2022 CAMPUS MASTER PLAN RESTART (2020 CAMPUS MASTER PLAN)





AYERS SAINT GROSS
JUNE 02, 2022





Who is in the Room?

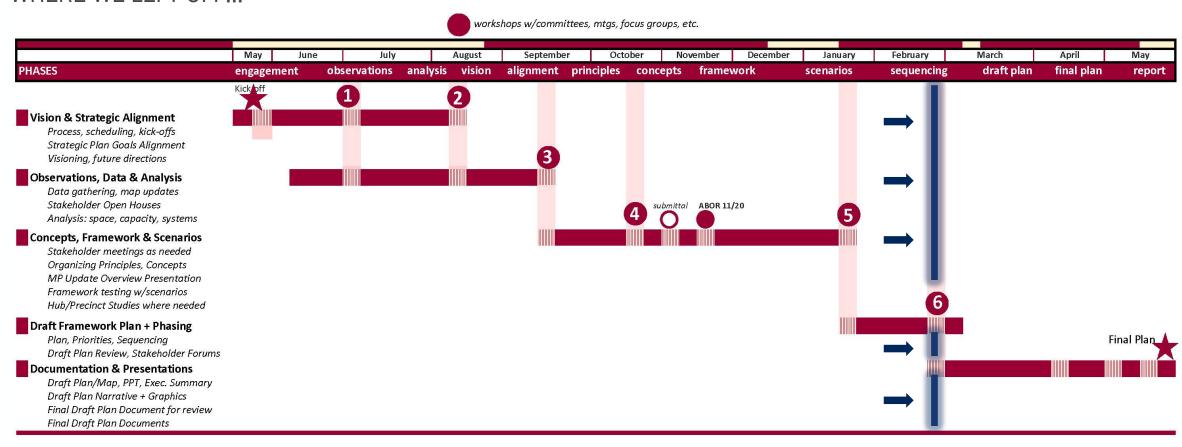
AYERS SAINT GROSS





(previous) 2020 Campus Master Plan Schedule

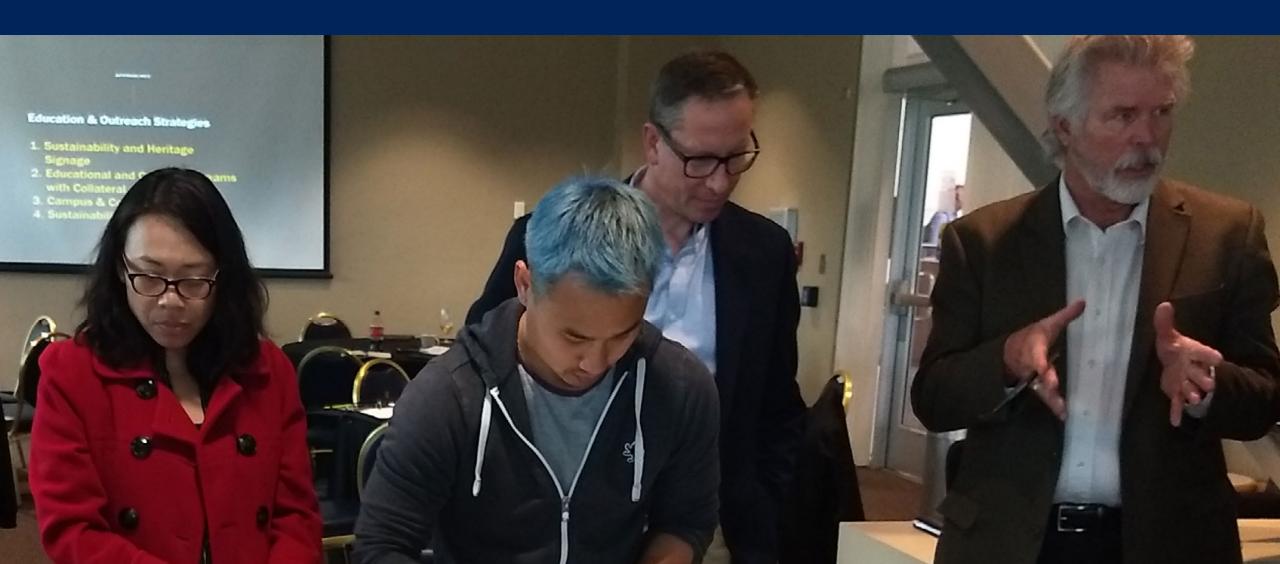
WHERE WE LEFT OFF...



