UTAH STATEWIDE HIGHER EDUCATION SPACE UTILIZATION MASTER PLAN

DFCM PROJECT NO. 20159300

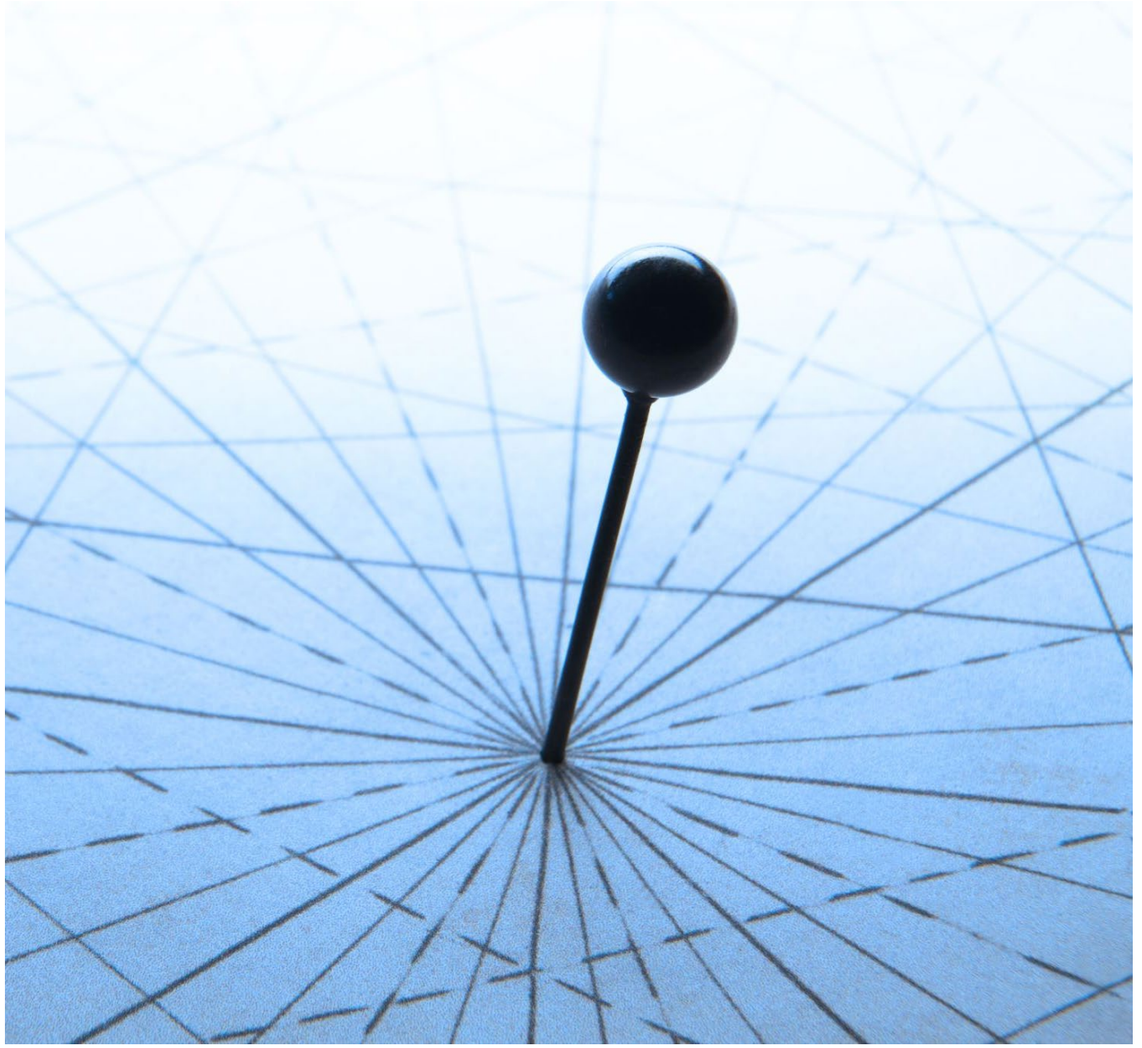
LEGISLATIVE UPDATE

FEBRUARY 5, 2024

SMITHGROUP NCHEMS

TODAY'S AGENDA

- Project Overview
- Existing Processes/Challenges
- Statewide Space Guidelines and Best Practices
- Putting it all Together – New Opportunities
- Next Steps



