WICHITA STATE UNIVERSITY

Campus Master Plan Update 2024



WICHITA STATE UNIVERSITY Campus Master Plan Update 2024

2024 Existing Conditions

Academic & Research Buildings

- 1. Devlin Hall
- 2. Corbin Education Center
- 3. Hubbard Hall
- 4. Heskett Center
- 5. Lindquist Hall
- 6. Jabara Hall
- 7. Grace Wilkie Hall & Annex
- 8. Morrison Hall
- 10. Jardine Hall
- 11. McKinley Hall
- 12. Fiske Hall
- 13. Ulrich Museum of Art
- 14. McKnight Art Center
- 15. Wilner Auditorium
- 16. Duerksen Fine Arts Center
- 17. Wiedemann Hall
- 18. Henrion Hall
- 19. Elliott Hall
- 20. Ahlberg Hall
- 21. Geology Building
- 22. Engineering Building
- 23. Neff Hall
- 24. Shocker Success Center
- 25. Ablah Library
- 26. Media Resources Center
- 27. Wallace Hall
- 28. Beggs Hall
- 29. ATLAS
- 30. Aviation Testing
 Laboratory
- 31. NIAR
- 32. Woolsey Hall
- 33. John Bardo Center
- 34. NIAR HAMR
- 35. Jerry Moran Center (AVET) 36. Digital Research &
- Transformation Hub

 37. Gravey International
- Center
- 38. Brennan Hall I,II,II
 39. Child Development Center
- **Athletics Buildings**
- 40. Charles Koch Arena
- 41. Student-Athlete Center
- 42. Cessna Stadium
- 43. Wilkins Stadium
- 44. Bombardier Learjet Practice Facility

- 45. Eck Stadium
- 46. Sheldon Coleman Tennis Complex

Student Life

- 47. Shocker Hall
- 48. The Flats at WSU
- 49. The Suites at WSU
- 50. Rhatigan Student Center
- 51. CAC Theater
- 52. Grace Memorial Chapel

Administration & Facilities

- 53. Marcus Welcome Center
- 54. Woodman Alumni Center
- 55. HR Building
- 56. President's Residence
- 57. Police Department
- 58. Parking Services Building
- 59. Gladdis Physical Plant Complex

Partnership Buildings

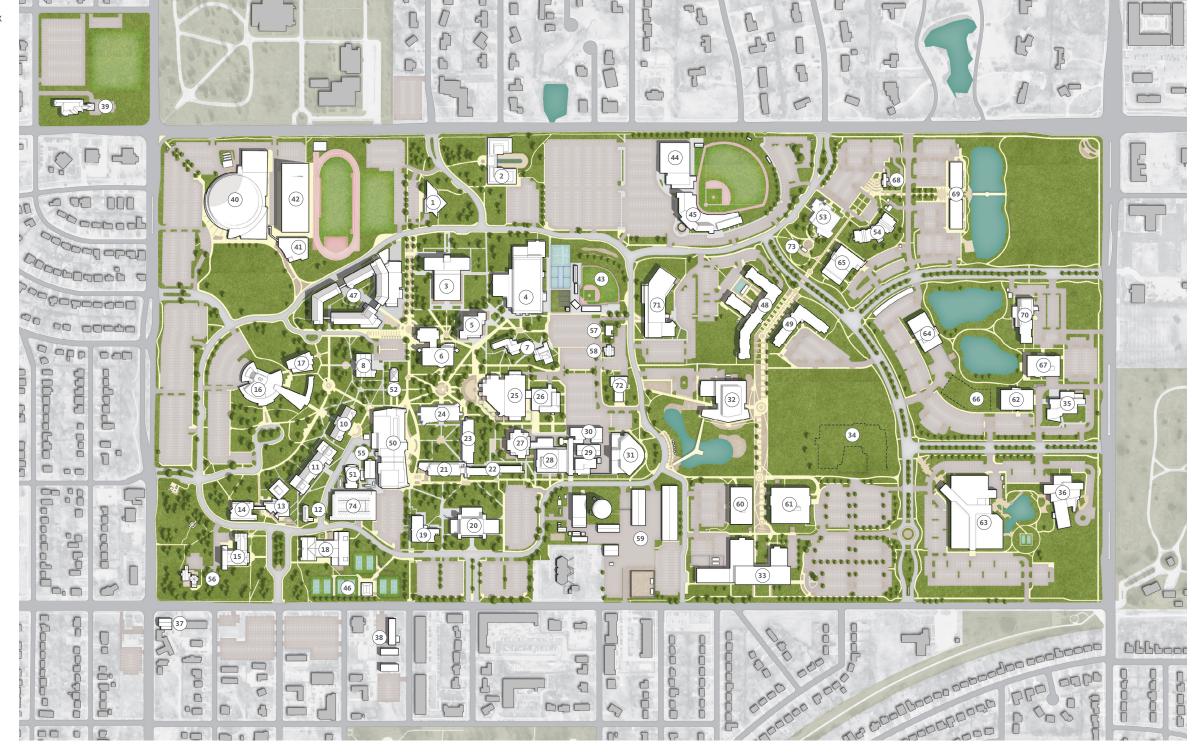
- 60. Partnership Building 1
- 61. Partnership Building 2
- 62. Partnership Building 363. NetApp
- 64. Partnership Building 7 Smart Factory
- 65. Law Enforcement Training Center
- 66. Partnership Building 3B
- 67. Partnership Building 11
- 68. Starbucks
- 69. Braeburn Square
- 70. Hyatt Place Hotel

Community Buildings

- 71. Steve Clark YMCA and Student Wellness Center
- 72. Wichita State Connect
- 73. Pizza Hut Museum

Parking Garage

74. Parking Garage 1



2024 Masterplan

Academic & Research Buildings

- 1. Interdisciplinary Academic Hall
- 2. Ablah Library Addition
- 3. Academic Arts Hall
- 4. Future Academic/ Research Building
- 5. Future Academic/ Research Building
- 6. NIAR Hub for Advanced Manufacturing Research (HAMR)
- 7. Child Development Center

Student Life

8. Recreation Center

Athletics Buildings

- 9. Koch Arena Addition
- 10. Indoor Track11. University Stadium
- 12. Wilkins Stadium Expansion

Partnership Buildings

- 13. University Village 1
- 14. University Village 2
- 15. University Village 3
- 16. University Village 4
- 17. University Village 5
- 18. Partnership/Mixed Used Building 1
- 19. Partnership/Mixed Used Building 2
- 20. Partnership/Mixed Used Building 3
- 21. Partnership/Mixed Used Building 4
- 22. Partnership/Mixed Used Building 5
- 23. Partnership Building
- 24. Partnership Building

LEGEND

- Existing buildingsSignificant renovations
- Proposed buildings

- 25. Partnership Building
- 26. Partnership Building 3B ATF Forensic Crime Gun Intelligence Laboratory
- 27. Partnership Building
- 28. Partnership/Mixed Used Building
- 29. Partnership/Mixed Used Building
- 30. Partnership/Mixed Used Building
- 31. Partnership/Mixed Used Building
- 32. Retail

Community Buildings

33. Community Hub

Parking Garage

- 34. Parking Garage 2
- 35. Parking Garage 3
- 36. Parking Garage 4

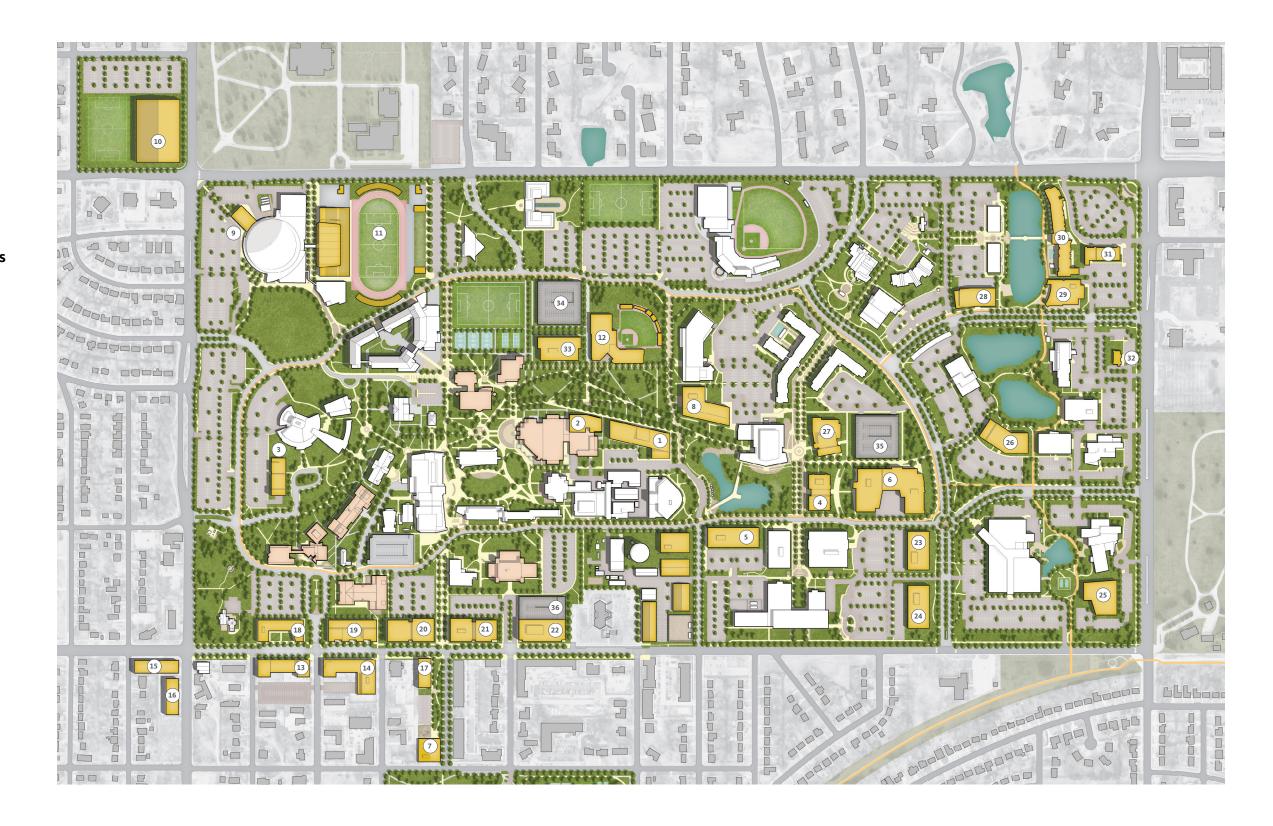


Table of Contents

09	
0孔 Introduction	14
Campus History	16
Process and Engagement Vision & Guiding Principles	26 32
Reading the Plan	34
02 Analytical Findings	26
Facility Condition Index	36
Classroom Utilization	38 40
Analytical Takeaways	44
03 Districts	46
Academic Core District Historic District	52 68
Athletics District	76
17th Street Gateway	82
Innovation Campus	98
○4 Frameworks	108
Building Use	110
Campus Life	122
Partnerships Community	126
Landscape	128 130
Mobility	140
05 Systems	152
_	
Sustainability MEP Narrative	154 166
0රි Metroplex Complex	180
Metroplex Complex	182
○7	
₩ Appendix	184

Consultant Team

Gensler | Lead Consultant

Confluence | Landscape Architecture

PEC | MEP/FP, Civil Engineering, Transportation, Technology, Security

A Letter from the President



Dr. Rick Muma

Over the past 10 years, Wichita State University has undergone an unprecedented and remarkable transformation — not only in our physical footprint with the Innovation Campus, but also in the way we connect to our students, our neighbors, and each other. On our way of becoming a premiere urban public research university, we've fostered the growth of an institution that is connected, resourceful, and responsive to the people and communities we serve.

I couldn't be prouder of what we've built and our trajectory for the next generations of Shockers. The future of Shocker Nation is an absolute certainty, and it's imperative that we make plans for its continued prosperity. With that in mind, I introduce to you the 2024 masterplan for Wichita State University.

To be sure, this master plan is aspirational. It's a roadmap to guide us along our journey. And like all journeys, there will be some unexpected detours. It is a fluid, living document that will be adjusted throughout the next 10 years, and plans will likely shift and become more refined as we continue to engage in conversations.

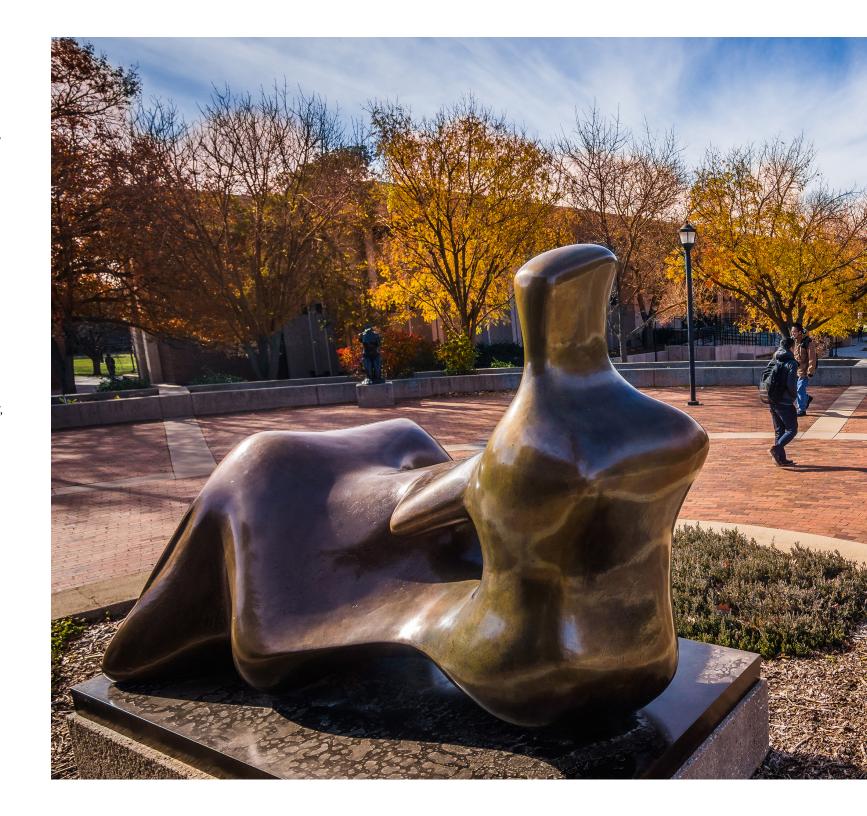
As we embark on this exciting chapter in the story of Wichita State University, it's essential to recognize the collaborative spirit that has fueled our progress thus far. Our success has been made possible by the dedication and support of our faculty, staff, students, alumni, and the broader community. Together, we have laid the groundwork for a future that is promising and transformative.

The 2024 master plan is more than a collection of blueprints and diagrams; it reflects our collective vision for the university. It embodies our commitment to affordability and access, feeding the talent pipeline, and increasing economic prosperity for our community. However, as we look ahead, we must remain agile and adaptable, ready to embrace change and seize new opportunities as they arise.

To everyone in Shocker Nation, thank you for your ongoing commitment and dedication to Wichita State. Together, we have accomplished so much, and together, we will continue to build a brighter future for our university and our community.

Go Shockers!

Dr. Rick Muma





OIL INTRODUCTION

The History of Campus

The development of Wichita State's campus is symbolic of its strong relationship with the community and the growth of the institution over time. Today, the campus exhibits three distinct land use patterns: the early development concentrated along North Hillside Street, the mid to late-century development of the central campus, and the Innovation Campus on the east side of campus. The Hillside and central campus areas reflect not only patterns of land use consistent with the period of time they were developed and the corresponding trends in architecture.

Fairmount College 1895-1926

Fairmount College was founded as a congregational college by the Rev. Joseph Homer Parker in 1886. The campus was initially organized around a large oval drive with buildings radiating from a central green space. This layout is reminiscent of educational institutions in New England and is the first example of this style west of the Mississippi River. Even the trees were shipped from the New England region to be transplanted in Wichita and lend to the prescribed ambiance that the founder wanted to achieve.

In the 1920s, Fairmount College developed a significant financial burden, threatening the survival of the college in the years prior to the Great Depression. After two campaigns for a transfer of ownership to the public domain, the institution was renamed the Municipal University of Wichita, thereby transforming the institution into one of the first in the emergence of city institutions in the Midwest.



Jardine Hall, established 1930

The Municipal University of Wichita 1926-1964

The fall of 1926 marked the transition of Wichita State from a small New England-style institution into the Municipal University of Wichita. The student population increased substantially from an initial enrollment of 28 students in 1895 to 7,000 students in 1964.

From the very beginning, the Municipal University of Wichita enabled students with financial setbacks or family obligations to participate and earn degrees. Even with the Great Depression and World War II, the university grew at a stable pace in both student enrollment and physical development. The institution constructed dormitories to support student population growth and to encourage students to live on campus. Several new schools and departments were established during this period, including a push for a research-centric environment.

After WWII, the need to expand the campus quickly and inexpensively changed the look of Municipal University of Wichita. A spate of building ensued, which reflected the popular international style of architecture. The sometimes-elaborate buildings included the Duerksen Fine Arts Center and the innovative roundhouse, Levitt Arena. Capping off these four decades of construction was the Corbin Education Center, a facility for the College of Education designed by Frank Lloyd Wright.

A long and arduous battle that began in 1955 finally culminated in 1963 with legislative approval of a new state university. The citizens of Wichita responded in the form of a 1.5 mill levy to pay the bonded indebtedness and provide a perpetual endowment for

the new state institution. After 38 years as a municipal university, Wichita State University entered the state system of higher education and is now governed by the Kansas Board of Regents (KBOR).



Corbin Education Center, established 1963



The History of Campus

Wichita State 1964-2014

Wichita State emerged as a state institution with a period of monumental growth and achievement. In 1965, for the first time, the Shocker basketball team reached the Final Four; the debate team won the national title; and students passed a referendum to fund half the cost to build Cessna Stadium. During this growth phase, the university struggled to hire enough faculty to keep pace with the increasing enrollment numbers.