Workshop Recap



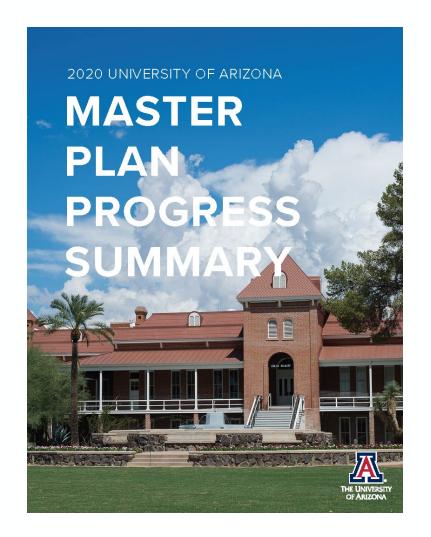
Workshop Recap



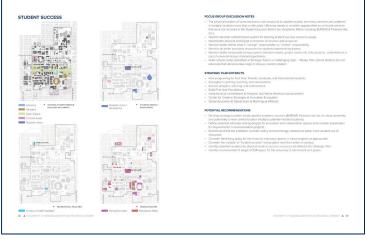
Workshop Recap

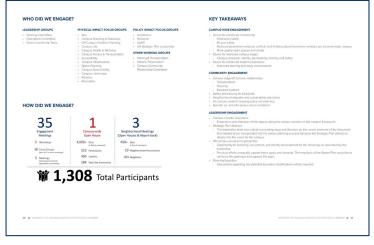


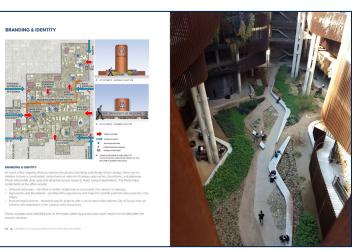
Executive Summary Draft



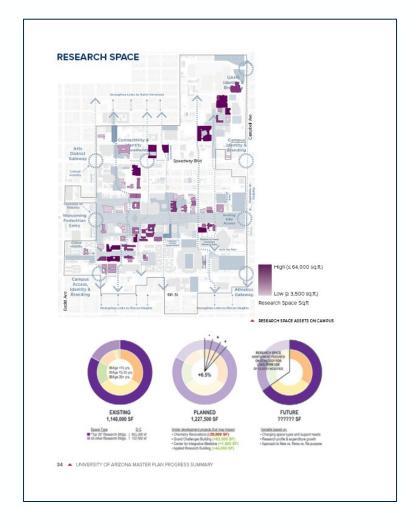




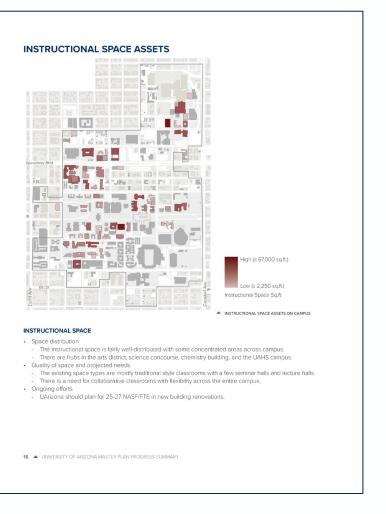




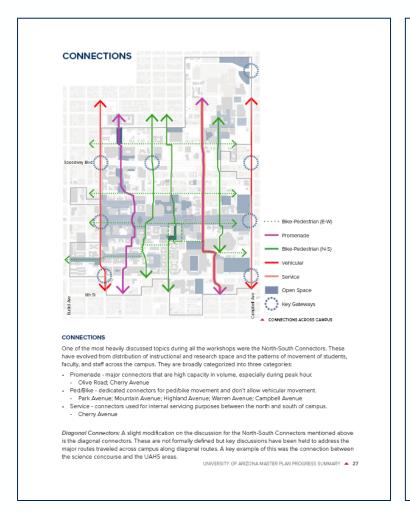
Frameworks

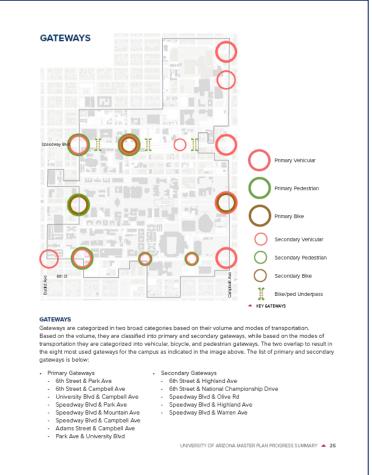


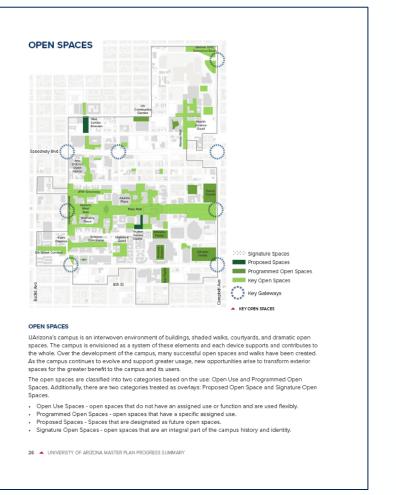
RESEARCH SPACE ASSETS High (≤ 64,000 sq.ft.) Low (≥ 3,500 sq.ft.) Research Space Sq.ft RESEARCH SPACE ASSETS ON CAMPUS RESEARCH SPACE - The research space has highly concentrated pockets across campus like the UAHS, Engineering, Science concourse buildings in the southwest of the campus. - There is an anticipated growth in expenditures and faculty, but not a specific target. - Interdisciplinary is a good goal for all future UArizona buildings including research – Grand Challenges is seen as a potential showcase. Hub locations, either new or existing buildings, or in the greenspace framework, will need to be determined. - A matrix of elements or functional resources that support the character of the area will need to be developed within the hub. Hubs should be used to support shared core resources when possible. - Hubs should create places for interdisciplinary and trans-disciplinary intersections. UNIVERSITY OF ARIZONA MASTER PLAN PROGRESS SUMMARY 🔺 17



Frameworks







CAMPUS FRAMEWORK



CAMPUS FRAMEWORK

One of the key aspects of the Master Plan is the Campus Framework. Although there are a number of factors that contribute to the campus environment, four key aspects are identified that help define the campus framework:

- Gateways
- Open Spaces
- Connections
- Planning Projects

24 A UNIVERSITY OF ARIZONA MASTER PLAN PROGRESS SUMMARY

Frameworks

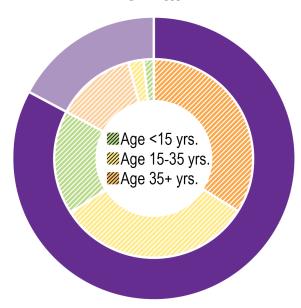
COMPOSITE CAMPUS FRAMEWORK

Multiple factors contribute to the campus environment. Four key aspects are identified that help define the campus framework:

- Gateways
- Open Spaces
- Connections / Circulation
- Planning Projects (current and proposed)
- Transit

Research Space

WHERE WE LEFT OFF...

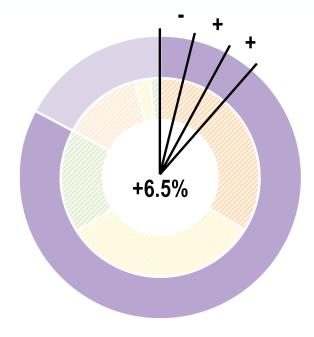


EXISTING 1,148,000 SF

Space Type

"Top 28" Research Bldgs. | 955,500 sf

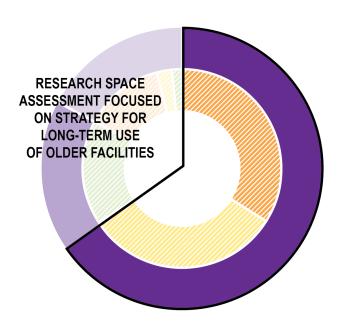
All other Research Bldgs. | 192,500 sf



PLANNED 1,227,500 SF

Under development projects that may impact

- Chemistry Renovations (-29,000 SF)
- Grand Challenges Building (+63,000 SF)
- Center for Integrative Medicine (+1,500 SF)
- Applied Research Building (+44,000 SF)



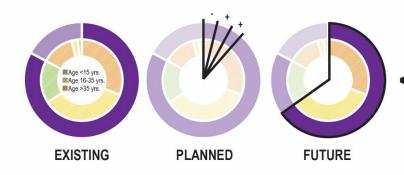
FUTURE ?????? SF

Variable based on:

- Changing space types and support needs
- Research profile & expenditure growth
- Approach to New vs. Reno vs. Re-purpose

Research Space

WHERE WE LEFT OFF...



