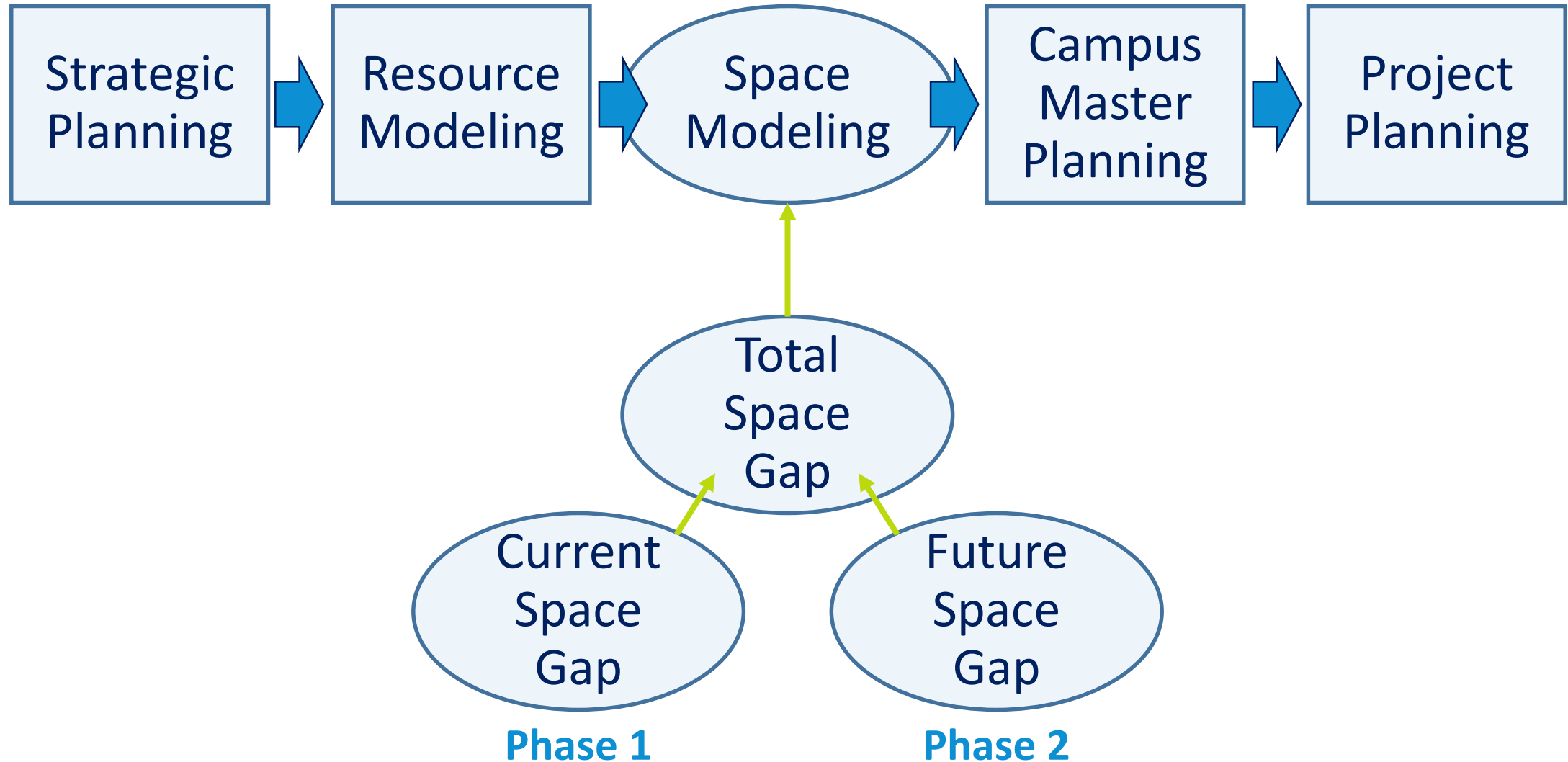


Space Modeling and Capital Plan Development

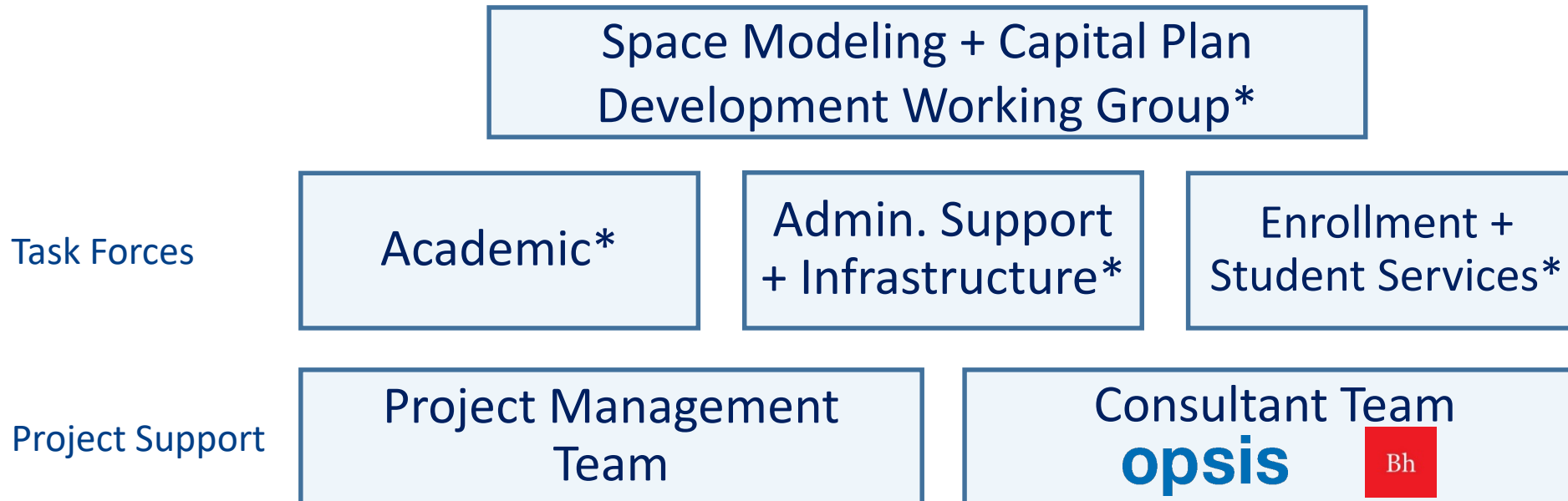
Charge: The Space Modeling + Capital Plan Development Working Group and their associated Task Forces will assist the Vice Presidents in determining the operational and future growth space gaps on main campus, as well as developing a capital ten-year plan for the 2021-2031 cycle.



Space Modeling



Project Structure



Phase 1 - Determine current operational gaps in on-campus space

- Quantify existing campus spaces by category
- Define Needs for that category based on selected metrics
- Identify “operational gaps” between current space and spaces needed

*Membership listed under Space Modeling committee documents, linked [here](#)

Reference Materials

- Office of Financial Management (OFM) Higher Ed Facility Study, 2019
- Facilities Inventory and Classification Manual (FICM) Coding Methodology
- National Intramural-Recreational Sports Association (NIRSA) Space Planning Guideline, 2009
- Viking Union Master Plan, 2018