The 1960s were turbulent times for campuses across the country. Wichita State, though, weathered the storm of continued controversy over the assassinations of Dr. Martin Luther King Jr., President John F. Kennedy and Robert F. Kennedy, increasing racial tensions and the Vietnam War. The student movement resulted in cooperation among faculty, students and administration to pass the Joint Statement of Rights and Freedoms of Students. Wichita State was the first campus to offer the document to all campus constituencies, and to have all responded positively.

In the 1970s, WSU formed the College of Health Professions, the university's well-known outdoor sculpture collection was established, the Ulrich Museum of Art was constructed to house the art collection of WSU, and doctoral studies grew substantially as Wichita State encouraged departmental research — a surge in growth not seen by WSU since its former status as a municipal institution.

The demographics of the student body shifted drastically as women garnered a majority presence on campus. Ethnic minorities grew to account for 12% of WSU's population and continued to increase as more programs were introduced and the graduate programs expanded to accommodate a growing population.

Wichita State 2014-Present

In the 1960s, Braeburn Golf Course was acquired by the Wichita State Board of Trustees for the purpose of future campus expansion. In 2014, the golf course closed its doors to make way for the construction of the Innovation Campus. Alongside this development, Wichita State University has been actively adapting to the evolving demographics of its student body. As part of the university's steadfast commitment to inclusive excellence and engagement, WSU prioritizes the success of its diverse community of students. Notably, the university recently established the Shocker Success Center, a project that transformed the former Clinton Hall into an all-inclusive and holistic support network of resources and tools to promote student success and persistence.

The Wichita State Innovation Campus

WSU Innovation Campus is a highly successful public-private research campus. As part of the 330-acre main campus, the Innovation Campus comprises approximately 120-acres. It is a synergistic collaboration of university, public and private partners working together to promote WSU's research and academic mission and the economic development of the region and state. Private development of office, research, hotel, restaurant, and retail space comprises over 570,000 square feet of third-party developed space. Several private companies, ranging from multinationals listed on Forbes' Global 1,000 to start-up firms, call the campus home.



2015 satellite image of campus



2022 aerial photo of Innovation Campus

The City Is Our Campus

Driven by a passion for connection and engagement, Wichita State is deeply committed to the people and businesses of its community. This sense of purpose propels the university to expand its footprint throughout the greater metro area, including nine distinct locations and four partner locations. By embracing the city as its campus, WSU is shaping the future of Kansas through education, research, and applied learning.



WSU Tech main campus



WSU West

Nine distinct locations for Wichita State:

- 1. Wichita State's main campus, 1845 N. Fairmount in Wichita
- 2. WSU West, 3801 N. Walker in Maize, Kansas
- 3. WSU South, 3821 E Harry St., B105, in Wichita
- 4. WSU Old Town, 213N. Mead in Wichita
- 5. Eugene M. Hughes Metropolitan Complex, 5015 E. 29th Street, Wichita which houses Advanced Education in General Dentistry
- 6. National Center for Aviation Training (NCAT), 4004 N. Webb Road in Wichita
- 7. NIAR Research Labs Aircraft Structural Test & Evaluation Center (ASTEC) 1229 E. 85th St. North in Park City, Kansas
- 8. NIAR Research Labs (WERX) 3800 S. Oliver, Wichita, Kansas
- 9. In Development: Wichita Biomedical Campus, the corner of Broadway and William in downtown Wichita

Four distinct locations for WSU Tech:

- National Center for Aviation Training (NCAT), 4004 N. Webb Road in Wichita
- 2. WSU South, 3821 E. Harry St. in Wichita
- 3. WSU Tech City Center, 301 S. Grove, in Wichita
- 4. National Institute for Culinary and Hospitality Education (NICHE), 124 S. Broadway in Wichita

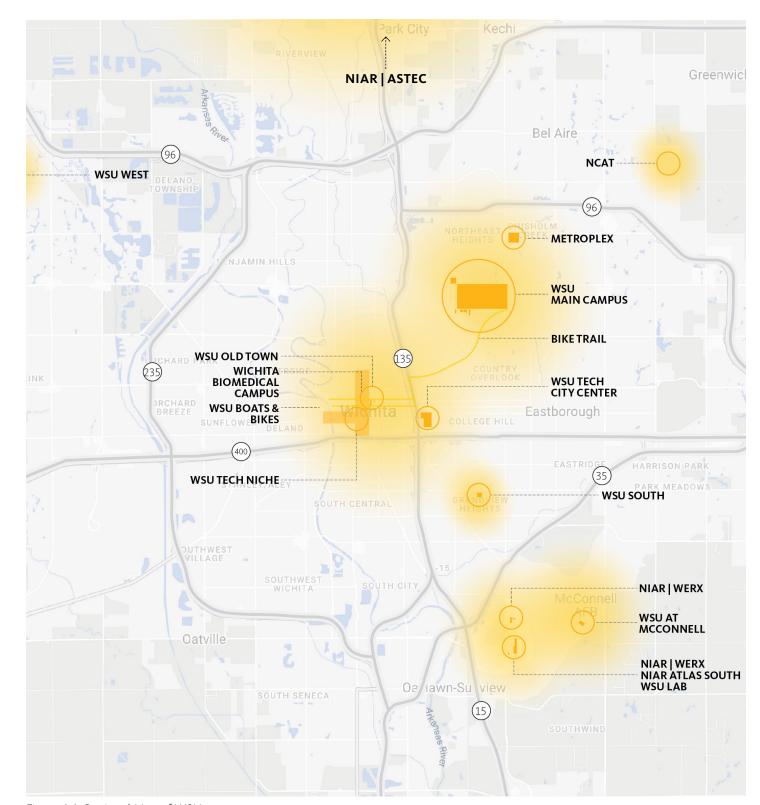


Figure 1.1: Regional Map of WSU



National Institute for Aviation Research



The National Institute for Aviation Research (NIAR) was established at Wichita State University in 1985 in an effort to increase research and development capabilities, focused on the needs of the Air Capital of the World.

Since then NIAR has expanded to multiple sites across Wichita. Globally, the institute is known for expertise in the most critical areas of aerospace R&D — including composites and advanced materials, digital twin and advanced manufacturing technologies such as automated and additive manufacturing. NIAR provides research, design, testing, certification and training to the aviation, manufacturing industries and government agencies including the FAA and U.S. Department of Defense.

With a \$300 million annual budget and a staff of 1,900, NIAR currently occupies 2 million square feet of laboratory and office space in six locations across Wichita with an additional office in downtown Huntsville. Alabama.

NIAR's dedicated research endeavors have placed Wichita State at No. 2 on the list of industry-funded engineering and research and development, as reported by the National Science Foundation. The university also sits at No. 13 on the list of U.S. universities in total engineering and research and development. Over the past two decades, Wichita State has consistently increased its R&D expenditures, a testament to the university's successful collaborations with government and industry.

Area of expertise include:

- Advanced machining & prototyping
- Advanced materials &
- Advanced manufacturing
- Additive manufacturing
- Ballistic and impact dynamics
- Crash dynamics

- Mechanical test

- Sustainment

NIAR Centers







3DEXPERIENCE CENTER

FAA **ASSURE**

FIREPOINT INNOVATIONS







ATLAS

AVET

FAA CECAM







ASTEC

CMH-17

NCAMP







NCAT

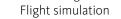
NDPC

FAA TTHP









Full-scale structural testing

- Reverse engineering
- Robotics and automation
- Virtual engineering
- Wind tunnel testing



Wichita Biomedical Campus

The Wichita Biomedical Campus is a collaboration between Wichita State University and the University of Kansas Medical Center to build a 470,000 square foot health science center in the heart of downtown Wichita.

The Wichita Biomedical Campus proposes the creation of a health corridor, beginning with Phase 1 construction near Broadway and William streets in downtown Wichita, where health care services, education, research and technology can be established near existing private hospitals and health care providers. That proximity will strengthen collaboration, and support inter professional health care learning, while foraging opportunities for partnerships in new and emerging research fields.

Phase 1 is currently in design. It is anticipated to be completed in Fall 2026. There are also plans underway Phase 2 of the campus at a later date.

The campus will co-locate many programs currently spread across Wichita. Programs within the building will include Wichita State College of Health Professions, WSU Tech's Health Professions program, and the University of Kansas School of Medicine and School of Pharmacy Wichita locations. Programs will share state-of-the-art spaces for clinical research and advanced laboratory technologies.

Upon completion, the first phase of the Wichita Biomedical Campus is expected to house 3,000 students and 200 faculty and staff members. The facility is strategically situated to facilitate future expansion, which will allow it to grow its footprint to accommodate for the growth of existing and new degree programs and research projects.











The Plan's Development Process & Engagement

Transparency, collaboration, access, and equity are core values that have continually underlined Wichita State's culture and identity. The process and engagement for developing the campus master plan is built on this foundation to create an open and inclusive five-phase design process that ensures that diverse voices and perspectives were heard and considered as we built the university's master plan.



Phase 1: Discover

At the start of the project, large amounts of information were collected to provide a baseline understanding of today's campus and inform the vision and guiding principles of the masterplan. Included in this deep dive were a 600+ participant survey and five visioning sessions with over 100 individual perspectives.

Phase 2: Analyze

Following the discover phase, the second phase of the masterplan assessed and synthesized the qualitative and quantitative data amassed to understand project priorities and potential short, medium, and long-term goals for the campus. Within this phase, facility conditions (FCI scores), classroom and building utilization, and current and future enrollment projections metrics were analyzed.

Phase 3: Explore

Building on the analysis of the campus, future needs, and the collective vision for the plan, three campus scenarios were developed to explore the physical opportunities of the future campus. Each scenario explored a different organizational and development strategy and allowed university leadership to compare varying priorities.

Phase 4: Recommend

Pulling from strengths within each scenario explored in the previous phase, a preferred scenario was developed and further refined in this phase.

Phase 5: Document

As the selected scenario was refined, the final phase of the project developed the plan into an actionable playbook for future growth and transformation.







In-person visioning sessions (upper left and upper right)
Steering and executive committee workshop (bottom left)



The Plan's Development Outreach & Engagement

To plan for a future environment that educates, empowers, and mobilizes students, faculty, staff, and the community to thrive, it was essential to ensure all WSU stakeholders were represented and actively engaged in the planning process. As part of the master plan we would like to thank the following groups and individuals for their participation and contribution in shaping the future of Wichita State.

EXECUTIVE & STEERING COMMITTEE

Dr. Rick Muma, President

Dr. Elizabeth King, President and CEO of the WSU Foundation

Stacia Boden, JD, General Counsel

Andy Schlapp, Executive Director of Government Relations and Strategy

Dr. Sheree Utash, President of WSU Tech

Shelly Coleman-Martins, Vice President for Strategic Communications and Marketing

Vicki Whisenhant, Executive Director of Human Resources

Zachary Gearhart, Chief of Staff

Emily Patterson*, Executive Director of Facilities Planning

Werner Golling*, Vice President of Finance and Administration

Dr. Shirley Lefever*, Executive Vice President and Provost

Dr. John Tomblin*, Senior VP of Industry and Defense Program + Executive Director of NIAR

Dr. Teri Hall*, Vice President of Student Affairs

Kevin Saal*. Athletic Director

Dr. Marche Fleming-Randle*, Vice President and Chief Diversity Officer

STAKEHOLDER REPRESENTATIVES

WSU Foundation Leadership

 $\label{lem:condition} Admission\ \&\ Recruitment\ Staff\ and\ Leadership$

Academic Faculty and Leadership

WSU Tech Faculty and Leadership

Student Affairs Staff and Leadership

Housing Staff and Leadership

Student Success Staff and Leadership

Facilities & ADA Staff

and Recreation Leadership
Undergrad Students
Graduate Students
Non-Traditional Students
City of Wichita Officials
Sedgwick County Officials
WSU National Advisory Council

Athletic Department Leadership Fitness



^{*} Indicates committee members who served on both executive and steering committee

Strategic Plan Alignment

Wichita State University endeavors to build a stronger Kansas and a brighter tomorrow through our relentless commitment to the people, business, and economy of our state. As such, the university has adopted a strategic plan and vision to be one of the nation's premier urban public research universities. The campus master plan update proposes physical and spatial recommendations in support of the university's strategic plan.

VISION

To be one of the nation's premier urban public research universities, known for providing impactful applied learning experiences and driving prosperity for the people and communities we serve.

MISSION

The mission of Wichita State University is to be an essential educational, cultural and economic driver for Kansas and the greater public good.

UNIVERSITY GOALS



STUDENT CENTEREDNESS

Promote holistic student success through a supportive learning environment in which all of our students — past, present and future — continually thrive and grow.



RESEARCH & SCHOLARSHIP

Accelerate the discovery, creation and transfer of new knowledge.



CAMPUS CULTURE

Empower students, faculty, staff and the greater Wichita community to create a culture and experience that meets their ever-changing needs.



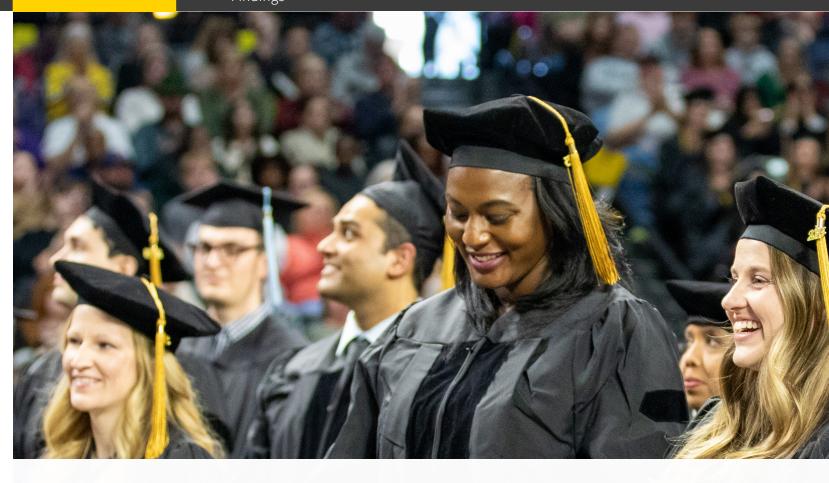
INCLUSIVE EXCELLENCE

Be a campus that reflects and promotes – in all community members – the evolving diversity of society.



PARTNERSHIP & ENGAGEMENT

Advance industry and community partnerships to provide quality educational opportunities and collaborations to satisfy rapidly evolving community and workforce needs.



2023-24 UNIVERSITY PRIORITIES

HELPING FAMILIES THROUGH ACCESS AND AFFORDABILITY

- Provide an accessible, affordable and impactful higher education for all Kansans with increased community connections and networks.
- Implement plan to increase enrollment. Grow Wichita State enrollment from 16K to 17K by 2025 and WSU Tech enrollment from 4,800 to 6,500 by 2025.
- Equalize completion rates among underserved and non-underserved students.
- Implement Shocker Promise statewide: Full tuition and fees for Pell-eligible families.
- Increase need-based aid.

SUPPORT KANSAS BUSINESSES WITH A TALENT PIPELINE THAT MEETS EMPLOYER NEEDS

- Increase relevant applied learning experiences that match the needs of industry, agency and community partners.
- Continue the development of the Innovation Campus by completing the Hub for Advanced Manufacturing (HAMR) facility and Partnership Building 11, which will house new Innovation Campus partners.

INCREASING ECONOMIC BUSINESSES WITH A TALENT PIPELINE THAT MEETS EMPLOYER NEEDS

- Elevate Wichita State as a premier, urban public research university in the United States.
- Seek and capitalize on opportunities for innovation and research for the Innovation Campus and beyond.
- Increase faculty research and innovation infrastructure.
- Continue to improve support of applied research efforts for industry and defense.
- Open the Digital Research and Transformation Hub in 2024.
- Enter into financially prudent publicprivate partnerships (P3) on universityowned property that provide services.
- Develop, enhance and maintain exceptional campus facilities.
- Support Wichita downtown development via hospitality, culinary arts and health sciences.

WSU strategic plan overview <u>available here</u>



Vision & Guiding Principles

DEFINE. BRIDGE. LEAD.

CHARTING WSU'S NEXT CHAPTER ON CAMPUS AND BEYOND

The Wichita State University master plan is establishing a framework for physical and experiential transformation across campus.

The plan will support WSU in defining the future of research, applied learning, and cutting-edge partnerships. Working at the scales of the individual, campus, community, city, region, and beyond, it will enable the university to bridge between academics and industry to be one of the nation's leading urban public research universities.



BE THE ENGINE FOR INNOVATION

Showcase the evolution happening on campus

Spotlight everything Wichita State University is doing. From cutting-edge industry partnerships to next-generation pedagogical approaches on an ever-changing campus, the master plan will highlight and establish WSU as a leader in applied learning and research.



FOSTER A HOLISTIC CULTURE

Unify the WSU experience across campuses and buildings

Enhance WSU's culture of belonging through the design of equitable open environments that encourage diversity, accessibility, inclusion, and choice to promote ownership and form a stronger collective identity.



THINK BEYOND THE CLASSROOM Build an 18-hour campus

Learning happens everywhere. Create environments and experiences at WSU for students, staff, industry partners and community members, to learn, live, work, and play beyond scheduled class hours.



Reading the Plan

This master plan document is a living playbook designed to be adaptable to WSU's evolving needs within the shifting education landscape of the next 10 years. To accommodate this flexibility, the plan adopts a systematic approach to explore the campus across a range of scales and topics.

Introduction

Beginning with how the plan was developed, the introduction outlines the planning process, engagement, objectives, goals, and overarching vision of the master plan.

Analytical Findings

Analytical findings provide valuable insights into classroom utilization, facility conditions, and infrastructure requirements crucial for informed decision-making within the master plan.

Districts

Districts are areas on campus that are grouped with complementary programs and geographic areas. Each district may have an unique character, and forms one collective campus when stitched together.