PROJECT OVERVIEW

SMITHGROUP

PROJECT PHASING AND TASKS

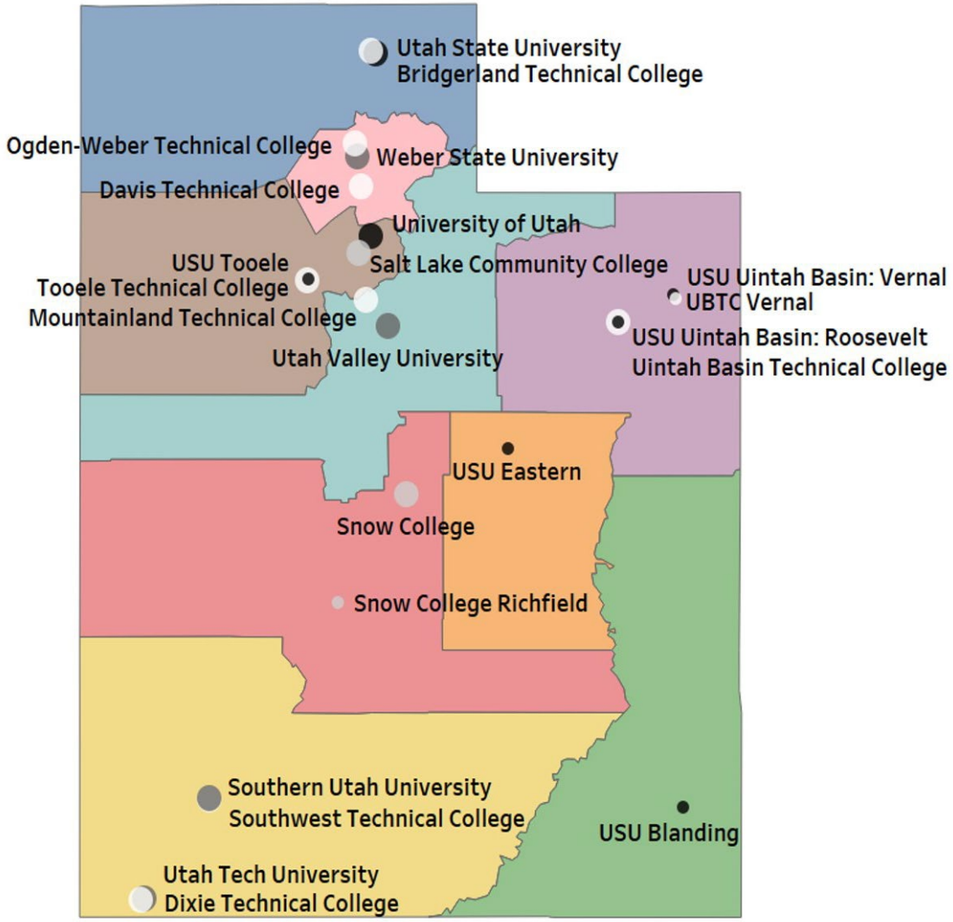
Phase	Task #	Tasks
UNDERSTAND	1	Scoping, Schedule, Data List
		Kickoff Work Session
	2	Project Coordination
		Trends/Benchmarking Work Session
	3	Project Coordination
		Campus Meetings, Tours, Data Validation
		Utilization, Challenges, Opportunities
EXPLORE	4	Project Coordination
		Space Metrics, Standards, Recommendations
	5	Project Coordination
		Projections, Space Needs
REALIZE	6	Project Coordination
		Study Findings and Recommendations
		Draft Report Review and Comments

- Consultant Working on Final Two Phases
  - Explore: Tasks #4 and #5
  - Realize: Task #6
- Committee Structure
  - Executive Committee
  - Advisory Committee
  - Campus Committees
- Today's overview will focus on Challenges, Opportunities, Best Practices, and their impact on the development of new space metrics

UTAH INSTITUTIONS INCLUDED IN STUDY

ANALYSIS INCLUDES ADDITIONAL BRANCH CAMPUSES, CENTERS AND OUTREACH SITES

Institution	Institution Type
University of Utah	Research
Utah State University	Research
Utah Valley University	Dual Mission
Weber State University	Dual Mission
Southern Utah University	Dual Mission
Utah Tech University	Dual Mission
Salt Lake Community College	Community College
Snow College	Community College
Davis Technical College	Technical College
Ogden Weber Technical College	Technical College
Bridgerland Technical College	Technical College
Mountainland Technical College	Technical College
Dixie Technical College	Technical College
Uintah Basin Technical College	Technical College
Southwest Technical College	Technical College
Tooele Technical College	Technical College