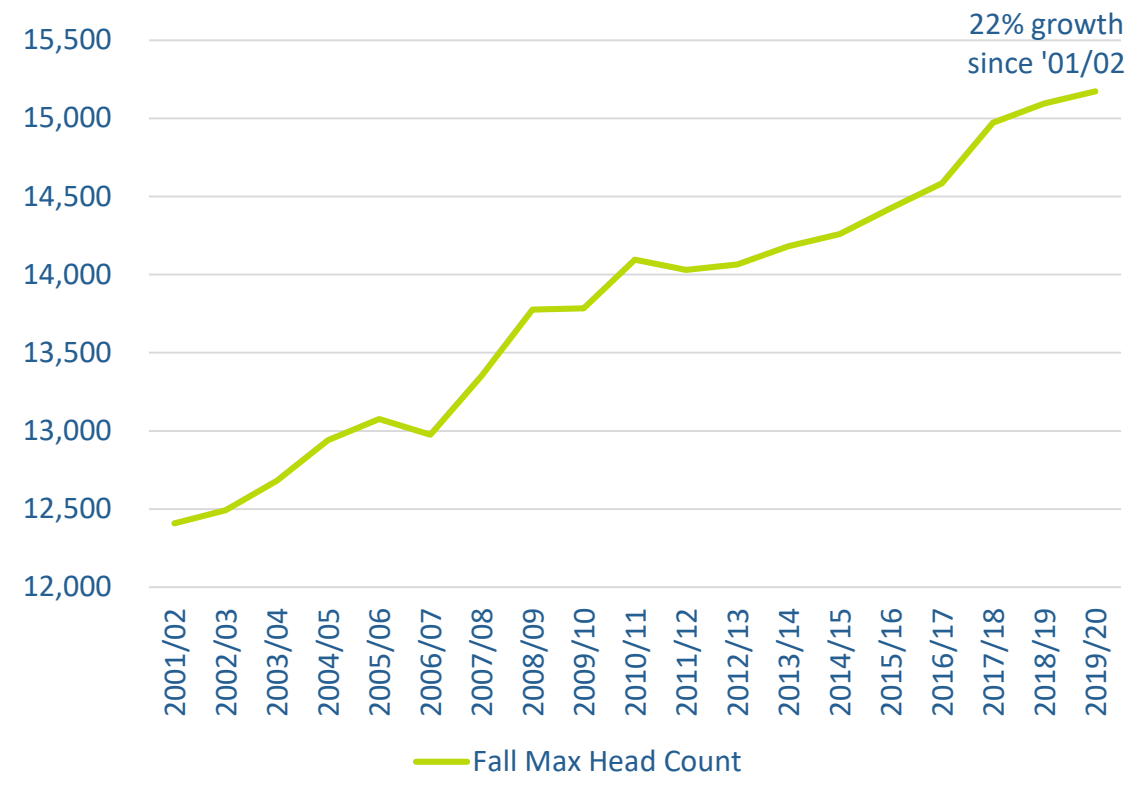
[Sharepoint link to documents above](#)

