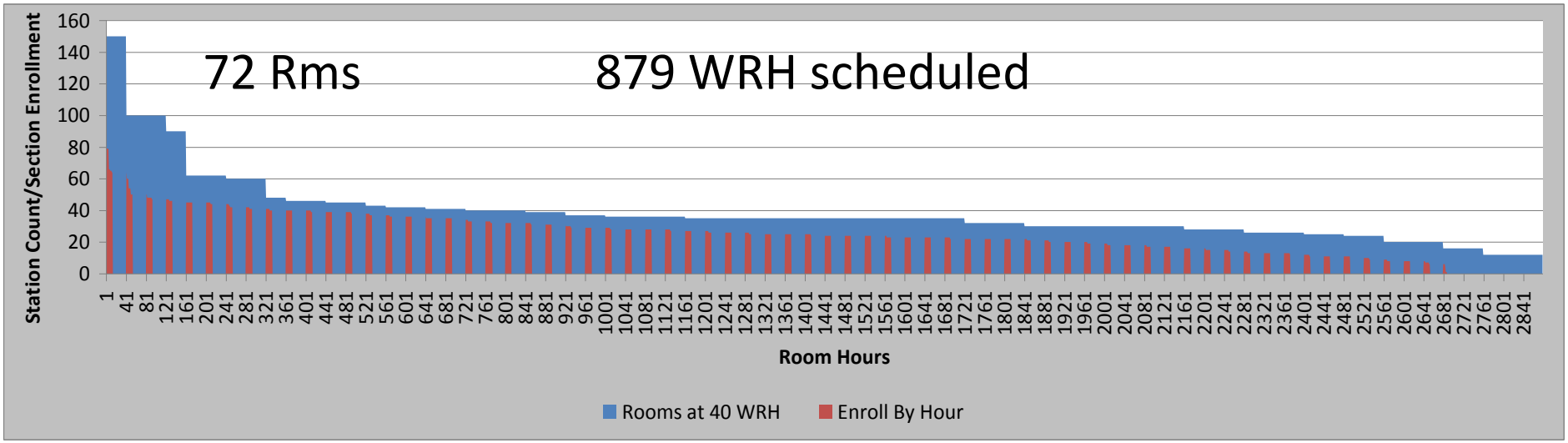
SAMPLE DISTRIBUTION - 2 CAMPUSES, 6 ROOMS