WORKSHOP 04 - FOCUS GROUP NOTES

- UA through master plan needs to be able to answer "3 Flags"
- If we get a \$100m program with 150 new faculty, where do we put it?
 New building? Lease space / at Bridges? What are our options?
- Innovation space in <u>every</u> building takes many different forms
- If ARB + Grand Challenges are successful and create demand/yearning for more similar space, how do we do that?
- (+)(-) Computational research space/facilities are critical to UA's future
 - · Physical infrastructure (server) spaces & cloud spaces different, both needed
- (+) Specialty facilities/research also in future
- (o) UA's model will <u>not</u> be a standardized "1 PI + 6 GA" type model
- (-) 120 SF offices for PI's is too big old school thinking
- (o) UA hopes to focus on larger awards in the future
- Currently experiencing significant research expenditure growth
 - · Growth programs/opportunities identified in strat plan plus others not included
- (-) Would like greater centralized control of space reclaim as renovations take place
- (+)(-) Shared core model, innovation space, collaboration space, mixed-use buildings

STRATEGIC PLAN ALIGNMENT - EXTRACTS

- (+) Grand Challenges & the 4IR space, earth, health, intelligent systems, data/computing
- (+) Research enablers graduate stipends, admin support, centers, collaboration redefined
- (+) Graduate student experience

Research Space

WHERE WE LEFT OFF...



WORKSHOP 04 - FOCUS GROUP NOTES

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STRATEGIC PLAN ALIGNMENT - EXTRACTS

- Grand Challenges & the 4IR space, earth, health, intelligent systems, data/computing
- Research enablers graduate stipends, admin support, centers, collaboration redefined

POTENTIAL RECOMMENDATIONS

- Provide clear options to address the 3 flags
- Recommend deep-dive study into research space focused on "top 28" to better understand what spaces are viable for renovation, which need to be repurposed to other uses, and when do we build new space
- Define potential attributes and typologies for innovation and collaboration spaces and consider parameters for requirements in new/reno projects
- Define basic parameters for the integration of research space into the broader campus framework
- Identify potential locations for physical research components identified in the Strategic Plan (those not being located in Grand Challenges)
- All research building projects (new or reno.) include some instructional space
- Others TBD

Key Takeaways and Topics

RESEARCH AND INNOVATION

Space Needs

- General guiding proportion of future space for research and innovation
- Consider new models of use shared through flex
- Parameters for Access and "Presence"
- Determine position on campus for next key projects and resources

Typologies

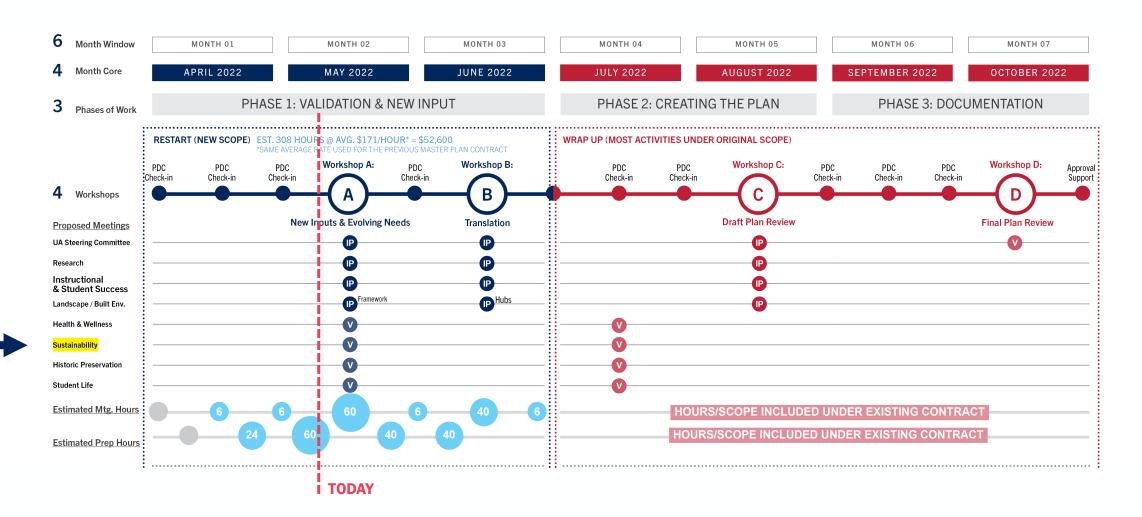
- Balance the spectrum of uses near term and long term
- Determine typologies of research and innovation spaces for specific uses and emerging needs
- Consider flexible and adaptable typologies when possible
- Consider the "Practice of Research"

Attributes

- Consider location, visibility and access
- Open Hub models for students
- Shared Core models for researchers
- Expand the presence of the activity
- Can we develop "Brand"



