1

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COURSE DESCRIPTION

403 Space Planning & Administration APPAU201908J
Space planning and management is one of the most sensitive issues that face facility organizations throughout the country. Changing technologies, new pedagogies, facility priorities, lack of resources, and ever evolving strategic planning issues challenge long accepted space planning practices in higher education. See how space planning can bridge the gap between academia and the physical plant. Understand how practices are moving from primarily a quantitative to a qualitative approach. Explore typical programming processes for capital projects and discuss this stage in the planning process is critical to the success of any project.

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LEARNING OBJECTIVES

1. Learn how changing technologies, facility priorities, and lack of resources challenge space planning.
2. Learn how to bridge the gap between academia and the physical plant.
3. Understand the practices needed to move from primarily a quantitative to a qualitative approach.
4. Explore typical programming processes.

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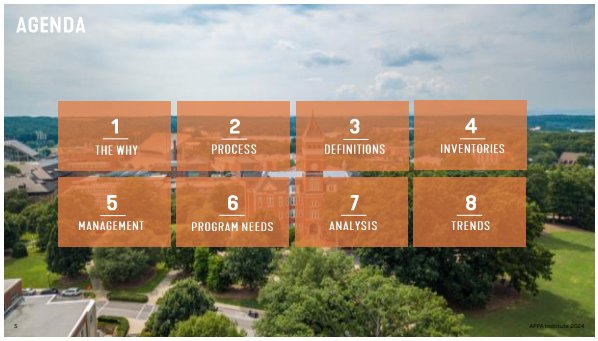

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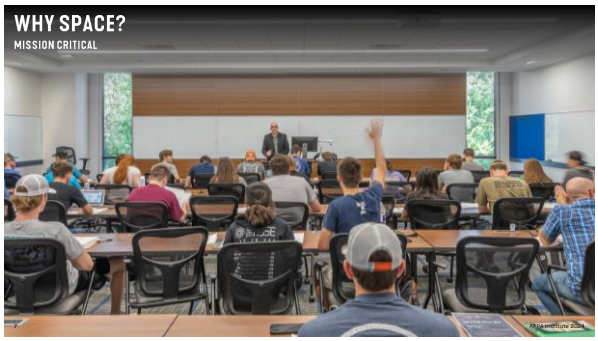
WHY SPACE?
MISSION CRITICAL

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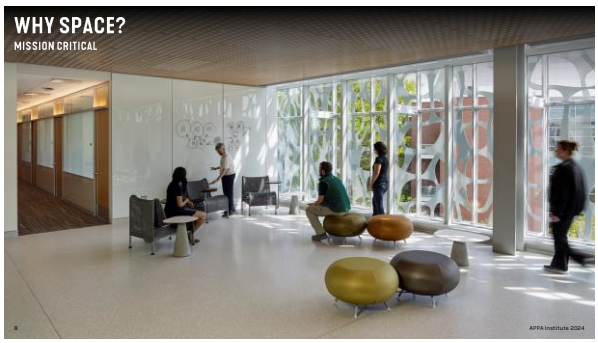
WHY SPACE?
MISSION CRITICAL
APPA Institute 2024

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WHY SPACE?
MISSION CRITICAL
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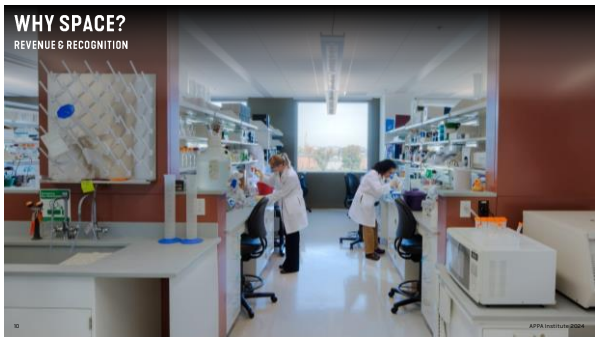
WHY SPACE?
REVENUE & RECOGNITION
10
APPA Institute 2024

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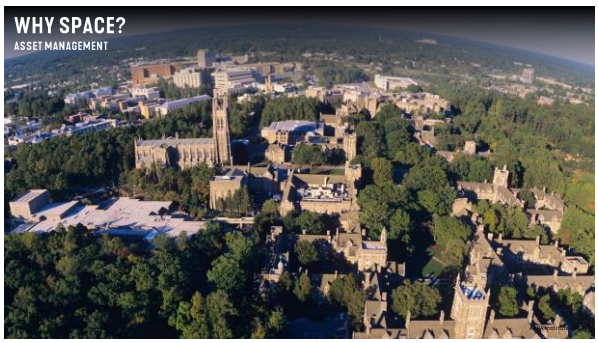

WHY SPACE?
ASSET MANAGEMENT

11

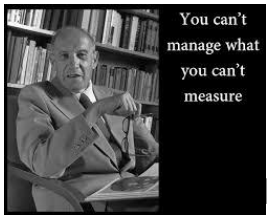

WHY SPACE?
ASSET MANAGEMENT

12

WHY IS IT IMPORTANT?

A SUMMARY

- **Largest Asset**
- **Provide Physical Environment**
  - Program Needs
  - Capital Assessments
  - Research Reporting
- **Develop Priorities**
  - Capital
  - Maintenance/Conditions
  - Minimum Quality Standards
- **Credibility and Accountability**
- **Statewide Analysis**
- **GOOD BUSINESS**



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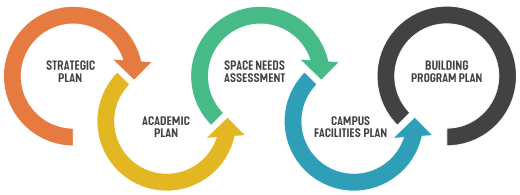
2 PROCESS

14

LEVERAGING THE PLANNING PROCESS



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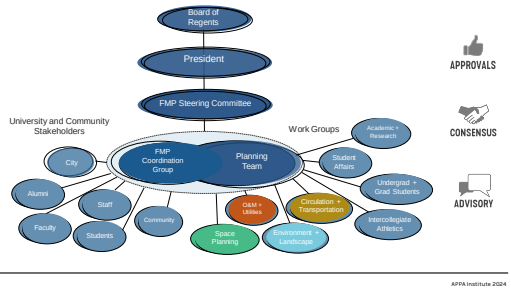
PLANNING



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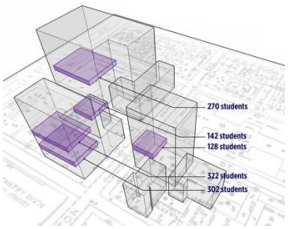
SPACE USE NEEDED FOR.....