Glossary of Terms

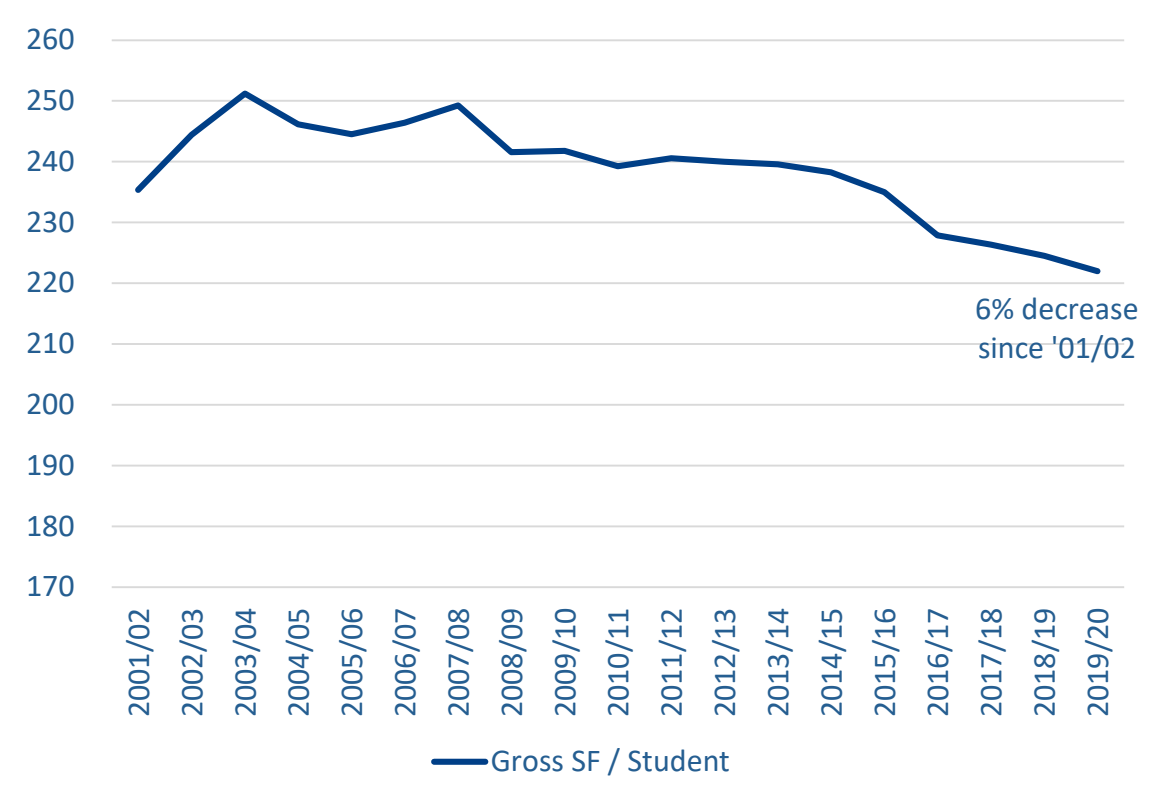
- NASF – Net Assignable Square Feet: Floor area assigned to an occupant, program or support function
- GSF – Gross Square Feet: Total footprint area per building floor including non-assignable areas (circulation, mechanical/electrical, restrooms) and building elements (walls & structure)
- WSCH – Weekly Student Contact Hours: Enrolled student x class hours x days/week

Campus Growth

Enrollment



Gross SF / Student



Methodology

Two types of gap analysis

Quantitative

A

Calculate existing space by type of space (from campus space database)

B

Determine optimum space needs using various space metrics

$$B - A = \text{Operational Gap}$$

Gap Overage (Gap Need)
% of existing (% of existing)

Qualitative

- Narrative descriptions of gaps in performance, quality or usability

Major Space Categories

	Space Category	Space Types
Net Assignable Square Feet (NASF)	Instructional + Research	Classrooms and support spaces
		Class Labs and support spaces
		Open Labs: Computer, Media and Special-Use Labs and support spaces
		Research Labs: dry, wet, other and support spaces
	Office Spaces	Faculty and Staff: Single-occupant offices and shared workspaces w/ multiple workstations
		Conference rooms, supply storage and support spaces
		Administrative + Student Services suites (except health + counseling clinics)
	Community Spaces	Library collections and processing
		Student study and collaboration spaces
		General use facilities: Lounges, food + dining facilities, merchandising, community meeting rooms, galleries and support spaces
		Health and counseling clinic facilities
	Athletics/Campus Rec	Indoor and outdoor athletic and recreational facilities
	Residential Facilities	Student housing
	Campus Support + Infrastructure	Central services: Storage, mail services, publishing/printing services
		Telecomm
		Police
Facilities Management		

Instructional Space

Quantitative

Space Type	Recommended Metrics (OFM Report, 8am-5pm)	Space gap (NASF)	Space gap (%)
Classrooms (General Use, Departmental)	1.19 NASF / WSCH (Weekly Student Contact Hour)	(17,054)	(11%)
Class Labs	1.18 NASF / WSCH	(48,810)	(35%)
Open Labs (Media, Computer, Special-Use)	6 NASF / Enrollment FTE	36,653	30%
Research Labs	1,280 NASF / Principal Investigator (All types)	(64,412)	(89%)