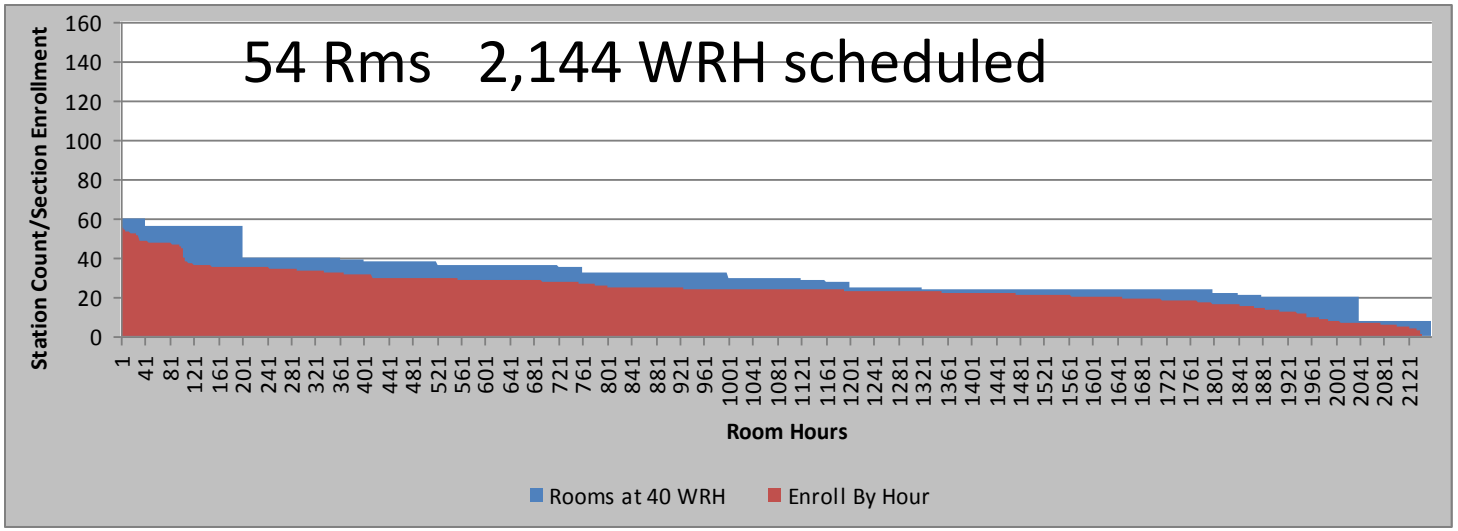


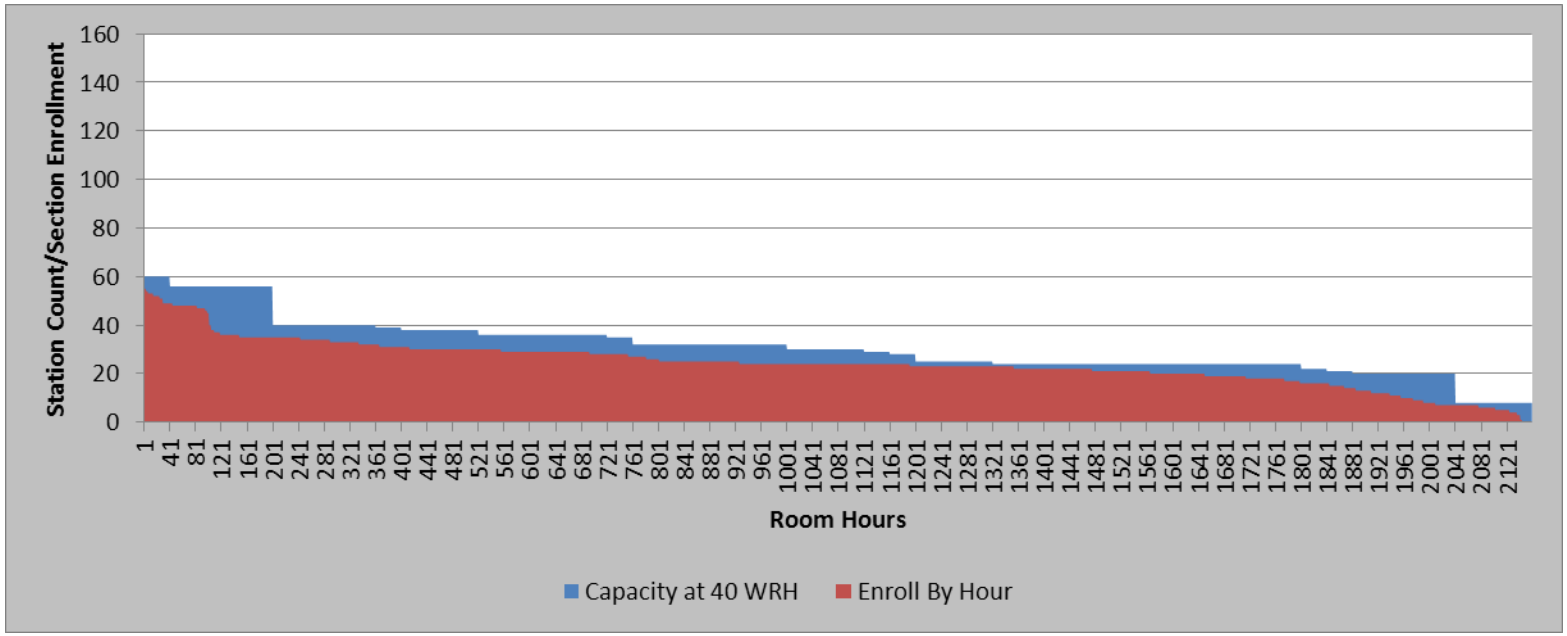


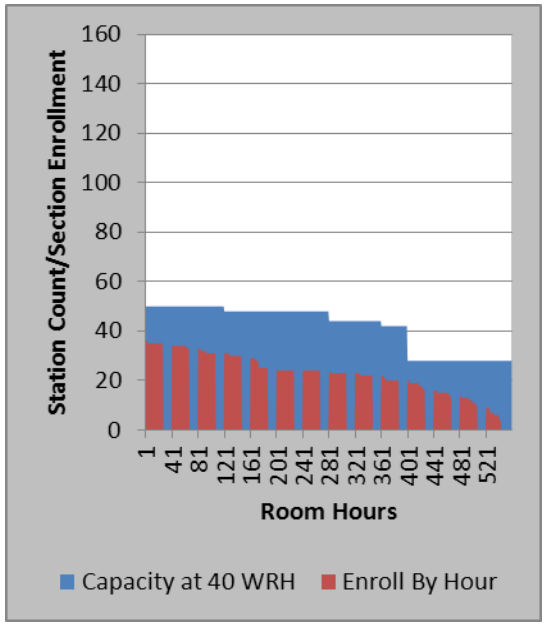
- **BLUE** = Total seats available in 40 target hours
- **RUST** = Seats in Use at optimal distribution