(proposed) Restart Schedule



Restart Considerations

PDC overview



Master Plan Structure: Strategic Assets

MASTER PLAN ORGANIZATION

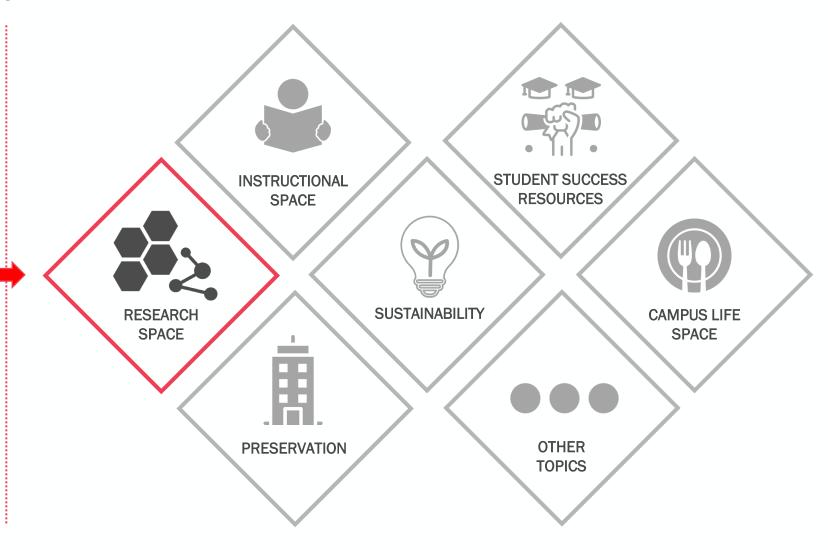
STRATEGIC PLAN

1 FRAMEWORK

2 STRATEGIC ASSET MANAGEMENT

3 PLANNING PROJECTS

SUPPORTING
TOPICS



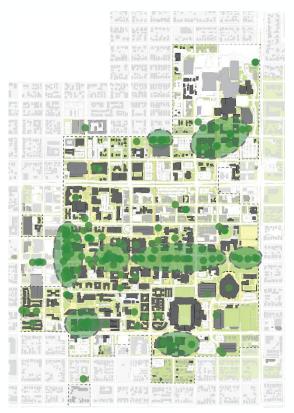
Summary of Previous Steering Committee Meeting (MAY 11, 2022)

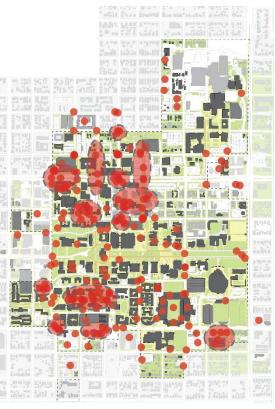
Major Topics for Re-analysis and Confirmation within the Restart Phase:

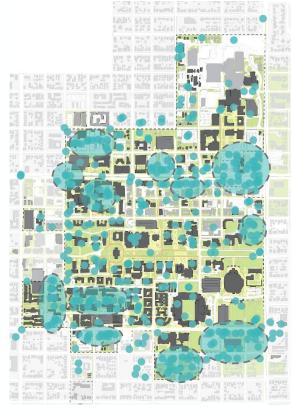
- SWOT
- Enrollment
- Boundaries
- Gateways
- Circulation
- Transit
- Innovation
- Wayfinding
- Sustainability



Steering Committee Suggestions - SWOT









Strengths

- · West Gate gateway and entry
- Old Main
- Research Facilities ENR2/HSIB
- Main Mall
- Rec Center
- · Community Garden

Weaknesses

- Gateway and Intersections along Speedway Blvd. & 6th St.
- North-South Connectivity
- Density & Infill along Speedway Blvd. & 6th St.
- Southwest Campus Quad

Opportunities

- Underutilized Parking Lots
- Gateways and Housing
- Land Use Synergies along Speedway Blvd. & 6th St.
- Open Space Improvements in Southwest Campus
- Southern Edge Land Uses

Threats

- Older Buildings on Campus
- Intersections and Bike/Pedestrian Pathways
- East Speedway Gateway
- Arizona Stadium deferred maintenance

Topic: Strengths, Weaknesses, Opportunities, and Threats (SWOT)

SWOT needs to be reassessed

Steering Committee

SPECIFIC COMMENTS

- Threats: there are challenges of work and sustainability
- Threats: totally unacceptable level of danger for pedestrians
- Threats: column feels "tepid" compared to other categories
- Post-pandemic the world has changed, opportunity to focus on things mentioned by LiesI:
 - Sustainability
 - Circulation
 - Food deserts
 - Maintenance deferrals

Topic: Enrollment

Future enrollment profiles and impact on space and utilization

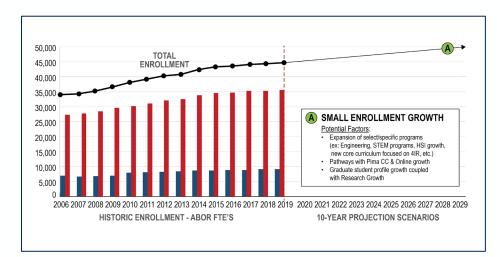
Steering Committee

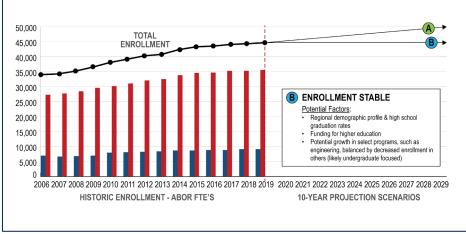
SPECIFIC COMMENTS

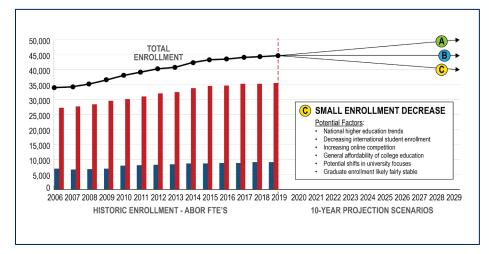
- Analytics have captured the number of students on campus for the past 2 years
 - Based on Wi-Fi connections
 - This data will be informative
 - Already know how many people are coming to campus each day
- Physical vs online demographics, subsequent use patterns
- Decouple grad and undergrad growth patterns because they will be different
- Long-term graduate profiles to support Tier 1 research goals

Steering Committee Topic: Enrollment

PREVIOUS ENROLLMENT PROJECTIONS (2019)



