



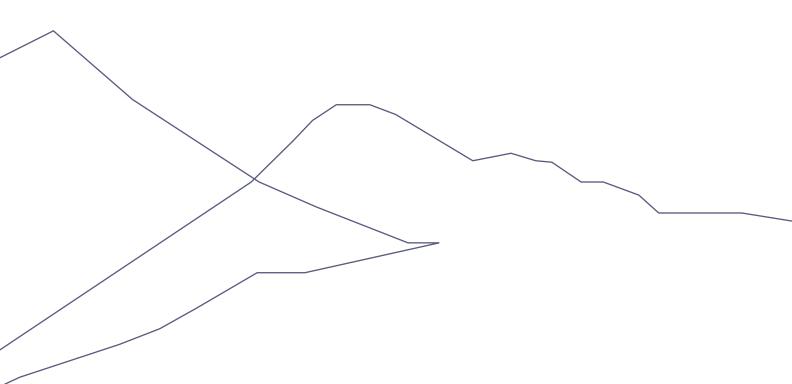
#### **CONSULTANT TEAM**

DLR Group Affiliated Engineers Inc. Compusult Kimley Horn Norris Tawaw Walchalski Advisory

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## **Northern Arizona University**

## COMPREHENSIVE SUSTAINABLE SMART CAMPUS MASTER PLAN



### Message from Leadership



I am pleased to invite you to explore Northern Arizona University's Sustainable Smart Campus Master Plan, a visionary roadmap for development that sets forth the pathway for change that will transform our campus over the next 10 years. This comprehensive plan sets forth guiding principles for the development of facilities and infrastructure on our campus and represents a collective effort and our shared vision for a campus that not only fosters academic excellence but also nurtures an inclusive and sustainable community.

This Master Plan follows the adoption of *NAU 2025 – Elevating Excellence*, NAU's updated Strategic Plan, aligning our articulated institutional mission and vision with how we plan, develop, and utilize our physical and technological infrastructure and campus real estate. The higher education landscape has evolved significantly in the past decade since the 2010 Master Plan. Capitalizing on this time of change, the Master Plan comes at a pivotal moment in NAU's history as we, like so many others in the higher education community, face formational challenges and opportunities on many fronts.

A hallmark of this Master Plan is the continuation of our long-standing dedication to fostering a vibrant, inclusive and caring community. Our spaces and places will reflect the diverse tapestry that makes our NAU community so extraordinary, including a focus on NAU's Indigenous Populations. Physical spaces play an integral role in welcoming students and employees and instilling a sense of belonging and pride in each Lumberjack.

Interdisciplinarity is the heart of our academic and research missions, and our Master Plan reflects this ethos. By laying the foundation for state-of-the-art academic facilities, collaborative spaces, and cutting-edge research spaces we not only encourage partnership, but also empower our students and faculty to tackle society's most complex challenges head-on through research and service to the community.

Furthermore, the enhancements to campus infrastructure will embrace technology to ensure that our facilities are accessible, safe, comfortable, and conducive to learning and working. From the modernization and replacement of several academic buildings to address programmatic and deferred maintenance needs, to expanded housing and recreational facilities, and enhanced community access, we are committed to providing an environment that supports the holistic development of every Lumberjack.

And finally, as the title of this process implies, a cornerstone of this Master Plan is our commitment to sustainability and environmental stewardship. In an era defined by pressing global challenges, Northern Arizona University is particularly well positioned to lead by example. Our campus will be a living laboratory, showcasing innovative solutions for a more sustainable future. Significant infrastructure investments, energy-efficient building retrofits and automation, and the expansion of native landscaping underscore our commitment to environmental consciousness will be evident in every corner of our campus.

As we embark on this exciting journey, I want to express my deepest gratitude to all who have contributed to this endeavor. Together, we are shaping a future where Northern Arizona University stands as a beacon of knowledge, a force for positive change, and a source of inspiration for generations of Lumberjacks to come.

DR. JOSÉ LUIS CRUZ RIVERA PRESIDENT NORTHERN ARIZONA UNIVERSITY

#### SPECIAL THANKS TO:

#### PRESIDENT'S CABINET

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**Ann Marie Chischilly,** Vice President of Native American Initiatives

**Bjorn Flugstad,** Senior Vice President for University Operations and Chief Financial Officer

Brian Register, Chief of Staff

**Christy Farley,** Senior Vice President for Engagement and Public Affairs

Harlan Teller, Chief Marketing Officer

Jason Wilder, Vice President of Research

**Jonathan S. Gagliardi,** Vice President of Economic Mobility and Social Impact

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**Steven Burrell,** Vice President of Technology and Chief Information Officer

**TC Eberly,** Associate Vice President of Campus Operations, Campus Services and Activities

**Valerie Elaine Barret,** Manager of Planning and Space Management

### **About Northern Arizona University**

With roots as a teachers college, NAU is committed to building a better tomorrow through education. Over 28,000 students attend the university's eight academic colleges whose programs of study enrich lives and create opportunities in Arizona and beyond.

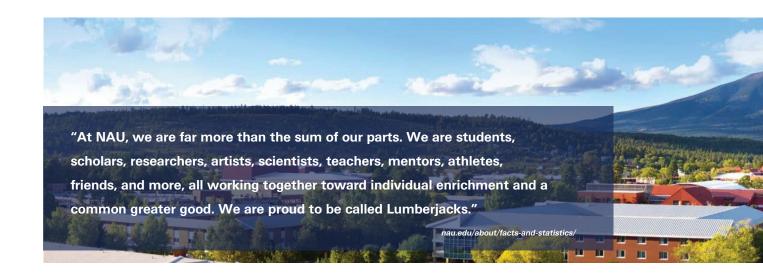
The Mountain Campus in Flagstaff has historically been the focal point of the university and its flagship campus. The Flagstaff campus is over 600 acres with over 6.8 million square feet in more than 100 buildings. NAU also has over twenty locations across the State of Arizona where over a third of Northern Arizona University's students are enrolled. The university continues to expand statewide outreach programs and distance learning, while the Flagstaff campus enrollment is assumed to remain at current levels.

The Northern Arizona University Mountain Campus is located in an ecologically diverse and sensitive area. Defined by forests, mountains, and grassy plains, the campus sits adjacent to downtown Flagstaff. It is surrounded by the Coconino National Forest, with other National Parks such as Walnut Canyon, Sunset Crater, Wupatki, and Grand Canyon all located within a short drive. Outdoor recreation is extremely popular among students, with many looking for open spaces on campus to draw inspiration from the adjacent diverse ecosystems. Many students chose to attend NAU for the outdoor element, climate, and landscape that Flagstaff provides.

Indigenous Nations such as the Yavapai, Hopi, Navajo, and Apache, and their ancestors have lived in the surrounding area for thousands of years. Flagstaff grew quickly in the late 1800s thanks to its abundant natural resources and strong ranching and railroad industries. This unique blend of people and history contributes to the cultural landscape today.

#### LAND ACKNOWLEDGMENT

Northern Arizona University sits at the base of the San Francisco Peaks, on homelands sacred to Native Americans throughout the region. **We honor their past, present, and future generations, who have lived here for millennia and will forever call this place home.** 



### **NAU BY THE NUMBERS:**



1899

FOUNDED IN FLAGSTAFF, AZ



28,000+

STUDENTS - FLAGSTAFF, STATEWIDE, AND ONLINE



4,600+

FACULTY AND STAFF



**40%**+

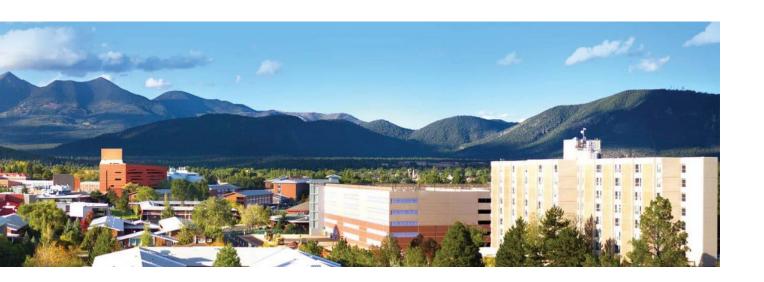
FIRST GENERATION COLLEGE STUDENTS



**20**+

NAU LOCATIONS

Information provided from NAU facts and statistics



### **NAU Strategic Roadmap**

NAU - 2025 Elevating Excellence, the strategic plan endorsed in 2022, describes priorities compiled through the NAU community's thoughtful engagement process. The Plan reflects bold aspirations for the future and the evolving challenges and opportunities facing public institutions of higher education. To equitably serve students and communities from all backgrounds, identities, and lived experiences, our commitment to diversity, equity, inclusion, and justice is infused throughout both the Strategic and Master Plans. The institution will capitalize on NAU's 124-year history of distinctive excellence as an engine of opportunity to drive social impact and economic mobility for the people of Arizona and beyond. The following priorities were established in the Strategic Plan and represent the foundation for the Master Plan

#### ACADEMIC EXCELLENCE

NAU's high-quality academic programs, general studies curriculum, and the teaching excellence of our faculty will foster students' knowledge and competencies necessary for professional success, informed civic engagement, global citizenship, lifelong learning, and the promotion of a more just and sustainable future.

#### STUDENT SUCCESS

Grounded in a student-centered institutional culture of care, NAU will provide accessible and affordable educational opportunities, with tailored support services that enable students to complete their academic credentials and realize transformative outcomes from their collegiate experience.

## COMMITMENT TO INDIGENOUS PEOPLES

In recognition of the unique sovereign status of Native Nations and the sacred land on which the university was built, NAU will continue intentional support for Indigenous students, faculty, and staff; develop university-wide culturally responsive educational opportunities and programming; and build mutually beneficial partnerships with Indigenous communities that will position NAU as the nation's leading university serving Indigenous Peoples.

#### IMPACTFUL SCHOLARSHIP

NAU's teacher-scholars will engage in impactful research, scholarship, and creative activities to provide transformative learning opportunities, engage our diverse students and communities, advance disciplinary and interdisciplinary knowledge, and contribute to solving problems of regional, national, and global relevance.

## MISSION-DRIVEN AND DIVERSE FACULTY AND STAFF

NAU will implement employment practices to support the recruitment, retention, development, and promotion of a highly qualified, mission-driven, diverse workforce. NAU's commitment to individuals from all racial, ethnic, cultural, and socioeconomic backgrounds, national origins, disabilities, age, veteran status, religious or political beliefs, sexual orientations, gender identities and expression, and lived experiences strengthens our institutional workforce culture that incorporates diversity, equity, inclusion, and justice in the pursuit of excellence and the promotion of student success.