CLASSROOMS – NEW METRIC





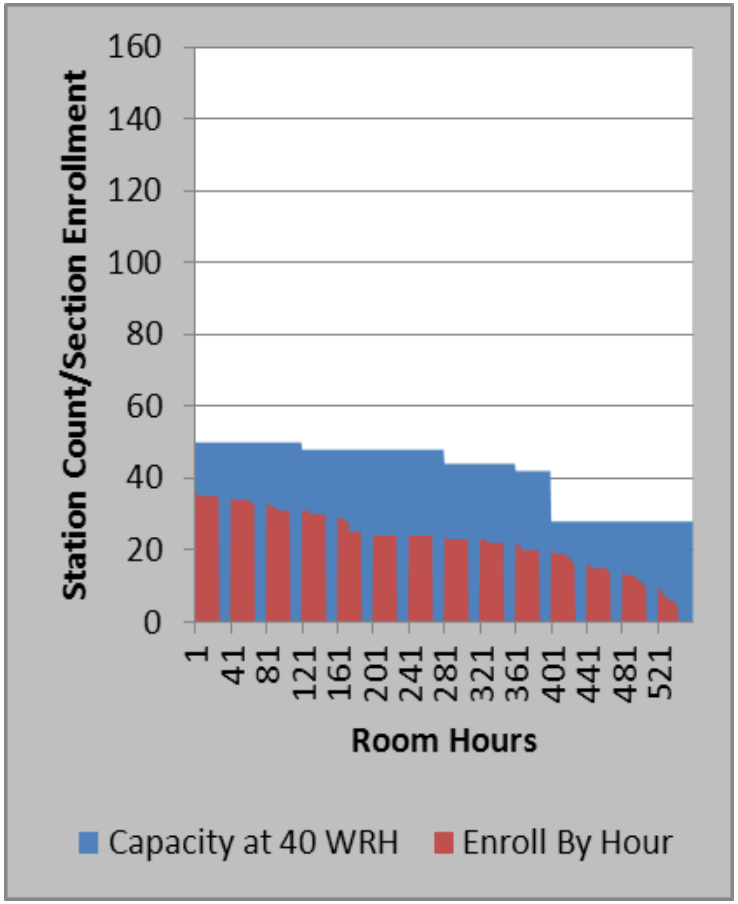


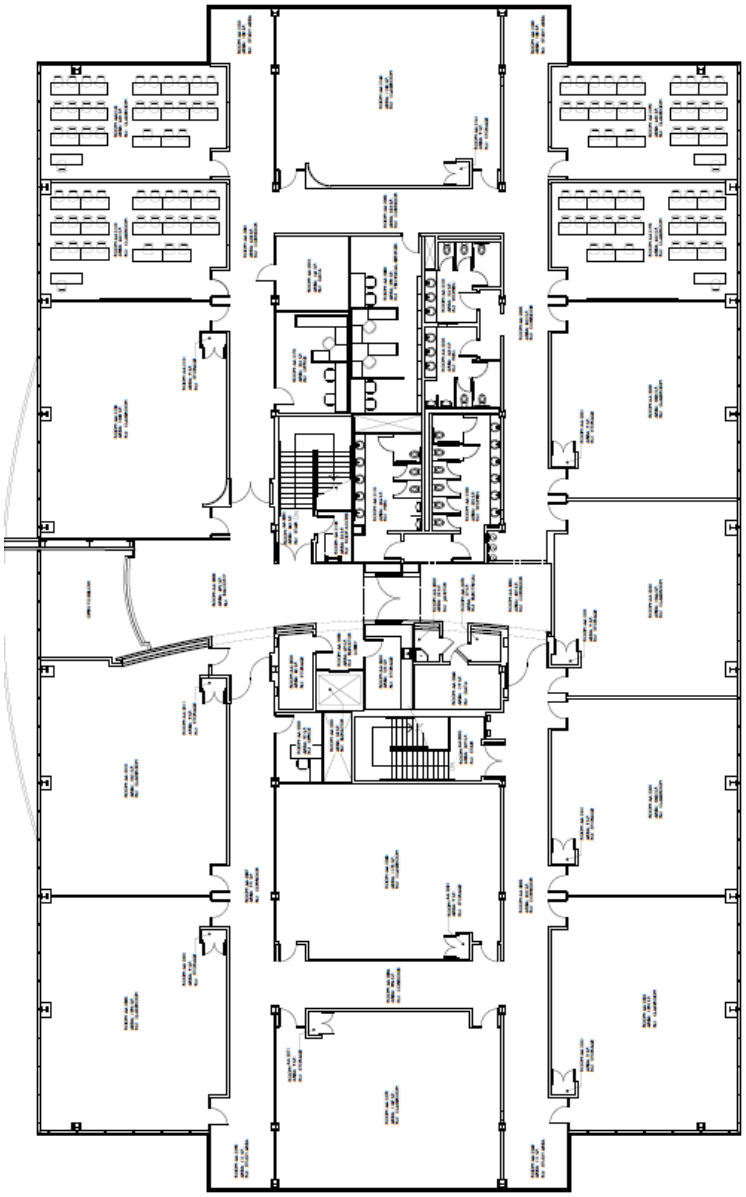


Dunwoody - 54 Rooms .789

Alpharetta - 14 Rooms .373

OPPORTUNITY





Office Metric Example

Traditional Analysis:

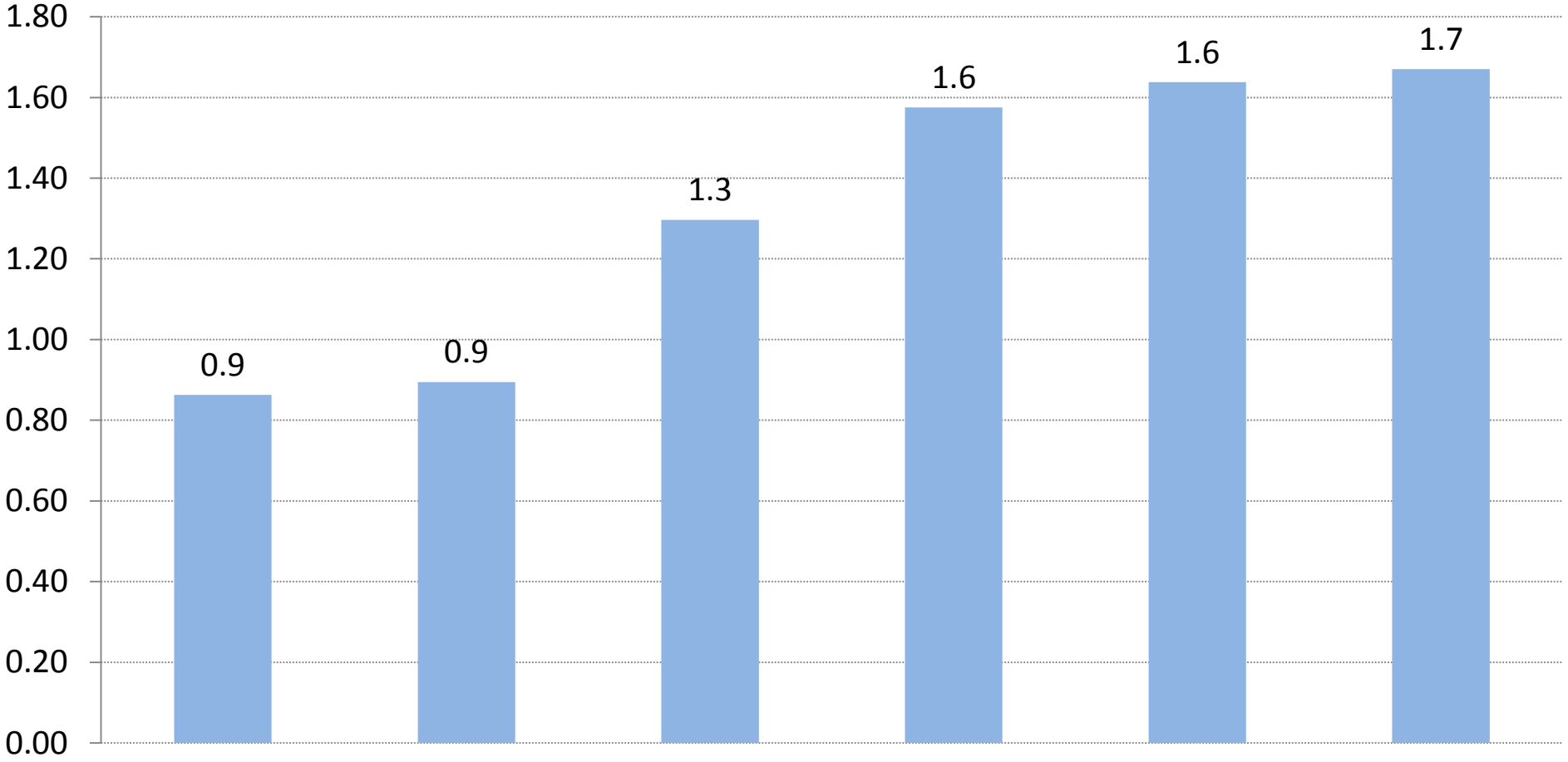
- Match each employee to a model amount of ASF
- Calculate current/future space needs per employee