Frameworks

Frameworks refer to groupings of system-wide themes across the campus. Within this section, the overall structure and organization of the master plan are detailed. From building use to pedestrian connections, frameworks are road maps that unify the campus across similar topics.

Systems

Outlining the infrastructural and operational components supporting the masterplan, this section illustrates and details the systems needed to facilitate a seamless functioning future environment.



ANALYTICAL FINDINGS

Facility Condition Index

Facility Condition Index (FCI) scores are one way to make informed decisions on campus regarding building maintenance. It is a goal of the masterplan to decrease the average FCI score of the campus through offloading buildings with high FCI scores that may be underutilized or with maintenance and repair costs that have grown too high for the age of the building.

Facility Condition Index scores are calculated by aggregating the total cost of any needed or outstanding repairs, renewal, or upgrade requirements at a building compared to the current replacement value of the building components. It is the ratio of the repair needs to the replacement value expressed in terms of percentage.

Currently, data visualized only reflects university owned mission-critical buildings. In the coming years, all buildings on university property are required to be reported by 2027. The Kansas Board of Regents' goal is to work towards good condition buildings or better.

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E

LEGEND

.00 - .20 | Excellent

.21 - .30 | Good

.31 - .50 | Average

.71 - .99 | Deficient

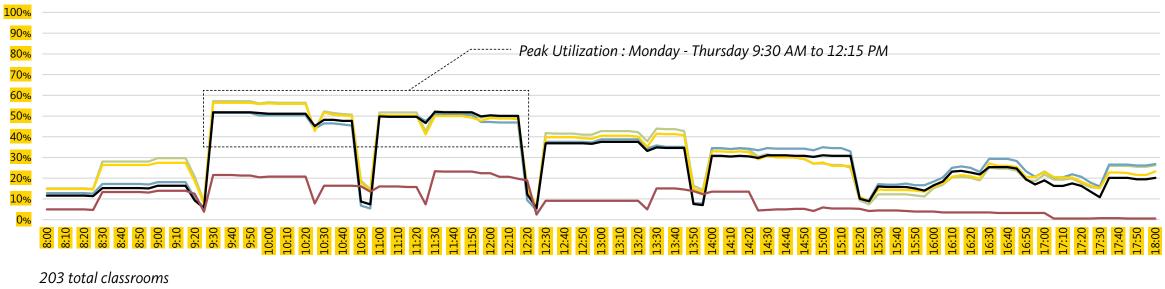
Classroom Utilization

One goal of the master plan was to increase classroom utilization on campus. Currently, the Kansas Board of Regents (KBOR) targets a 68% utilization during daytime hours. Based on fall 2022 class data, the university falls significantly below this benchmark, struggling to achieve optimal utilization even during peak times.

In response to this challenge, Wichita State University will implement significant changes in its scheduling approach. As a first step, the university has transition to a centralized scheduling system for all college/department classes and labs. This strategic shift aims to streamline the scheduling process, minimize conflicts, and maximize the efficiency of classroom and lab space across campus. By centralizing scheduling efforts, the university anticipates better coordination of resources, reduced idle classrooms, and improved utilization rates.

Additionally, the master plan includes recommendations for targeted demolitions aimed at repurposing or consolidating underutilized classroom spaces. By strategically reallocating resources and optimizing existing infrastructure, the university aims to increase overall classroom utilization while aligning with long-term campus development goals outlined in the master plan.

Percentage of classrooms utilized throughout the day (Monday - Friday)



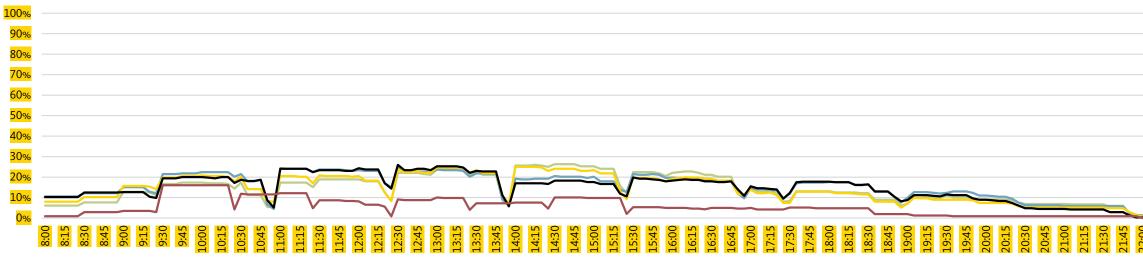
The peak utilization of classrooms throughout the day is 57%

25% of classrooms on campus were never utilized

Monday (Average: 33%)
Thursday (Average: 30%)

Tuesday (Average: 31%) Friday (Average: 10%) Wednesday (Average: 32%)

Percentage of classroom labs and open labs utilized throughout the day (Monday - Friday)



156 total classroom labs, open labs, and teaching labs

The peak utilization of class labs throughout the day is 26%

Monday (Average: 17%)
Thursday (Average: 18%)

Tuesday (Average: 18%) Friday (Average: 7%) Wednesday (Average: 18%)

41



Classroom Utilization

The chart below shows the average number of course hours scheduled in a classroom based on its size weekly.

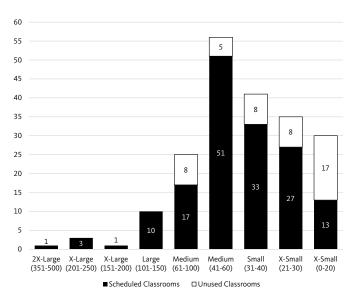
This takes into account courses that are scheduled for half semesters and only looks at courses scheduled Monday through Friday.

The average utilization benchmark of a day-time school is 35 hours per week. The maximum classroom utilization when including evening courses is 60 hours per week.

Refer to appendix sections for further information on classroom utilization and building usage and program.

Classroom size is determined by seat count:		
2X - Large	351 - 500 seats	
X - Large	201 - 250 seats	
X - Large	151 - 200 seats	
Large	101 - 150 seats	
Medium	61 - 100 seats	
Medium	41 - 60 seats	
Small	31 - 40 seats	
X - Small	21 - 30 seats	
X - Small	0 - 20 seats	





CLASSROOM DISTRIBUTION BY SIZE



Analytical Takeaways

Five key findings emerged from analyzing classroom data, building data, and scheduling data. By understanding how classrooms, buildings, and schedules interact, the planning team can chart a direction forward that optimizes space utilization, enhances facilities, and ultimately improves the overall learning environment for students and faculty. These takeaways provide insights into current space utilization and building data and serve as key principles for the 2024 campus master plan.



HIGHLY UTILIZED TEACHING BUILDINGS REQUIRE THE MOST WORK

Six out of the seven most utilized buildings have a FCI score of poor or worst.

Action: Offload classroom space to increase utilization on campus.



QUALITY LABORATORY SPACE IS LACKING ON CAMPUS

Highly specialized lab space in excellent condition is a high demand for many colleges on campus. The average lab space FCI is .52 (poor).

Action: Build or renovate lab space within the university to meet the demands for research and leverage the space for recruiting and retention of faculty.



COLLEGES ARE HIGHLY DISTRIBUTED ACROSS MULTIPLE BUILDINGS

Colleges are currently scattered across campus and located in many buildings. Several colleges are located in more than six buildings.

Action: Co-locate and consolidate colleges within fewer buildings.



OLDER BUILDINGS ARE LACKING STUDENT SUPPORT SPACES

Some aging facilities on campus are unable to accommodate study and collaborative spaces to support student learning and success beyond the classroom.

Action: Expand the volume and placement of third spaces on campus.



OFFICE AREA PER PERSON IS HIGH COMPARED TO INDUSTRY STANDARDS

Net office area per staff and faculty is high compared to the industry standard benchmark.

Action: Offload and consolidate office space on campus.

DISTRICTS



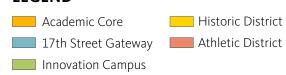
Campus Districts

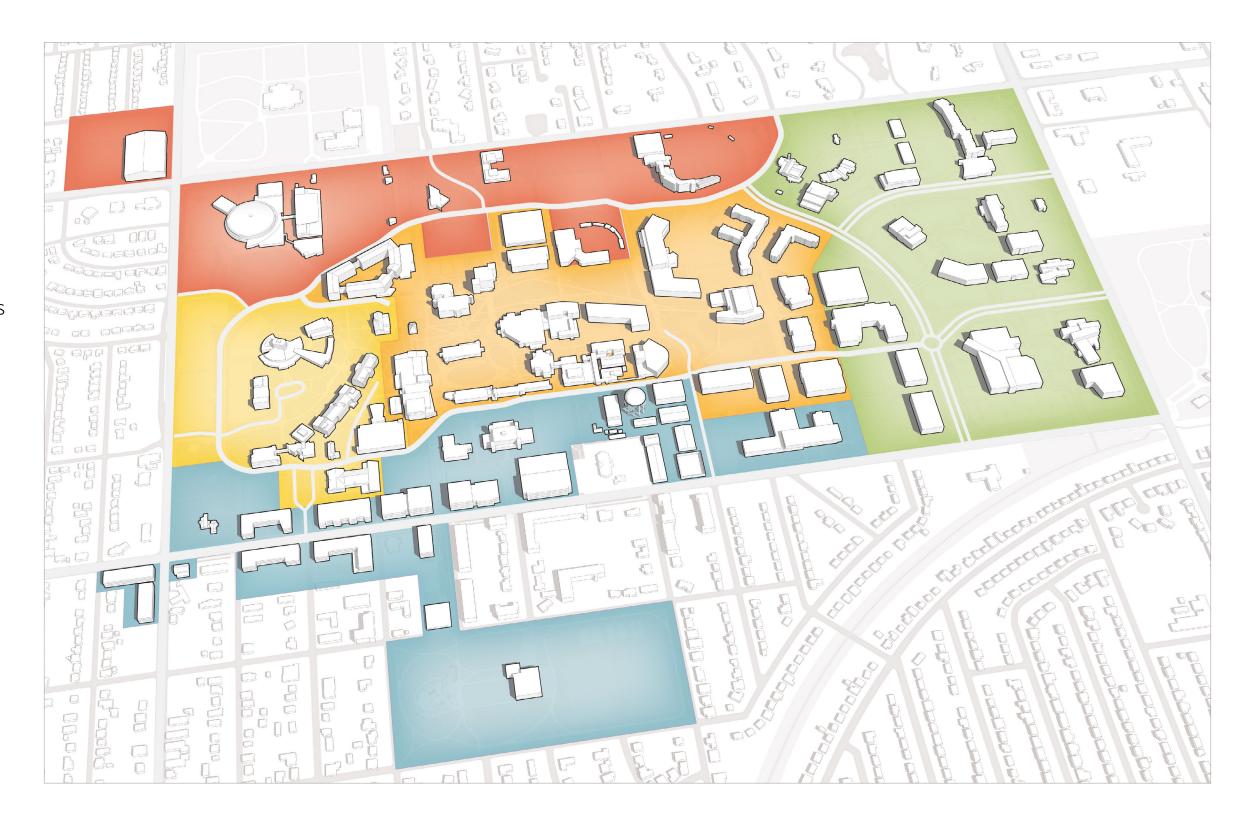
The master plan for Wichita State
University's main campus is centered
around five pivotal themes: investing
in the academic core, reimagining
the southern edge as the 17th Street
Gateway with strong connections
to Fairmount Park, enhancing
connections to the nearly completed
Innovation Campus, investing in the
aging facilities of the historic district,
and expanding the scope and offerings
of the athletics district.

Overview

This plan heralds a new growth phase, aiming to seamlessly connect the traditional academic campus with the Innovation Campus through new developments and green spaces. Key projects — including a new interdisciplinary classroom and lab building and a modern recreation facility — are poised to drive this transformation, complemented by upgrades in circulation, parking, and infrastructure. With a 10- to 20- year horizon, the plan aspires to forge a more interconnected, vibrant, and inclusive campus, nurturing an environment conducive to innovation, creativity, and community engagement — thereby ensuring Wichita State University's continued evolution and impact into the 21st century.

LEGEND



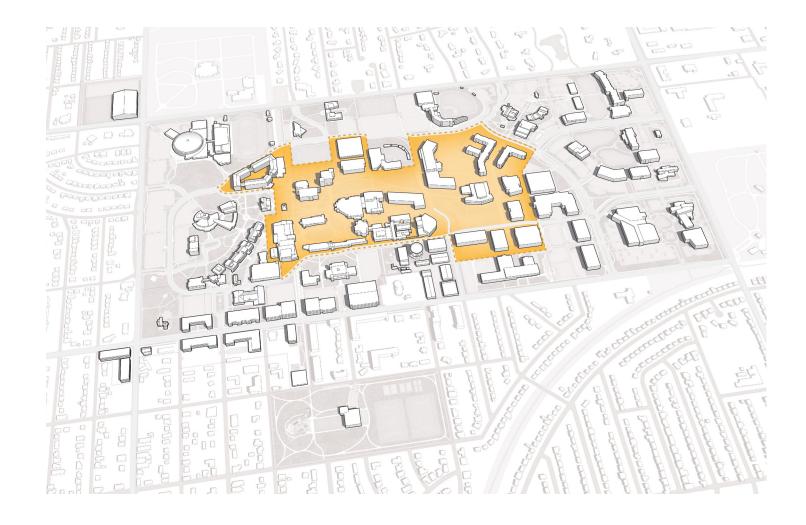




Planning Foundations



With the rapid development of the Innovation Campus, what was once the edge of campus is now the heart of campus. Strengthening the center will be a crucial next step for the university to unify.





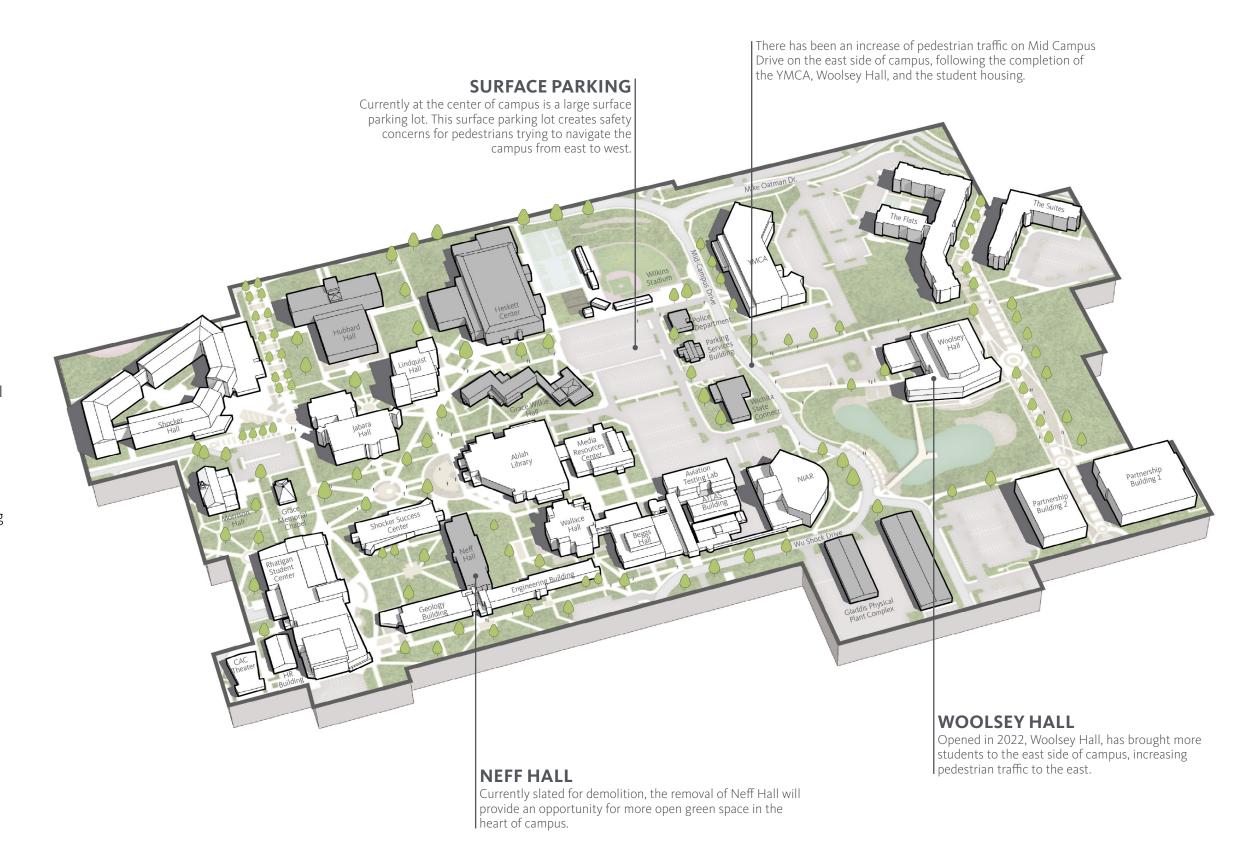


Existing Conditions

The academic core district at Wichita State University is anchored by significant landmarks: the Rhatigan Student Center and Shocker Hall to the west and Woolsey Hall to the east. Historically, the district's eastern portion, extending from the Media Resources Center to the Innovation Campus, delineated the eastern edge of campus. This area — characterized by extensive surface parking lots and smaller-scale buildings like Grace Wilkie, the Wichita State Connect Building, Parking Services, and the Wichita State University Police Department, now stand at a pivotal juncture between the traditional campus and the rapidly developing Innovation Campus.

In recognition of its strategic position on campus, the master plan proposes a transformative reimagining of this district. Plans include replacing central parking lots and aging facilities that have very high FCI scores (Hubbard Hall and the Heskett Center) with modern, state-of-theart buildings designed for academics, research, recreation-focused play-fields, and expanded green spaces.