#### **COMMUNITY ENGAGEMENT**

NAU will engage locally, regionally, and globally with public and private partners to foster mutually beneficial relationships that enhance our student's educational experiences, contribute to broad social impact, and increase individual, communal, cultural, and economic vitality.

## SUSTAINABLE STEWARDSHIP OF RESOURCES

NAU will effectively utilize our physical, technological, and financial resources in support of our vision and mission, with a commitment to the responsible use of environmental resources, innovative use of technology, and mission-driven financial investments and philanthropic activity.

#### SUSTAINABILITY

The Strategic Plan is a result of the goal to reimagine how NAU utilizes and continually improves physical resources to optimally deliver all aspects of the university's mission. NAU aspires to be a catalyst of change in higher education institutional impact of sustainability climate adaptiveness.

Source: NAU 2025 - Elevating Excellence

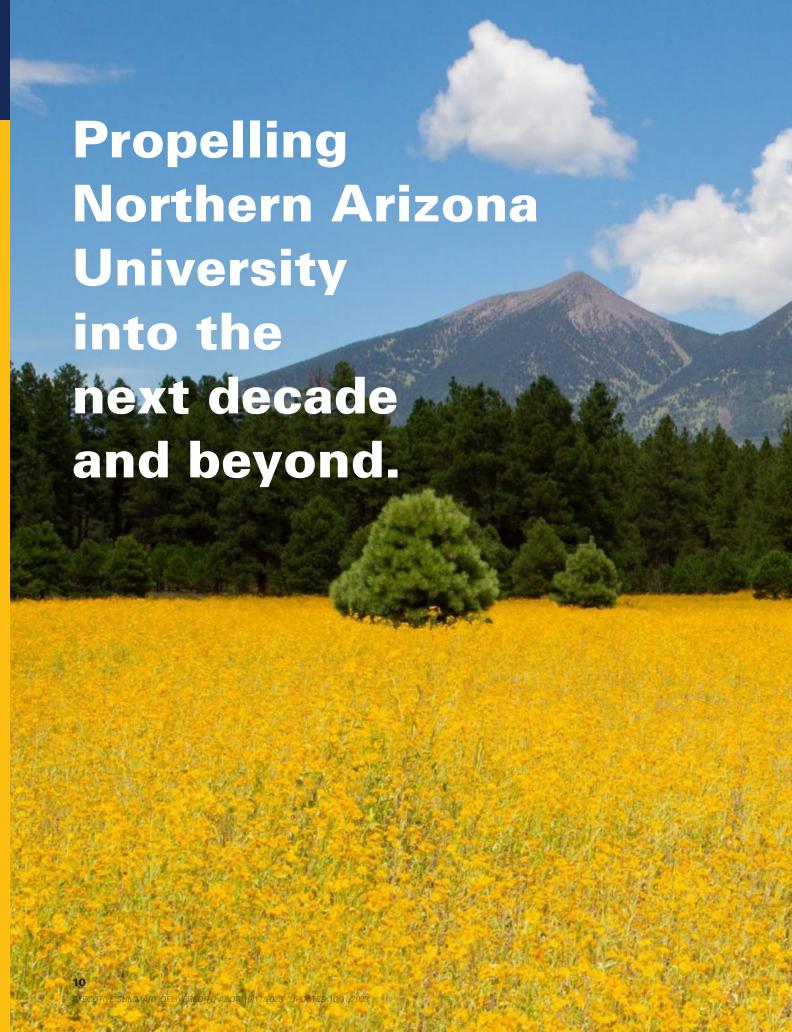
# Aligning Elevating Excellence with the Campus Environment

The Comprehensive Sustainable
Smart Campus Master Plan is the
physical manifestation of the Elevating
Excellence Roadmap and the academic
mission of the university.

Achieving the vision set forth in *Elevating Excellence* will require changes to the physical campus. The Campus Master Plan furthers the university's long-standing mission and documents the vision for the physical campus environment.

The Master Plan is an ambitious, yet realistic, shared vision that will guide the physical development of NAU over the next decade and beyond.

Decisions regarding the prioritization of needs are outlined, including all the strategic planning methods that have gone into its development. Within the plan are recommendations for the physical campus environment, including land use, open space, infrastructure, and circulation.



# The Comprehensive Sustainable Smart Campus Master Plan establishes a vision for a vibrant campus environment.

The Comprehensive Sustainable Smart Campus Master Plan ("Master Plan," "Plan") envisions a dynamic campus that addresses both the current and future needs of the university. **Instead of focusing on physical expansion, the Plan optimizes existing physical assets of the campus, transforming it into a center for discovery, innovation, societal change, and learning.** 

The Plan emphasizes priority facility projects that will be implemented in the coming decade and beyond. These projects encompass strategies for preserving and repurposing existing buildings while also proposing new and replacement structures.

A key aspect of the Plan is the integration of a unique and distinctive landscape strategy, a comprehensive sustainability framework, forward-thinking infrastructure, and a comprehensive multimodal circulation strategy. Together, these components ensure seamless movement and connectivity across the entire campus.

The Plan reimagines how NAU utilizes and continually improves physical resources to optimally deliver all aspects of its mission within the context of climate and carbon commitments, a post-pandemic environment, a commitment to safety and health, and ongoing prioritization of exceptional student learning, service, and support.

This Plan responds directly to the university's strategic road map with bold actions and deliberate measures:

- · Focuses on students on campus today and promises to embrace students of the future
- Promotes an inclusive campus environment
- Reflects the thoughts and passionate ideas of a variety of voices
- Stretches sustainability and resiliency actions to meet NAU's carbon commitments
- Encourages ideas that embrace and welcome the many communities of Northern Arizona

Aligned with the strategic priorities outlined in the Climate Action Plan and Roadmap to Carbon Neutrality and incorporating the themes, goals, and principles of the Plan, this visionary blueprint outlines a framework for the university's growth and development over the next ten years.

## The Role of the Comprehensive, Sustainable, Smart Campus Master Plan

The Campus Master Plan is the principal planning document for the physical campuses of NAU. It defines and sets the direction for the ongoing development of the campus environment that supports the mission, core values, and heritage of the institution.

#### The purpose of the Plan is to:

- Craft a vision for the future that aligns with the strategic direction of the university
- Create a guide for physical development over time
- Establish a basis for informed decisionmaking
- Strengthen relationships across the campus and within the community
- Provide a road map and tools for implementation
- Fulfill a requirement of the Arizona Board of Regents

Planning is an ongoing process; a flexible framework must be in place that can respond to current and future needs. While the goals, principles, and values of the Plan will remain consistent over time, the physical implementation of these will need to evolve to meet unanticipated changes. The Plan is developed with the intent to be adaptable to the changing needs of the institution.

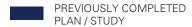
The consideration of a future campus is centered around creating outstanding student engagement, optimizing resources, and anticipating new perspectives on human interactions and experiences in both the physical and virtual world.

NAU is pursuing the possibilities of a Smart Campus through integrating technological influences into the campus environment. Influences thoughtfully consider a future defined by new interactions among humans and cyber sentient entities, redefining the sense of place, and projecting the impact of innovations of technology, autonomous vehicles, automated building infrastructure, augmented realities, and immersive virtual learning space to create unique working and learning experiences.

Within the Master Plan recommendations, there are opportunities to pilot new technologies for campus circulation, gathering spaces, wayfinding, information sharing and collection, learning and working spaces, and building design.

The diagram on the following page describes the relation of past, current and future planning efforts to the Plan. To support NAU's Master Plan, additional studies have been recommended to enhance and expand the university's understanding and direction of the physical campus. These future plans will provide more detail around specific elements and campus programs.

## **Integrated Planning**







#### Landscape Master Plan

Multi-Modal Recommendations

#### Placemaking Report

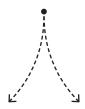
Facility Condition Assessment

Capital Improvement Plan

Student Union Planning

- Tree and Reforestation Plan / LMP Update
- Classroom Modernization
  Plan
- Snow/Ice Removal and Storage Plan
  - Campus Lighting Master
    Plan Update

NAU Comprehensive Sustainable Smart Campus Master Plan



Future Planning Studies Campus Lighting Master Plan

Strategic Space Study

Library Master Plan

Climate Action Plan

NAU 2025

Transportation Demand Management Study

Storm Water Action Plan

Donor Opportunity Plan

Dining and Food Service Master Plan

ADA Upgrade Master Plan Update

#### **Process and Schedule**

## Throughout the planning process, we created a prioritized road map for the future of NAU.

A successful plan is built with critical input from students, faculty, staff, administrators, and community members throughout all phases of the project. The project kicked-off in April 2022 and will be presented to the Arizona Board of Regents for approval in Fall 2023.

During each phase, various workshops, milestones, and deliverables were completed.

#### Phase 1 - Analysis & Assessment

In Phase 1, the focus was on conducting a comprehensive analysis and assessment of the existing campus conditions, needs, and challenges. This involved gathering data, conducting surveys, interviews, and workshops with interested and affected parties, and analyzing various factors such as enrollment projections, infrastructure, transportation, sustainability, and campus culture.

2022 -2023 PHASE 1 PHASE 2 **ANALYSIS & ASSESSMENT BIG IDEAS & CONCEPTS** Qualitative & Quantitative Data-Informed Recommendations Scoping meeting & Data Request Analysis & Ideas **MILESTONE 3: MILESTONE 4:** Concepts Workshop 2: Workshop 1 (B) Workshop 1 (A

#### Phase 2 - Big Ideas & Concepts

Phase 2 focused on generating vision, inspiration, and design principles that shape the future vision of the campus. It involved brainstorming sessions, design charrettes, and workshops to explore innovative and creative possibilities.

#### Phase 3 - Planning for Implementation

Phase 3 involved developing a detailed plan for Master Plan phasing. It included prioritizing projects, defining strategies, creating an implementation timeline, cost and impact analysis, and establishing a framework for resource allocation.

#### Phase 4 - Documents & Approvals

The final phase compiled final deliverables and approvals from necessary parties, including the Board authorities, Arizona Board of Regents. It included the comprehensive report, models, tools, presenting the Plan to decision-makers, and incorporating final feedback.



#### CAMPUS AND COMMUNITY ENGAGEMENT

Though the Plan was guided by planners, architects, and consulting experts, it is at its core, a community effort. Through a series of active workshops, open houses, interviews, tabling activities, and digital tools, the voices of NAU students, faculty, staff, and community members were captured and their experiences informed the final deliverables and outcomes of the project. This engagement defined goals, prioritized planning solutions, and encouraged participatory decision-making. Most of these sessions included interactive components where participants worked alongside the project team to advance the Plan in real-time. The holistic view that results from this level of engagement creates momentum and buy-in that is essential for the implementation and long-term success of the proposed Master Plan.