New Method:

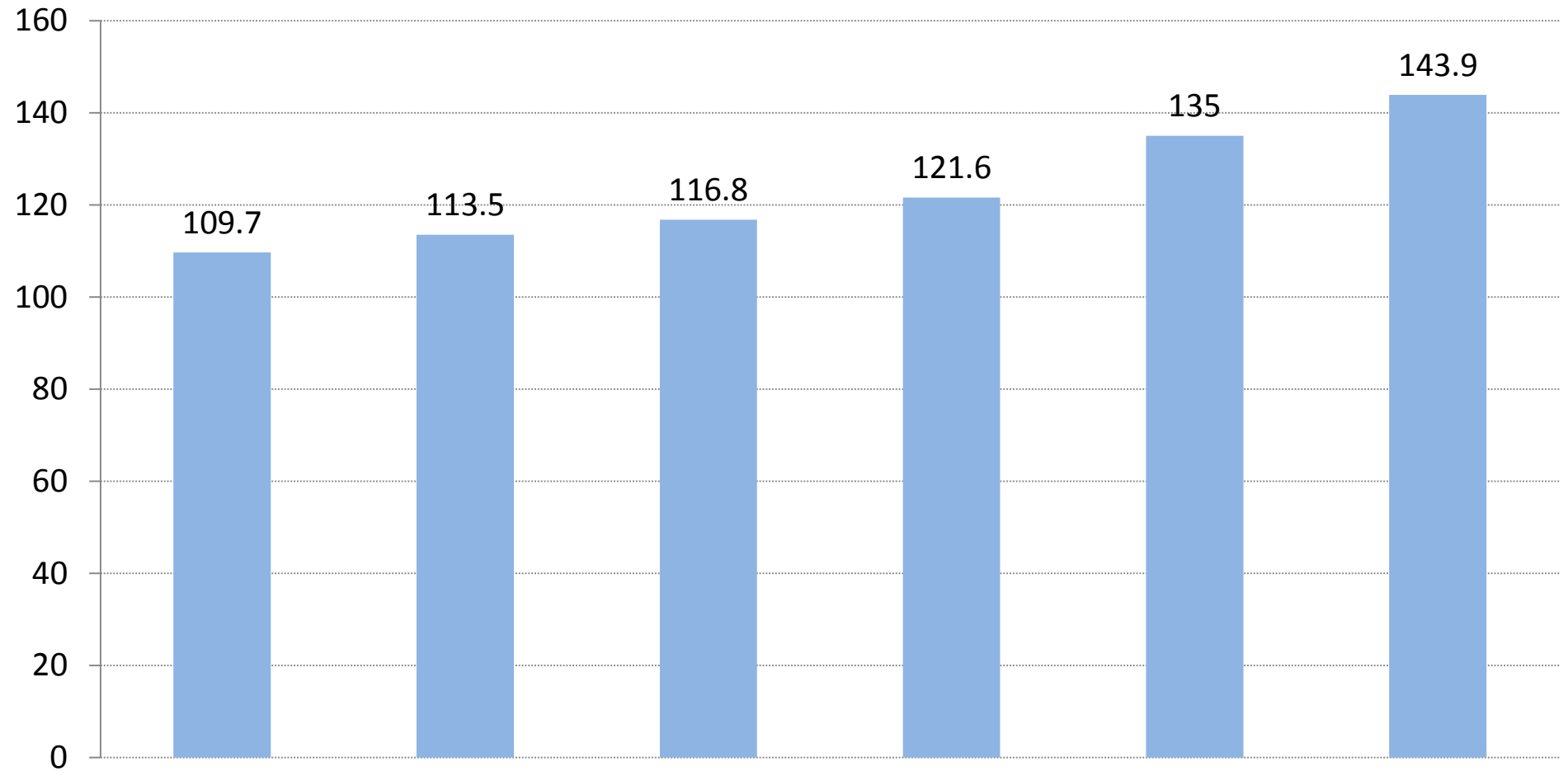
- Focus on number of office workstations in addition to space
- Support space and conference rooms measured separately