EXISTING PROCESSES / CHALLENGES

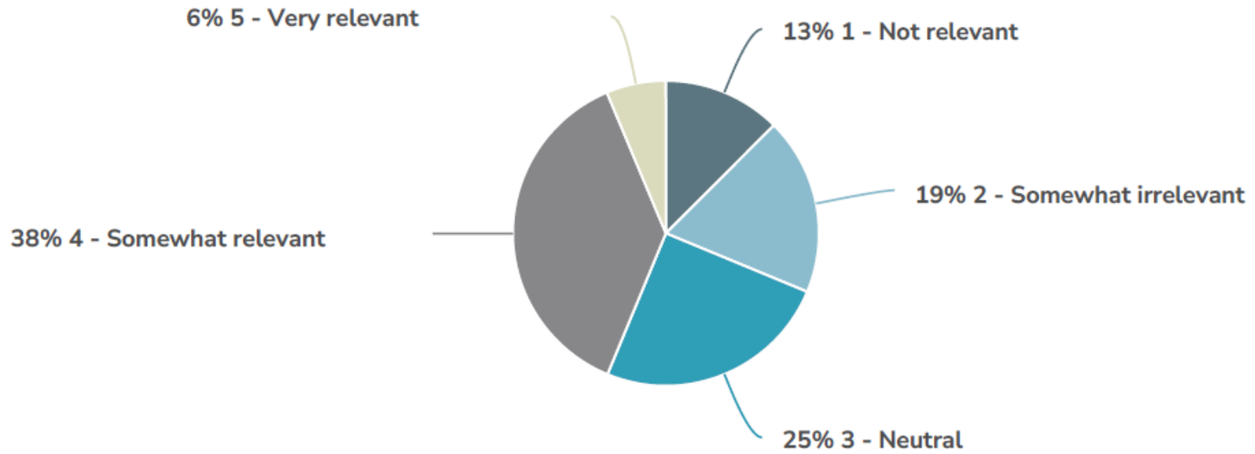
SMITHGROUP

CHALLENGES – RELEVANCY OF EXISTING SPACE TAXONOMY

FACILITY SURVEY AND CAMPUS TOURS

Respondents noted that current USHE Facility Inventory Taxonomy is less relevant for multiple types of spaces in their institutions.

25. USHE's space inventory room use codes are derived from the Postsecondary Education Facilities Inventory and Classification Manual (FICM). On a scale of 1 to 5, how relevant are current room use codes for coding space at your institution? Please provide an explanation for the ranking given.

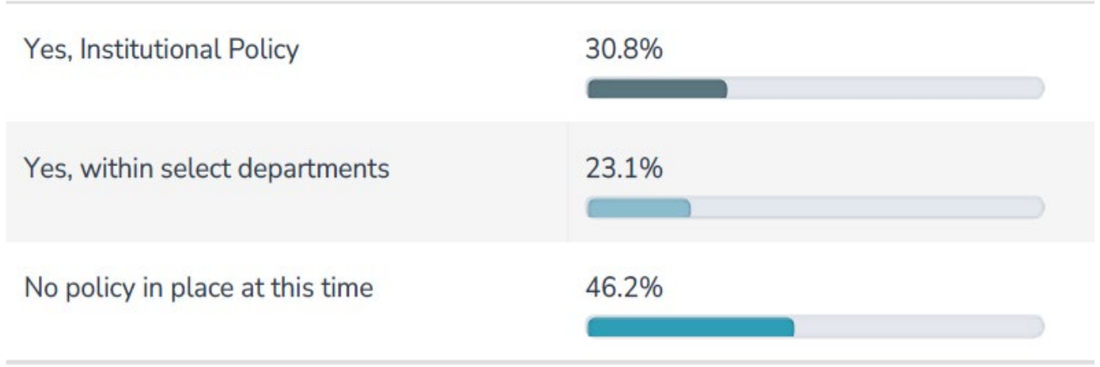


CHALLENGES: NEW DATA NEEDS FOR A CHANGING LANDSCAPE

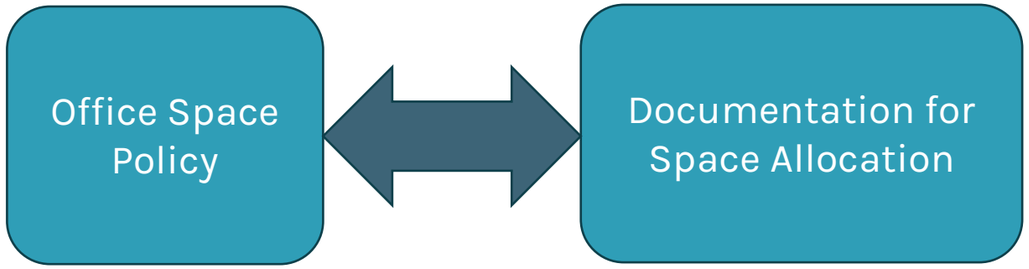
FACILITY SURVEY – OFFICE SPACE POLICY EXAMPLE

Q: Does your institution have a remote work/telecommuting policy in place for employees?
81% Yes
19% No

Q: Does that policy address office arrangements specific to remote or hybrid employees? (As an example, hybrid employees will be eligible for touchdown or hotel space when on campus. Remote employees will not have a dedicated individual office or workstation on campus.)