(AND WHY ACCURACY IS IMPORTANT)

- Master Planning
- Long Range Planning
- Building Programming
- Accreditation Issues
- Budget/Funding Requests
- Maintenance/Repair and Replacement Issues
- Space Efficiency Studies
- Appropriate Space Allocations
- Understand Space Adjacencies
- Research Accountability
- Proper Space Use – Program Locations
- Operating Cost Allocations (RCM budget models)



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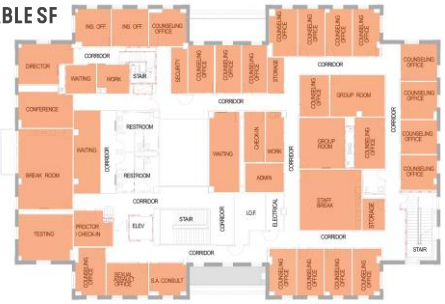
3 DEFINITIONS

18

ASSIGNABLE SF



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CIRCULATION

20

SHAFTS

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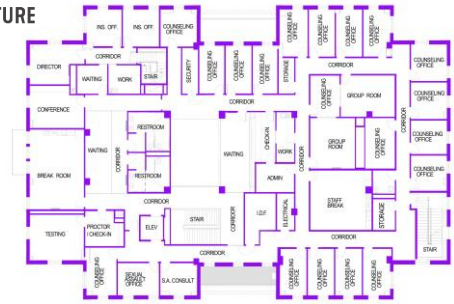
STRUCTURE
AND WALLS



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SERVICE

23

GROSS SF

24

SOME FUN SPACE FACTS

- Assignable:Gross for Research Building? (i.e., percent of ASF in a building)
- Precent of Office on a campus?
- Classroom?
- Library?
- Research Laboratory?

25

4 INVENTORIES

26

WHAT KIND OF SPACE IS IT?

FICM IS THE STANDARD

- The "Red Book": http://nces.ed.gov/pubs2006/2006160.pdf
- NCES – US Dept of Education
- Defines all space categories for higher education
- Vast majority of institutions use (with some exceptions)
- Dated 2006

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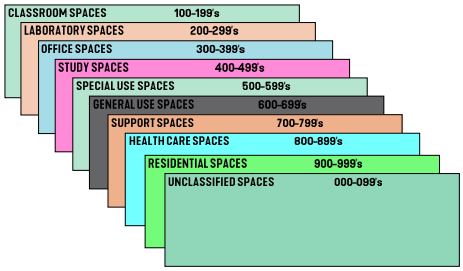
MAJOR CLASSIFICATIONS



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WHAT KIND OF SPACE IS IT?

- **000** – Unclassified Room Space (assignable and non-assignable)
- **100** – Classrooms (instructional)
- **200** – Laboratory Facilities (instructional & research)
- **300** – Office Facilities
- **400** – Study Facilities
- **500** – Special Use Facilities
- **600** – General Use Facilities
- **700** – Support Facilities
- **800** – Health Care Facilities (student & animal)
- **900** – Residential Facilities

29

100s
CLASSROOM FACILITIES

110 Classroom

A room used for classes that is not tied to a specific subject or discipline by equipment in the room or configuration of the room.

Rooms that do not require specialized equipment. Lecture rooms, seminar rooms, general purpose classrooms.

115 Classroom Service

A room that directly serves one or more classrooms as an extension of the activities in that room.

These spaces can have audio equipment, projectors, computers, computer racks with DVD/CD/VHS. Can be at the front, side, or back of a space in closets or rooms.



30

210s
CLASS LABORATORIES

210 Teaching (Instructional) Laboratory

A room used primarily for formally or regularly scheduled classes that require special purpose equipment or a specific room configuration for student participation, experimentation, observation, or practice in an academic discipline.

Band or choral rooms, science laboratories, instructional shops, computer labs, instructional health laboratories, discipline specific instructional spaces with specialized equipment.

215 Teaching Laboratory Service

A space that directly serves one or more class laboratories as an extension of the activities in those spaces.

Preparation rooms, coat rooms, material storage, cold rooms, stock rooms, closets if they serve class laboratories.



220s
OPEN LABORATORIES

220 Open Laboratory

A laboratory used primarily for individual or group instruction that is informally scheduled, unscheduled, or open and serves the needs of a particular discipline.

Music practice rooms, writing labs, departmental computer labs, discipline specific labs without scheduled instruction.

225 Open Laboratory Service

A room that directly serves one or more open laboratories as an extension of the activities in those rooms.

250s
RESEARCH LABORATORIES

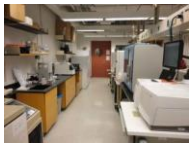
250 Research Laboratory

A room used primarily for laboratory experimentation, research or training in research methods; or professional research and observation; or a structured creative activity within a specific program

255 Research Laboratory Service

A room that directly serves one or more research/non-class laboratories as an extension of the activities in those rooms.





300s
OFFICE FACILITIES

310 Office

A room housing faculty, staff, or students working at one or more stations (desks).

315 Office Service

A room/space that directly serves an office or group of offices. May include file rooms, office related storage, kitchen space for an office area, break rooms, copy/printer rooms, office supply rooms, first aid rooms serving office areas, and open and private circulation areas.

350/355 Conference/ Conference Service

A room serving an office complex and used primarily for staff meetings and departmental activities.

34

400s
STUDY FACILITIES

410 Reading & Study Room

A room or area used by individuals to study at their convenience, the space not being restricted to a particular discipline. Includes open access computer laboratories and learning labs.

420 Stack

A space used to house arrange collections of educational materials for use as a study resource.

430 Open-stack Reading Room

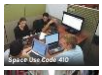
A combination study space and stack, generally without physical boundaries between stack and study areas.

440 Library Processing

A room or area devoted to processes and operations in support of library functions.

455 Library & Study Service

A space that directly serves study spaces, stacks, open-stack study spaces, or processing rooms as direct extension of the activities in those spaces.



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CAPTURING ASSIGNABLE SPACE FROM CIRCULATION

Seating within circulation spaces is sometimes captured. Discuss as an institution to what degree these seating areas should be recorded as individual spaces.