#### **FOCUS GROUPS AND DEEP DIVE MEETINGS**

As part of the Plan, focus groups were established to drive and inform the planning process. Key to the process were frequent touchpoints with these groups as well as in person and remote interviews with university leadership, meetings with affinity groups, school divisions, departments, colleges, and key constituency groups including the



#### **DIGITAL ENGAGEMENT**

A project website was developed for the Campus Master Plan and served as an active homepage that charted the schedule and progress while providing a platform to transfer information and communication to the campus community. Throughout the planning process, the project website included workshop reminders, updates, and reports.

Digital communication through the use of a project website and social media accounts complemented in-person sessions by providing easy access to presentation materials and acting as a conduit for participants to ask questions and provide input.



#### SURVEY AND QUESTIONNAIRES

A survey of NAU students, faculty, staff, alumni, and community members was conducted to better understand the experiences of individuals and their ideas for a future campus. Topics focused on services and resources, circulation patterns, wellness, dining and retail, and points of interest. In total, more than 1,500 individuals participated in the survey. The results of this survey and all engagement can be found in the Campus Engagement Report located in the Appendix.



Comments submitted on website



**550**+

Staff Participants



**200**+

Faculty Members



2,000+

Website Participants



<del>5</del>0+

Focus Groups



600+

Student Participants



1,500+

Survey Responses



5,000+

**Total Participants** 

## The drivers of the Comprehensive Sustainable Smart Campus Master Plan are:



#### A Student-Centered Plan

NAU is a hub for learning, discovery, innovation, and societal change. The Plan seeks to adapt the campus environment to meet student needs of the future. The Plan also focuses on supporting all members of our diverse student body so they feel welcomed, supported, comforted, and safe. The NAU campus of the future will further reflect and enhance inclusiveness.



### **Resource Optimization**

Presently, funding for campus physical growth is limited, but the need for higher education is greater than ever. Therefore the Plan's focus is less about physical growth and more about optimizing the existing campus over the next decade. The Plan addresses critical short-term needs that center around deferred maintenance and student success, as well as minimizing impacts on natural resources through carbon reduction as part of the Climate Action Plan.



## **Visionary Framework**

This Plan sets a high-level vision for long-term development on the campus over the next decade and beyond. It balances aspirational thinking with a realistic understanding of constraints.

## Aligning the Vision of the Plan

#### **NAU** Vision Statement:

NAU aims to be the nation's preeminent engine of opportunity, vehicle of economic mobility, and driver of social impact by delivering equitable postsecondary value in Arizona and beyond.

Above is the vision statement for NAU as an institution. During early phases of engagement for the Plan, the steering committee collaborated to create a vision statement that describes what they would like the Plan to help accomplish. This Campus Master Plan Vision Statement guided the process to confirm any decision or outcome proposed aligned with the collective vision.

#### **Campus Master Plan Vision Statement:**

NAU is a welcoming community that embraces collaboration and inclusion and honors Indigenous Peoples. Sustainability, creativity, and accessibility are all reflected in a well-designed environment that connects people and leaves a lasting imprint on one's experience.

### **Key Elements of the Plan**



#### SENSE OF PLACE

Northern Arizona University is located in one of the most beautiful and culturally rich places in the United States. The plan must honor and reflect the sense of place including acknowledging the land:

"Northern Arizona University sits at the base of the San Francisco Peaks, on homelands sacred to Native Americans throughout the region. We honor their past, present, and future generations, who have lived here for millennia and will forever call this place home."



## INTEGRATION OF PAST PLANNING

Over the past decade, NAU has completed several plans and studies that provide direction to systems and spaces across campus. The Comprehensive Sustainable Smart Campus Master Plan must integrate these plans together, while adding more insight for the future.



## STUDENT-CENTERED PLANNING

The campus will further develop student-centered spaces, which provide opportunities for collaboration, gathering, and connections for learning beyond the classroom. The Plan outlines and highlights facility needs around academic requirements, research, student life, and activities that support overall student success.



#### POST-PANDEMIC PLANNING

Higher Education has changed immensely as a result of the pandemic. The Plan considers changes and new strategies around teaching, learning, and working environments for the campus such as updated space metrics to encourage collaboration, large, flexible and tech-rich classrooms, and hybrid work policies that allow for flexibility of workspace.



#### **EQUITABLE PLACEMAKING**

The campus serves populations today that are different from who it was designed for. Today and in the future, NAU students, faculty, and staff will continue to evolve, and the Plan must consider changes to the physical environment that celebrate and represent them and the larger campus community.



## CONNECTED CAMPUS: SMART TECHNOLOGY CAMPUS ELEMENTS

NAU is pushing the boundaries of creating a frictionless campus environment. In partnership with Information and Technology Services, the Plan must incorporate smart technology solutions across the physical campus.



#### SYSTEMS THINKING: INFRASTRUCTURE, CIRCULATION, OPEN SPACE

The Plan fosters a comprehensive planning approach, improving functionality, shaping campus identity, and prioritizing user experience and well-being. It also ensures the long-term adaptability of interconnected campus elements.



#### **CARBON NEUTRALITY**

The Climate Action Plan (CAP) and Roadmap to Carbon Neutrality outline NAU's commitment to sustainability and reaching carbon neutrality by 2030 for Scope 01 (onsite emissions, fleet and natural gas) and Scope 02 (purchased electricity). Investment in the university's infrastructure will be a critical component to achieving this commitment. By integrating climate considerations into this Plan, NAU will mitigate climate impact and promote a more resilient and sustainable campus community.



#### STATEWIDE LOCATIONS

The promotion of access to higher education, regional economic development, community engagement, distributed resources, and resilience are all important to NAU and statewide locations. By expanding and improving the NAU presence, the university can continue to fulfill the mission of providing high-quality education and serving the diverse needs of students and communities throughout the state.



#### **COMMUNITY DYNAMICS**

Planning for the relationship between the Flagstaff community and the NAU campus is crucial for fostering connectivity, promoting attainable transportation, providing access to essential resources, stimulating economic development, encouraging cultural exchange, and ensuring a positive town-gown relationship.



## ASSET MANAGEMENT AND IMPLEMENTATION

To optimize resource allocation, promote long-term sustainability, inform strategic decision-making, enhance the user experience, ensure compliance and risk management, and foster accountability and transparency, NAU can create a resilient and efficient campus environment supporting its mission and goals.

### **Campus Today**

NAU's campus has a variety of needs addressed throughout this Plan.

#### **ACADEMIC NEEDS**

- Consolidating colleges: will reunite users who are currently spread out across campus and enable participation in interdisciplinary work
- Create inter/intra-college community dialogue by developing spaces to come together (library, academic living rooms, lounges, study spaces)
- Implement the Library Master Plan
- Redesign teaching spaces to support a more active learning environment and provide training/incentives to do so
- Ensure the presence of spaces that foster and support the research, scholarly and creative work of the campus community

#### LANDSCAPE AND OPEN SPACE NEEDS

- Replacement and establishing of plantings, especially native, educational, and tree restoration
- Conversion of ornamental grass turf to more native and drought tolerant plantings
- Landscape on campus edges and entries
- Outdoor learning spaces and East-West Pedway connections
- Reinforcement of green space as critical enrollment factor and student wellness

#### SAFETY NEEDS

- Address perceived dark areas, while balancing dark sky requirements including night walk
- A cohesive emergency and communication system to compliment or replace the legacy blue phone system

#### CIRCULATION NEEDS

- East-west connections and enhancement of Pedway
- Alternative transportation including bike lanes (where missing) and storage, scooter and skateboard needs, missing sidewalks
- Parking toward the edges of campus and fewer internal parking lots
- Separation of circulation modes, including e-mobility, specifically on the Pedway
- Incentivization of electric vehicles and transit
- Address vehicular intersection and pedestrian conflict areas

#### STUDENT LIFE NEEDS

- University Union renovation to align with need for clubs, organizations, informal study spaces, and lounges
- More on-campus housing to meet a growing demand
- Student-focused amenities on south campus
- Additional recreation and wellness space on south campus

#### SUSTAINABILITY NEEDS

- Follow goals established in, and continue to improve campus through the Climate Action Plan and Roadmap to Carbon Neutrality
- Reduction of overall campus Energy Use Intensity
- Improved recycling/waste management and behavior change programming

#### **INFRASTRUCTURE NEEDS**

- Resiliency in infrastructure and utilities
- Stormwater maintenance
- Planning and resource allocation for the implementation of geothermal and woody biomass next generation heating and cooling systems



### **Statewide Campuses and Locations**

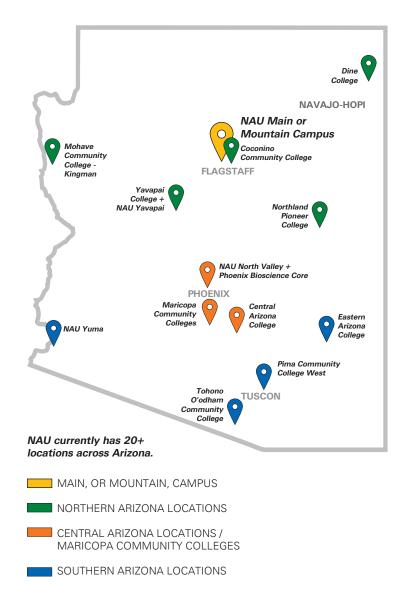
## STATEWIDE LOCATIONS FUTURE PRIORITIES

#### Expanding for workforce development.

NAU is currently studying industry trends to ensure that program offerings are in alignment with the changing needs of Arizona's workforce. Most of NAU's projected enrollment growth is planned to occur at statewide locations, therefore program offerings must be focused on high-demand, high-growth programs, such as Nursing, Allied Health, and Engineering. For example, at North Valley, there is a current initiative to expand healthcare programs such as accelerated nursing, allied health, and occupational health.

Investigating the opportunity for regional branch campuses. While NAU has not had specific conversations with partners in the statewide sites, as an institution, NAU is investigating how a regional presence makes a difference in how students are served. The goal is to make education accessible and affordable for students across the state. A current consideration is to create standalone branch campuses throughout the state. Unlike many of the locations today, the branch campuses should be planned and designed to create a complete campus experience that is in alignment with the NAU brand. The campuses should include spaces and programs that include student services, wellness spaces, student space, dining, residence halls, etc.

Partnerships are key. Within statewide locations or with the expansion of branch campuses, collaboration and partnership with the local institutions is critical for articulation agreements, sharing space, services, and amenities.