- While USHE institutions have remote work/ telecommuting policies, most are not linked to the allocation of office space
- Office space allocation data would need to be standardized and reported to USHE before space needs analyses could be completed



CHALLENGES – NEED FOR REVISED DATA DEFINITIONS

Types of Exclusions
Room Grouping Codes

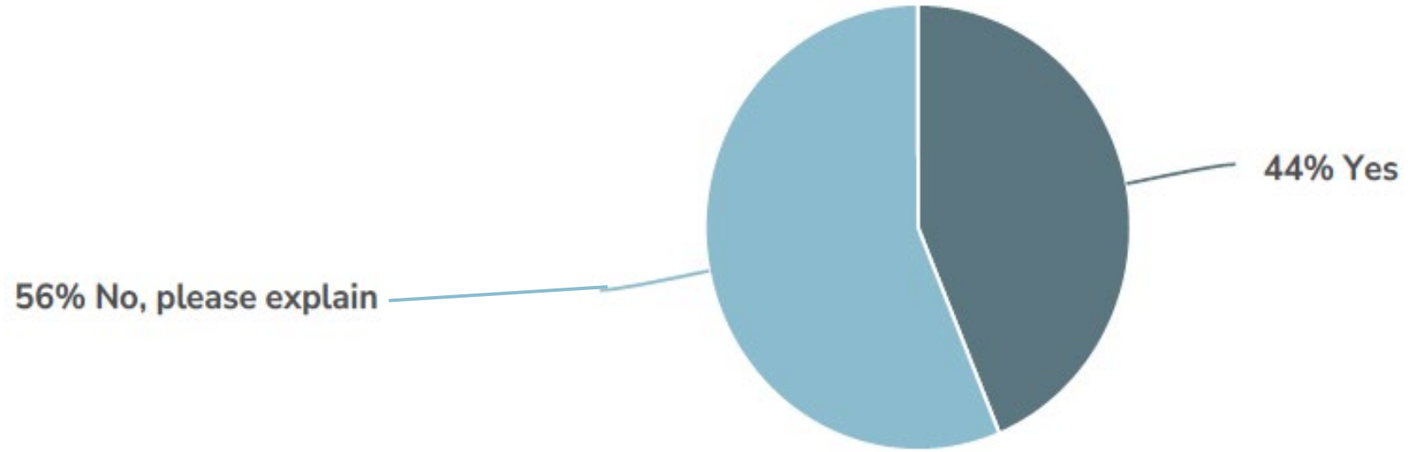
Field Value	Field Attributes and Example
A	Needs Analysis
B	Auxiliary
C	Hospital
D	Public Broadcast
E	Museums and Galleries
F	Ext. & AG Exper
G	Farm
H	Greenhouses
I	Shared w/Institution
J	Hosting Conferences
K	Public Theater
L	Special Res./Inst.
M	Public Daycare
N	Student Health Clinic
O	Airport Hanger
S	School of Medicine
V	Federal Space
X	Excluded from Space Utilization
Y	Non Assignable
Z	Leased Out Space

- There is currently no provided definition for the room grouping codes.
- Institutions interpret the codes differently, therefore there are inconsistencies in how they are used and what space is included in the space analysis across the space on institutions.
- Data definitions of each category would improve the coding of spaces and, in turn, the data received.

CHALLENGES – LACK OF RESOURCES

FACILITY SURVEY

Q: Do you feel as though your institution has adequate resources applied towards space management?



WHY?

- No space management mechanism nor funding to support one.
- No, efforts are very decentralized.
- Not entirely. Most of us have it added to our regular duties which makes time management tricky.
- Most people that conduct the space report or that are part of the space committee consider space to be under other duties as assigned so it tends to be ruled by time management.
- We have not been funded for dedicated space management positions.

STATEWIDE SPACE GUIDELINES AND BEST PRACTICES

OVERVIEW OF ADJACENT STATES

SYSTEMWIDE SPACE GUIDELINES: ADJACENT STATES

SPACE POLICIES / GUIDELINES

- Four of the six adjacent states repealed state guidelines or allow institutions to set their own space guidelines
- Two states have System offices that calculate utilization outcomes and use statewide space guidelines to generate space needs

- **Arizona**: Arizona Board of Regents (ABOR) repealed statewide guidelines in 2014. ABOR and universities develop and maintain methodology for developing space guidelines.
- **Colorado**: Most Colorado Commission on Higher Education (CCHE) space guidelines were repealed. CCHE reviews space needs requirements at the institutional level.
- **Idaho**: No statewide Space planning guidelines. Metrics are developed at the institutional level.
- **New Mexico**: No Statewide space guidelines. Guidelines are developed at the institutional level.