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500s – 600s

500 Special Use Facilities

- 510/515 Armory/Service
- 520 Athletic or PE
- 523 Athletic Facilities Spectator Seating
- 525 Athletic or PE Service
- 530/535 Media Production/Service
- 540/545 Clinic/Service
- 550/555 Demonstration/Service
- 560 Field Building
- 570/575 Animal Facilities/Service
- 580/585 Greenhouse/Service
- 590 Other (All Purpose

600 General Use Facilities

- 610/615 Assembly/Service
- 620/625 Exhibition/Service
- 630/635 Food Facility/Service
- 640/645 Day Care/Service
- 650/655 Lounge/Service
- 660/665 Merchandising/Service
- 670/675 Recreation/Service
- 680/685 Meeting Room/Service

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700s – 800s

700 Support Facilities

- 710/715 Central Computer or IT/Service
- 720/725 Shop/Service
- 730/735 Central Storage/Service
- 740/745 Vehicle Storage/Service
- 750 Central Service
- 755 Central Service Support
- 760 Hazardous Materials Storage
- 770/775 Hazardous Waste Storage/Service
- 780 Unit Storage

800 Health Care Facilities
(Human and Animal)

- 810/815 Patient Bedroom/Service
- 820 Patient Bath
- 830/835 Nurse Station/Service
- 840/845 Surgery/Service
- 850/855 Exam and Treatment Clinic/Service
- 860 Diagnostic Service Laboratory
- 865 Diagnostic Service Laboratory Support
- 870 Central Supplies
- 880 Public Waiting
- 890/895 Staff On-Call Facility/Service

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MANAGEMENT

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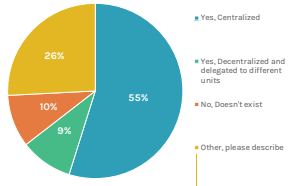
IS SPACE MANAGED, AND IF SO, HOW?

SPACE MANAGEMENT POLICIES & PROCEDURES



OTHER RESPONSES

> *Data management and high-level approvals are centralized; how the spaces are used is decentralized.*

> *Historically, this work was decentralized, but we are in the process now of working to create a space planner position under the umbrella of our Facilities Planning and Maintenance group.*

> *Columbia has a centralized database and inventory for all University space. Individual schools manage their own space assignment.*

40

COMPUTER AIDED FACILITIES MANAGEMENT (CAFM)

- Software type less important than having a system and a process
- Understand how you will use the data; different systems have different core strengths
- Understand staffing and operational issues

ARCHIBUS
PLANON FACILITY MANAGEMENT & REAL ESTATE SOFTWARE
famis
AIM
AssetWORKS
TRIRIGA An IBM Company
TRA School Software Solutions

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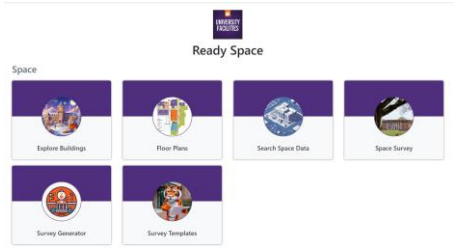
CLEMSON U SPACE MANAGEMENT SYSTEM

CHOSEN FOR COMPATIBILITY WITH AIM ASSETWORKS AND ABILITY TO CONDUCT SPACE SURVEYS



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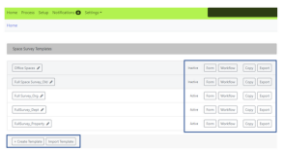
CLEMSON U SPACE MANAGEMENT SYSTEM

CHOSEN FOR COMPATIBILITY WITH AIM ASSETWORKS AND ABILITY TO CONDUCT SPACE SURVEYS



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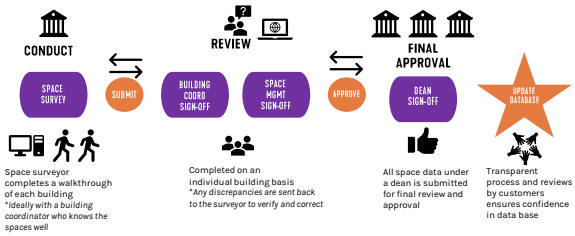
CLEMSON U SPACE MANAGEMENT SYSTEM

AUDIT WORKFLOW AND APPROVALS



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SPACE SURVEYS

EXAMPLE APPROACHES & TOOLS

- Staff
- Students/PT Help
- Departmental Space Reps
- Space Mgt Software
- Consultants

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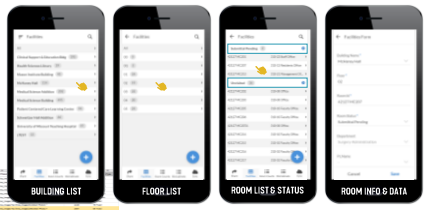
SPACE INVENTORY VERIFICATION

ENSURING ACCURACY OF FOUNDATIONAL DATA

Data Types
- Photos
- Pre-populated pull-downs
- Numeric entry
- Microphone translation

Examples
- Department/unit
- Adjacencies
- Use type
- Seat counts



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ENSURING DATA QUALITY

ALIGNING SPACE USE CODES

Facilities inventory is interpreted in different ways by different institutions.

SPACE INVENTORY VALIDATION

Space inventory will be validated for accuracy and consistency. Two approaches:
- Dedicated FTE
- Delegated to users

"EXCEPTIONS REPORT"

Identifying data anomalies for timely resolution

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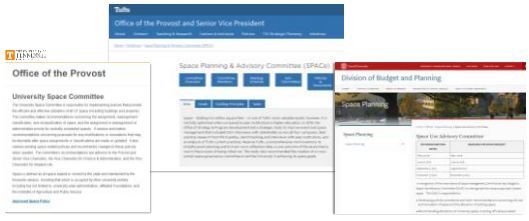
SPACE PLANNING COMMITTEES



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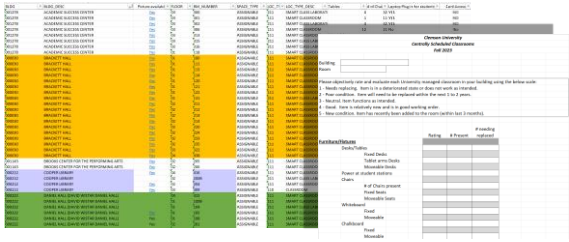
SPACE IS MORE THAN SQUARE FOOTAGE

MINIMUM QUALITY STANDARDS



Clemson University
Centrally Scheduled Classrooms
Fall 2023

Please objectively rate and evaluate each University managed classroom in your building using the below scale:
1 - Needs replacing. Item is in a deteriorated state or does not work as intended.
2 - Poor condition. Item will need to be replaced within the next 1 to 2 years.
3 - Neutral. Item functions as intended.
4 - Good. Item is relatively new and is in good working order.
5 - New condition. Item has recently been added to the room (within last 3 months).