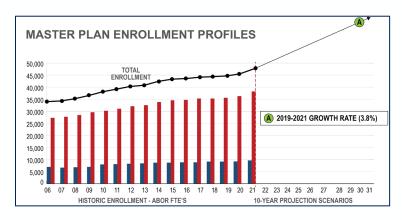


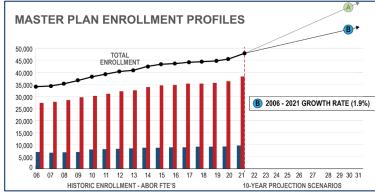


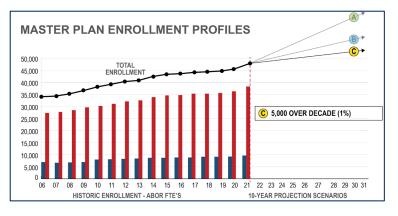
Enrollment Profile		Graduate Enrollment	Undergraduate Enrollment	Total Enrollment	What This Means?	
EXISTING FALL 2019 ABOR FTE)	Ε	XISTING PROFILE (FALL 2019)	9,094	35,620	44,714	
10-YEAR PROJECTION SCENARIOS (2029-2030)	<u>Pc</u>	MALL ENROLLMENT GROWTH tential Factors: Expansion of select/specific programs (ex: STEM programs, HS/border, etc.) Pathways with Pima CC & Online growth Graduale student profile growth coupled with Research Growth	9,500 - 10,500	36,500 - 39,500	46,000 - 50,000	Strategic program growth (new & existing)
		NROLLMENT STABLE Idential Factors: Regional demographic profile & high school graduation rates Funding for higher education Potential growth in select programs balanced by decreased enrollment in others	8,500 - 9,500	34,500 - 36,500	43,000 - 46,000	Enrollment shifts will take place to align with priorities, but net count will remain fairly stable
		MALL ENROLLMENT DECREASE Jential Factors: National higher education trends Decreasing international student enrollment Increasing online competition General affordability of college education Potential shifts in university focuses	8,000 - 9,000	31,500 - 34,500	39,000 - 43,000	Overall enrollment figures return to ~2010 levels, but graduate FTE grows as a % of total

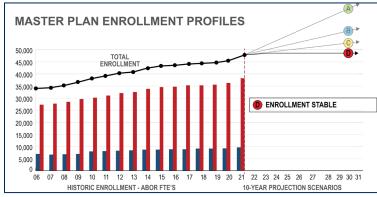
Steering Committee Topic: Enrollment

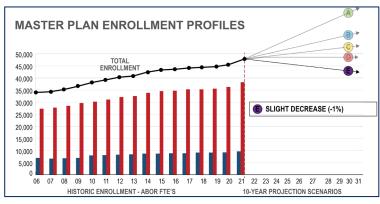
UPDATED ENROLLMENT PROJECTIONS (2021)







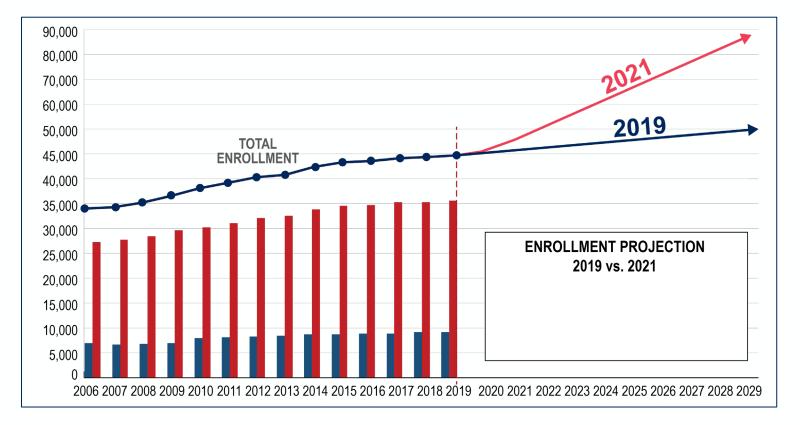




MASTER PLAN ENROLLMENT PROFILES						
	Enrollment Profile	Graduate Enrollment	Undergraduate Enrollment	Total Enrollment	What This Means?	
EXISTING (FALL 2021 ABOR FTE)	EXISTING PROFILE (FALL 2021)	10,943	38,528	49,471		
	(A) 2019 - 2021 GROWTH RATE %	14,740 - 15,881	51,919 - 55,938	66,666 - 71,828	???	
	B 2006 - 2021 GROWTH RATE %	12,716 - 13,203	44,786 - 46,503	57,506 - 59,711	???	
10-YEAR PROJECTION SCENARIOS	C 1% OVER DECADE	11,845 - 12,082	41,716 - 42,554	53,565 - 54,641	???	
(2029-2031)	D ENROLLMENT STABLE	10,943 - 11,162	38,528 - 39,302	49,471 - 50,464	???	
	E SLIGHT DECREASE	10,093 - 9,892	35,547 - 34,839	45,646 - 44,737	???	
		•				

Steering Committee Topic: Enrollment

2019 VS. 2021 PROJECTIONS (PROJECTION A 2019 VS. PROJECTION A 2021)



2021

	Enrollment Profile	Graduate Enrollment	Undergraduate Enrollment	Total Enrollment
EXISTING (FALL 2021 ABOR FTE)	EXISTING PROFILE (FALL 2021)	10,943	38,528	49,471
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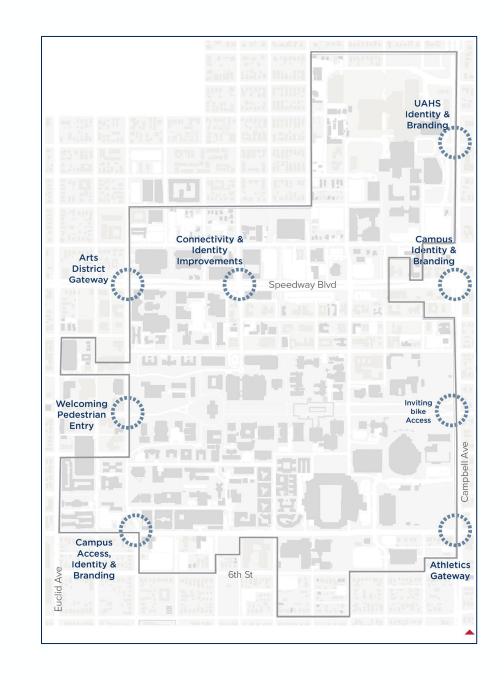
2019

EXISTING (FALL 2019 ABOR FTE)			Undergraduate Enrollment 35,620	Total Enrollment 44,714	
	SMALL ENROLLMENT GROWTH Potential Factors:	9,500 - 10,500	36,500 - 39,500	46,000 - 50,000	

Topic: Gateways

Previous analysis of key gateway existing conditions focused on:

- 6th Street & Park Avenue
- 6th Street & Campbell Ave
- University Blvd & Park Ave
- University Blvd & Campbell Ave
- Speedway Blvd & Park Ave
- Speedway Blvd & Mountain Ave
- Speedway Blvd & Campbell Ave



Topic: Circulation

Rationalization of how to handle circulation, the connectivity of the plan

Steering Committee

SPECIFIC COMMENTS

- How do we move people on bikes, on foot, on golf cart, on car, other EVs?
- Create a more comprehensive framework for different modes of transportation
- Separate meeting or workshop for transportation
- Alignment with Sustainability and Planning
- Assess parking location and capacities

Topic: Circulation

- Bike / Pedestrian (E-W)
- Bike / Pedestrian (N-S)
- Promenade
- Vehicular
- Parking



Topic: Transit

Master Plan framework needs to revisit transit and pedestrian interface

Steering Committee

SPECIFIC COMMENTS

- Give definition to open space and transit patterns
- We live in a desert, want to deal with heat islands surface parking?
- We must figure out how to migrate outdoor spaces to handle increased pressure, hotter climate
- Integrate transit with public systems
- Think about scales of transit from public to transit
 - Are technical studies necessary for this?

Topic: Transit

- Sunlink Streetcar
- On-campus Routes
 - Purple Line
 - Green Line
- Off-campus Routes
 - Red Line
 - Orange Line
- Policy and protocols?



Topic: Innovation

Innovation spaces need to be included in some way or another in every building.

Steering Committee

SPECIFIC COMMENTS

- Need overt and continuous attention to innovation spaces
- Innovation spaces need to be included in some way or another in every building
- Space typologies, attributes, and characteristics
- Discipline-specific resources
- Discovery space

Topic: Innovation

Innovation spaces need to be included in one way or another in every building.



Topic: Wayfinding

Review other options including website, mobile apps, and on-campus information.

Steering Committee

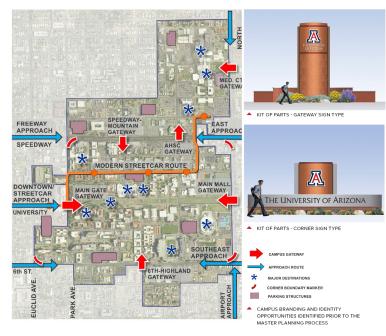
SPECIFIC COMMENTS

- How will wayfinding integrate with the master plan?
- Review branding, identity, and edge condition studies
- Review other options including website, mobile apps, and oncampus information
- Need to advance GIS models
- Showcasing sustainability and campus as a learning lab

Topic: Wayfinding

Review other options including website, mobile apps, and on-campus information.

BRANDING & IDENTITY



RANDING & IDENTITY

As a part of the ongoing efforts to improve the physical branding and identity of the campus, there was an initiative to have a coordinated, comprehensive network of campus approaches, boundaries, and gateways. These will provide clear, easy and attractive access routes to major campus destinations. The three major components to the effort include:

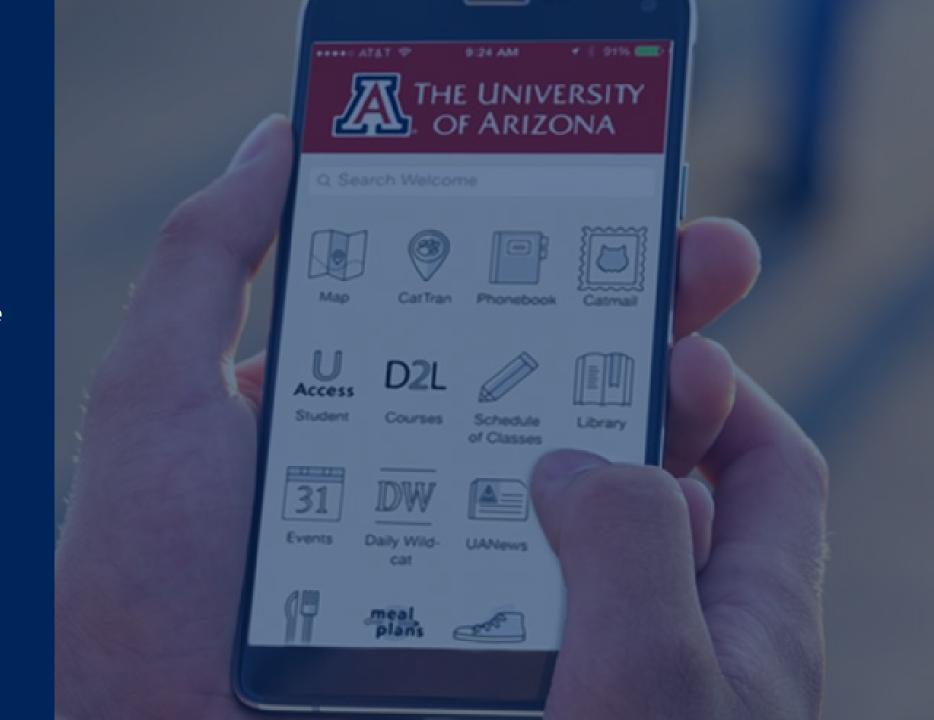
- · UArizona Gateways identified a number of gateway access points into campus for signage.
- Approaches and Boundaries prioritized the approaches and helped to identify potential improvements in the
 edges
- Planned Improvements identified specific projects with a coordinated effort with the City of Tucson that will
 enhance the experience of the campus entry sequences.

These concepts were identified prior to the master planning process and would need to be revisited after the process resumes.

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Topic: Wayfinding

Review other options including website, mobile apps, and on-campus information.