Office Metrics:	Stations / (Faculty + Staff FTE)
	Average ASF per Station
	% of individual offices > 150 ASF
Office Support Metric:	ASF as % of office space

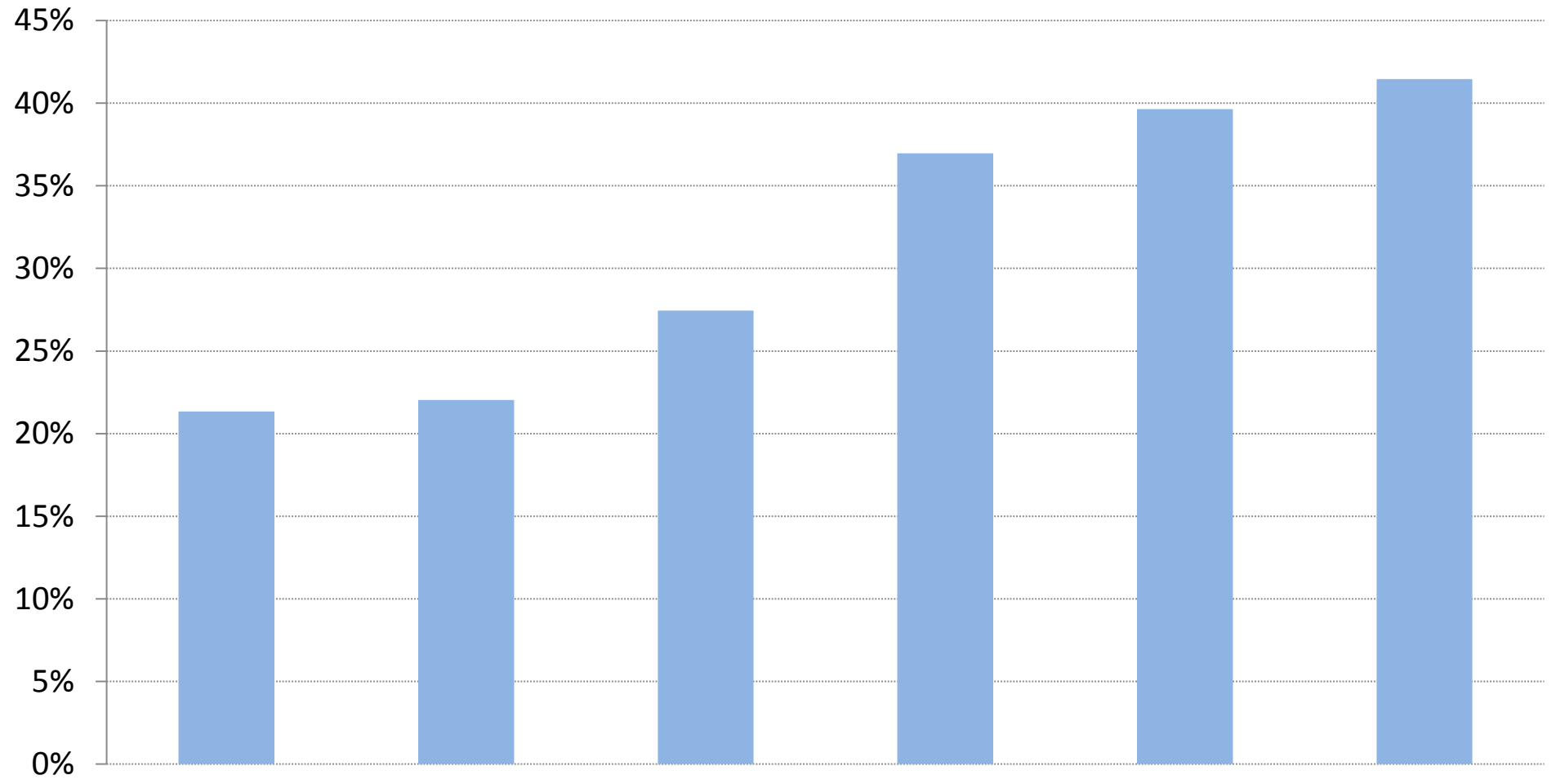
OFFICE STATIONS / FTE



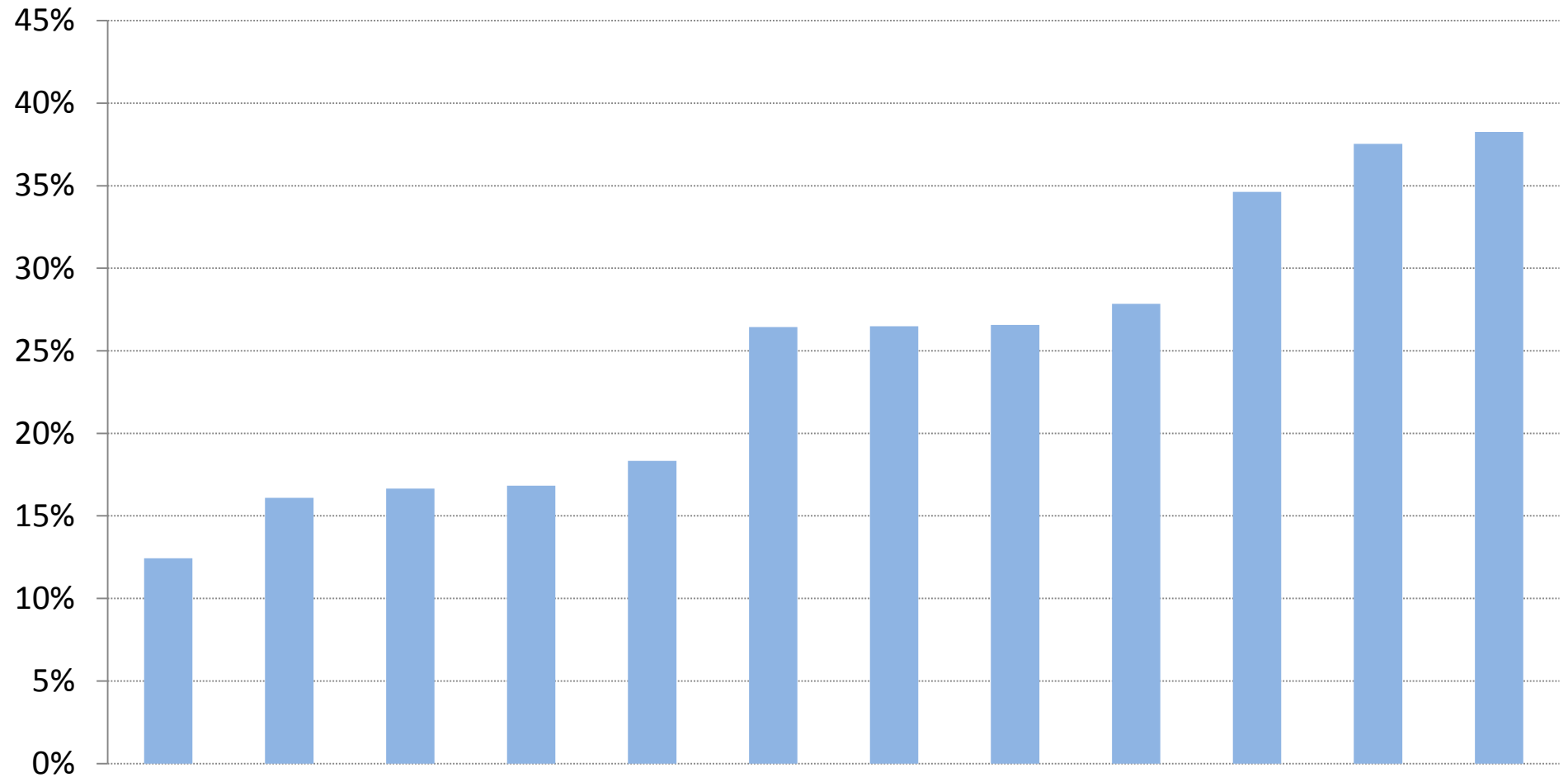
AVERAGE ASF PER STATION



% INDIVIDUAL OFFICES > 150 ASF



OFFICE SERVICE %



Phase I – Key Observations

3. Greater efficiency is possible – most campuses can get more out of the space they have
   - Efficiency is often not easy or convenient
   - Leaders must instill culture of institutional space allocation with appropriate sharing and use of resources
   - Space management can enable better facility utilization and effectiveness
   - Technology can help improve data quality and analysis, and support management and operations.

Phase I – Key Observations

4. We need to focus on smart, innovative investment in existing facilities
   - Facilities quality is a real issue
     - Not all spaces are equal
     - Current system data don't tell the whole story
   - Toured six campuses, 27 buildings, 1.1 m GSF
   - Condition and quality of space does not have a consistent effect on utilization
   - Many facilities require investment to enhance utilization, improve effectiveness, and decrease operating costs

Learning Environments – What Matters?

1. Pedagogical Appropriateness
2. Enough Rooms?
3. Size of rooms
4. Technology
5. Room Configuration
6. Light
7. Acoustics
8. Climate Control


04G
304F
3040

Phase I – Key Observations

5. Initiative supports the Board of Regents, Chancellor, and system office
   - Strategic decision support
   - New approach to capital allocation

6. "System" initiative provides direct, immediate value to institutions
   - No System without Institutions
   - Working Group reported mutual benefits

Utilization – What's Next?