Building:
Room:

Furniture/Fixtures	Rating	# Present	# needing replaced
Desks/Tables			
Fixed Desks			
Tablet arms Desks			
Moveable desks			
Power at student stations			
Chairs			
# of Chairs present			
Fixed Seats			
Moveable Seats			
Whiteboards			
Fixed			
Moveable			
Chalkboard			
Fixed			
Moveable			

49

SPACE IS MORE THAN SQUARE FOOTAGE

MINIMUM QUALITY STANDARDS

Configuration:	
Scale-up	List configuration type in AIM (active learning type with tables that form a circular pattern with or without individual monitors) power to each seat location, flat screen monitors around perimeter of classroom
Flat Floor	List configuration type in AIM (fixed or loose tables and chairs), if seat capacity is greater than 25 and tables are fixed-installe power to each seat.
Flat floor with raised teaching platforms	List configuration type in AIM (usually have fixed tables, have either loose chairs, chairs that pivot and rotate, or the chair bottoms that flip down) all should have power to each seat if seat count is greater than 25
Tiered floor	
Audio Visual (A/V) system:	A/V systems should be operable 100% of the time. A small sign is located at each lectern with CCIT A/V team's number to text for immediate response. Systems are on a 5-year life-cycle replacement schedule.
VTC	classrooms in AIM must be identified as VTC if they have this capability
Projector(s)	verify number or projectors, they must be operable 100% of the time.
Projector screen(s)	verify number or projector screens and of they are manual or automatically operated, they must be operable 100% of the time.
Zoom/recording capable	verify this feature, if included it must work 100% of the time
Wi-Fi capable	verify this feature is robust, it must work 100% of the time
Lectern	Verify ADA accessibility, should be operable 100% of the time. A small sign is located at each lectern with CCIT A/V team's number to text for immediate response
Tower computer at lectern	Computer must be operable 100% of the time and software up to date. The purpose for this is to eliminate technical content issues.
Marker Board(s):	
Glass	verify the quantity, board should be clean, surface finish should be less than 50% worn, no chips
White/sand surface	verify the quantity, board should be clean, surface finish should be less than 50% worn, no chips
Portable	verify the quantity, board should be clean, surface finish should be less than 50% worn, no chips casters/feet should work freely, be stable
Chalk Boards	Surface finish should be clean, free of scratches or pits
Window treatments:	
Vertical blinds	verify type, manual or automatic, surfaces should be clean, less than 50% worn, no broken slats
Horizontal blinds	verify type, manual or automatic, surfaces should be clean, less than 50% worn, no broken slats
Solar shades	verify type, manual or automatic, surfaces should be clean, less than 50% worn
Black out shades	verify type, manual or automatic, surfaces should be clean, less than 50% worn

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SPACE IS MORE THAN SQUARE FOOTAGE

MINIMUM QUALITY STANDARDS

Floor Type:	
Carpet	carpet should be clean, surface is less than 50% worn, free of asbestos mastics
Wood	Wooden floors should be clean, surface is less than 50% worn, no deep scratches
VCT tile	VCT should be clean, surface is less than 50% worn, no deep scratches, free of asbestos materials (abate in renovations)
Concrete	concrete floors should be clean, surface is less than 50% worn surface finish, no deep scratches
No-Wax laminate	Surface should be clean, surface is less than 50% worn, no deep scratches
Ceiling type:	
Ceiling tiles	all ceiling tiles should be clean and in place, surface should be less than 50% worn, no deep scratches, free of asbestos materials
Exposed	all exposed ceiling features should be clean and in place, paint surface should be less than 50% worn, no deep scratches, free of asbestos coatings
Drywall	drywall ceilings should be clean and in place, surface paint should be less than 50% worn, no deep scratches, free of asbestos materials
Wall surfaces:	
Drywall	drywall should be clean, surface paint finish should be less than 50% worn, no deep scratches, free of asbestos materials
Tile	tile should be clean, surface finish should be less than 50% worn, no deep scratches, free of asbestos materials, no large chips
Concrete block	block walls should be clean, surface paint should be less than 50% worn, no deep scratches, free of asbestos materials
Wood paneling	Wood paneling should be clean, surface finish should be less than 50% worn, no deep scratches, free of asbestos materials
HVAC system(s):	
Fan coil(s)	verify type and quantity, they should be operable in cooling and heat mode, surfaces should be clean and the finish should be better than 50%
Air handler/ducted air supply	verify type and quantity, system should be operable in cooling and heat mode, grill surfaces should be clean
Chilled beam	verify type and quantity, they should be operable, surfaces should be clean and the surface finish should be better than 50%
Electrical	verify that all electrical outlets are operable and in good condition
Lockdown buttons	Verify that the lockdown buttons are operable (this may involve TigerOne and CUPD)
Card access readers	Verify that the card access readers are operable
Noise standards	verify if acoustic panel features are present and quantities, surfaces should be clean, fabrics surfaces should be less than 50% worn

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6
PROGRAM NEEDS

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WHAT ARE THE DRIVERS OF SPACE?

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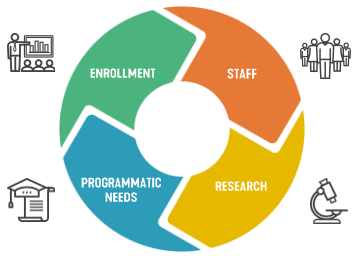
WHAT ARE THE DRIVERS OF SPACE?



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USE OF GUIDELINES

- University Space Planning Guidelines by Bariether & Schillinger
- WICHE Higher Education Facilities Planning and Management Manuals
- CEFPI Space Planning Guidelines for Institutions of Higher Education

- Association of Physical Plant Administrators
- Mandated Guidelines

❖**CREATE YOUR OWN**

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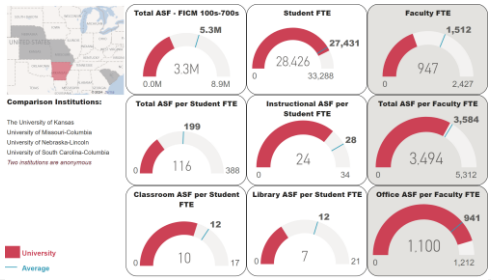
SPACE BENCHMARKING



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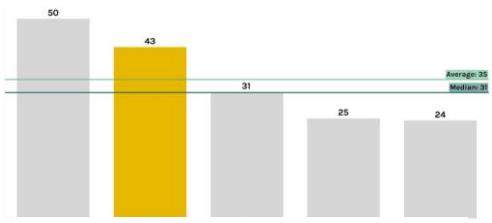
BENCHMARKING

INSTRUCTIONAL SPACE PER STUDENT FTE

CLASSROOMS, TEACHING LABS, & OPEN LABS + ASSOCIATED SERVICE SPACE



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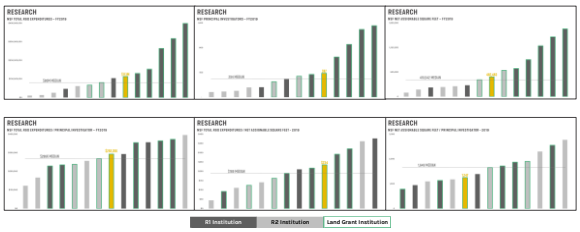
INSPIRED DISCOVERIES | PATHWAY TO R1 STATUS