Source: https://nau.edu/about/locations-and-maps/

**Expanded programs within the Reservations** and Tribal Community. NAU is also investigating the opportunity to provide services and programs within reservations and tribal communities across the state.



Main or Mountain Campus



NAU-Yavapai



Phoenix Bioscience Core



NAU-Yuma

### **Planning and Development Framework**



#### **USE CAMPUS EDGE TO CONNECT TO COMMUNITY**

The campus edge offers an opportunity for improvement and enhancement. NAU can create a welcoming transition between the campus and the surrounding Flagstaff community through a thoughtful landscape, the incorporation of pedestrian-friendly pathways, and the integration of signage, art, and gathering spaces. Enhancing the campus edge can foster a stronger sense of connection and collaboration with the community, while also creating a positive first impression for visitors. Additionally, attention to safety, lighting, and accessibility can further improve the functionality and attractiveness of the campus edge, ensuring that it serves as a vibrant and engaging gateway to the university.



#### STRENGTHEN EAST-WEST CONNECTIONS

Strengthening the east-west connections is crucial for enhancing accessibility and universal design, promoting efficient circulation, and fostering a cohesive campus environment. Seamless pathways facilitate movement between different academic and administrative areas, which can be achieved through the development of well-designed pedestrian and cycling routes, the integration of wayfinding signage, and the creation of vibrant gathering spaces along these connections. These connections enhance the sense of community and unity within the campus, allowing for a more integrated and dynamic learning and working environment.



#### **IMPROVE UNDERUTILIZED OUTDOOR SPACES**

By revitalizing underutilized outdoor spaces, NAU can create versatile and functional environments that cater to various needs and activities. This could involve redesign, incorporating different seating options, providing shade structures, and integrating amenities such as Wi-Fi access and power sources. Additionally, the introduction of new landscape elements and art installations can transform underutilized spaces into vibrant and inviting areas that promote relaxation, socialization, and outdoor learning. By optimizing these outdoor spaces, NAU can create dynamic campus environments that enrich the student experience, foster a sense of community, and promote overall well-being.



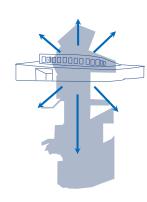
#### **CREATE A MORE EFFICIENT SERVICE HUB AND NETWORK**

Streamlining operations and providing enhanced support to the campus community can be done by centralizing key services and resources into well-designed hub areas, where NAU can improve convenience and accessibility for students, faculty, and staff. The Plan will consolidate administrative offices, student support services, and campus facilities into locations that offer easy access and efficient workflows. Establishing two hubs of service ensures essential resources and assistance are readily available for academic and residential areas. NAU can optimize its operations and enhance the experience, especially with the new south campus service hub area, which has the most opportunity for growth.



#### **RESOLVE VEHICLE AND PEDESTRIAN CONFLICT AREAS**

By identifying and addressing conflict areas, NAU can implement measures that promote coexistence between cars, bicycles, and pedestrians, ensuring the safe and efficient movement of all campus users. Such measures include redesigning intersections, crosswalks, and parking areas to prioritize pedestrian safety and improve visibility. Examples of implementing traffic calming measures include closing Knoles Drive to single occupancy vehicles at peak times of day. Enhancing signage, implementing designated pedestrian zones, and providing clear markings can all help clarify the right-of-way and improve overall traffic flow for a smooth and efficient campus.



#### **INDIGENIZE NAU**

By embracing and integrating Indigenous perspectives, knowledge, and culture from the Native American Cultural Center (NACC) throughout campus, the NACC can serve as a hub for education and cultural activities that promotes appreciation of Indigenous traditions. The planned expansion of the NACC footprint will serve growing programs. Incorporating medicinal plants across the campus not only honors healing practices but also provides education opportunities. Due to the relationship with cemeteries, it is important to obstruct the views to them from campus to make Indigenous campus users feel more comfortable. Installing murals, flags, and other art that reflect Indigenous stories, communities, nations, symbols, and experiences can visually represent and celebrate Indigenous cultures. Creating talking circles and gathering spaces encourages dialogue, community-building, and the sharing of Indigenous knowledge.



#### ADDRESS DEFERRED MAINTENANCE AND INFRASTRUCTURE

It is crucial to ensure that the backlog of maintenance projects is steadily decreasing instead of growing each year, and to find ways to implement smaller, more manageable improvements alongside larger capital projects. While some facilities are candidates for demolition, it is important to also prioritize key renovations of existing assets. Investing in the utility plant locations is vital to maintain the functionality of the campus, with particular attention to the aging south plant which requires action within the next decade. This goal is vital in supporting NAU's Climate Action Goals along with improving operational efficiency and taking a proactive approach to campus improvements.



## CONSOLIDATE ACADEMIC USES AND BUILD COMMUNITY WITHIN DISTRICTS

By strategically consolidating disciplines that are spread widely across campus, such as engineering (yellow), social behavioral sciences (green), and health and human services (blue), NAU can minimize collaboration "commute" times and reduce cross-campus traffic. Promoting cohesion, it also encourages interdisciplinary collaboration and creates a sense of community within specific districts. Bringing related academic departments and faculty closer together will enable for innovation and integrated learning.

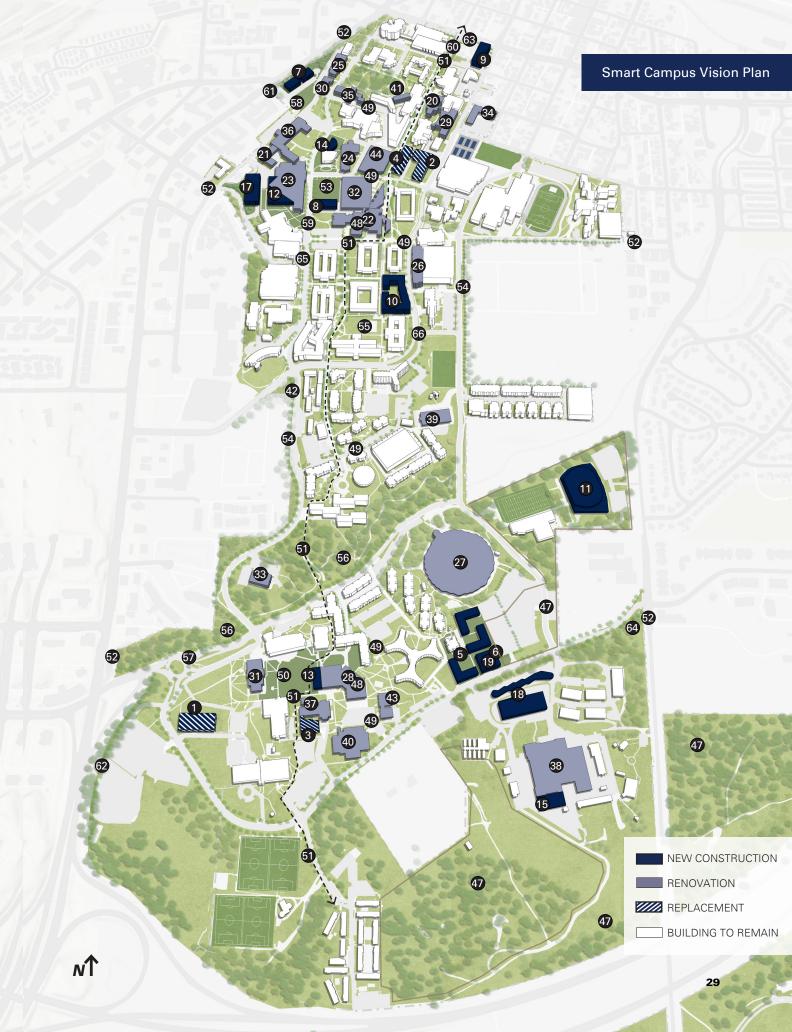
## **NAU Campus Vision Plan for New Construction,** Renovation, and Replacement

REPL	ACEMENT BUILDINGS \\\\\\	BUIL	DING AND SYSTEMS RENOVATIONS (CONTINUED)
0	Social and Behavioral Sciences Replacement Building	33	Babbitt Administrative Center (51)
2	Interdisciplinary Science and Academic Complex (ISAAC)	34	South Beaver Street School (07A)
3	Nursing Replacement Building	35	Old Main (10)
4	Arts and Letters Replacement Building	36	Eastburn Education Center (27)
NET-	NEW BUILDINGS	37	Health Professions (66)
6	South Campus Apartment Complex	38	Facility Services (77)
6	South Campus Community, Recreation, and Wellness Building	39	ROTC and C4P Lab Building (47A)
7	Milton Community Building	40	Rolle Activity Center (68)
8	Student Pavilion Building	41	Bury Hall (08)
9	Northend Mixed-Use Complex	INFR.	ASTRUCTURE
10	Central Campus Apartment Complex	42	Interconnect North and South Heating Systems
1	Multi-purpose Arena	43	Conversion of South Campus Plant to Low Temperature Hot Water
ADD	ITIONS	44	Conversion of North Campus Plant to Low Temperature Hot Wate
12	Cline Library Addition	45	Conversion of existing buildings from local heating systems to a centralized heating system (multiple)
<b>B</b>	Du Bois Student Union Addition	46	Deep energy retrofits (multiple)
	Native American Cultural Center Addition	47	Woody biomass and/or geothermal conversion project
<b>1</b>	Facility Services Addition	48	Electrify campus commercial kitchens
16	Engineering Addition (location TBD)  KING STRUCTURES	OPEN	N SPACE
		49	East West Connections (multiple)
<b>1</b>	North Campus + Cline Library Parking Structure  South Campus Parking Structure + Transportation Center	<u> </u>	South Quad Improvements
<u>©</u>	South Campus Residential Parking Structure	<u> </u>	Pedway Improvements
Ť	DING AND SYSTEMS RENOVATIONS	<u> </u>	Trails Connections to FUTS
20	Physical Sciences (19)	<u> </u>	Library Plaza and Gathering Lawn
<u>a</u>	Institute For Human Development (27A)	54	Cemetery Screenings
<u>a</u>	University Union (30A-C)	55	Central Quad Improvements
23	Cline Library (28)	<u> 56</u>	Sinclair Wash Improvements / Walk of Nations
24	Adel Mathematics (26)	CIRC	ULATION
25	Gammage (01)	•	McConnell Drive Improvements
26	Student and Academic Services (60)	58	Milton Entry and Connection to S. Riordan Ranch Street
2	J. Lawrence Walkup Skydome (73)	59	Pedestrianize Knoles Drive
28	Du Bois Ballroom (64)	60	Pedestrianize Humphrey's Street
29	Biological Sciences (21)	EDGI	E IMPROVEMENTS
	Geology Building (12)	<b>61</b>	Milton Edge Open Space and Indigenous Welcome Signage
	deology building (12)		
30	Raul H. Castro Social and Behavioral Sciences (65)	62	I-17 Edge Gateway Signage and Landscape
		63	I-17 Edge Gateway Signage and Landscape  Bulter Avenue and Humphrey's Street Gateway Signage + Landsc

University Drive and San Fransisco Street Gateway Signage and Landscape

Riordan Road and Knoles Drive Gateway Signage and Landscape

65



## The landscape and open space of Northern Arizona University are essential for immersive engagement.

Campus landscape and open spaces contribute to the identity of Northern Arizona University and serve diverse functions such as teaching, learning, recreation, outdoor gatherings, relaxation, and cultural expression.