Phase II

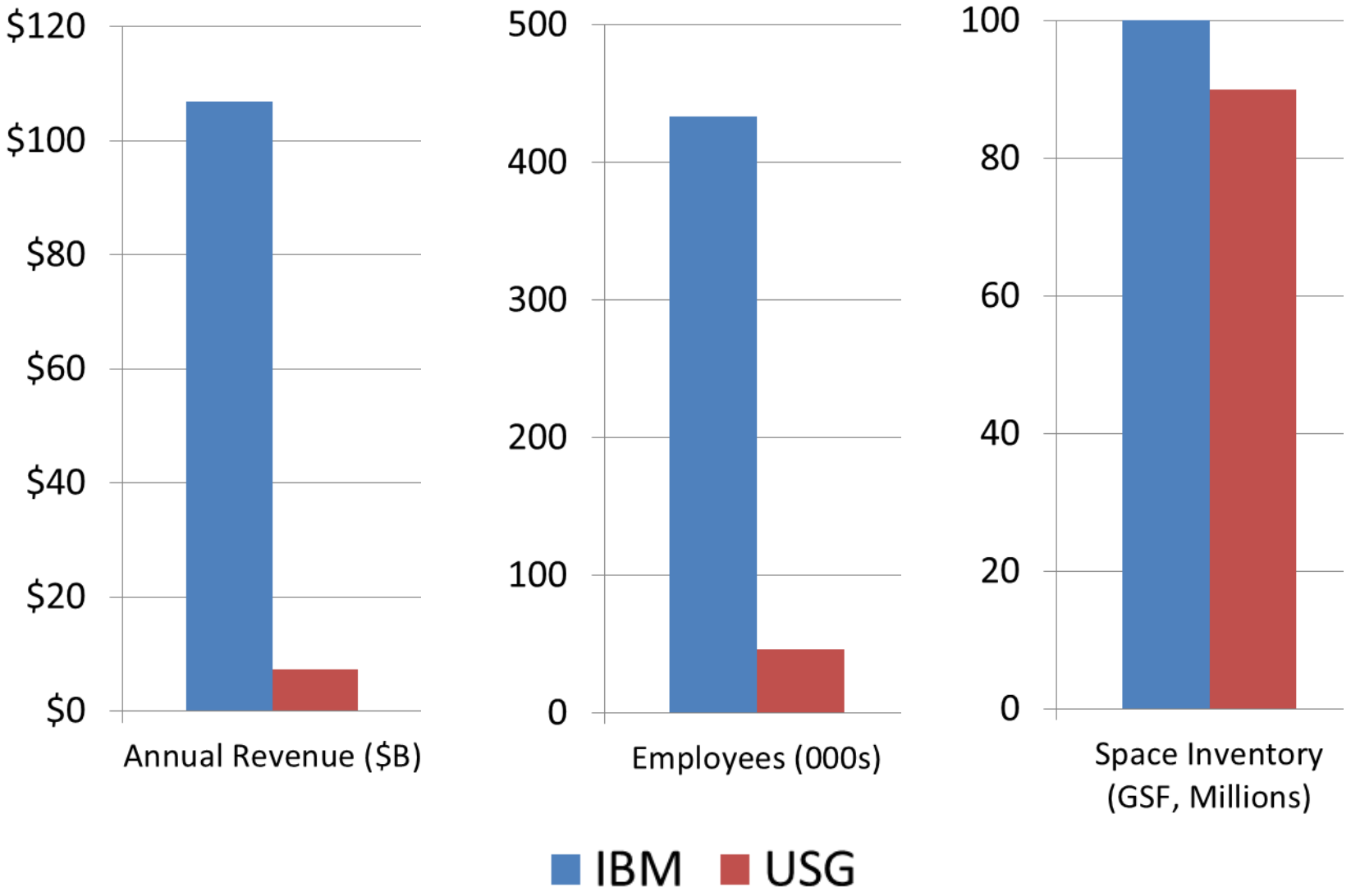
- Validate institutional space data
- Submit Fall 2012 space data via FIDC
- Assess Fall 2012 utilization for all USG institutions (December 2012 – May 2013)
  - Refine Phase I utilization metrics
  - Determine targets/ranges for metrics
  - Develop methodology for research and athletics
- Leverage utilization analysis to support System strategy and inform future capital allocations
- How will new approach support integrated planning?

Utilization – What's Next?

What does it all mean for Facilities Officers?

- Fewer new buildings
  - Need for more external $$$
  - Greater discipline in preplanning and programming
- Priority on renovation and repurposing
- New thinking on Master Planning and Capital Planning
- Better information and analysis to support reality-based decision making
- Technology to enhance facility data, analysis, and management

Facilities Technology



Facilities Technology – System Priorities

- Objective: Integrated applications and data for facility management, planning, and analysis
- Current priorities:
  - System PPV and Operating Lease Management
  - Capital Project Management (E-Builder)
    - FY13 - Business Needs and Feasibility Assessment
    - FY14 - System/Campus Implementation
  - Campus Facility/Space Management
    - FY13 - Preliminary Risk and Gap Assessment
    - FY14 - Business Needs and Application Assessment
    - FY15 - Begin Campus Implementation

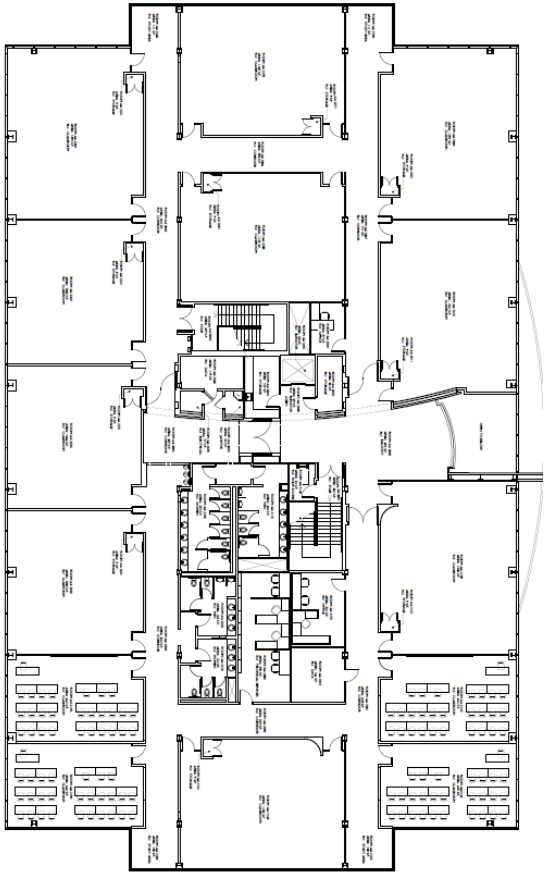
Facilities Technology – Campus Survey

- Last informal survey: May 2009
- What applications are you using for:
  - Facility Management
  - Space Management and Scheduling
  - Maintenance/Work Order Management
  - Capital Project Management
  - Energy Management
- One survey per institution
- Complete your survey during the conference and return it to an OREF staffer

Conclusion

- Utilization Study is critical priority of Chancellor.
- Utilization study outcomes will inform future system resource allocation and strategy
- You can't effectively manage what you don't understand.
- You can't get optimal outcomes from what you can't effectively manage.
- While utilization data and analysis benefit each institution, Phase II is a system product with a comprehensive focus.
- Good space data are critical for effective utilization analysis
- "System" and "institution" space data must be consistent.
- Technology can help us move to the next level