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QUANTIFYING CAMPUS SPACE NEEDS & DEVELOPING STRATEGY

EXAMPLE: FOUNDATION FOR IMPROVED SPACE USE

SPACE STRATEGY RECOMMENDATIONS

- Establish a space management process
- Revise how research space is allocated to include productivity metrics
- Reallocate non-student facing functions off campus
- Create a student one-stop center
- Reposition Addlestone Library as an academic success center
- Prioritize a new science teaching building
- Set the foundation for an update to the campus master plan

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BUILDING SPACE PROGRAM

Assumptions:

- Assumes 2 new faculty lines and housing 2 Adj., 3 GA's and 1 SA
- Shared break room with one other academic department; can be aggregated

Use Code	Functional Area	Existing Bldg ASF	Existing Staffing	Future Staffing	No. of Occup/Sta	ASF per Occupant	ASF per Space	No. of Spaces	Total ASF	TOTAL AREA
310	**Offices**	**398**	26	29						**2,735**
	Department Chair	224	1	1			175	1	175	
	Administrative Asst	174	1	1			100	1	100	
	Faculty & PT Lecturers		16	18			100	18	1,800	
	Vacant Positions		3	3			100	3	300	
	PT/Adjuncts		1	2			60	2	120	
	Graduate Assist		3	3			60	3	180	
	Student Assist		1	1	1		60	1	60	
	Tutoring Office						60	0	0	
315	**Office Support**	**178**								**240**
	Waiting	incl above					80	1.0	80	
	Office Storage						100	1.0	100	
	Mailbox, Filing	incl above					60	1.0	60	
	Meeting	**0**								**290**
	Conference Room						150	1.0	150	
	Shared Break Rm	178					280	0.5	140	
	Internal Office Circ									**327**
	Circulation Factor						10%		327	
								TOTAL UNIT'S ASF		**3,592**

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BUILDING SPACE PROGRAM

- The Option 1 includes most all desired spaces
- The Option 2 scenario deletes the large spaces but includes a 2,000 ASF lobby; events could potentially be accommodated
- Option 2 is approx. 2,017 ASF above the target

RICHARDS COLLEGE OF BUSINESS SPACE SUMMARY

			Option 1	Option 2	TARGET
			-	-	
Dean's Office			**3,392.5**	3,392.5	
Development Office			**276.0**	276.0	
SBDC			**661.3**	661.3	
Advising			**1,489.3**	1,489.3	
Academic Departments			**12,694.0**	12,694.0	
	Accounting & Finance	**3,063.5**			
	Economics	**3,151.5**			
	Management	**3,591.5**			
	Marketing & Real Estate	**2,887.5**			
Instructional & Study			**18,169.0**	18,169.0	
Other					
	Lobby/Informal Space		**2,000.0**	2,000.0	
	Café Space		**1,800.0**		
	Event Space		**2,500.0**		
	Testing Center		**1,800.0**		
	Vending		**300.0**	300.0	
	Graduate Student Lounge		**360.0**	360.0	
	Student Organizations		**660.0**	330.0	
	ITS Office		**100.0**	100.0	
	ITS Storage		**80.0**	80.0	
	Unfinished Basement Storage	TBD			
	Main Distribution Facility	TBD	**200.0**	200.0	
Support					
	Mech, Elec, Hsekeeping, etc	Included in Net to Gross Factor			
	Unfinished Basement	TBD			
SUBTOTAL ASF			***46,482.0***	***40,052.0***	***38,035***
Net to Gross Factor		**0.59**	-	-	
TOTAL GSF			**78,783.1**	**67,884.7**	**64,466**

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ADJACENCY DIAGRAM

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OUTDOOR SPACE

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OUTDOOR SPACE

Clemson looking for unmarked graves across properties

Memorial to Enslaved Laborers

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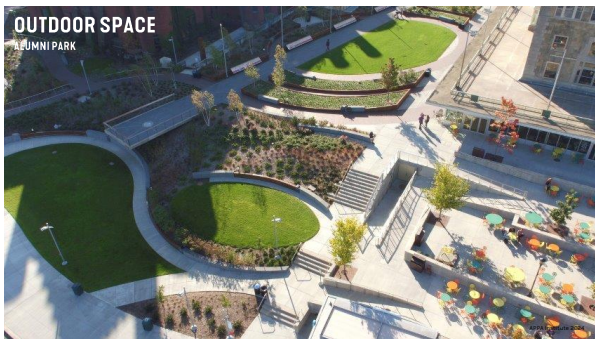

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7
ANALYSIS

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DATA COLLECTION

ANALYSIS INPUTS

- STUDENTS
- EMPLOYEES
- COURSES
- SPACE
- RESEARCH

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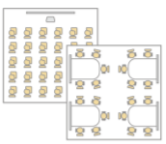
INSTRUCTIONAL SPACE

UTILIZATION FACTORS

WEEKLY ROOM HOURS (WRH)
Number of hours per week a credit-bearing course is scheduled into a room.

SEAT FILL RATE (SFR)
The percentage of seats filled when a course is scheduled as compared to the actual number of seats in a room.

ASSIGNABLE SQUARE FEET (ASF) PER SEAT
Space ASF divided by the number of student seats or stations.



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CLASSROOM ANALYSIS

CONTACT HOURS
Weekly Hours * Room Utilization * Station Efficiency
= Number of Stations
Stations * ASF per Station =
TOTAL ASF

600 stdnts * 2 credits * 1 contacts/day or 1200
40 Hours * 75% Utilization * 67% Station Efficiency or 20.1
1200/20.1 = 59.7 or 60 Stations
60 Stations * 30 ASF per Station =
1800 TOTAL ASF

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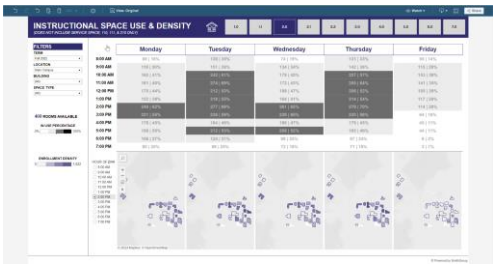
CLASS LABORATORY ANALYSIS

CONTACT HOURS
Weekly Hours * Room Utilization * Station Efficiency
= Number of Stations
Stations * ASF per Station =
TOTAL ASF

600 stdnts * 2 credits * 4 contacts/day or 4800
40 Hours * 50% Utilization * 80% Station Efficiency or 16
4800/16 = 300 Stations
300 Stations * 60 ASF per Station =
18,000 TOTAL ASF