LEGEND Existing buildings Buildings to be demolished Plaza Surface parking Green area





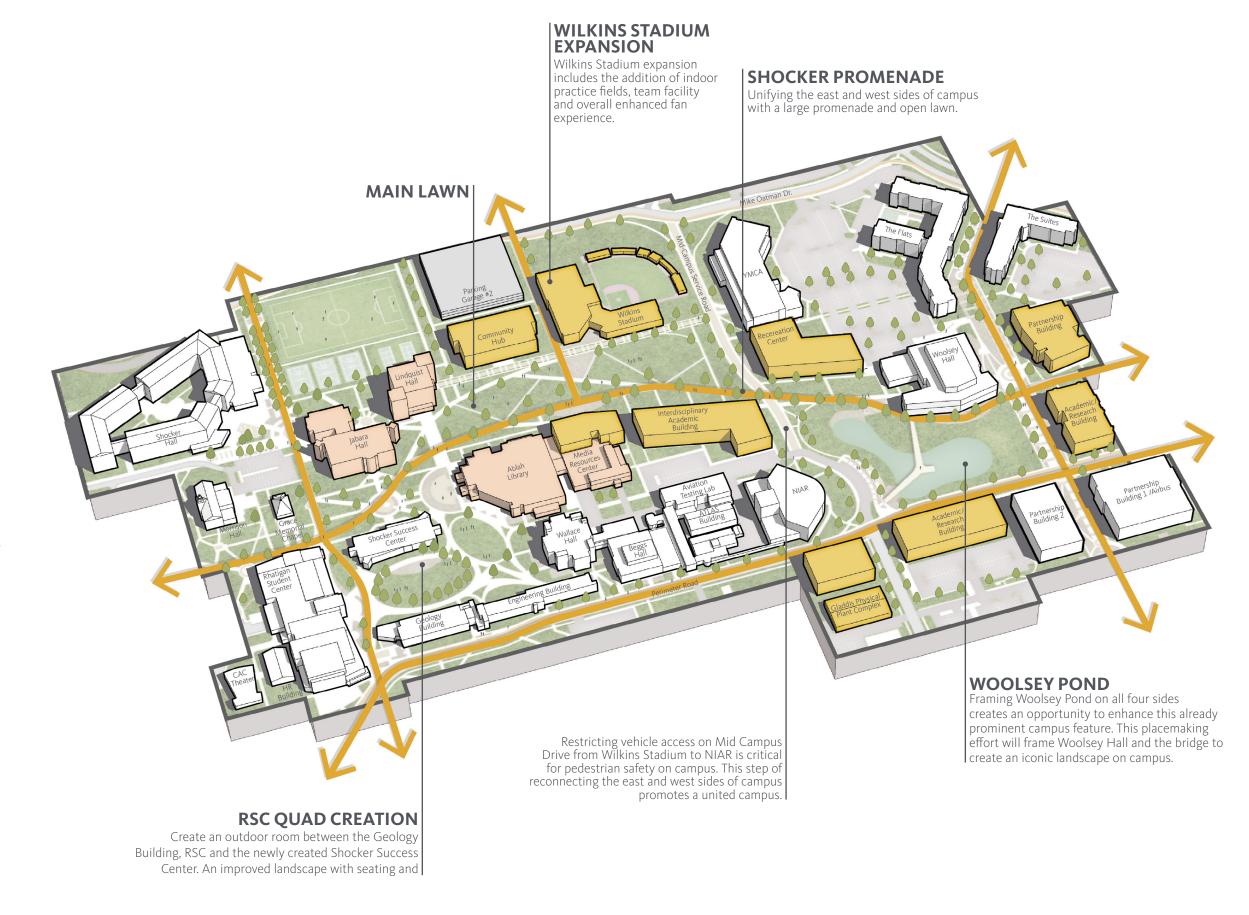
Enhanced Conditions

The campus master plan envisions extending the traditional campus landscape character across what was once the edge to create a robust connection between the traditional academic campus, Woolsey Hall, and the Innovation Campus. At the heart of this transformation, a new main lawn replaces Grace Wilkie and the central surface parking lot, blending the traditional and Innovative Campus. Additionally, the demolition of the Heskett Center creates the opportunity for a new community outreach center, reflecting WSU's commitment to community engagement. A resized and efficient recreation center is added south of the YMCA to maintain indoor playing courts and studio space for campus recreation.

Framing the southern edge of the main lawn, a cutting-edge interdisciplinary classroom research building complements the expanded Ablah Library and Media Resource Center to reinforce the academic core of the campus.

South of the main lawn, a newly envisioned RSC quad, double its current size, replaces the Neff Hall site, creating a strategic linkage among the RSC, Ablah Library, and the newly created Shocker Success Center.

LEGEND Existing buildings Plaza New buildings Green area Substantial renovations Main circulation path







Main Lawn

This main lawn represents a landmark landscape feature, offering the university its foremost expansive green area. Strategically positioned to the north of Ablah Library and the south of Wilkins Stadium, it stretches east-west from Jabara Hall to Woolsey Hall. Intentionally designed for students and the wider community, this vast and open grassy space serves as an inviting location for recreation while enhancing the overall landscape quality of the campus. The planning ensures that the main lawn is surrounded by campus buildings, creating a framed experience that establishes an appropriate sense of scale that contributes to the visual balance of the campus landscape.

This significant transformation is accomplished by the demolition of smaller structures such as the Police Department Building, Grace Wilkie Hall, Wichita State Connect Building, and the Parking Services Building.



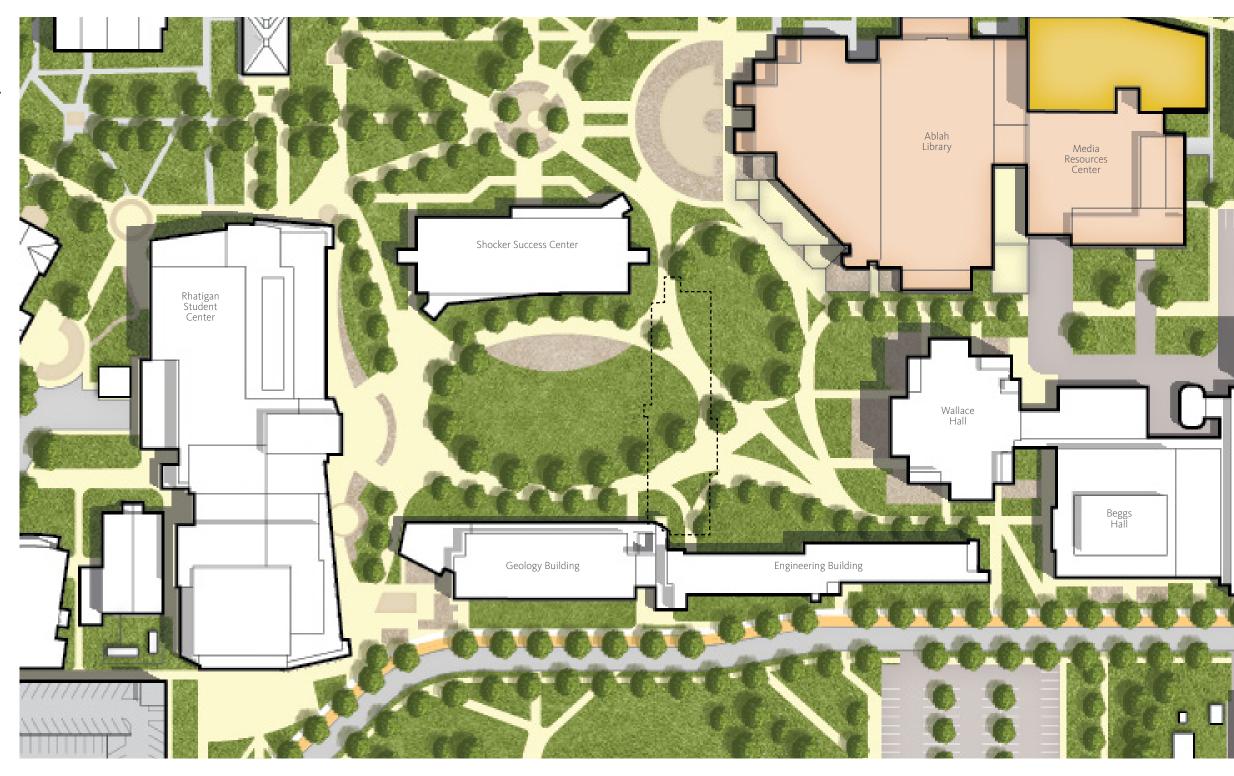


RSC Quad

The slated demolition of Neff Hall enables the development of an open landscape east of the Rhatigan Student Center and to the south of the newly established Shocker Success Center. This quad, scaled in relation to the landscaping of the Rhatigan Student Center and the new Shocker Success Center, creates an intimate and welcoming outdoor environment.

Strategically programmed to serve as a flexible space capable of accommodating various programs that extend beyond the confines of the Rhatigan Student Center or the Shocker Success Center, the quad is a dynamic hub of activity, fostering collaboration, engagement, and a vibrant campus atmosphere.

With pathways ringing the quad and extending toward the entries of the surrounding buildings, the environment fosters an interactive and engaging experience for students, faculty, and staff. Additionally, the design enhances the aesthetic cohesion of the campus and ensures a seamless integration of the quad with surrounding architectural elements.











Woolsey Pond

To the east of the main lawn, the area surrounding Woolsey Pond is reimagined as a third academic core district quad. Bridging spaces that are home to academic learning, applied research, and partnerships, Woolsey Pond creates another inviting outdoor anchor on campus.

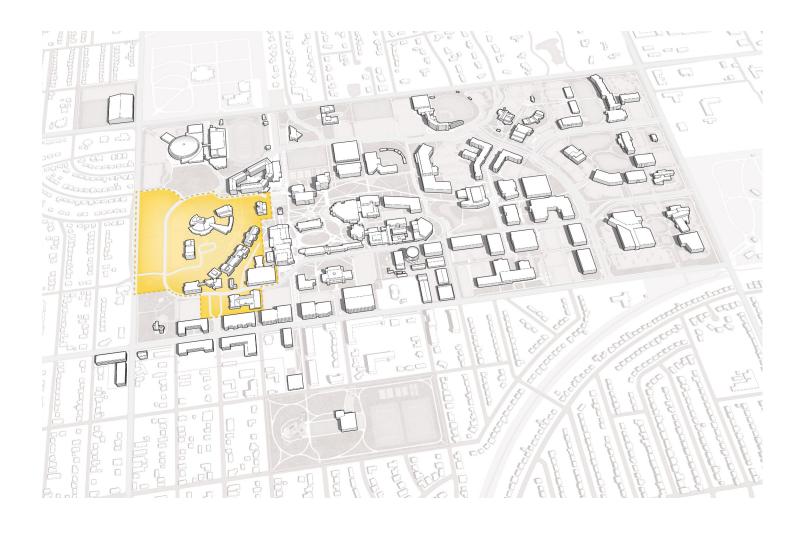
To support this development, Mid Campus Drive — a corridor previously dominated by vehicular traffic — is transformed into a pedestrian-first, limited-access route. This strategic shift significantly mitigates pedestrian and vehicular conflicts, creating a safer and more secure environment along this critical campus thoroughfare. It also creates a direct pathway and landscape gesture from the main lawn to Woolsey Hall.

Of importance, any surface parking removed will be replaced with surface parking located to the north of Woolsey Hall in combination with a parking garage to ensure accessible parking close to Woolsey Hall, NIAR HAMR, and other buildings on the west side of the Innovation Campus.



Historic District

Anchoring campus to the west, the historic district is the oldest area on campus and has the most mature landscape. The core concept behind the transformation of the historic district is to invest resources in and update historic facilities, ensuring they meet contemporary building standards and provide excellent learning and research environments.







Historic District

Existing Conditions

The historic district of the campus stands as a testament to WSU's rich heritage, housing the oldest structures and the most developed landscape. As the age of these buildings increases, so does the need for maintenance and renovations to occur.

Located between the Duerksen Fine Arts Center and Jardine Hall and extending southward, an engaging quad with mature trees and notable sculptures anchors the northern portion of the district.

Further south, the Ulrich Art Museum takes center stage as a destination on campus. Welcoming visitors as they drive onto campus is the 350,000-tile Joan Miro monumental mural adorning the front face of the museum. This remarkable artwork stands as one of the many artistic and sculptural expressions that are woven throughout the entire campus.

LEGEND

Existing buildings

Buildings to be demolished

Plaza

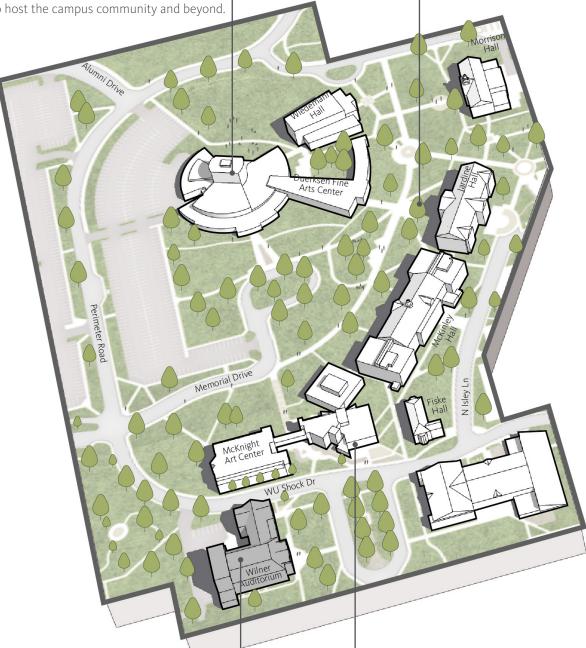
Surface parking

Green area

AMPHITHEATER Located just north of the Duerksen Fine Arts Center, the amphitheater serves as an outdoor gathering space for the campus community. Updated with a new sound system and a vibrant new mural, this space is equipped to host the campus community and beyond.

OUAD

A product of the 2014 masterplan, this quad includes vibrant landscaping and mature trees dotted among the university's sculpture garden, offering a tranquil respite from hectic campus life.



WILNER AUDITORIUM

Wilner Auditorium is slated for demolition due to high deferred maintenance and renovation expenditures it would cost to bring it up to be a cutting-edge performance hall. With its demolition, comes the opportunity to co-locate university's programs with professional programs off campus and extend applied learning opportunities for students.

ULRICH MUSEUM OF ART

Celebrating its 50th year on campus, the Ulrich Museum of Art brings the campus community and visitors to the west corner of campus. The outside of the museum is home to a Miro Mural that stands as a landmark within the historic district.

71



Historic District

Enhanced Conditions

The focus of the historic district in the masterplan is to maintain the rich architectural character and buildings that are located within this area. Among the structures slated for renovation, the McKnight Art Center and McKinley Hall take precedence. These buildings serve a large portion of WSU's academic activity, housing diverse programs and classes. The master plan outlines renovations that will substantially enhance the quality of these academic environments, making a dramatic impact on the students and faculty they serve.

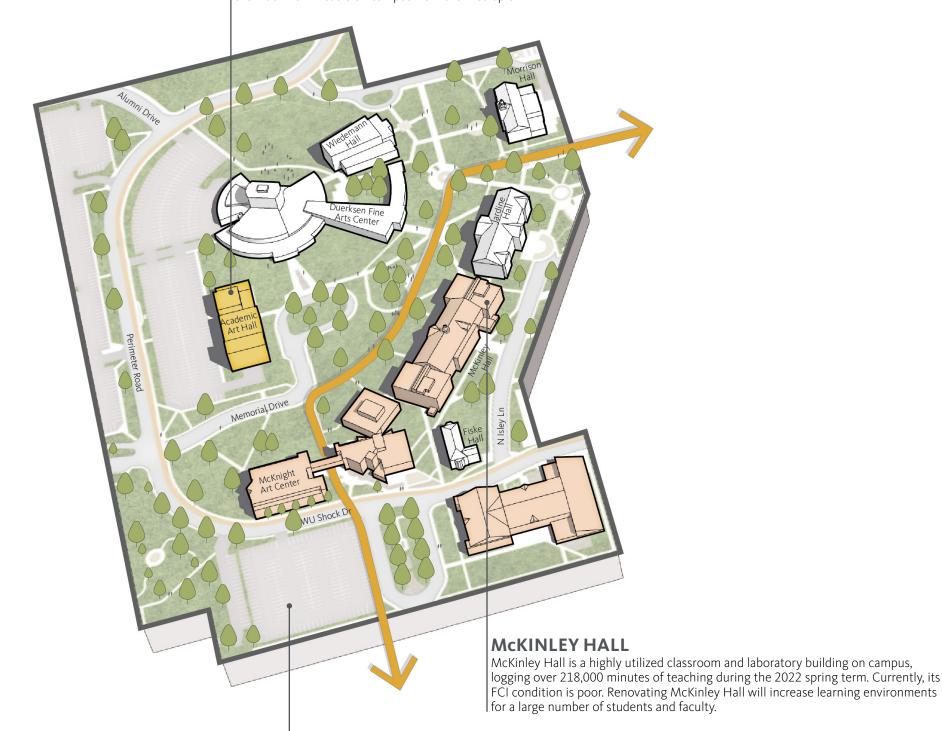
In addition to maintaining the existing academic spaces within the district, the master plan proposes a academic arts hall. Programmed to serve the College of Fine Arts, it will have rehearsal spaces for theater and dance and also bring the Black Box Theatre back onto campus from the Metroplex. The building is strategically placed south of Duerksen Fine Arts Center, forming a cohesive and aesthetically framed landscape space.

LEGEND



ACADEMIC ARTS HALL

Replacing a program that was previously located in the Heskett Center, the academic arts hall will house rehearsal space for the dance program and relocate the Black Box Theatre on campus from the Metroplex.



With the removal of Wilner Auditorium, the current plot of land will be used as surface parking to serve the southwest corner of campus.



Historic District





Athletic District

Located on the north side of campus with a prominent presence on 21st Street, the athletic district houses many of the functions of the Athletic Department from practice facilities to competition spaces. The focus of this district in the master plan is centered on building upgrades to enhance the athletic experience on campus for athletes, students, and the community.







Athletic District

Existing Conditions

The athletic district is anchored to the west by Koch Arena on the corner of 21st and Hillside. To the east of Koch Arena is Cessna Stadium. There are plans for the stadium to be renovated into University Stadium. The first phase is already underway with the demolition of the east side of the stadium in 2023.