The outdoor spaces throughout campus also play a pivotal role throughout each season. In spring, the landscape blooms with colorful flowers and trees, adding beauty and vibrancy to the surroundings and providing a welcoming environment for outdoor activities. In the summer, the landscape offers shaded areas and tree canopies, providing relief from the heat for recreation and relaxation, and also becomes popular for outdoor pursuits. In the fall, the foliage is showcased with trees displaying vibrant colors and scenic atmosphere as well as providing cooler temperatures for campus users to enjoy. In the winter, the landscape hosts snow activities and brings a different environment to the campus. It also provides needed functions, like locations for snow storage. Per the 2015 Landscape Master Plan (LMP), the landscape should incorporate species to provide year-round interest and integrate evergreens for structure and ground plane.

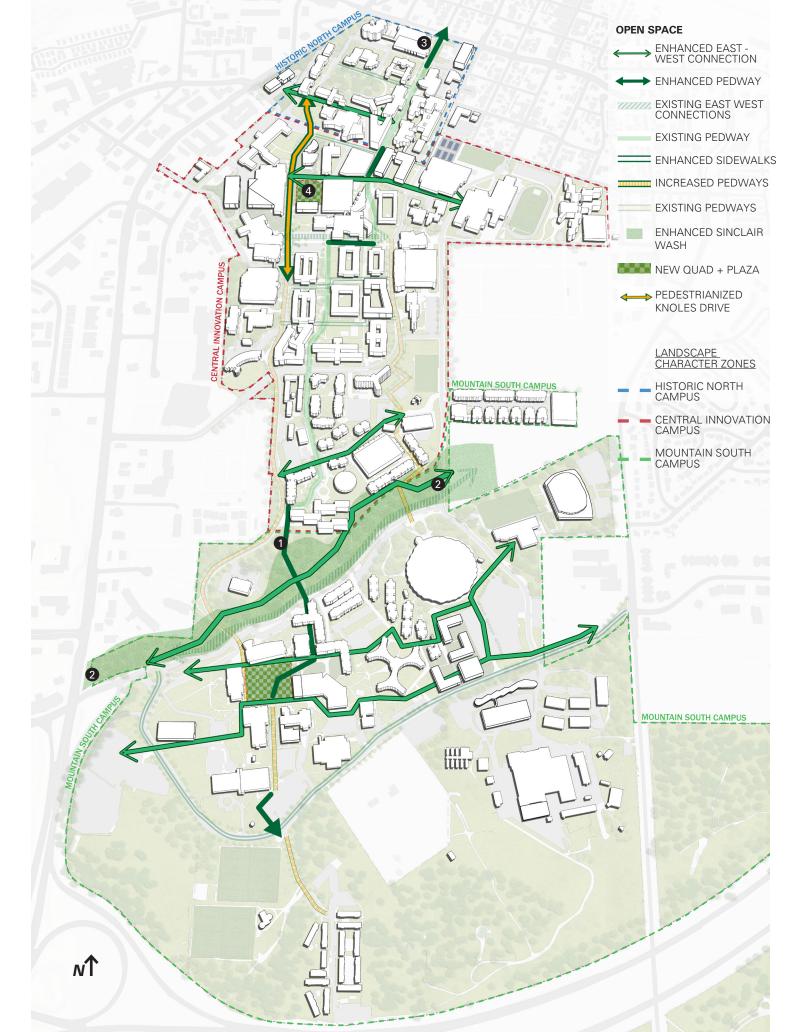
The Master Plan focuses on optimizing the campus outdoor space to create a useful and sustainable environment. Campus landscapes will enhance the user experience, help conserve resources such as water, labor, energy, and promote biodiversity.

The proposed landscape improvements will energize areas that are currently underutilized. By completing the mobility network across campus and connecting all sidewalks and pathways, the campus can become a seamless network that is welcoming and navigable to all who visit.

The organizing spine of the pedestrian network is the campus Pedway. Improvements and points of interest added along the Pedway will enhance the user experience and the campus brand, maximizing the benefit of this unique campus asset.

The landscape also plays a critical role in welcoming visitors to campus, beginning at the campus edge and throughout its space. Enhancing the campus gateways with interesting landscape and intuitive wayfinding provides a cohesive feeling of arrival and destination before even entering the grounds.

The campus character zones, outlined in the 2015 Landscape Master Plan lend themselves to be enhanced and provide areas of campus to have specific plantings, feelings, and looks. These character zones provide a sense of place when in a specific area of campus and include: Historic North Campus, Central Innovation Campus, and Mountain South Campus.



## Circulation is a critical part of experiencing Northern Arizona University's large campus.

Moving the university's population across the large campus for daily activities creates an enormous amount of movement both on and off campus.

From on-campus residents walking to class, to offcampus residents relying on the transit system, and service vehicles accessing buildings for deliveries and repairs, each of these systems must align harmoniously to create seamless, convenient, and safe experiences for all campus users.

The Master Plan relies on a hierarchical mobility structure focused primarily on pedestrian safety. A dynamic and functional pedestrian environment contributes to the overall campus environment, supports campus sustainability goals, and is cost-effective.

The preferred travel modes at NAU include walking, bicycles, skateboards, scooters, and on-campus transit. These modes have the lowest environmental impact and also support campus wellness initiatives.

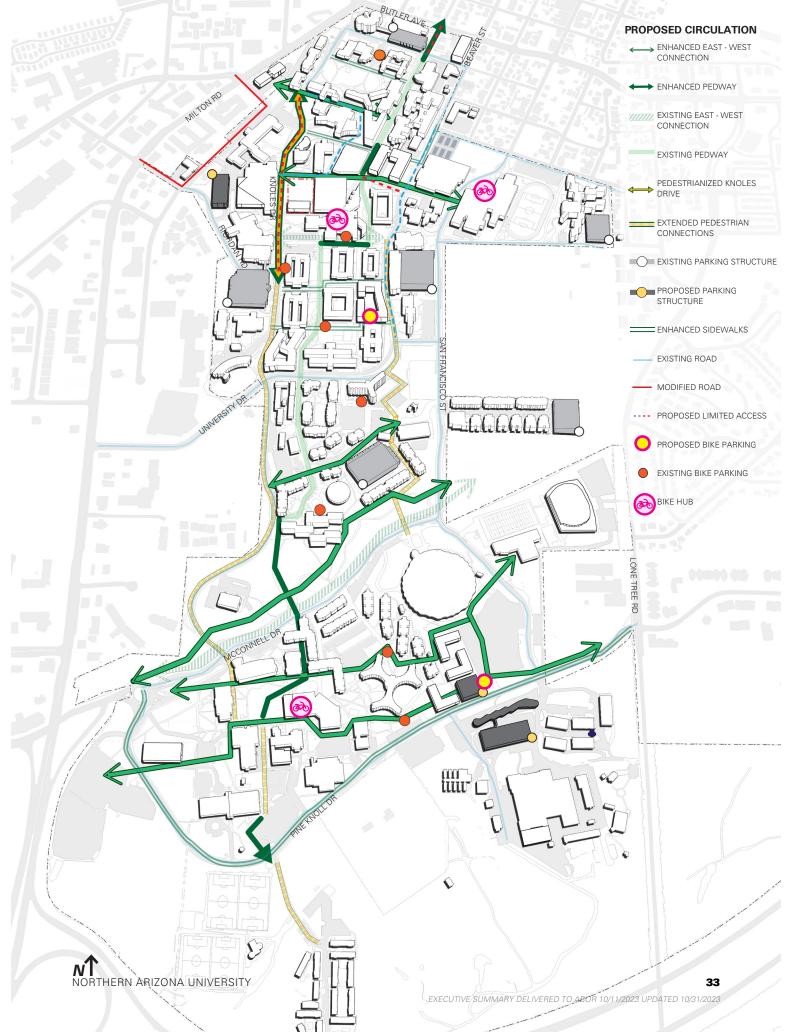
The vision to create a pedestrian-focused campus requires a mobility system that relocates vehicles away from the center and uses the recovered areas for the highest and best use of university land. This mobility approach improves the quality of life for campus users by creating more opportunities for the exchange of ideas, chance meetings, and places to collaborate and socialize. For example, a new signature open space at the heart of campus will connect the Library, NACC, Field House, and Union in an area that today is host to pedestrian/ vehicle conflict, congestion, idling cars waiting for parking spaces, etc.

Vehicle parking is encouraged along the campus perimeter by the future construction of structured parking which will serve as transition points to switch travel modes from vehicle to walking, cycling, or transit. A perimeter parking strategy poses little inconvenience to travelers because once on campus, little time is typically lost by walking or cycling compared to driving short distances and parking a vehicle. No net change in parking spaces is planned, however, the University's carbon commitments and goals result in the need to reduce the number of spaces through Transportation Demand Management (TDM) measures.

Through improvements to the pedway and the additions of East-West connections, the Plan encourages separation or restriction of mixed travel modes in order to emphasize both pedestrian and cycling safety.