71

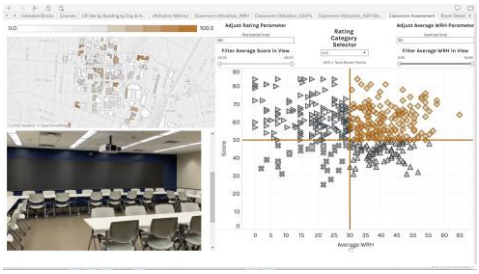
CLASSROOM UTILIZATION (VIDEO)



72

CLASSROOM EDUCATIONAL ADEQUACY (VIDEO)

UT AUSTIN



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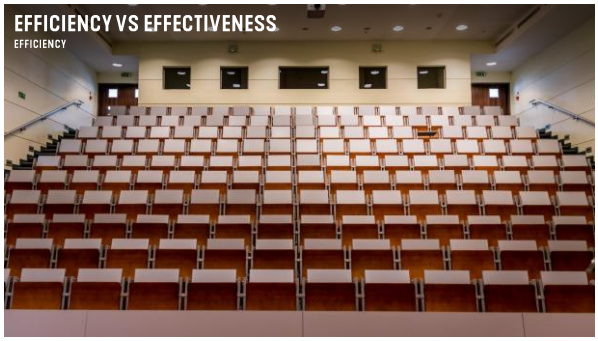
EFFICIENCY VS EFFECTIVENESS

EFFICIENCY



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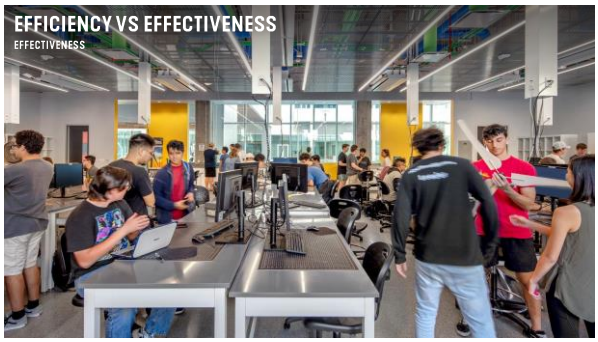
EFFICIENCY VS EFFECTIVENESS

EFFECTIVENESS

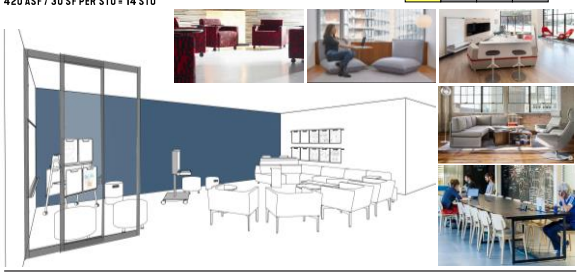


75

LEARNING LOUNGE

420 ASF / 30 SF PER STU = 14 STU

S <20> | M <60> | L <100> | XL <200>



76

LEARNING CAVE

S <20> | M <60> | L <100> | XL <200>

ADD POWER TO EACH STATION

ADD MONITORS TO SIDE WALLS
> CREATE A HYFLEX CAVE

77

SLOPED ACTIVE LEARNING

HOW MIGHT WE MAKE MORE ACTIVE?

S <20> | M <60> | L <100> | XL <200>

DOUBLE TIER

TEAM BOOTHS

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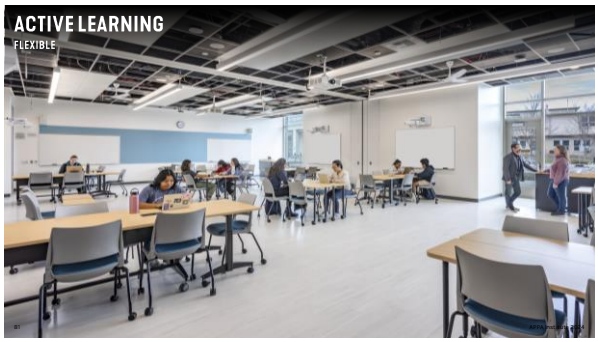
FLAT FLOOR ACTIVE LEARNING

LARGE FORMAT ... 189 SEATS

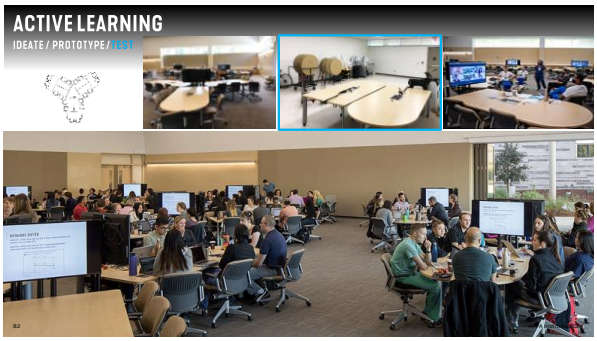
S	M	L	XL
<20>	<60>	<100>	<200>

79

80



81


ACTIVE LEARNING
IDEATE / PROTOTYPE / TEST
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EVERYWHERE
WHERE DOES LEARNING HAPPEN?
83
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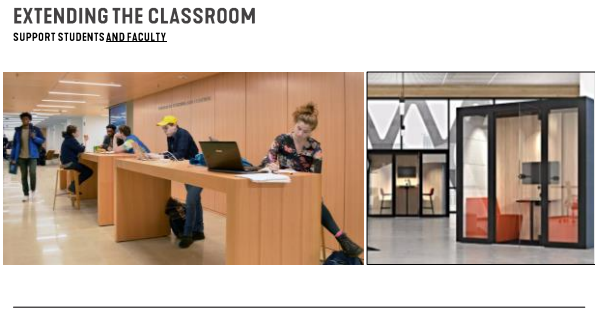
EXTENDING THE CLASSROOM
SUPPORT STUDENTS AND FACULTY
84
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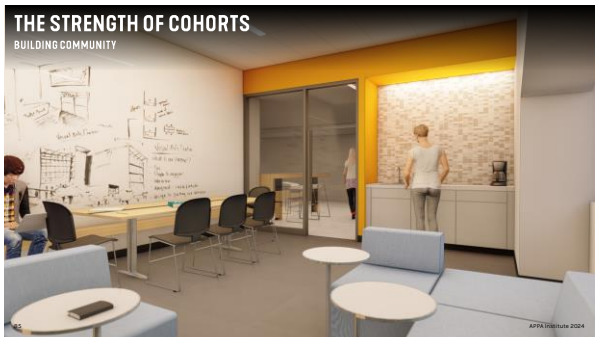
THE STRENGTH OF COHORTS
BUILDING COMMUNITY
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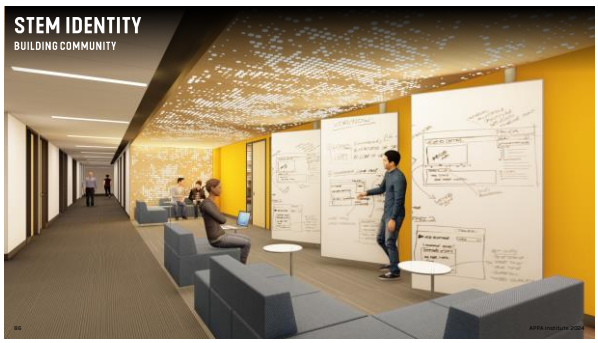
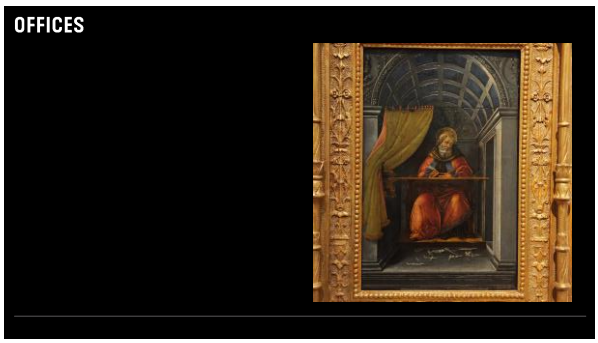