STATEWIDE SPACE GUIDELINES: NEVADA

Nevada System of Higher Education

Space Inventory Predictors - Current Need Calculations

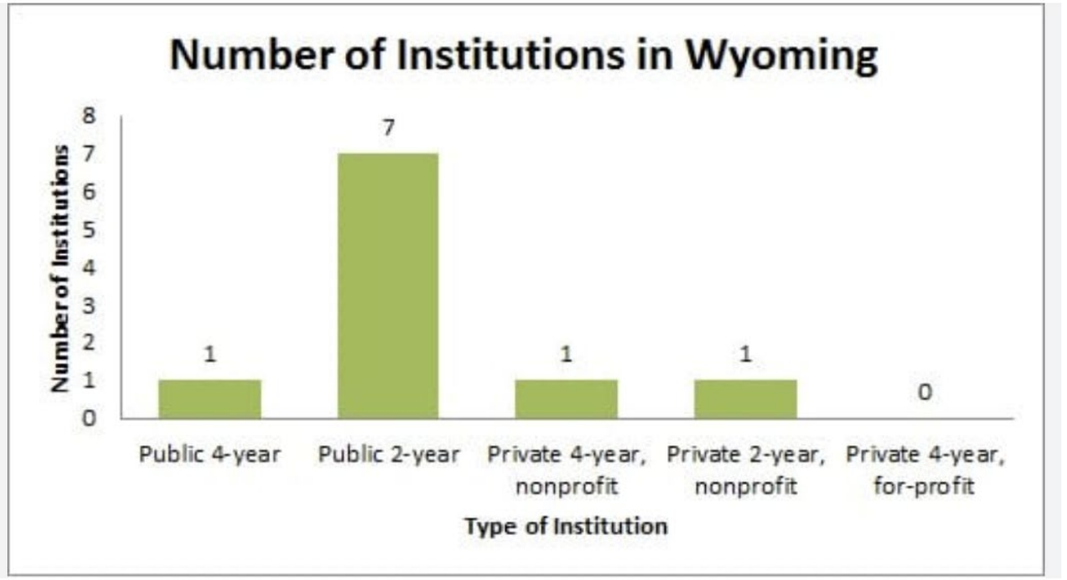
Facility Type	Driver	Process	Rate	Current Calculated Space	Need for
CLASS ROOMS	Total student FTE	multiply by	9.24	Result	
CLASS LABS	Total student FTE	multiply by	17	Result	
RESEARCH LABS	3 Yr Avg Reseach divided by $1 million	multiply by	6,244	Result	
STUDY FACILITIES					
Part 1 - Stack space	Total bound volumes	multiply by	0.08	Result	
Part 2 - Study space	Total student FTE multiplied by 0.30	multiply by	30	Result	
Part 3 - Tech space	Part 1 Result plus Part 2 Result	multiply by	0.20	Result	
Part 4 - Media services	Total student FTE minus 10,000 multiplied by 0.20	plus	10,000	Result	
		Total		Result	

- NSHE developed four high-level space predictors / guidelines
- Focus is on space efficiency and optimization
- NSHE calculates 10-year enrollment projections
- Applicable to all state public colleges and universities
- Formulas generate current space needs and 10-year space projections
- NSHE updates outcomes every two years

STATEWIDE SPACE GUIDELINES: WYOMING

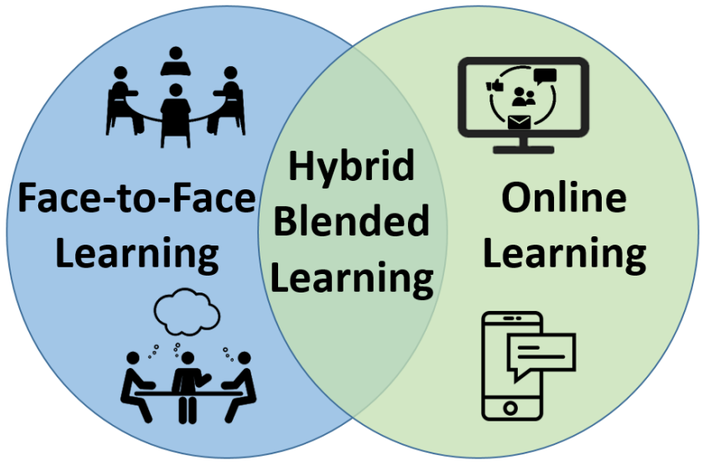
WYOMING COMMUNITY COLLEGE COMMISSION

- WCCC manages a database comprised of building inventory, building condition, square footage, usage, space utilization and building capacity data
- Establishes statewide planning and reporting criteria and space guidelines for use by community colleges
- Computes future student enrollments, building space demands and future space needs in 10 space categories



BEST PRACTICES: TRENDS

IMPACT ON CAMPUS SPACE NEEDS



During Fall 2022, 28% of student FTE generated in Utah degree-granting institutions was by online students

Standardized data on remote and hybrid employees is needed before office space needs analyses can be generated

Calculating Space Needed

Ratios here are for guidance; adjust to meet department needs.