The goal of a Pedestrian-Focused Mobility
Hierarchy is to create a campus that emphasizes
a more urban experience, prioritizing
pedestrians, cycling, and then transit, and
aligning with the university's commitments
and goals around sustainability and carbon
emissions. The outcomes will:

- 1. Improve the safety of all users
- 2. Make non-motorized transportation and walking more comfortable and convenient
- 3. Reduce traffic congestion by reducing the number of staff, students, and visitors who drive a vehicle to and around campus
- 4. Reduce the demand for expensive parking and street capacity projects
- 5. Improve storm water management



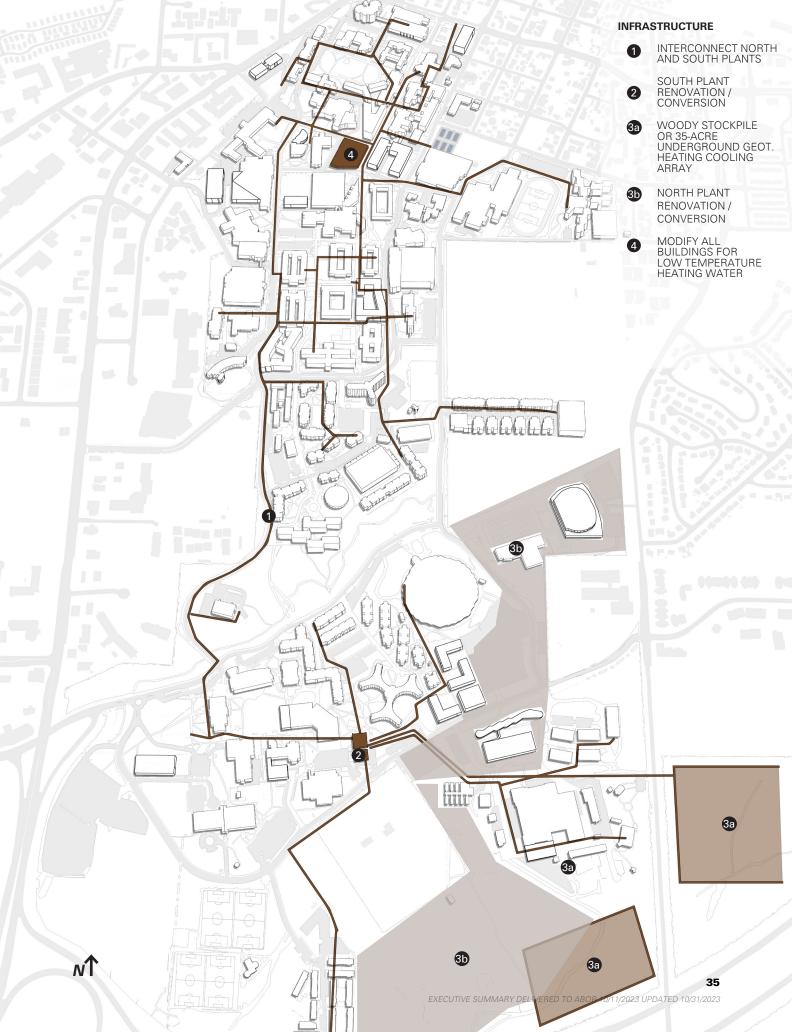
## Resiliency is important for infrastructure and utilities of Northern Arizona University's campus.

Campus infrastructure aims to digitize, modernize, and decarbonize to align with NAU's goals for smart, efficient, and clean utility infrastructure. The Plan focuses on infrastructure and utilities as the foundation for the effective functioning and support of the educational and operational activities for all of campus. Reliable and well-maintained infrastructure ensures the seamless delivery of essential services throughout the campus. At the core of the recommendations is to revitalize campus infrastructure while tackling deferred maintenance at the building, distribution, and plant levels.

NAU Flagstaff Mountain Campus will realize carbon neutrality by 2030 for Scope 01 (on site emissions, fleet and natural gas) and Scope 02 (purchased electricity) and the investment in the university's infrastructure will be a critical component to achieving this commitment. At the forefront of the Master Plan, all future buildings and plans must consider the best way to approach planning and implementation through the goals of the Climate Action Plan and the actions outlined in the 2022 Roadmap to Carbon Neutrality.

How NAU will get there:

- Maximizing energy and water efficiency to reduce the campus' energy use intensity (EUI) and realize utility savings
- Prioritizing renovation over demolition
- Transitioning to carbon-free electricity through partnerships or a Virtual Power Purchase Agreement
- Converting the district heating system to low temperature hot water, and connecting the north and south plants
- Transitioning to ground source heat pumps (geothermal) and/or a woody biomass system
- Electrifying NAU's fleet
- Creating a culture of sustainability through behavioral change programs, enhanced commuting options, community trainings, and updated policies
- Creating a national model of a living laboratory to ensure it is preparing students, staff, and faculty to meet the climate challenges of the 21st century



## A smart campus leverages technology and data to enhance the experience and optimize operations.

The future campus is centered around creating outstanding student engagement and anticipates new perspectives on human interactions and experiences in both the physical and virtual world. NAU is planning for the possibilities of technological influences on our physical world, by thoughtfully considering a future defined by new interactions among humans and cyber sentient entities, redefining the sense of place, and projecting the impact of innovations of nanotechnology, autonomous vehicles, self-repairing infrastructure, augmented realities, and immersive virtual learning space to create a unique working and learning experiences.

#### **Smart Campus Elements:**

**Digital Twin:** NAU will create a Digital Twin of the Flagstaff Mountain Campus and other campuses to effectively manage design, planning, and construction. This tool will enhance building performance, operations and predictive maintenance through simulations, optimize and measure realized energy efficiencies, improve space utilization, enhance safety, and capture facilities lifecycle insights to inform renovation and retrofitting priorities that address legacy deferred maintenance.

Paths of Travels: In alignment with the circulation recommendations in this plan, the university will pilot technology that provides information and connected experiences along the Pedway. Smart sidewalks also measure the traffic flow of people and can provide critical planning information to campus safety programs and future campus master planning. NAU's Pedway and sidewalks are already used for small food delivery robots. In the future, autonomous delivery applications will include the movement of larger items, goods, and supplies,

and pathways and roadways should be planned to ensure there is adequate space.

Smart Signage: Through touch-screen overlays or Bluetooth network connections, smart signage drives heightened engagement and communications with campus users and can help market events held in and around campus. In alignment with the Digital Signage recommendations and with existing mobile and digital sign technologies, NAU will pilot Smart Signage, primarily along the Pedway and at community engagement sites.

Robots: Artificial intelligence, machine learning, robotics, nanotechnology, 3D printing, genetics, space sciences, and biotechnology are expected to dominate in the coming decades. At NAU, there are opportunities to explore robotic autonomous devices to conduct labor-intensive work like traffic control, mowing, window washing, snow plowing, etc. In addition, smart warehouses to centralize and optimize receiving on campus, and smart library storage.

Smart Learning Environments: Traditional classrooms are transforming with the adoption of virtual reality environments and through flexible learning environments that support active teaching and learning. Outside the classroom, learning evolves through the presence of experiential learning throughout the campus such as maker labs, virtual reality, multimedia studios, etc. It is important to note that faculty must be engaged in how to best leverage advanced learning technologies.

Smart Buildings: A smart building collects actionable data from user devices, sensors, systems, and services on the premises. Applying that data using artificial intelligence and machine learning makes the building both programmable and responsive to the needs of the users and the building manager. A smart building converges various building-wide systems - such as HVAC, lighting, alarms, conveyance, and security capabilities - into a managed network infrastructure.

Specifically, NAU can leverage an enterprise building information system to:

- Optimize energy management and building operations.
- 2. Improve space management and design
- 3. Enhance occupant experience and productivity.
- 4. Enhance safety and promote healthy buildings.

NAU will integrate Smart Building standards and components into new construction and major renovation projects such as automated building scheduling, space utilization measurement through sensoring, predictive maintenance indicators, and real-time water and energy use data.

Internet of Things (IoT): Integrating everything under the management umbrella of campus facilities operations, operational technology (OT) in utilities, and internet-of-things (IoT) technologies can secure and enable "smart campus" efficiencies beyond utilities management. NAU's ITS IoT Lab has been working on the development of new ideas such as Collaboration with Facilities Services. As a pilot project, "Smart Restrooms" help NAU monitor the use of restrooms throughout the campus in order to deploy custodial resources where there is the most need. In addition, the expansion occupancy opportunities to measure utilization of space, and smart outdoor lighting.

## Indigenous Placekeeping drives the cultural interpretive strategy of the Plan.

Northern Arizona University has a long-standing history of honoring Indigenous Peoples in the university strategic plan by dedicating one specific goal to the Commitment to Indigenous Peoples. This goal includes the recognition of the unique sovereign status of Native Nations and the sacred land on which the university was built. It has the mission "to become the leading university serving Indigenous Peoples."

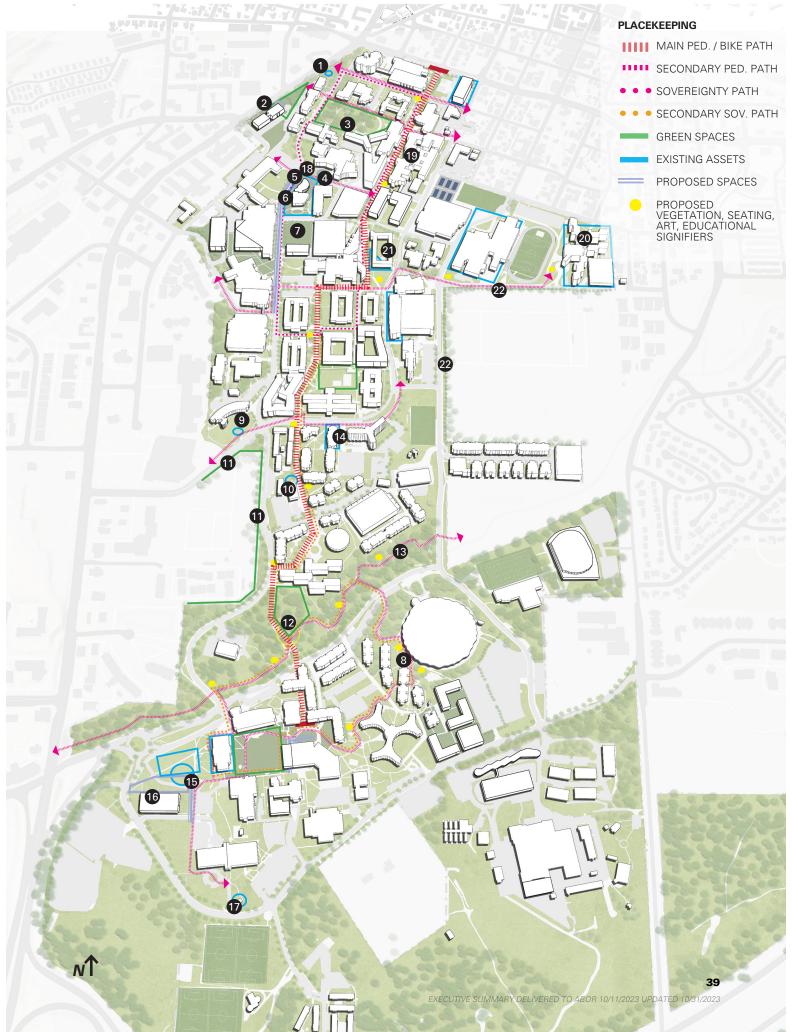
Indigenous design strategies apply a triad as an indicator of outcomes to be achieved in the Indigenous design. There are three levels of meaning in the triad: identity, lifeways, and worldview (ways of knowing). All three ways should be understood in order to fully explain the dynamics of relationships between built environments and human behaviors:

- Identity: How does the Plan reflect the identity of the people?
- Lifeways: How does the Plan offer space for community life ways?
- Ways of Knowing: How does the Plan engage an Indigenous worldview?