STEM IDENTITY
BUILDING COMMUNITY

86


OFFICES

87

88

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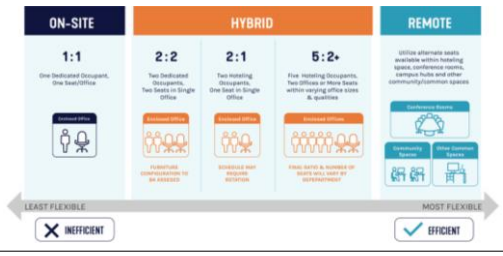
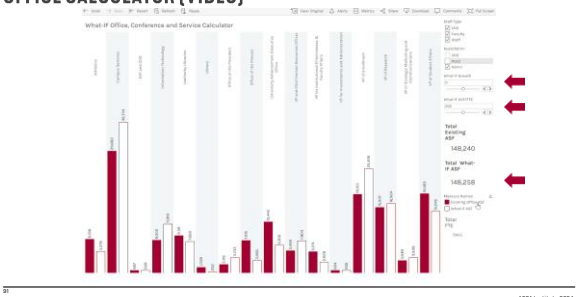
THE CHANGING WORKPLACE



90

90

OFFICE CALCULATOR (VIDEO)



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LABORATORIES

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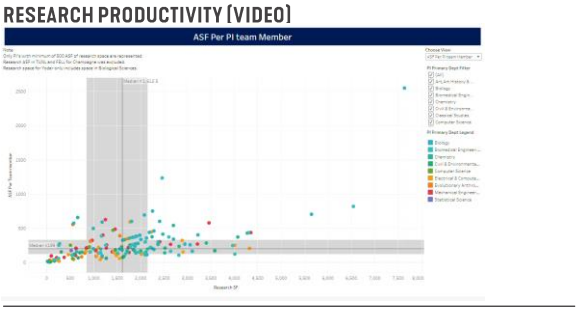
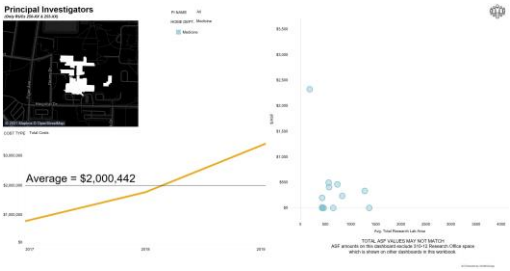
RESEARCH PRODUCTIVITY (VIDEO)



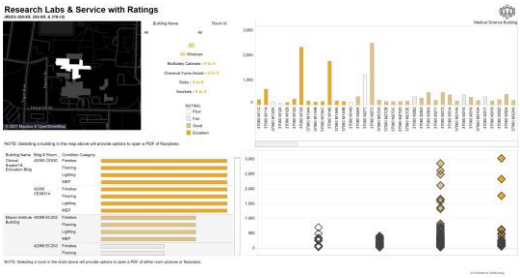
93

RESEARCH PRODUCTIVITY



94

RESEARCH PRODUCTIVITY



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ALTERNATIVE EXAMPLE: BUILD NEW RESEARCH SPACE

TARGET: $100M Expenditures

- **$250k/PI → 400 PI's**
- **$500k/P I→ 200 PI's**

- **50% Lab Intensive = 100 PI's**
- **30 Engr @ 1500 ASF/PI**
- **70 Scientists @ 1200 ASF/PI**
- **→ 139,000 ASF**
- **→ 232,000 GSF**

- **Construction cost @ $1,000-$1,200/GSF =**
- **$232,000,000 – $278,400,000**

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8
TRENDS

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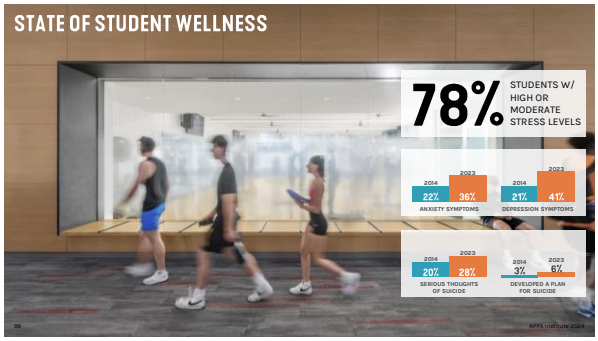
STATE OF STUDENT WELLNESS



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WELLBEING STRATEGIES

BELONGING

MENTAL HEALTH SERVICES

INTEGRATED / STREAMLINED SUPPORT

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COMMUNITY

101


QUIET STUDY
NEURO-DIVERSITY

102


PEER LEARNING/TEAM-BONDING/COLLABORATION

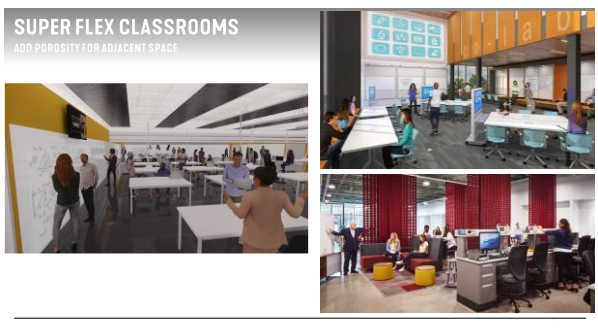
103


DEATH OF THE LECTURE HALL?