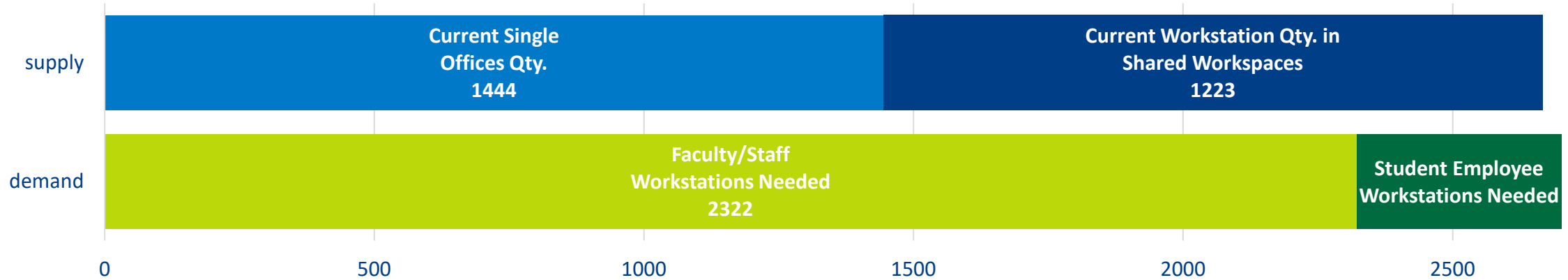
Qualitative

- Distribution of classroom sizes mismatched with course sizes
- Space needs assessment required to understand potential for adaptation to other lab types/uses
- Inequities in the amount and quality of research space
- Furniture and equipment mismatched with pedagogical and curricular needs

Office Space

Quantitative

Workstation Quantities Across Campus - "Supply vs Demand"



Faculty/Staff needs based on 1:1 workstation / head count, except
 1:2 Graduate TA's + police, 1:10 for construction, maintenance, custodial positions

Qualitative

Office Spaces generally

- Wide variation in office sizes and workstation allocations in shared spaces
- Significant variation in quality of work environments
- No swing, surge or flex space

Student Services Programs

- Most Student Service programs are far from parking
- Inadequate spaces for confidential advising, support, outreach and counseling
- Many campuses have Welcome centers for visitors and prospective students
- Many NW campuses have a formal Longhouse

Library + Study Spaces

Quantitative

Space Type	Recommended Metrics (OFM Report)	Space gap (NASF)	Space gap (%)
Library Stacks & Processing	0.07 NASF / Physical Volume Equivalent (PVE)	(14,016)	(14%)
Campus Study Space	5.25 NASF / Student Head Count	1,126	1%

Qualitative

- As with office spaces, need to provide more and better common spaces that facilitate and encourage student collaboration

Community Spaces

Quantitative

Space Type	Recommended Metrics (OFM Report)	Space gap (NASF)	Space gap (%)
Community Spaces	20 NASF / FTE	(36,795)	(15%)

Qualitative

- Very few after-hours amenities or entertainment on campus
- Lacking accommodations for commuter students
- Equity, Inclusion, Dignity
 - Need to continue gender inclusive accommodations
 - Need more lactation accommodations
 - Need to provide space and amenities for spiritual and meditative practices
 - Need further improvements in accessibility
 - Need accommodations for low-income and homeless students
- Limited number of event spaces are small and outdated
- Shortage of makerspaces

Recreation/Athletics

Quantitative

Space Type	Existing Rec Spaces	Recommended NASF (NIRSA Guide for 10-20k students)	Space gap (NASF)	Space gap (%)
Indoor	130,678 NASF	148,000 NASF	(17,322)	(13%)
Outdoor	±9 acres	±15 acres	(±6 acres)	(67%)

Qualitative

- Indoor NASF include Carver spaces that are used ±30% of time for Recreation
- Many athletics, recreation and club activities have to be held off campus
- Conflicts in scheduling
- For reference, regulation soccer field ~3.5 acres

Residential

Quantitative

Space Type	Existing Beds	Operational Gap
Residential	4,035	(842)

Bed count projections are supported by the recent “Housing and Dining Development Assessment – 2019” prepared by Ayers Saint Gross.