				Enter Headcount by Type			*Result: Seatcount by Type*			*Result: Total*
Building	Unit/Department	Total Headcount	Current Seats	Onsite 60% or More	Onsite 20-60%	Onsite 20% or Less	*Ratio 1:1* Onsite 60% or More	*Ratio 1:2* Onsite 20-60%	*Ratio 1:10* Onsite 20% or Less	Total number of seats needed
Building ABC Sample	Department 123 Sample	27	27	11	12	4	11	6	1	18
							0	0	0	
							0	0	0	
							0	0	0	
							0	0	0	
							0	0	0	
							0	0	0	

SMITHGROUP

STATE GUIDELINE SUMMARY

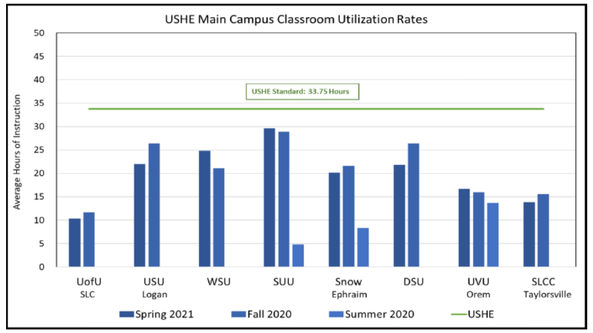
HOW STATES ARE USING SPACE GUIDELINES

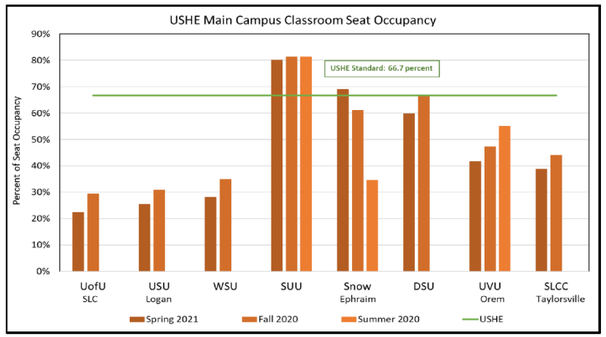
- Conveying at a high level the demand and supply of space in multiple categories
- Forecasting high-level future space needs based on changes in programs, services, and student enrollments.
- Allocating resources efficiently and effectively to meet the demand while ensuring full utilization of resources
- Adapting to changing needs and expectations of students, faculty, and staff and their expectations.
- Responding to emerging trends and opportunities in higher education (such as online learning, remote work, occupational demands.
- Aligning with statewide and institutional strategic goals, mission, and vision.
- Addressing technical and operational challenges of space use and maintenance (safety, security, reliability, sustainability).

PUTTING IT ALL TOGETHER – NEW OPPORTUNITIES

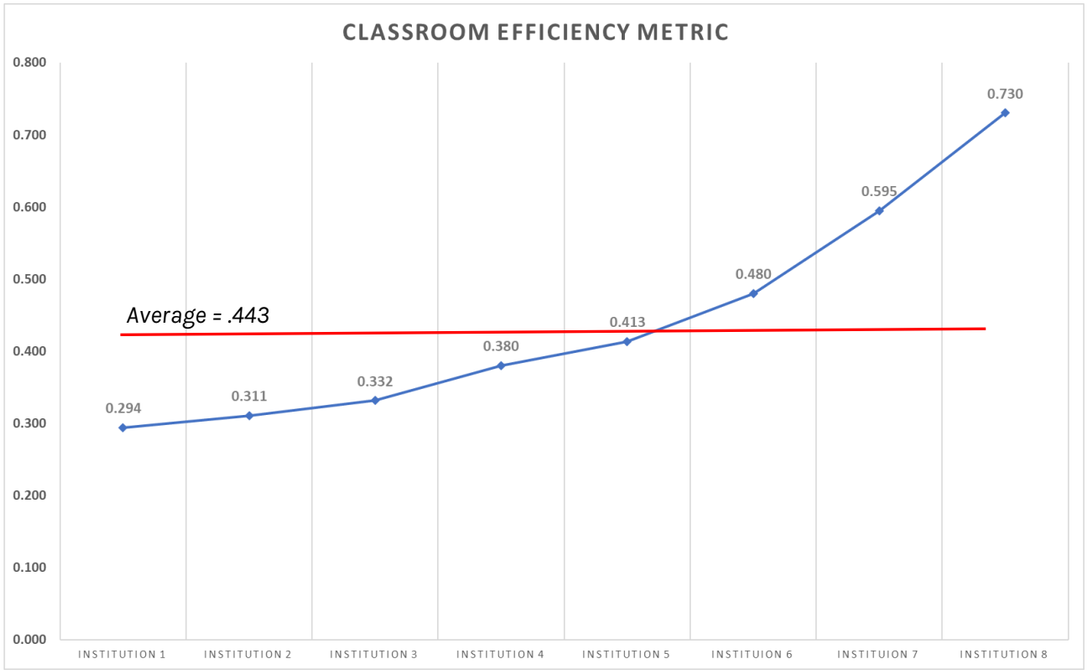
ALTERNATIVE CLASSROOM UTILIZATION OUTCOMES