The Plan provides opportunities throughout the NAU campus to engage in local narrative, language, story teaching, art, ethnobotany, Indigenous identity, and more to honor the Ancestral presence and deep connection of the Indigenous Peoples to the land in which it is located. Some of these are shown in the Plan as spaces that are welcoming with natural materials, spaces that have a meaningful purpose, and places of outdoor education and native flora and fauna.

## **Indigenous Placekeeping on Campus**

- 1 Existing Code Talker Statue
- 2 Proposed Indigenous Welcome Signage
- 3 Existing Little Tree Man Trail
- 4 Proposed Four Seasons gathering space
- 5 Proposed NACC expansion + Sweat Lodge
- 6 Existing Native American Cultural Center
- 7 Proposed Plaza and Gathering Lawn
- 8 Proposed Indigenous Banners and Signage
- 9 Enhanced NAU sign with Indigenous Elements
- 10 Existing International Pavilion
- 11 Proposed Cemetery Vegetation Visual Barrier
- 12 Proposed Walk of Nations
- 13 Proposed Sinclair Wash Enhancements
- 14 Existing Navajo Nation Archaeology Department
- 15 Re-imagined SSLUG Garden
- 16 Satellite Indigenous Lounge at South Campus
- 17 Enhanced Hogan
- 18 Relocated Institute for Tribal Environmental Professionals (ITEP)
- 19 Existing Grimm Tree Walk
- 20 Existing Indigenous Peoples Living-Learning Community at Mountain View Hall
- 21 Future Expansion Indigenous Peoples Living-Learning Community and Commons
- 22 Proposed Cemetery Vegetation Visual Barrier



# Student life and campus living is a crucial asset for NAU, playing a significant role in student recruitment, retention, and community building.

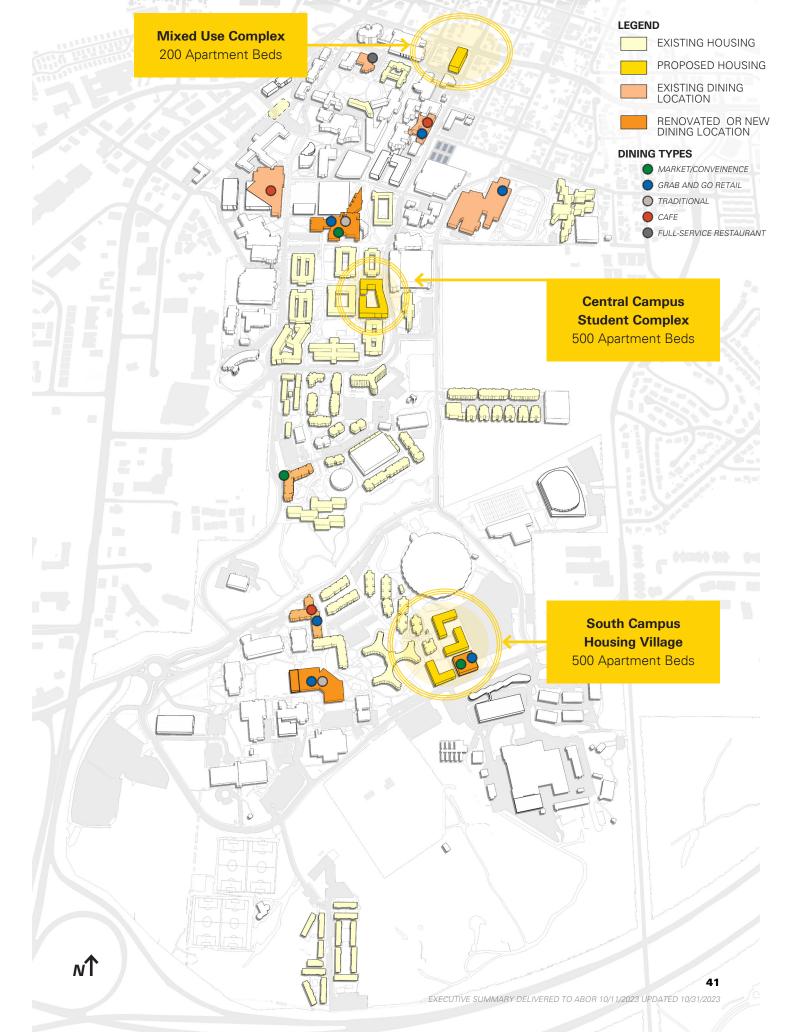
The university recognizes that auxiliary operations, including housing, are essential for its long-term financial sustainability. This Plan acknowledges and aims to address deferred maintenance issues within existing housing over time. Overall student satisfaction with campus living is high, and there is a limited supply of affordable housing in the off-campus market, leading to a growing interest among upper-division students to return to oncampus living. This Plan and NAU explore the possibility of providing housing support for faculty and staff. The Plan assumes, based on a spring 2023 housing demand analysis, demand for up to 1,000 new apartment style beds with the need for renovations to existing buildings and taking certain buildings offline.

NAU has an adequate capacity, variety, and distribution of dining services across campus, which generate strong revenue for the University. However, there are infrastructure issues in the University Union's food service area, including kitchen size. The Du Bois Center renovation, 2017, was successful but additional capacity is still needed to serve a growing wouth campus population. The University Union lacks student-oriented spaces such as lounges, study areas, and dedicated student organization spaces. This Plan suggests undertaking a comprehensive renovation of the University Union to address programmatic and aesthetic deficits. The future of additional dining options should consider the type and location of new housing developments. Another critical component of student life is

comprehensive wellness. This includes supporting students' mental and physical health with counseling resources and recreational spaces. Demand for counseling services has increased since the Covid-19 pandemic and is anticipated to continue to rise as stigma around receiving counseling decreases. The Plan proposes distributed counseling resources across campus to "meet students where they are" and make sure any and all students can get the help they need. These services are proposed within a new satellite recreation facility on South Campus. This facility will help alleviate competing demands from athletics and student recreational users that currently plague Rolle Activity Center.

"As a university that serves first generation college students as well as minorities, it is important to consider who NAU students are, and how the university is serving them to achieve their academic goals. Meeting basic needs is an essential component to academic success and overall wellbeing for students."

- NAU Faculty Member



## **Phase 01 Projects**

Phasing was determined after meetings with the steering committee and university leadership and considered many factors, including prioritization, sequencing, swing space needs, cost assumptions, and funding opportunities. The Plan evaluates which buildings can alleviate high levels of deferred maintenance by renovation or replacement versus which buildings are worth re-investment and renovation.

Proposed demolitions consider many factors such as condition, buildings that are well below average (poor or critical), beyond the return on investment, and poor programmatic fit. Buildings that fit some of the previous list and that sit on sites that could increase density are also candidates for demolition.

Renovations were prioritized over demolition and replacement as a means to reduce embodied carbon caused by the need to replace an existing structure. Renovations are critical as NAU continues to address deferred maintenance.

Proposed new buildings were carefully considered. There is minimal space increase for academic and administrative functions. A core tenant of the Plan was no new space added without purpose. The expansion of space is centered around a need for additional study, lounge, wellness, housing, and dining to better support the student experience.

Partnership sites are located at the edges of campus. These sites are nimble but should support ideas that bring community and industry onto campus.

The projects below identify priorities for long-term capital improvements consistent with the timeline of this plan, and are not in priority order.

	Bundled Projects	Project Type	Demolition GSF	Renovation GSF	New Build GSF
	Milton Property Demo	Demolition	16,500		
61	Indigenous Welcome Signage	Gateway Improvements			
61	Milton Edge Open Space	Open Space and Landscape			
	Peterson Hall	Demolition	39,439		
2	Interdisciplinary Science and Academic Complex (ISAAC)	New Construction			100,000
41	Bury Hall	Swing Space Renovation		17,470	
34	South Beaver Street School	Renovation		30,271	
	Huffer Lane Facility	Demolition	5,220		
1	Social and Behavioral Sciences	New Construction			108,000
21	Institute of Human Development*	Swing Space Renovation		12,642	
49	E-W Connection - State Trust Land to South Quad	Open Space and Landscape			
50	South Quad Improvements	Open Space and Landscape			
14	Native American Cultural Center	Addition			36,000
22	University Union Dining Services	Major Renovation		127,575	
32	University Union Fieldhouse	Renovation (functional upgrades)		45,000	

**TABLE LEGEND** 

DEMOLITION

OPEN SPACE/ LANDSCAPE

RENOVATION

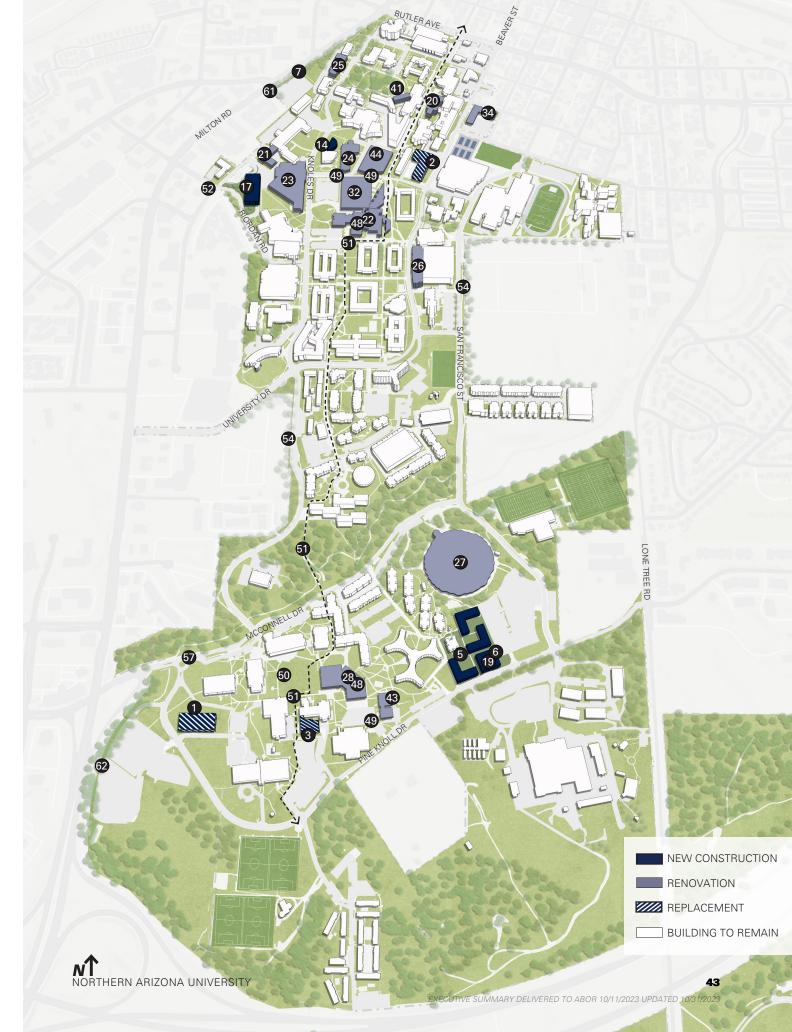
NEW BUILD/ REPLACEMENT

**CIRCULATION** 

**INFRASTRUCTURE** 

Continued on page 44

\* Indicates Secondary Effect Renovation Project \*\* Historically Sensitive Renovation \* Does not include new parking structures



## **Phase 01 Projects**

#### Continued from page 42

The projects below identify priorities for long-term capital improvements consistent with the timeline of this Plan, and are not in priority order.