Discussion



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Existing USG RUC	FICM Code Name	Current USG FIR Room Code Name	New USG RUC	New FICM/USG FIR Description	Tax. Super	Proposed Overlay Taxonomy
111	Classroom	General Classroom <50 stations	111	Non-Tiered Classroom	a	Classroom
112	Classroom	General Classroom >50 stations	112	Tiered Classroom	a	Classroom
115	Classroom Service	Classroom Service	115	Classroom Service	b	Classroom Service
211	Class Laboratory	Specialized Classroom (class meets in room)	211	Discipline Lab	c	Teaching Lab
212	Class Laboratory	Class Laboratory (Lab only)	212	Computer Classroom	c	Teaching Lab
213	Class Laboratory	Distance Learning Classroom	213	Distance Learning Classroom	c	Teaching Lab
215	Class Laboratory Service	Class Laboratory Service	215	Class Laboratory Service	c	Teaching Lab Service
220	Open Laboratory	Special Class Lab (no scheduled labs)	221	Discipline Open Lab	d	Open/Discipline Lab
230	N/A	Individual Study Lab (incl music practice)	221	Discipline Open Lab	d	Open/Discipline Lab
225	Open Laboratory Service	Special Class Lab Service	225	Open Lab Service	d	Open/Discipline Lab Service
235	N/A	Individual Study Lab Service	225	Open Lab Service	d	Open/Discipline Lab Service
530	Media Production	Audio/Visual, Radio, TV	530	Audio/Visual, Radio, TV	d	Special Instruct/Research
535	Media Production Service	Audio/Visual, Radio, TV Service	535	Audio/Visual, Radio, TV Service	d	Special Instruct/Research
540	Clinic	Clinic	540	Clinic	d	Special Instruct/Research
545	Clinic Service	Clinic Service	545	Clinic Service	d	Special Instruct/Research
550	Demonstration	Demonstration	550	Demonstration	d	Special Instruct/Research
555	Demonstration Service	Demonstration Service	555	Demonstration Service	d	Special Instruct/Research
560	Field Bldg	Field Bldg	560	Field Bldg	d	Special Instruct/Research
570	Animal Facilities	Animal Quarters	570	Animal Quarters	d	Special Instruct/Research
575	Animal Facilities Serv	Animal Quarters Service	575	Animal Quarters Service	d	Special Instruct/Research
580	Greenhouse Serv	Greenhouse	580	Greenhouse	d	Special Instruct/Research
585	Greenhouse	Greenhouse Service	585	Greenhouse Service	d	Special Instruct/Research
590	Other	Other (All Purpose)	590	Other (All Purpose)	d	Special Instruct/Research
310	Office	Office	310	Office	e	Office
315	Office Service	Office Service	315	Office Service	e	Office Service
410	Study Room	Reading/Study Room	410	Reading/Study Room	f	Social/Study
220	Open Laboratory	Special Class Lab (no scheduled labs)	411	Open Computing Lab	f	Social/Study
230	N/A	Individual Study Lab (incl music practice)	411	Open Computing Lab	f	Social/Study
220	Open Laboratory	Special Class Lab (no scheduled labs)	412	Learning Support Labs	f	Social/Study
420	Stack	Stack	420	Stack	f	Social/Study
430	Open-Stack Study Room	Open-Stack Study Room	430	Open-Stack Study Room	f	Social/Study
440	Processing Room	Processing Room	440	Processing Room	f	Social/Study
455	Study Service	Study Service	455	Study Service	f	Social/Study
650	Lounge	Lounge	650	Lounge	f	Social/Study
655	Lounge Serv	Lounge Service	655	Lounge Service	f	Social/Study
630	Food Facility	Food Facilities	630	Food Facilities	g	Dining
635	Food Facility Serv	Food Facilities Service	635	Food Facilities Service	g	Dining
350	Conference Room	Conference Room	350	Conference Room	g	Meeting
355	Conf Rm Service	Conference Room Service	355	Conference Room Service	g	Meeting
610	Assembly	Assembly	612	General Assembly	g	Meeting
615	Assembly Serv	Assembly Service	617	Assembly related	g	Meeting
680	Meeting Room	Meeting Room (not for teaching)	680	Meeting Room (not for teaching)	g	Meeting
685	Meeting Room Serv	Meeting Room Service	685	Meeting Room Service	g	Meeting
660	Merchandizing	Merchandising Facilities	660	Merchandising Facilities	g	Merchandizing
665	Merchandizing Serv	Merchandising Facilities Service	665	Merchandising Facilities Service	g	Merchandizing
610	Assembly	Assembly	611	Performance Venue	g	Performance/Exhibit
615	Assembly Serv	Assembly Service	616	Venue related	g	Performance/Exhibit
620	Exhibition	Exhibition	620	Exhibition	g	Performance/Exhibit
625	Exhibition Serv	Exhibition Service	625	Exhibition Service	g	Performance/Exhibit
220	Open Laboratory	Special Class Lab (no scheduled labs)	222	Testing/Services Lab	h	Other
230	N/A	Individual Study Lab (incl music practice)	222	Testing/Services Lab	h	Other
510	Armory	Armory	510	Armory	h	Other
515	Armory Service	Armory Service	515	Armory Service	h	Other
640	Day Care	Day Care	640	Day Care	h	Other
645	Day Care Serv	Day Care Service	645	Day Care Service	h	Other
690	N/A	Locker Room (not including PE and Athletics)	690	Locker Room (not including PE and Athletics)	h	Other