The district is bookended by the softball and baseball programs to the east. Wilkins Stadium is currently undergoing a renovation to expand its capacity and bring all operations under one roof. The project involves creating an indoor practice facility, enhanced team spaces. These team spaces include team rooms, locker rooms, and coaching offices.

On the northwest corner of this district, the Child Development Center and an empty field offer an opportunity for development. The Child Development Center is a significant asset to the community, but it's currently at capacity with no room to grow and at the end of its life cycle. The master plan proposes that this vital facility finds a new home

CHILD **DEVELOPMENT CENTER** Adjacent to the main campus, the land where the Child Development Center is located was previously occupied by the Fairmount Towers apartments. With those facilities recently demolished, there is now a significant quantity of land available for development. **UNIVERSITY STADIUM** The east side of the stadium was recently demolished in 2023, opening the opportunity for a new and re-imagined University Stadium.

LEGEND

Existing buildings

Buildings to be demolished

Plaza

Surface parking

Green area



Athletic District

Enhanced Conditions

With many improvements to the athletic district currently already underway, the 2024 master plan proposes a few key additions to enhance the district. As the Child Development Center moves to a new location, and following the demolition of the Heskett Center, the northwest plot of land is available to hold a new indoor track facility. Positioned directly on the corner at the intersection of Hillside and 21st, this facility will address the athletic needs of the university and provide an impactful frontage, expanding WSU's presence within the community. Adjacent to the track facility, grass playing fields or outdoor tennis courts provide additional room for athletic department functions. The synergy between the new indoor track facility and the adjacent playing field or courts ensures athletes can seamlessly share pre- and post-workout, optimizing training and space efficiency.

In a strategic move to mitigate scheduling conflicts within the athletic department, the 2024 master plan also proposes an addition to Koch Arena on the northwest corner. This new expansion is designed to house an additional hard court surface, providing a comprehensive solution to the scheduling challenges faced by the basketball and volleyball programs. This addition will provide a new look and feel to the entire corner of campus.

LEGEND Existing buildings Plaza New buildings Green area Substantial renovations Main circulation path

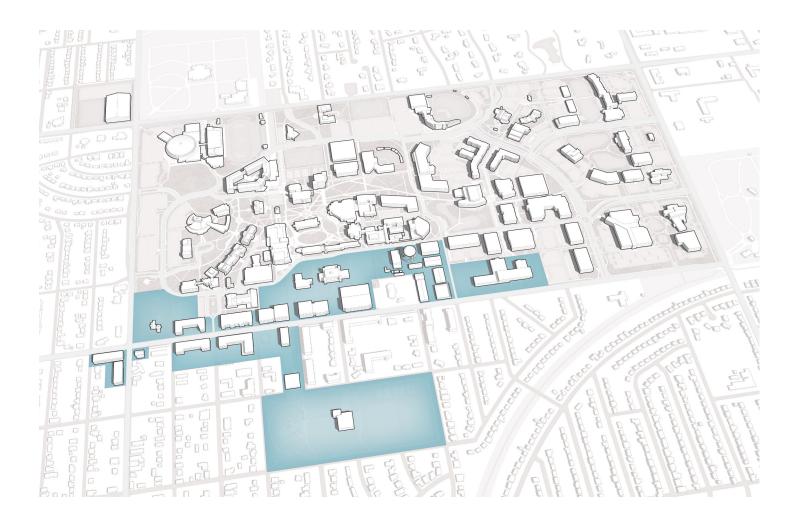
GRASS PLAYING FIELD With the removal of the Child Development Center, open land will be available to house a **GRASS PLAYING FIELD** grass playing field. Bringing play to the main campus is a focus of the masterplan. This field will serve campus recreation. INDOOR TRACK FACILITY With the removal of the Heskett Center, the indoor track requires a new location on campus. EXPANDED WILKINS STADIUM Wilkins Stadium is slated for a renovation and expansion to house the Women's Softball program. **KOCH ARENA ADDITION** A hard court addition placed on the northwest corner of Koch Arena houses an additional

WICHITA STATE UNIVERSITY MASTER PLAN

practice court for the Athletic Department.



Expanding upon the development of University Village, the 17th Street Gateway will create a vibrant hub for university activity on the campus' southern edge. Connecting from Fairmount Park to the newly created RSC quad, this north-south axis will bring energy and activity to the southeast corner of campus, creating an opportunity for community engagement.







Existing Conditions

Historically, 17th Street marked the southern edge of the campus. The President's Residence, Wilner Auditorium, and Henrion Hall act as the southeast gateway as you enter campus from the 17th and Hillside. In 2020, the university initiated the University Village project — a mixed-use corridor developed in partnership with private investors. Although the market uncertainties of the pandemic paused the project, the university is putting renewed focus on University Village. In the past few years, rapid development occurred in the surrounding area, with large multifamily housing developments emerging just blocks from University Village.

LEGEND

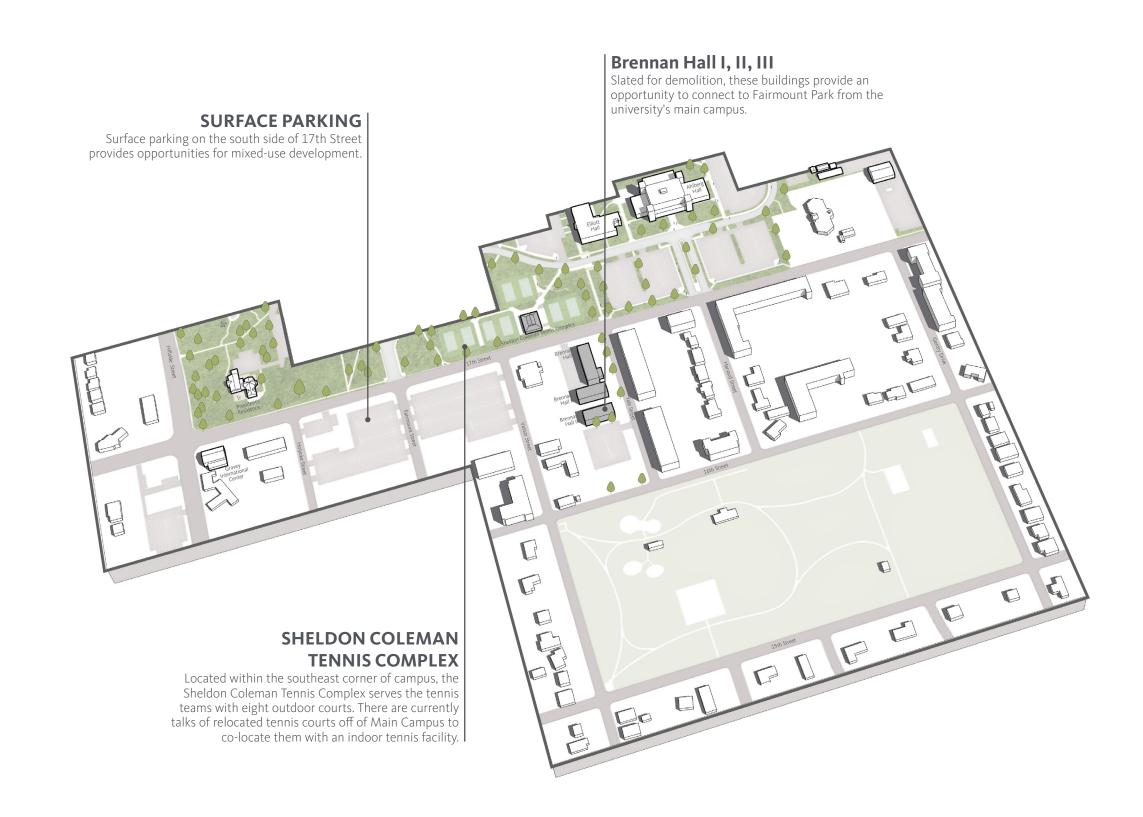
Existing buildings

Buildings to be demolished

Plaza

Surface parking

Green area





Enhanced Conditions

Building on momentum from the University Village development, the campus master plan envisions a bold transformation along both sides of East 17th Street. The plan outlines the transformation of the existing streetscape, adding angled on-street parking adjacent to storefronts, creating a more urban main street experience that blends commercial vitality with campus life.

On the north side of 17th Street, the plan replaces existing surface parking lots and the tennis court complex with three- and four-story mixed-use buildings. These structures — featuring active ground-floor uses with residential or office and lab space above — leverage their proximity to the core campus. This prime location makes them ideal for partnerships with private industry, fostering a blend of academic, research, and commercial activities.

Overall, the plan for 17th Street Gateway is not just about physical redevelopment. It's about creating a synergistic environment that reaches out into the community. The development creates a new type of experience for the campus and the community.

YALE STREET PROMENADE Introduction of landscaping and pedestrian connection from campus to Fairmount Park create new places for community gatherings and connection. **SCULPTURE** Maintain current sculpture Wichita Arch by Andy Goldworthy by pushing back building massing. **DOUBLE-SIDED STREET SCAPE** Building upon the current plans for University Village, additional buildings on 17th Street create a vibrant business district. This development creates an urban main street feel on the southeast corner of the campus.

Creating recreation spaces within

and increases connection with the

community and neighborhood.

Fairmount Park expands play on campus

LEGEND

Existing buildingsNew buildingsSubstantial renovationsPlazaGreen areaMain circulation path













Fairmount Park

The campus master plan proposes the development of Fairmount Park as a focal point for campus-community collaboration. This currently underutilized space offers a unique opportunity for joint investment, envisioning a green, vibrant, and multi-functional area that benefits both the university and the community through recreation. With the removal of Brennan Halls I, II, & III, a landscape and architectural gesture is possible to pull the campus community south and into the park.

Park Program

- 1. Soccer fields
- 2. Basketball courts
- 3. Tennis courts
- 4. Pickleball courts
- 5. Playground
- 6. Community lawn
- 7. Child development center
- 8. Community center





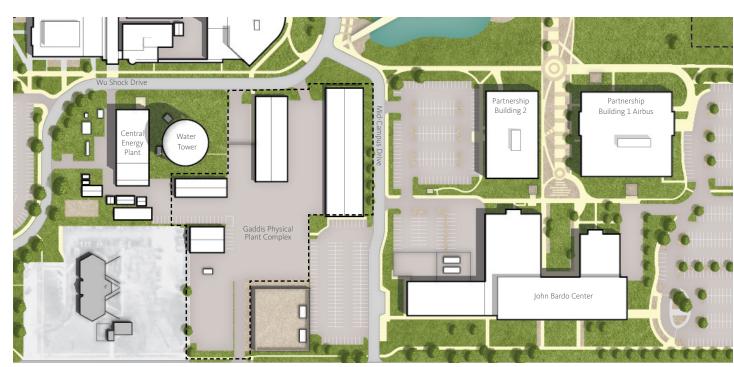




Physical Plant

The Wichita State University master plan introduces a visionary re-imagining of the Physical Plant site, a crucial area nestled just east of the iconic water tower and Energy Plant along Wu Shock Drive. This strategic locale, home to the Gaddis Physical Plant Complex and Central Receiving and Warehouse, serves as a hub for Facilities Services — including HVAC, plumbing, carpentry shops as well as custodial services and landscaping. Encompassing a variety of structures, from ancillary buildings to storage lots, the site has evolved from a peripheral campus boundary to a central piece of real estate, reflecting the dynamic growth and changing needs of the university. The plan recognizes this transformation, proposing a thoughtful reconfiguration that balances operational functionality with the campus' broader aesthetic and spatial ambitions.

In response to the site's newfound centrality and potential, the masterplan ambitiously proposes to streamline the Physical Plant's footprint from its original 4 acres down to 2.3 acres. This strategic reduction facilitates a more direct alignment of Mid Campus Drive, enhances campus flow and connectivity, and opens valuable space for the introduction of a new, public-facing building. This building, envisioned to occupy approximately 42,000 square feet, will front the NAIR buildings and Woolsey Pond, adding a significant architectural landmark to the university's landscape. Additionally, the plan outlines two distinct scenarios for the redevelopment of the physical plant and warehouse facilities: either as two separate buildings retaining their functional integrity or merged into a single, more efficient structure with a partial two-story design. This flexible approach allows for an adaptive reuse strategy that aligns with the university's growth and evolving functional needs, marking a significant step forward in the campus' ongoing development.



Existing conditions



New conditions



A key element of the plan for the Innovation Campus is to create a more unified and connected pedestrian environment. A new north-south multipurpose pathway will serve as a strong connector, extending from East 21st Street across East 17th Street to the Redbud Trail. Additionally, secondary walkways and bike paths will provide new east-west connections, strengthening the link to the academic core district.

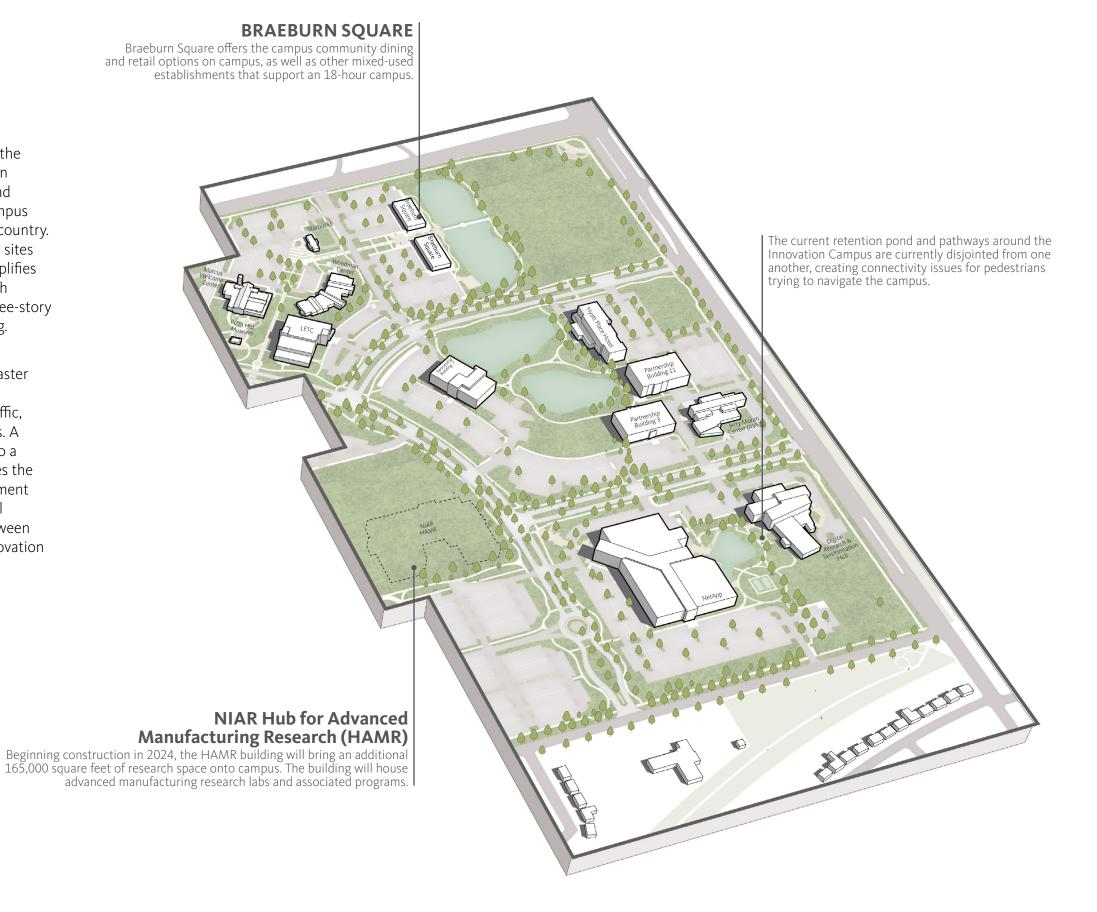




Existing Conditions

Over the last decade, the rapid development of the former Braeburn Golf Course into the Innovation Campus has cemented WSU as an Innovative and leading research institution. The Innovation Campus has become a model for universities across the country. Now approaching the complete build-out of the sites identified in the original plan, the campus exemplifies a modern suburban research park, complete with attractive boulevards, scenic ponds, one- to -three-story buildings adjacent to convenient surface parking.

One of the primary objectives of the campus master plan is to enhance connectivity across multiple modes of transportation, including vehicular traffic, public transit, bicycles, and pedestrian pathways. A key focus is to elevate the Innovation Campus to a level of walkability and accessibility that matches the main campus. This involves creating an environment that follows pedestrian desire lines – the natural paths people prefer to take when walking – between buildings. The aim is to make traversing the Innovation Campus as intuitive and efficient as possible, encouraging movement and interaction.



LEGEND

Existing buildings

Buildings to be demolished

Plaza

Surface parking

Green area

Enhanced Conditions

As the Innovation Campus approaches the completion of the initial phase of build-out, Wichita State University has the opportunity to enhance it's infrastructure to align with the vision for a dynamic, interconnected environment.

The plan addresses the current gap in bike and pedestrian pathways, proposing a new multi-use path from East 21st Street to East 17th Street, connecting to the Redbud Trail and downtown. This path transforms access across the campus, integrating natural features and creating new entry points.

Additionally, a re-imagined roundabout on Innovation Boulevard and a new campus loop drive are planned to improve overall campus flow. These initiatives are central to creating a more accessible, vibrant campus, underscoring the university's commitment to a community-focused campus environment.



LEGEND

Existing buildingsNew buildingsSubstantial renovationsPlazaGreen areaMain circulation path





FRAMEWORKS



Building Use

Existing

The buildings at Wichita State University are strategically arranged, with similar-use structures grouped across the campus. The northern section predominantly houses athletic facilities, while academic and student life buildings are concentrated in the central and western areas of campus. On the eastern side, partnership buildings define the Innovation Campus.

Within the center of campus, there are several low-density buildings. These buildings, once on the outskirts of campus, are now the heart of campus. The master plan addresses opportunities for these buildings and sites going forward.