Qualitative

- Majority of inventory is in fair to poor condition
- Triple-beds in rooms designed for two
- Insufficient variety of amenities on campus for residents, especially afterhours (grocery, entertainment, communal cooking, etc)
- Equity, Inclusion, Dignity
 - Need to continue gender inclusive accommodations
 - Need further improvements in accessibility

University Support + Infrastructure

Quantitative

Space Type	Recommended Metrics (OFM Report)	Space gap (NASF)	Space gap (%)
University Support & Infrastructure	7% of all other NASF	(9,237)	(12%)

Qualitative

Preservation challenges

- Density of Campus
- Age of Buildings
- Conditions of Campus Facilities

Programmatic challenges

- Modernization needs
- Programmatic Improvements
- Repurposing space

Transportation Infrastructure

Quantitative (Parking)

Existing Spaces	Current Spaces / Head Count*	Calculated Need [assuming .25 spaces / head count]	Operational Gap
3,375 [~28 acres]	.19 [84% avg. occupancy]	4,332 [~75% avg. occupancy]	(957) (~8 acres)

*Student + Staff + Faculty = 17,327

Qualitative

- Pedestrian corridor not ideal for multi-modal alternative transportation
- Need for better routing for transit to and through campus
- Parking proximity to programs, for visitors and students/staff

Space Needs Summaries

Space Type	Existing	Operational Gap
Instructional/Research Space	497,908sf	(93,623)sf
Office Space	384,394sf	(20-50)workstations
Library and Study Spaces	187,961sf	(12,890)sf
Community Spaces	253,359sf	(36,795)sf
Recreational/Athletics (Indoor)	130,678sf	(17,322)sf
Recreational/Athletics (Outdoor)	±9 acres	(±6) acres
Residential	4,035 beds	(842) beds
University Support	79,794sf	(9,237)sf
Transportation (Parking)	3,375 spaces	(957) spaces

Next Steps

Feb 27 - Mar 13: UPRC – Review Phase 1 Findings, References and Provide Feedback

Milestones

- Mar 2: Working Group Begins Work on Phase 2 Projecting Future Growth Gap
- Apr 15: Status Report to UPRC
- May 20: Present draft Final Space Modeling Report to UPRC
- **May 21 – May 29: UPRC – Review Report and Provide Feedback**
- June 11: Working Group posts Final Space Modeling Report

10-Year Capital Plan

Projects for Consideration



Continuation Projects

Received funding in prior biennia; funding will be requested in 2021-23

PROJECTS:

- Electrical Engineering and Computer Science Building

Programmatic Projects (UPRC to Evaluate)

New facility to meet institutional needs; change or improve existing space to meet program requirements

PROJECTS:

- Classroom + Lab Upgrades
- CFPA Addition + Renovation
- Consolidated Academic Support Services Facilities (Phases 1-3)
- Environmental Studies Center Renovation
- Ross Engineering Renovation
- Student Development Success Center
- Wilson Academic Renovation
- Minor Works - Program

Preservation/Infrastructure Projects

(UPRC to Evaluate)

Renovating building systems to extend useful life; upgrading and expanding utility and infrastructure systems

PROJECTS:

- Access Control Security and Infrastructure Upgrades
- Elevator Preservation Safety + ADA Upgrades
- Heating System Carbon Reduction + Energy Efficiency Improvements
- Southcentral Campus Roadway Revisions
- Westside By-Pass Road Realignment
- Minor Works - Preservation

Next Steps

- **Feb 27 - Mar 11:** **UPRC Reviews and Propose Ranking of Projects**
- **Mar 11:** **UPRC Meeting – Discuss and Provide Feedback**

Milestones

- April 17: Present Draft 10-Year Plan to BOT
- June 12: Request Approval of Final 10-Year Plan to BOT
- Summer 2020: Submit Project Proposals, 2-Year Capital Request, and 10-Year Capital Plan to OFM