104


FLEXIBLE, MULTI-USE

105


SUPER FLEX CLASSROOMS
ADD POROSITY FOR ADJACENT SPACE
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EXPERIENTIAL LEARNING

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TREND: RETHINKING OFFICE WORKSPACE

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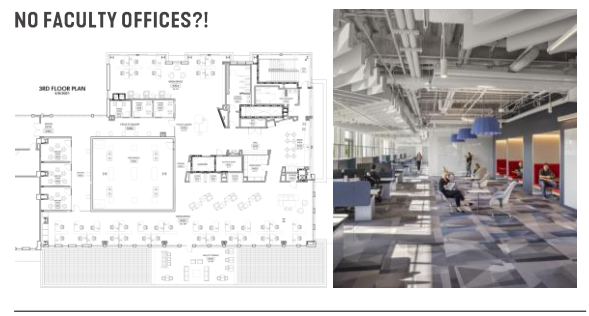
NO FACULTY OFFICES?!
3RD FLOOR PLAN
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NEW UTILIZATION METRICS

OLD ONES THROWN OUT THE WINDOW

- Increased occupancy targets
- More ASF/Station
- Recognition of multi-purpose uses in utilization
- Smaller or redistributed ASF/FTE for offices
- Greater use of teaching labs due to flexibility
- More central control for increased efficiency

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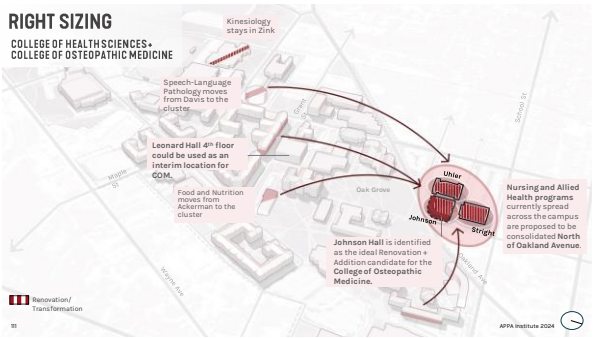
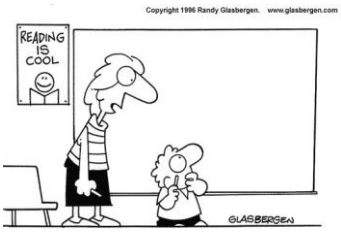
RIGHT SIZING

COLLEGE OF HEALTH SCIENCES + COLLEGE OF OSTEOPATHIC MEDICINE



111

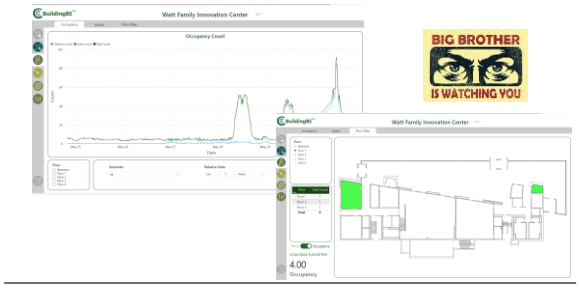
TECHNOLOGY



"There aren't any icons to click. It's a chalk board."

112

OCCUPANCY TRACKING/ DATA



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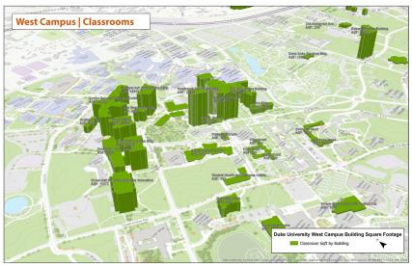
GEO-SPATIAL INFORMATION SYSTEMS (GIS)



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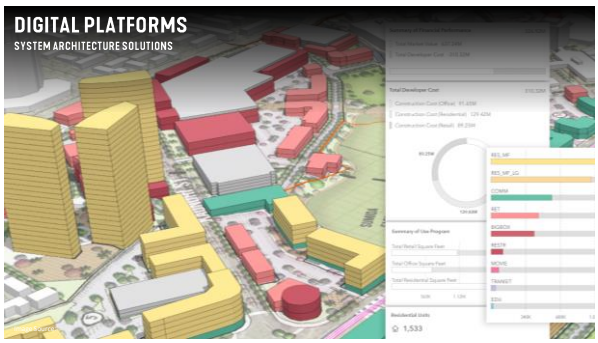
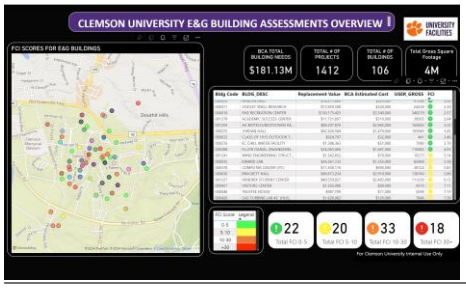


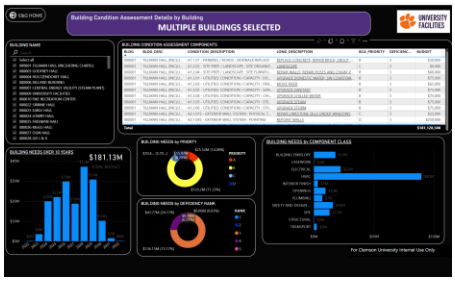
115

FCA



116

FCA



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TRENDS: DATA

OVERLAYS OF OPERATIONAL DATA: OPERATING COSTS, AGE, FCA, STUDENTENROLLMENT

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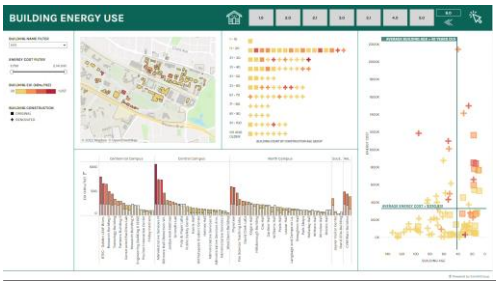
TRENDS: DATA (ENERGY AND BUILDING AGE) – VIDEO



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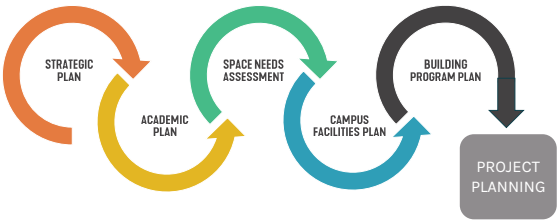
LEVERAGING THE PLANNING PROCESS



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This concludes the American Institute of Architects Continuing Education Systems Course

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