LEGEND

Academic

Residential
Student life

Athletics

Research

Partnership - mixed used

Partnership - industry

Administration
Parking garage

Services



Building Use

Proposed Demolition

Following a comprehensive analysis of both quantitative and qualitative campus data, strategic decisions were reached regarding the buildings to be demolished on campus. These demolitions enhance the Facility Condition Index (FCI) score of the campus and pave the way for cutting-edge facilities that support the needs of the Wichita State community. Additionally, some key building sites create opportunities for the integration of significant landscape features on campus.

The proposed demolitions are organized into three tiers. Approved demolitions, scheduled to take place in the near term represent the initial phase of this transformative process. Next, proposed demolitions encompass key buildings identified for removal to make way for essential components outlined in the master plan. Lastly, the possible demolitions category includes buildings with high FCI Scores that demand substantial efforts for program accommodation elsewhere on campus. These structures are near the end of their useful life.

Importantly, the programs housed within the targeted demolitions will be strategically integrated, either into existing structures or new additions on campus.

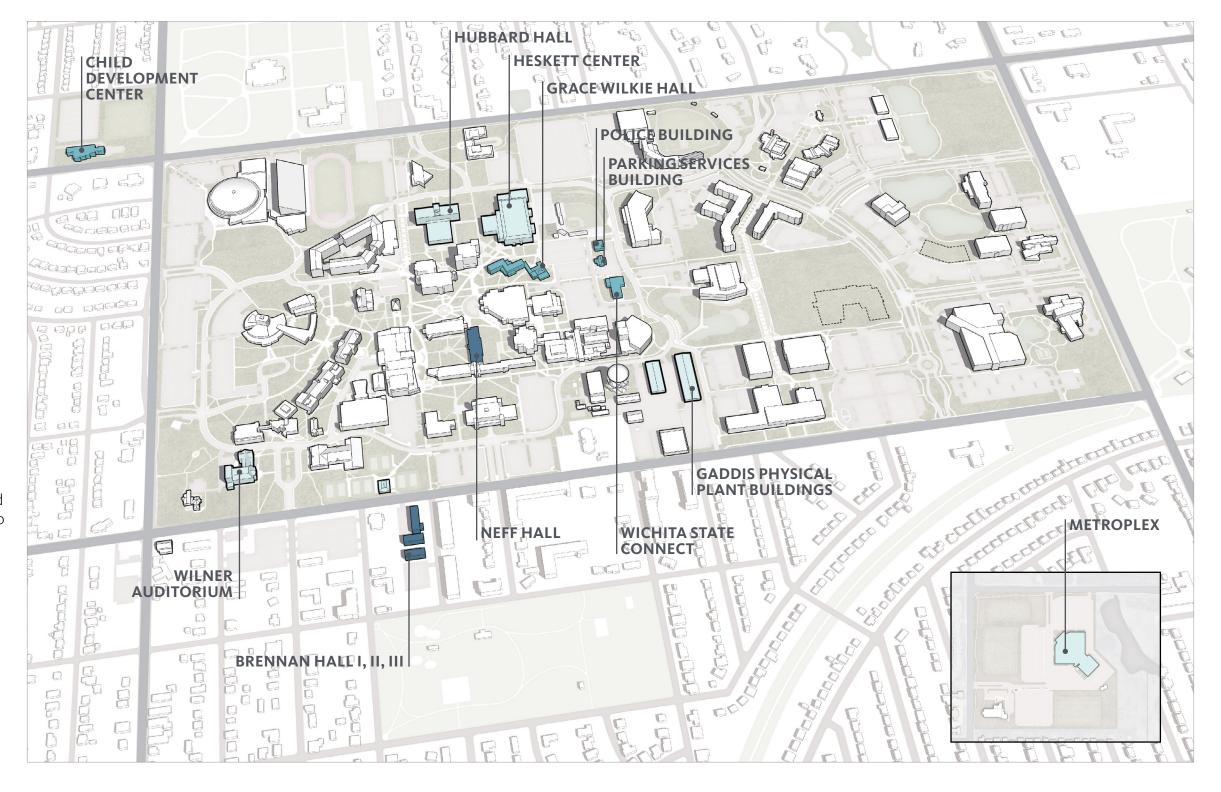
LEGEND

Approved demolition

Proposed demolition

Troposed demonto

Possible demolition





Building Use

Approved and Underway

Before the introduction of the 2024 master plan, Wichita State's campus witnessed a substantial influx of new building projects, all of which are documented within the master plan. These capital projects are categorized into two distinct groups:

The first group, labeled "approved and underway," denotes projects that are presently in the design or construction phase and are poised to become new additions to the campus soon.

The second group, designated as "approved and not underway," comprises projects that have secured approval from the university but are currently awaiting funding or a specific start time in the future.

APPROVED AND UNDERWAY

University Stadium Phase 1-Demo/track widening Wilkins Stadium Phase 1-Renovation Shocker Success Center -Renovation McKnight Art Center -HVAC upgrades Marcus Welcome Center -Renovation Woodman Center -Renovation NIAR HAMR -New build Partnership Building 11-New build Partnership Building 3B-ATF Forensic Crime Gun Intelligence Laboratory -New build

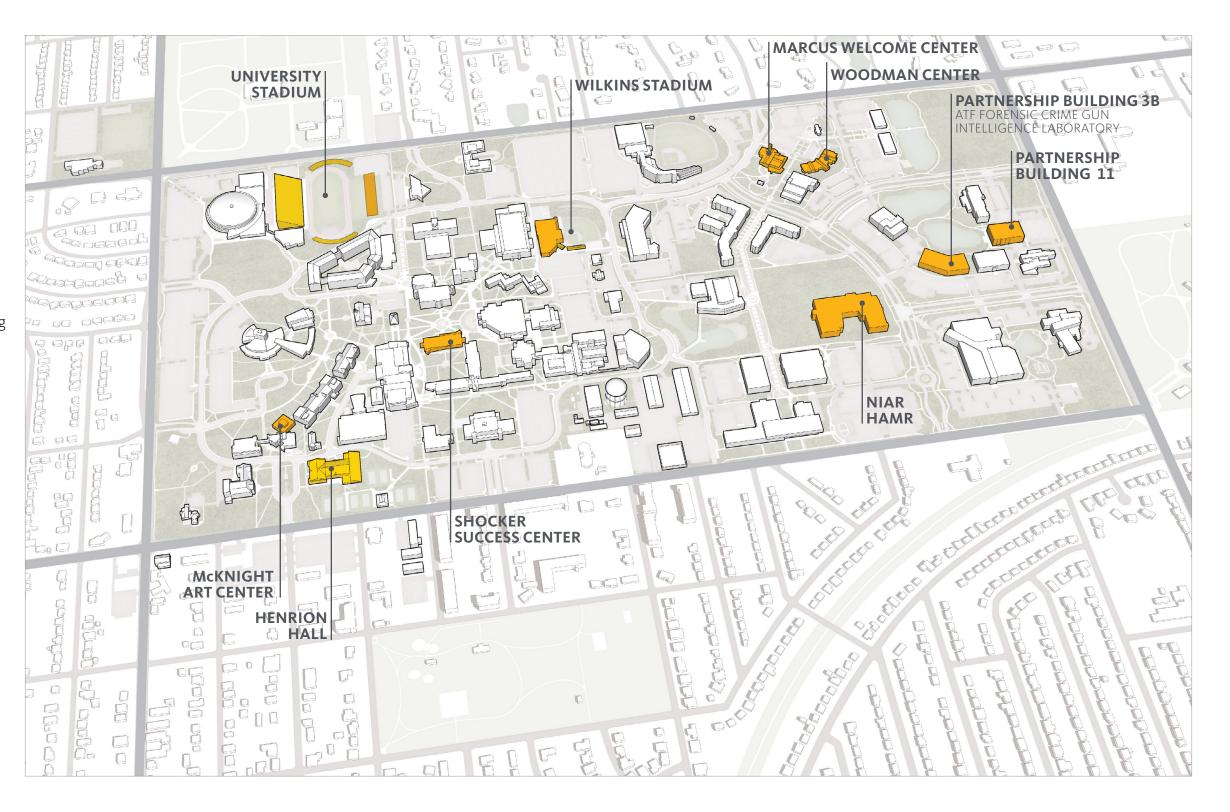
APPROVED AND NOT YET UNDERWAY

Henrion Hall — HVAC upgrades Walkins Phase 2 & 3 — Renovation University Stadium Phase 2 — Demo/new construction west side

LEGEND

Approved and underway

Approved and not underway



Building Use

New Building

A significant amount of new buildings are being proposed within the 2024 master plan. Development of these buildings has been concentrated within the 17th Street Gateway district and the academic core district. The removal of smaller ancillary buildings within the center of campus has made way for new sites for academic buildings. Additionally, to frame out Woolsey Pond, academic and research buildings have been plotted around the pond to frame and create a landscape oasis on campus.

With the success of the Innovation Campus, the master plan identifies additional plots of land to bring more industry partners on campus. One area of opportunity is 17th Street. Bringing industry partners to the 17th Street Gateway creates the opportunity for a double-sided street to create an urban main street feel.



EXISTING BUILDING NEW BUILDING LEGEND LEGEND Academic Academic Residential Residential Student life Student life Athletics **Athletics** Research Research Partnership — mixed used Partnership — mixed used Partnership — industry Partnership — industry Administration Administration Community Community Parking garage Parking garage

Services

Services

116

Academic & Research

Academics

At the very core of Wichita State University's mission lies its commitment to being one of the nation's premier urban public research institutions. Central to this mission is the institution's dedication to advancing research and academic endeavors, with the infrastructure supporting these endeavors playing a vital role in WSU's pursuit of excellence.

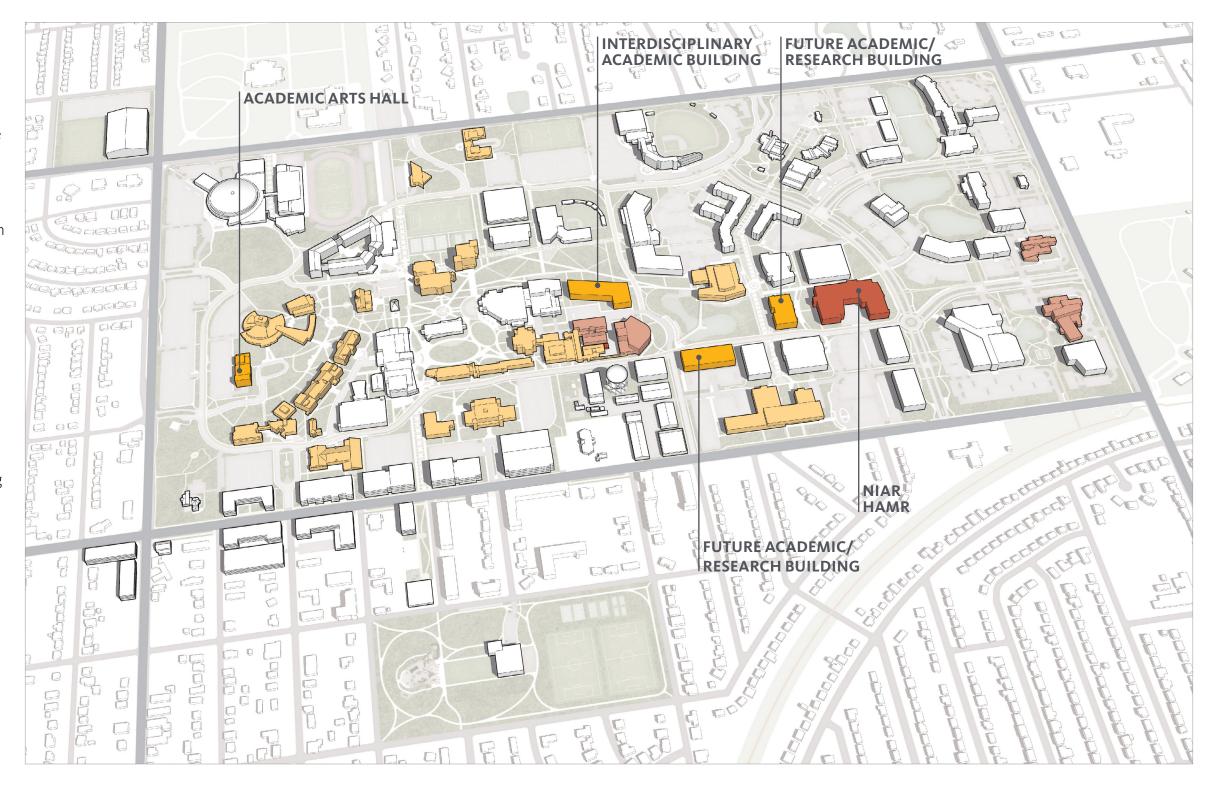
Traditionally, academic buildings have been located on the west side of campus, and industry and research facilities have been built on the Innovation Campus. A strategic objective of the master plan is to dissolve the delineation between the main campus and the Innovation Campus, fostering a seamless blend of academics, research, and industry partnerships across campus.

Woolsey Hall has served as a critical catalyst for this goal, drawing a significant influx of students to the Innovation Campus. The proposed Interdisciplinary academic building, strategically situated at the heart of the campus, further amplifies these efforts, bringing academic vitality to the east and establishing a harmonious synergy with the main lawn and promenade leading to Woolsey Hall.

The master plan earmarks two open plots of land around Woolsey Pond for future academic and research programs. This intentional planning ensures flexibility for the evolving landscape of academic pursuits.

LEGEND

- New academic building
- New research building
- Existing academic building
- Existing research building



Campus Life

Recreation & Student Life

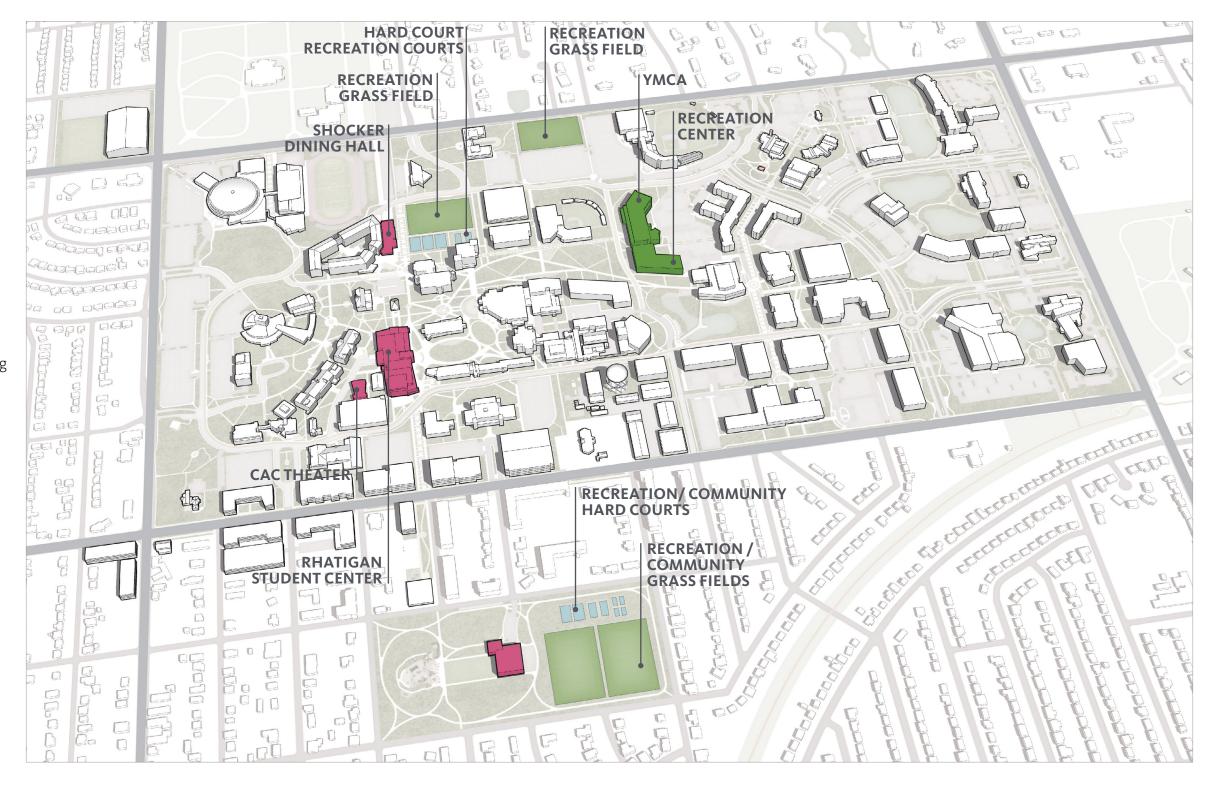
Increasing the amount of recreation space within the confines of the main campus is a high priority of the masterplan. Adjacent to Shocker Hall, a vibrant hub of activity has been established, featuring three basketball courts, two versatile futsal and pickleball courts, and open fields designed for recreational soccer. This strategic placement centralizes energy within the heart of the campus and positions these facilities in close proximity to campus dining options, creating a dynamic and accessible recreation zone.

The master plan also extends its reach beyond the immediate campus boundaries by introducing recreation areas in Fairmount Park. This proposed collaborative effort with the city aligns with the mission of creating synergies between the university and the community and ensures that students residing off campus can readily access these amenities, fostering a sense of connectivity and inclusion.

The removal of the Heskett Center paves the way for the integration of an appropriately sized recreation center situated alongside the existing YMCA. This new building addresses the need for recreational facilities and capitalizes on the strategic location to create a comprehensive space for campus recreation. The master plan's holistic approach to recreation underscores its commitment to providing diverse and accessible opportunities for wellness on campus.