	Bundled Projects	Project Type	Demolition GSF	Renovation GSF	New Build GSF
22	University Union Food Court	Renovation		24,767	
22	University Union Student Services	Renovation		24,354	
49	E-W Connection - Cline to HLC	Open Space and Landscape			
23	Cline Library	Major Renovation		211,312	
17	Cline Library Parking (400)	Parking Structure			128,000
5	South Campus Apartments	New Construction			204,000
6	South Community + Wellness	New Construction			20,300
19	South Campus Resident (345)	Parking Structure			96,000
24	Adel Mathematics	Major Renovation		43,488	
25	Gammage**	Major Renovation		43,684	
26	Student Academic Services	Interior Renovation		111,915	
27	J. Lawrence Walkup Skydome	Building Upgrades		254,360	
28	Du Bois Ballroom	Interior Renovation		92,946	
54	Cemetery Screening - Vegetation Visual Barrier	Open Space and Landscape			
51	Pedway Landscape Improvements	Open Space and Landscape			
57	McConnell Drive Improvements	Circulation			
62	I-17 Edge Gateway Signage + LS	Gateway Improvements			
3	Nursing Replacement Building	New Construction			34,500
20	Physical Sciences Building	Major Renovation		51,318	
	Babbitt Academic Annex	Demolition	39,033		
42	Interconnect North and South Heating Systems	Infrastructure			
43	Conversion of South Campus Plant to Low Temperature Hot Water	Infrastructure			
44	Conversion of North Campus Plant to Low Temperature Hot Water	Infrastructure			
45	Conversion of buildings from local heating systems to a centralized heating system	Infrastructure			
46	Deep Energy Retrofits by building	Infrastructure			
48	Electrify On Campus Commercial Kitchens	Infrastructure			

**TABLE LEGEND** 

**DEMOLITION** 

OPEN SPACE/ LANDSCAPE

**RENOVATION** 

NEW BUILD/ REPLACEMENT

**CIRCULATION** 

INFRASTRUCTURE

Phase 01 Total Project Costs: \$846,643,000

Totals

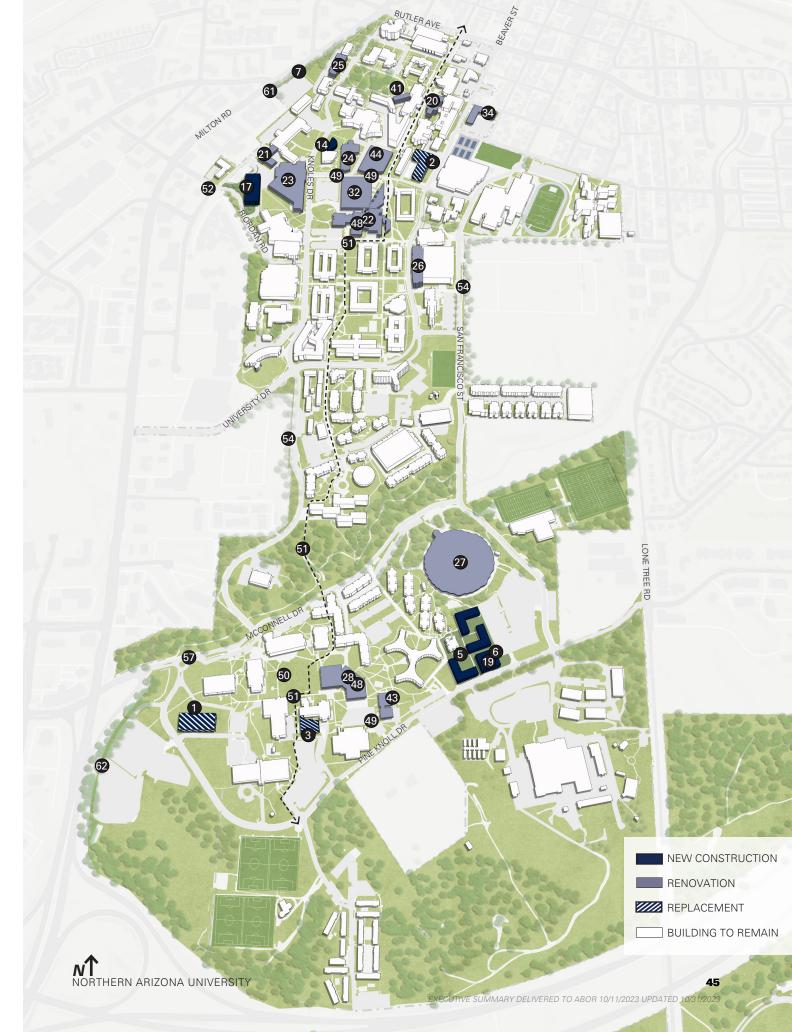
\* Indicates Secondary Effect Renovation Project \*\* Historically Sensitive Renovation \*Does not include new parking structures

1,091,102

+ 466,800+

Cost Estimates are total project cost, based on 2023 dollars (no escalation), and based on rough order of magnitude costs per square foot

(100, 192)



## **Phase 02 Projects**

The projects below identify priorities for long-term capital improvements consistent with the timeline of this plan, and are not in priority order.

	Bundled Projects	Project Type	Demolition GSF	Renovation GSF	New Build GSF
	Geology Annex	Demolition	7,904		
7	Milton Community Building	New Construction			28,800
58	Milton Entry/Riordan Ranch	Circulation			
	Roseberry Apartments	Demolition	34,558		
30	Geology **	Major Renovation		22,559	
	SBS West	Demolition	71,312		
31	Raul H Castro SBS	Major Renovation		63,321	
8	Student Services Pavilion	New Construction			39,000
59	Pedestrianize Knoles Drive	Circulation			
49	E-W Connection - Performing Arts to Bookstore	Open Space and Landscape			
53	Library Plaza	Open Space and Landscape			
12	Cline Library Expansion	Addition			58,800
65	Riordan Rd Edge Gateway Signage + Landscape	Gateway			
33	Babbitt Admin Center*	Interior Renovation		29,423	
26	Student Academic Services*	Interior Renovation		111,915	
27	J Lawrence Walkup Skydome	Building Upgrades		254,360	
	Nursing Building	Demolition	19,696		
49	E-W Connection - South Quad to East of Du Bois	Open Space and Landscape			
13	Du Bois Student Center	Addition			18,000
35	Old Main **	Renovation		31,259	
4	Arts + Letters Replacement	New Construction			78,800
	Academic Annex	Demolition	3,600		
47	Implement Biomass or Geothermal	Infrastructure			
29	Biological Sciences	Major Renovation		86,964	
	Totals			499,801 GSF	+ 223,400 GSF

**TABLE LEGEND** 

**DEMOLITION** 

OPEN SPACE/ LANDSCAPE

**RENOVATION** 

NEW BUILD/ REPLACEMENT

**CIRCULATION** 

**INFRASTRUCTURE** 

#### Phase 02 Total Project Costs: \$490,460,000

Cost Estimates are total project cost, based on 2023 dollars (no escalation), and based on rough order of magnitude costs per square foot.

<sup>\*</sup> Indicates Secondary Effect Renovation Project \*\* Historically Sensitive Renovation \*Does not include new parking structures



## **Phase 03 Projects**

The projects below identify priorities for long-term capital improvements consistent with the timeline of this plan, and are not in priority order.

	Bundled Projects	Project Type	Demolition GSF	Renovation GSF	New Build GSF
32	University Union Fieldhouse	Renovation		88,019	
15	Facility Services	Addition			17,000
38	Facility Services	Major Renovation		127,981	
37	Health Professions	Renovation		59,826	
16	Engineering Addition (location TBD)	Addition			20,000
39	ROTC + C4P Lab Building	Renovation		25,182	
64	Lone Tree Edge Gateway Signage + Landscape	Circulation			
18	Transportation Center + Garage	Parking Structure + Circulation			200,000
49	E-W Connection - east of DuBois to Kinsey + HPC	Open Space and Landscape			
	<b>Butler Office Building</b>	Demolition	9,195		
	Humphreys Office Building	Demolition	2,177		
	Printing Services	Demolition	5,111		
9	Northend Mixed-Use Building	New Construction			105,000
60	Pedestrianize Humpherys Road	Circulation			
63	Bulter Edge	Open Space and Landscape			
66	University Drive/San Francisco	Gateway			
	Gateway Success Center	Demolition	16,662		
10	Central Campus Apartments	New Construction			220,000
55	Central Quad Improvements	Open Space and Landscape			
51	Pedway Improvements	Open Space and Landscape			
49	East-West Connection	Open Space and Landscape			
56	Sinclair Wash Improvements	Open Space and Landscape			
52	FUTS Trail Connections	Open Space and Landscape			
40	Rolle Activity Center	Renovation		47,697	
36	Eastburn Education Center	Renovation		78,047	
11	Multi-Purpose Arena	New Construction			200,000
	Totals		(33,145) GSF	426,752 GSF	+ 562,000⁺ GSF

#### **TABLE LEGEND**

### **DEMOLITION**

OPEN SPACE/ LANDSCAPE

**RENOVATION** 

NEW BUILD/ REPLACEMENT

**CIRCULATION** 

**INFRASTRUCTURE** 

### Phase 03 Total Project Costs: \$680,465,000

Cost Estimates are total project cost, based on 2023 dollars (no escalation), and based on rough order of magnitude costs per square foot.

<sup>\*</sup> Indicates Secondary Effect Renovation Project \*\* Historically Sensitive Renovation + Does not include new parking structures