Topic: Sustainability

Master Plan framework needs to revisit circulation and pedestrian interface

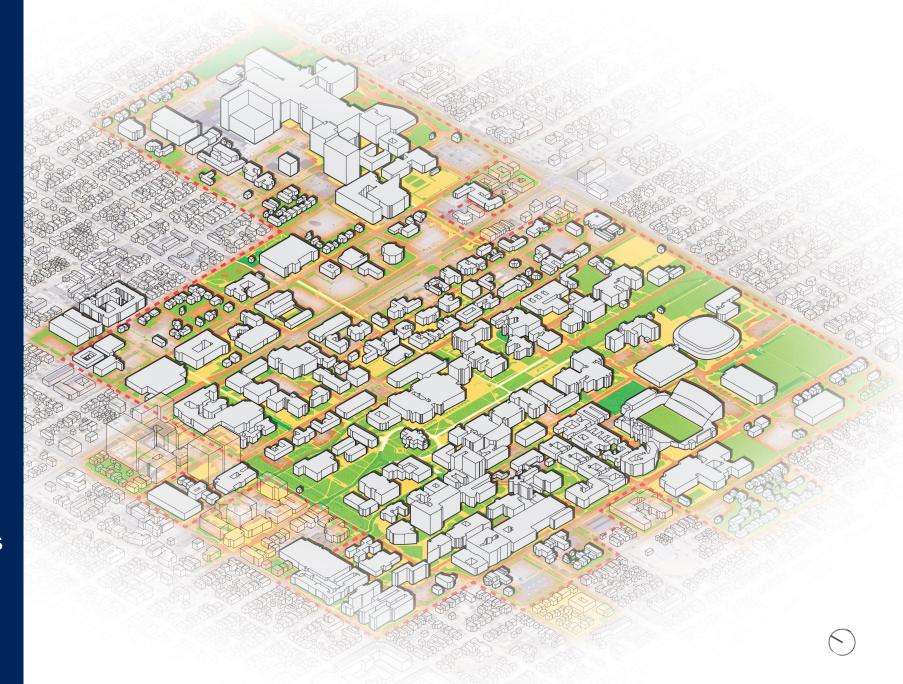
Steering Committee

SPECIFIC COMMENTS

- Sustainability and climate action working group that will put out RFP this summer
- Give definition to open space: circulation, identify where the "oases" are
- We live in a desert, want to deal with heat islands and open space character
- Pandemic marked a pivot to more sustainable approach
- Elevate landscapes further: outside spaces more important than inside, a reflection of climate
- We must figure out how to migrate outdoor spaces to handle increased pressure, hotter climate
- Showcase sustainability and campus as a learning lab
- Other input...

Topic: Sustainability

- Bike Paths
- Sidewalks
- Landscaped Spaces
- Programmed Spaces
- Key Spaces
- Stormwater retention
- "Oases" / micro-climates
- Building performance
- Cultural connections



Discussion Point

- Do you see the campus differently over the past 2 years?
- Do we have new programs or initiatives that impact the master plan?



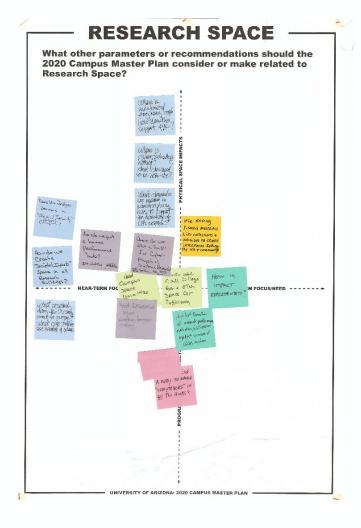
Discussion Point

- Any general thoughts about how the campus functions today?
- What impacts and changes have occurred regarding providing work and services?





January - March 2020



RESEARCH SPACE

<u>Draft Parameters & Recommendations</u>: Do you agree? Advise any wording changes? Additional/specific details?

- 1. Provide clear options to address the 3 flags
- Recommend deep-dive study into research space focused on "top 28" to better understand what spaces are viable for renovation, which need to be re-purposed to other uses, and when do we build new space
- Define potential attributes and typologies for innovation and collaboration spaces and consider parameters for requirements in new/reno projects
- 4. Define basic parameters for the integration of research space into the broader campus framework

CONTRACTORS

ADDOMANCIES

TO DASHDOOD

CONTRACTORS

PRETERS

- Identify potential locations for physical research components identified in the Strategic Plan (those not being located in Grand Challenges)
- 6. All research building projects (new or reno.) include some instructional space

January - March 2020

Where do we put a "hub" for cyberphysical systems research? M.E. Aero Sys Eng, Al math stat

Where do we put a human performance hub? Com nutrition athletics Where is mechanical engineering housed How does this support 41R? What other parameters or recommendations should the 2020 Campus Master Plan consider or make related to Research Space?

How do we create "societal impacts" space in all research buildings?

Does the bridges become a "national security" research campus? What elements are needed in interdisciplinary hubs to support the direction of UA

Where is cybertechnology housed? What hubs need to be near this? PHYSICAL SPACE

IMPACTS

PROGRAM OR POLICY IMPACTS

Use existing research materials like collections + archives to create interfaces between the UA + community

NEAR-TERM FOCUS/NEED

Review use of all college res + other space for increased efficiency

Need campus space committee

Need researcher input inclusive decision making

What research does the university want to pursue? What core facilities are needed and where?

A way to embed "storytellers" in all the hubs? , ____

LONGER-TERM FOCUS/NEED

Highlight benefits
of research
performance eval
/ utilization
highlight
successes of
UAHS system

How is impact represented?

Transposed from physical notes

KEY TAKEAWAYS

Key takeaways:

- Space planning questions + concerns
- Location/connection between specific spaces
- Impact of research

NEAR-TERM FOCUS/NEED

Key takeaways:

- Need more input from other user groups / committees
- Space planning- what and where

What other parameters or recommendations should the 2020 Campus Master Plan consider or make related to Research Space?

PHYSICAL SPACE

IMPACTS

PROGRAM OR POLICY IMPACTS

Key takeaways:

Ways to organize research (existing + new)

LONGER-TERM FOCUS/NEED

Key takeaways:

Overall impact of research

January – March 2020

- Provide clear options to address the 3 flags
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- Define potential attributes and typologies for innovation and collaboration spaces and consider parameters for requirements in new / renovation projects
- Define basic parameters for the integration of research space into the broader campus framework

Connections and adjacencies to desired collaborators and partners

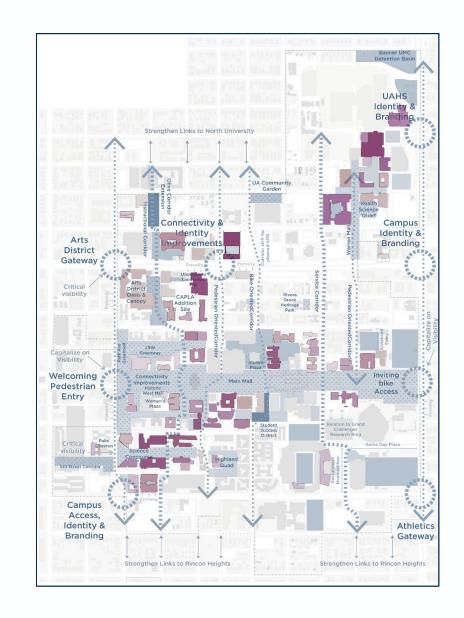
January – March 2020

- Identify potential locations for physical research components identified in the Strategic Plan (those not being located in Grand Challenges)
- All research building projects (new or renovation) include some instructional space and potentially accessible innovation space