LEGEND Student life Recreation Recreation fields

120

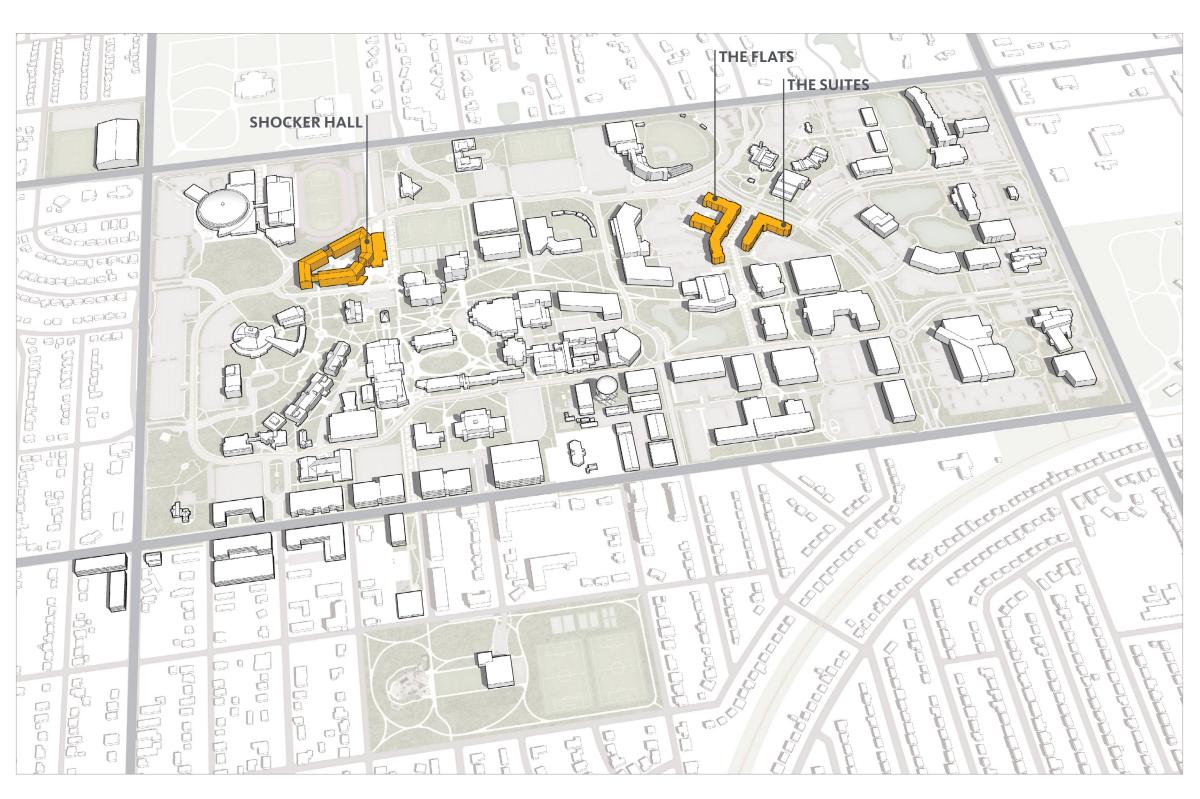


Student Life

Housing

Presently, Wichita State University's housing landscape is composed of three distinct structures, Shocker Hall (807 Beds), The Suites (221 Bed), and The Flats (458 Bed). Each of these buildings offers diverse housing options and configurations, catering to the preferences and needs of WSU's diverse student body.

Expanding the volume of on-campus housing was not a goal of the 2024 master plan. Over the past five years, the periphery of the campus has witnessed a rapid surge in private development, specifically in housing. This external development boom has introduced a variety of housing options. These options give students opportunities to reside in close proximity to the campus.



LEGEND

On campus housing

Partnerships

Partnerships with industry and other organizations are vital to the DNA of Wichita State University. With the Innovation Campus reaching full capacity, the master plan sets out to establish new developments to increase the number of industry partnerships on campus.

Innovation Campus

Building upon the success of the Innovation Campus, the Masterplan looks to increase density within the the Innovation Campus. Two plots of land east of the John Bardo Center were created to provide frontage to Innovation Boulevard and provide opportunities for additional industry partners on campus. This strategic move reflects the commitment to maintaining a thriving ecosystem where academia and industry seamlessly intertwine, fostering innovation and progress.

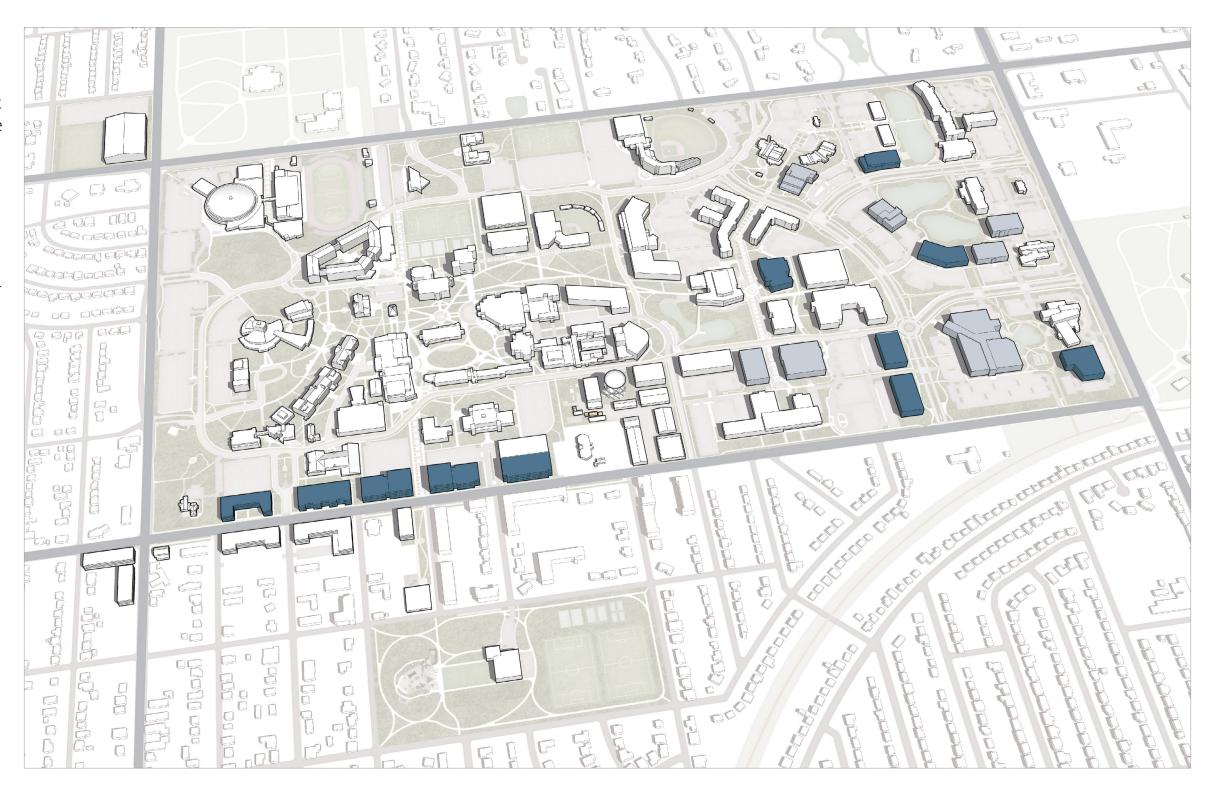
17th Street Gateway

Venturing beyond the confines of the Innovation Campus, the masterplan looks at the 17th Street Gateway, identifying it as a pivotal area for the cultivation of new partnerships. The master plan identifies five additional buildings to bring more industry partners on campus. This deliberate placement aims to create a dynamic, district and makes way for the further development of diverse partnerships.

LEGEND

124

Partnership building - new
Partnership building - existing



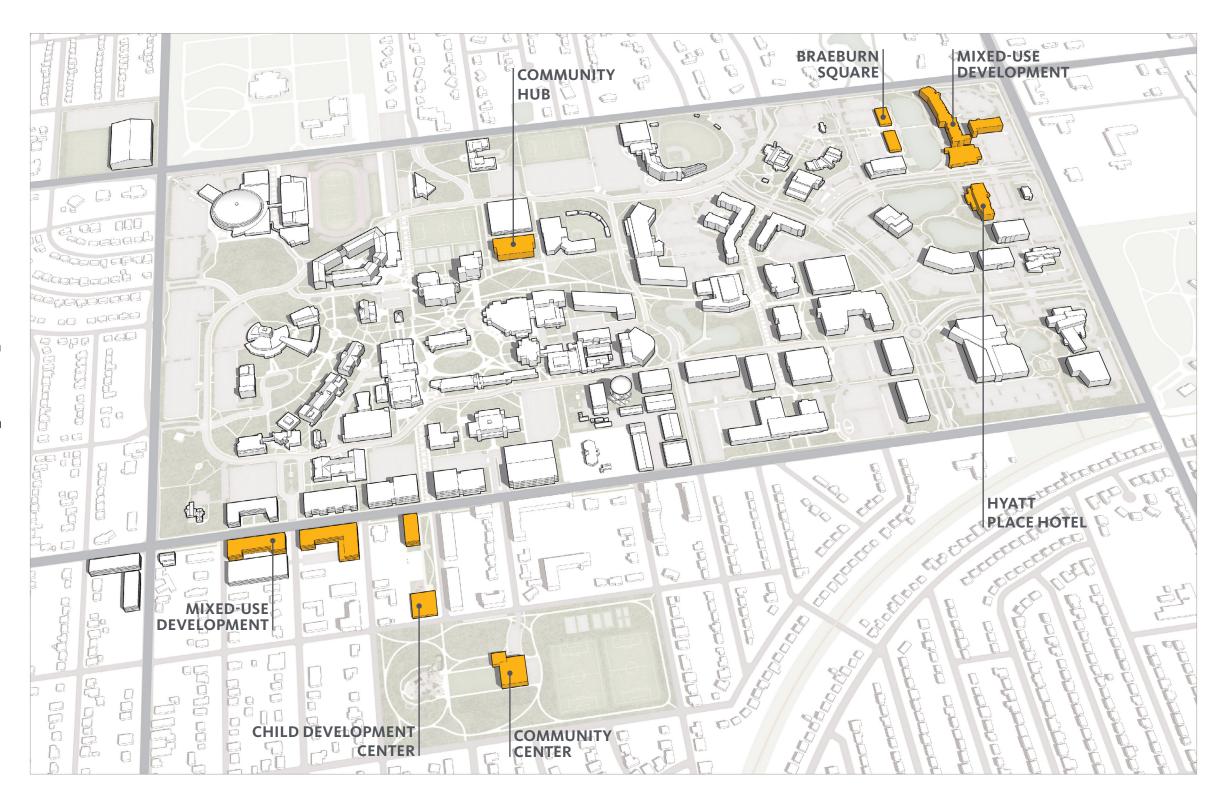
Community

The Wichita community is a vital part of Wichita State University. Pulling community onto campus and taking the university to the community are key initiatives.

Community on Campus

At the northeast edge of campus sits Braeburn Square — a welcoming spot for campus and community to dine and shop. With the creation of the 17th Street Gateway, the university will extend its reach further into the community. This strategic expansion underscores the university's dedication to breaking down boundaries and fostering a symbiotic relationship with the surrounding neighborhoods.

Additionally, the Child Development Center has been placed on the corner of Yale and 16th Street creating a larger building that accommodate more children and increasing its value to the greater community. The location was deliberate, providing a safe place on campus with ease of access for drop off and pick up. Located next to Fairmount Park, the park provides a nice amenity to the building.



LEGEND

Campus community amenities



Landscape

The landscape framework aims to shape future design implementation by proposing programmable outdoor space that supports student health and wellbeing.

Introduction

To accommodate the ever-growing needs of the campus, it's crucial to view the landscape as a transitional space. This approach allows for flexibility and adaptability to meet evolving requirements. Leveraging innovations as networking assets can introduce fresh and novel landscape elements throughout the site, enhancing its appeal and functionality. A key strategy involves strengthening the core of the campus, which entails integrating the existing landscape foundations on the west campus with the innovations on the east campus. This integration fosters cohesion and connectivity across the entire campus environment. Additionally, amenities, activity zones, and greenspaces will emerge in various locations, responding to the dynamic expansion and evolution of the campus over time. This comprehensive approach ensures that the landscape remains vibrant, functional, and responsive to the needs of its users.



Landscape

Open green and active spaces are the connective tissue intended to link students across campus to meet the university's health and wellness goals while outdoors.

Green + Active Space

Pedestrian movement is pivotal in shaping the utilization of open greenspaces throughout the campus. By strategically placing programmed elements such as activity zones and entertainment areas, these spaces can transform into vibrant destinations. It is essential to locate athletic fields and courts near student housing and off-campus living areas to encourage increased usage and participation. Situating entertainment and performance areas at the axis ends of the campus creates focal points that draw interest and activity from one side to the other, enhancing the overall campus experience. Additionally, providing larger open green areas devoid of pavement interruptions fosters an environment where students can freely engage in various activities, contributing to the development of an active and lively 18-hour campus culture.

LEGEND

- Green/open lawn space
- Connecting green spine
- New active space

 Existing active space
- New performance/entertainment space
- Existing performance/entertainment space
- Main Walkways

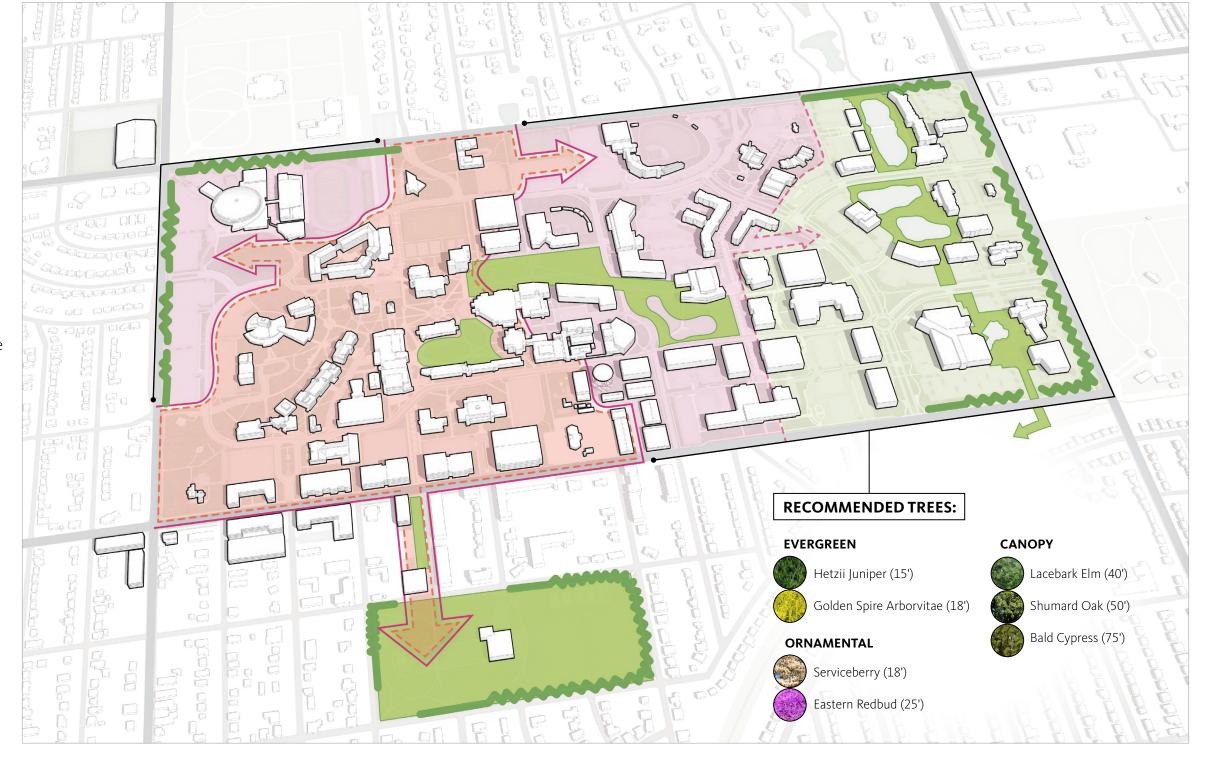


Landscape

Campus Greening

Transforming the outdoor spaces on the east side of campus involves a deliberate integration of large canopy trees, creating a more natural environment that bestows users with a distinctive experience around the interconnected chain of ponds. These strategically placed green elements contribute to the aesthetic appeal and provide a sense of tranquility. To promote relaxation and mental health, there is a concerted effort to maximize views to green landscape areas within newly implemented buildings, fostering a harmonious connection between built and natural environments.

Expanding the canopy coverage, trees are proposed along the edges of the campus and within parking lots, serving both functional and aesthetic purposes. Along high-traffic areas, the thoughtful placement of trees aims to stabilize soils, offer shade for seating, and reduce water runoff. This multifaceted landscaping strategy not only improves the overall campus environment but also plays a pivotal role in elevating the campus's identity, making a lasting impression during tours and resonating through social media channels.



LEGEND

Proposed open green space

Priority tree infill area

Auxiliary tree infill area

Canopy precedent area

Tree edge

Campus Comfort

Comfort is an integral factor to campus life and can be refined by discovering problematic safety, landscape, and climatic concerns while enhancing existing social opportunities.