Current USHE Classroom Utilization Reporting:
Weekly Room Hours and Seat Occupancy





Alternative Single Metric Reporting



- Supplement current utilization reporting with a single "efficiency" metric
- Focus on efficiency or optimization of instructional spaces
- Focus on end results — let institutions decide on how to achieve statewide guidelines based on unique needs
- Establish accountability for improvements if institutions fall below average

UTILIZATION IN TECHNICAL COLLEGES

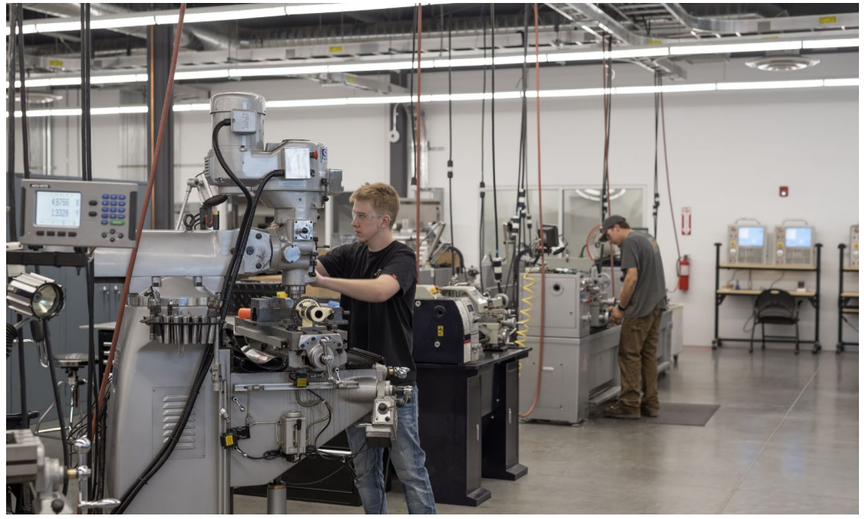
Degree-Granting Institutions

English 101, 8:30 am – 10:00 am, Monday & Wednesday

- Course schedule is fixed (Defined time of day and day of week)
- Defined start and end dates (semester system)
- All students attend a course at the same time
- The number of students enrolled in a course is consistent over time
- The unit of analysis is the classroom or lab
- Uniformity allows for measurement of room utilization

Technical Colleges

Machining 101, Lab open 8:00 am – Noon, Monday - Friday



- Course schedule is fluid (enrollment changes by hour and by day)
- Open-entry, open-exit courses are competency-based (students work at their own pace)
- Students arrive and depart at different times
- Multiple program on-ramps – no defined start/end times
- The unit of analysis is space dedicated to the *program*
- Lack of consistency makes it difficult to measure traditional utilization metrics

REVISED SPACE TAXONOMY FOR TECHNICAL COLLEGES

Revised Room Use Code Taxonomy
Utah Technical Colleges

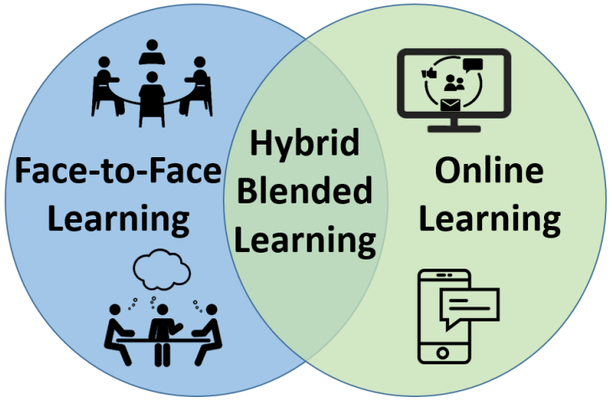
Room Use Code	Space Type
Classrooms	
110	General Purpose Academic Classroom and Service
120	Computer Classroom and Service
130	Training Room and Service (non-credit)
Laboratories	
210	General Laboratory (see list for qualifications)
215	Lab Service
230	Trade-Based Laboratory (see list for qualifications)
232	Trade Lab - Related Instructional Classroom
235	Trade-Based Laboratory Service
220	Open Laboratory and Service
Offices	
310	Office and Office Service
315	Office Service
350	Conference Room and Service
Study/Gathering Spaces	
410	Individual / Group Study Room and Service
420	Open Collaboration / Social / Study Area
650	Lounge and Service
680	Meeting Room & Service
610	Assembly/Exhibition and Service
Institution-Wide Spaces	
530	Media Production and Service
630	Food Facility and Service
660	Merchandising and Service
Support Spaces	
710	Central Computer / Telecommunications
720	Facilities (Shops, Storage, Campus Support)