Consider sustainability
+ inst. spaces not fully
utilized / efficiency of
use for our needs

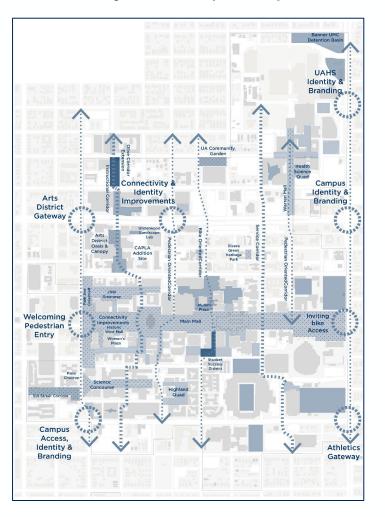
Site Plan Hubs

- 6th Street
 - 6th Street & Park Ave
 - 6th Street & Campbell Ave
- University Blvd
 - University Blvd & Park Ave
 - University Blvd & Campbell Ave
- Speedway Blvd
 - Speedway Blvd & Park Ave
 - Speedway Blvd & Mountain Ave
 - Speedway Blvd & Campbell Ave
- Adams St & Campbell Ave

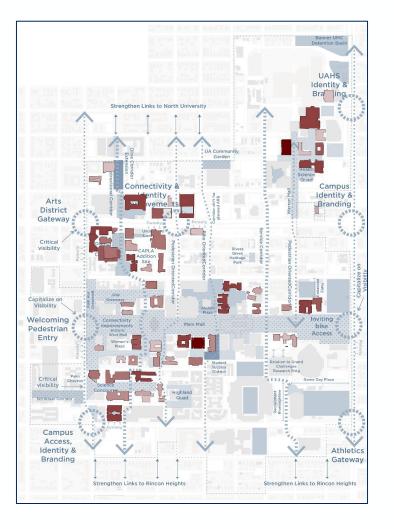


Site Plan Hubs

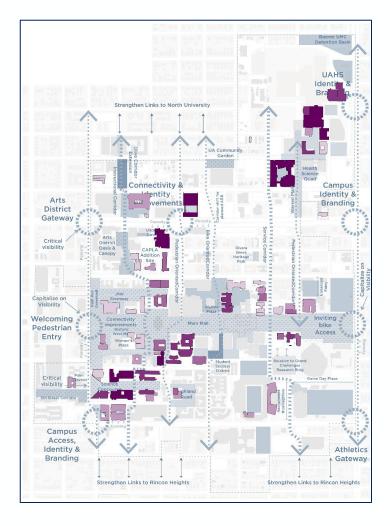
Gateways and Open Spaces



Instructional Hubs



Research Hubs



How does the University showcase and communicate its research mission today?

Previously Answered	Agree	No Opinion	Disagree
We market ourselves as a research institution, but often don't dive into the next level of that message.			
People know we have a lot of research space and do innovative things, but specifics often aren't communicated and live in small silos.			
We are multifaceted: multiple major successes in recent years including health research, physical sciences, and environments, but that is not well communicated internally or externally.			
We have four main pillars: Science, Space, Environment, and Health.			
Our presence in newspapers, websites, published work, and in the community through engagement and partnerships communicates our research mission.			

How can the University better share its research success?

Previously Answered	Agree	No Opinion	Disagree
It is rare for UA experts to be called on by media/TV. We need to forge relationships to change this so that UA's brand is prominent on the national stage.			
Have display space in buildings that display our work – make them interactive!			
Continued support for signature programs and signature buildings.			
Peer-to-peer collaboration (intra-campus and with other institutions).			
Tap into undergraduate research opportunities so that they are experiencing what we do, and then take it into the world when they graduate as informed champions.			

How does sustainability interconnect with research at the University?

Previously Answered	Agree	No Opinion	Disagree
Through sustainable facilities, but we need to be careful about what this means (i.e.: "net zero" goal established for CIM) and set achievable goals.			
Sustainability is multiple lenses – triple bottom line – economic, environmental, cultural, and social.			
Re-purpose buildings as appropriate – let this be a sustainable value/ethic for UA.			

Where do interdisciplinary buildings and research hubs fit within research?

Previously Answered	Agree	No Opinion	Disagree
Interdisciplinary is a good goal for all future buildings.			
All new research buildings should be flexible and adaptable space and infrastructure.			
Master Plan needs to identify where Research HUBs should be located.	1		
Define what goes on campus, and what goes off.			
Collaboration and innovation space key – create moments for interaction and BIG picture thinking between different groups and programs.			

How does the Strategic Plan intersect with research at the University?

Previously Answered	Agree	No Opinion	Disagree
Re-emphasis that it focuses on building on existing rather than new.			
UA needs a research institution that maps future aspirations and opportunities so that we are pro-active, rather than current model which is "reactive to Washington."			
Need facilities that help us tell our story.			
Stories and outreach around the 4IR important.			

Where do projections fit with research at the University?

Previously Answered	Agree	No Opinion	Disagree
Collectively, if all of our assets/departments performed equal to their peers, then UA would be above \$1 billion in research today.			
Anticipate continued growth in expenditures and faculty, but don't have a specific target – lots of opportunity.			

What else?

Next Steps: Your Input...

- Determine the next meeting and what format it will be in
- What other information is useful to you from other groups?



Next Steps

RESEARCH AND INNOVATION

Program

- Update the Campus Plan with recent completed projects and any proposed projects
- Update space utilization and operational perspectives
- Capture long-term view on space

Physical Planning

- Use Research and Innovation as a catalyst to activate the campus
- Synchronize types of uses with broader campus activities to create hubs

Data

- Determine critical paths for academic programs with allied research resources
- Develop space needs profile that synchronizes with campus holistically
- Determine how current research resources are impacted by facility condition or historic preservation goals