- Technical Colleges do not have the depth and breadth of space types commonly found in a comprehensive community college or university.
- 65% of all space in Utah Technical Colleges is in classrooms and laboratories
- The current USHE classification taxonomy of 92 room use codes was not applicable and confusing, as most codes for degree-granting institutions did not apply
- A revised taxonomy of 25 codes was developed that focuses on the unique spaces used by Utah's technical colleges

NEW WAYS TO DISAGGREGATE THE DATA

Metrics Defined by Campus Size and Type

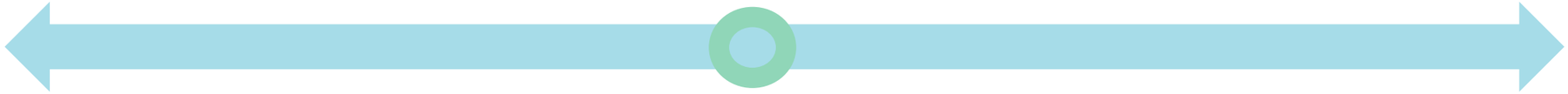
- Salt Lake Community College
- Weber State University
- Taylorsville Campus
- Ogden Campus
- Jordan Campus
- Davis Campus
- South City Campus
- Westpointe Center
- Herriman Campus



- Institutional enrollment data must be disaggregated at the campus level to calculate space needs
- For space planning, enrollment data should focus on the number of students physically present on each campus
- At some colleges, online students and concurrent enrollments are 25% to 35% of FTE on a campus

SPACE NEEDS METRICS: LABORATORY EXAMPLE

The type and quality of existing data determines the level of metric complexity and accuracy of outcomes



One-size fits all Metrics with nominal inputs

Detailed Metrics with Complex Analytics

Teaching Laboratory Guideline: 68 Assignable Square Feet per Student FTE

Space Guideline Based on Type of Laboratory

Table 4: Teaching Lab and Studio Multipliers - Universities and Community Colleges, with CIP Codes

Category A	**150 NASF / Station**	14.02 Aeronautical, Aviation & Aerospace Automotive 46 Construction	14.17,15.06 Industrial Machinery and Equipment 14.19 Mechanical Engineering 15.0611 Metal, Shop, & Welding	Power and Energy 14.31 Materials Science 51.24 Veterinary Medicine
Category B	**100 NASF / Station**	01 & 02 Agriculture 14.06 Ceramic 50.03 Dance 50.05 Dramatic Arts	51.04 Dentistry 51.2306 Occupational Therapy 51.17 Optometry	51.2308 Physical Therapy 14.08 Structural Engineering
Category C	**75 NASF / Station**	40.0502 Analytical Chemistry 26.04 Anatomy, Gross 04 Architecture 40.0202 Astrophysics 26.02 Biochemistry 26.02 Biophysics 26.04 Cell Biology 14.08 Civil Engineering 51.06 Dental Hygiene	14.01 Engineering, General 15.13 CAD/CADD Technology 01.10 Food Science and Technology 26.08 Genetics (lab-based program) 40.06 Geophysics, and Seismology 26.04 Histology 21 Tech Ed / Industrial Arts 50.04 Interior Design 04.06 Landscape Architecture 26.05 Microbiology	26.1302 Marine Biology 26.02 Molecular Biology 50.09 Music Performance 30.24 Neurosciences 51.16 Nursing - Practical and RN 40.0504 Organic Chemistry 51.2 Pharmacy 10.03 Printing and Lithography 42 Psychology (lab-based) 51.0911 Radiology
Category D	**60 NASF / Station**	45.02 Anthropology 40.0201 Astronomy 26.01 Biology, General 40.05 Chemistry, General 09.01 Communication 11.07 Computer Science	50.07 Drawing, Painting 26.13 Ecology 16 Foreign Languages 26.08 Genetics (lecture-based program) 40.06 Geology 09.04 Journalism	26.07 Pathology 40.08 Physics, General 51.22 Public Health
Category E	**40 NASF / Station**	52.03 Accounting 05.01 Afro-American Studies 50.07 Art History and Appreciation 52.08 Finance 45.06 Economics 13 Education	13.06 Educational Statistics and Research 54 History 23&45 Humanities and Social Sciences 22 Law **Learning Support** 27 Mathematics	50.09 Music History and Appreciation 45.10 Political Science and Government 42 Psychology (lecture-based program) 45.11 Sociology 45.12 Urban Studies

Source: THEC Space Guidelines

SMITHGROUP

NEXT STEPS

- Testing of space metrics
- Finalizing projection of inputs
- Initial space needs testing/QC
- Space needs projections
- Executive Committee review/recommendations
- Advisory Committee review/ recommendations
- Documentation and Report