LANDSCAPE

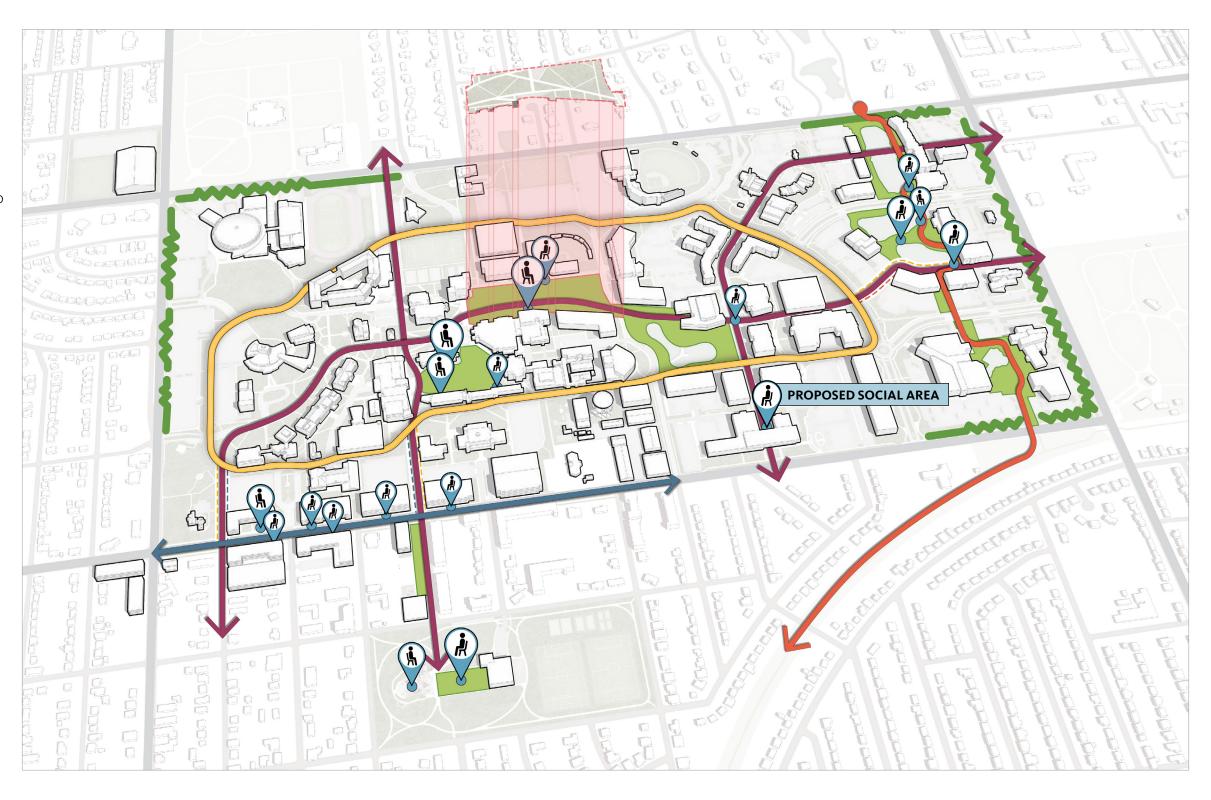
In strategizing the landscape development, it's prudent to leverage trees as natural screens along the periphery of the campus, effectively mitigating wind interference and the heat-island effect, thereby enhancing the comfort and livability of outdoor spaces. Expanding outdoor social areas, encompassing both programmed and non-programmed functions, fosters a sense of community and engagement throughout the campus. Additionally, a wellness loop, consisting of bike and shared paths, facilitates convenient and sustainable transportation options for students across campus.

AMENITIES

Addressing safety concerns, pathways should feature highlighted open views and ample lighting to ensure visibility and security, particularly for an 18-hour campus environment. Transitioning to amenities, the inclusion of hammocks, casual-style seating, pavilions, and boardwalks along the water's edge enhances recreational opportunities and encourages relaxation in natural surroundings. Moreover, incorporating overlooks along the water's edge provides scenic vistas, enriching the overall campus experience for students and visitors alike.

LEGEND

- Main walkway
- Programmable social space
- North south walkway
- 17th Street Corridor
- Wellness loop
- Tree edge



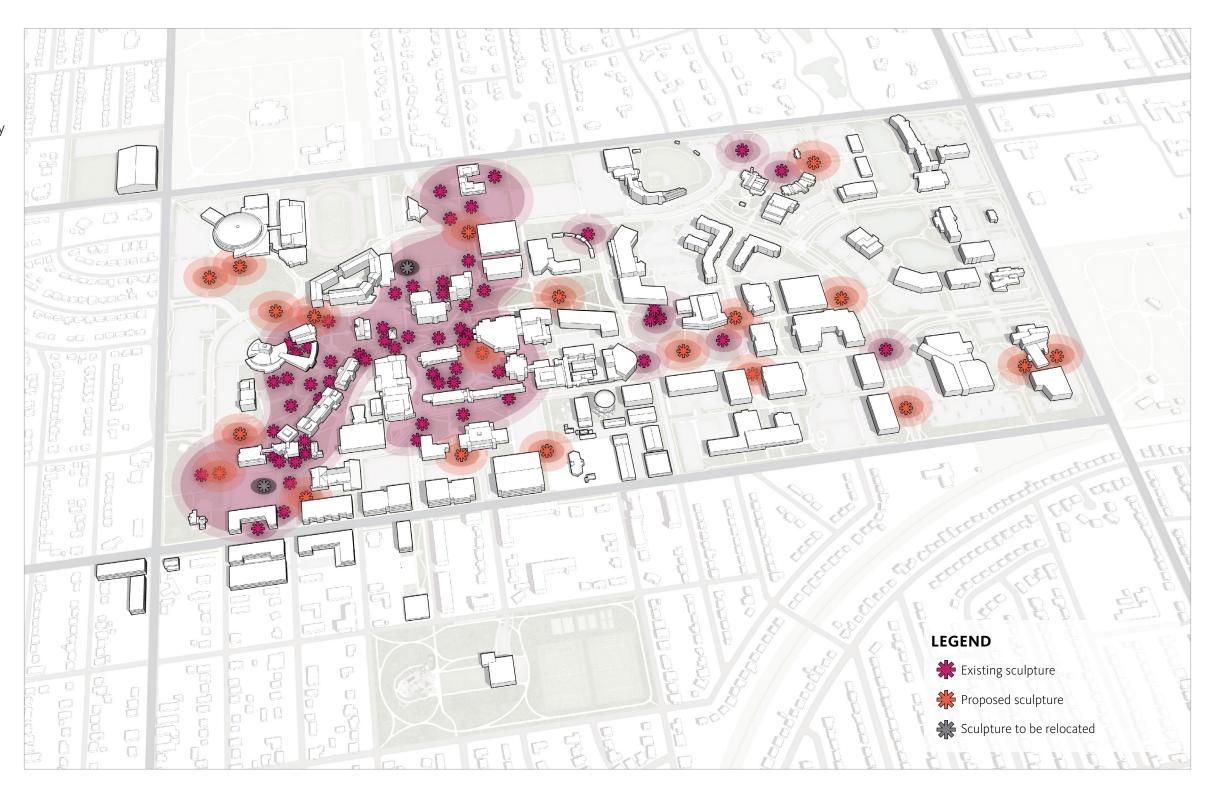
Ulrich Museum of Art Collection

The Ulrich Museum of Art proudly hosts the Martin H. Bush Outdoor Sculpture Collection (OSC), a prominent feature with 88 works scattered throughout the Wichita State University campus. By 2025, this collection is set to expand, accompanied by the debut of an outdoor mural at the Duerksen Fine Arts Amphitheater, crafted by renowned global contemporary artist, GLeo. Established in 1972, the OSC has evolved into an indispensable component of both university and community life — curated, managed, and maintained by the Ulrich Museum.

Each sculpture, meticulously chosen and positioned, contributes to the vibrant campus atmosphere and fosters daily encounters with art that are free and accessible. This growth over five decades underscores the Ulrich Museum's dedication to enriching the cultural fabric and well-being of its community through art engagement. Public art exposure promotes a sense of belonging and well-being and has tangible physical and mental health benefits.

These sculptures serve as iconic symbols of Wichita State's identity, with favorites like Joan Miró's Personnages Oiseaux mosaic prominently featured in university branding materials. The acceptance process into the Ulrich's permanent collection involves thorough evaluation and often require fundraising effort. As part of its role on campus, the Ulrich also coordinates biannual maintenance treatments for a selection of the outdoor sculptures

Through partnerships and maintenance initiatives, the Ulrich ensures a sense of connection and ownership for its campus community. As a cherished asset for Wichita State University and beyond, the OSC reflects a source of great pride for the region and the state of Kansas. Looking ahead, the Ulrich Museum eagerly anticipates expanding its collection and continuing its invaluable service to the community.



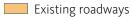
Mobility

Existing Roadways

The existing road infrastructure at Wichita State University hinders the ability of the campus to function as one harmonious campus. The challenge lies in the current difficulty of navigating the campus, primarily attributed to the absence of a connection between the Mid Campus Drive and the eastern side of campus. This lack of integration leads to an increased concentration of vehicular traffic traversing the central area of campus, where a growing number of pedestrians are directed eastward. This area was once the edge of campus, but is now the center. Addressing these road connections can improve the mobility of vehicle and pedestrian traffic on campus.



LEGEND



B Existing street lights

Mobility

Proposed Roadways

As part of the updated master plan, modifications are proposed to the road layouts, establishing vital connections between the east and west sides of the campus. North of the John Bardo Center and south of HAMR a road extension was created to detour traffic from the center of campus. Concurrently, the traffic circle has undergone relocation northward, aligning with the trajectory of the newly established road, thereby optimizing traffic flow and overall campus accessibility.

The master plan proposes Mid Campus Drive to become a controlled service road from NIAR to the YMCA. With the removal of this regular vehicle traffic thoroughfare, a significant transformation has occurred, eliminating the physical barrier that once demarcated the east and west sections of the campus. Additionally, Alumni Drive north of Morrison Hall is proposed to become a controlled drive to limit delivery traffic in the heavily pedestrian area of campus.

Wu Shock Drive is proposed to be relocated to north of Ahlberg Hall to create a more seamless loop road that promote an ease of traffic navigation on campus..

LEGEND



B Existing street lights

---- Removal of road

New/reworked road

New street lights
---- Limited access road

Mobility

Existing Parking

As Wichita State University's campus undergoes expansion and densification, it is imperative to adapt parking infrastructure that serves the current and future functions of the university.

With the Innovation Campus reaching capacity, the surface parking that once was on the edge of campus now sits in the center of campus. While convenient and close to many academic buildings, these parking lots present opportunities for key new buildings and landscapes that can bridge the east and west sides of campus.

As Wichita State University continues its trajectory of growth and development on campus, thoughtful adjustments to the parking landscape stand as an integral component in shaping a unified campus environment.

EXISTING SURFACE PARKING | 10,450 spots*

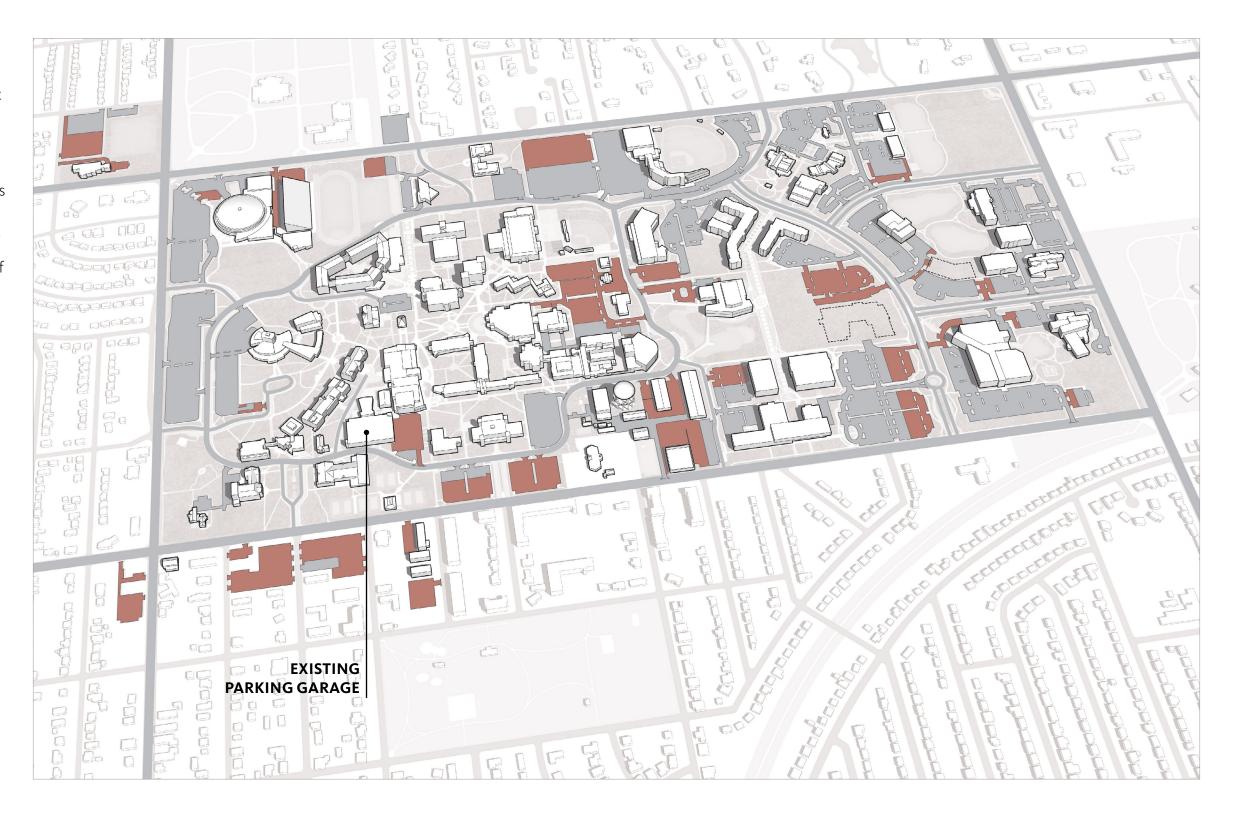
NET SURFACE PARKING REMOVED | 2,100 spots

*Based on full build out of Innovation Campus

LEGEND

Existing parking

Existing parking to be removed



Mobility

Proposed Parking

With limited land area to expand, parking needs to densify and reconfigure. To accommodate the removal of surface parking in the core of campus, surface adjacent to Woolsey Hall, the YMCA and The Flats have been reconfigured to create additional parking. Parking garages have been introduced to serve different districts on campus.

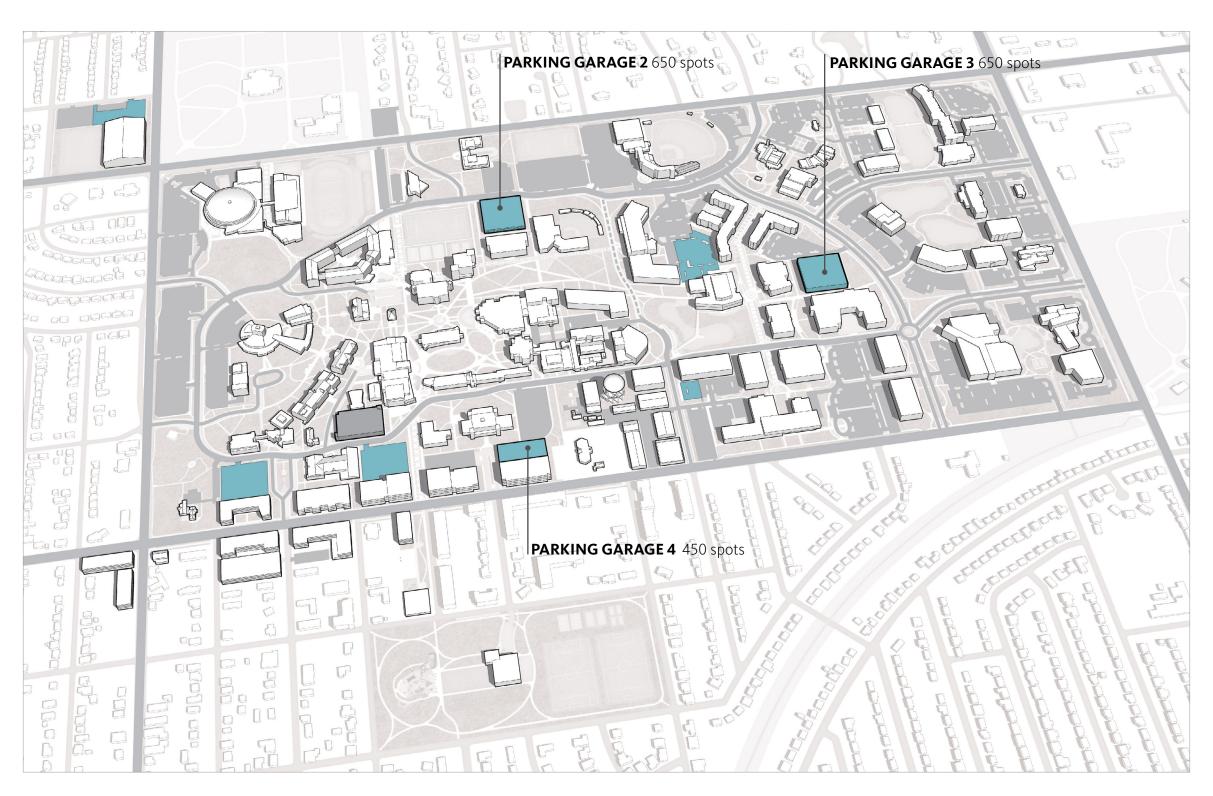
Three new parking garages are set to enhance campus accessibility. The first will be located directly east of Woolsey Hall, catering to the Innovation Campus. The second will be situated near Wilkins Stadium, addressing parking needs in the academic core district. This parking garage will be near the proposed community building and ease congestion from athletics events on campus. The fourth proposed garage will serve the 17th Street Gateway district, supporting the partnership office buildings and mixed-use developments in the area.

This strategic re-evaluation optimizes the utilization of available parking spaces on campus and lays the groundwork for a more cohesive and aesthetically pleasing campus. By relocating parking to the periphery and within garages, key land within the heart of campus is available for potential academic or recreational expansion.

GARAGE PARKING ADDED | 1,750 spots
TOTAL PARKING IN MASTER PLAN | 10,450 spots

LEGEND

- Existing parking
- New surface parking
- New garage parking



Mobility

Primary Pedestrian Routes

The master plan prioritizes pedestrians across the campus, creating a place where walking is the most convenient and enjoyable mode of transportation. At the heart of the plan is a focus on redesigning key thoroughfares and pathways, optimizing them for pedestrian use and ensuring seamless integration with accessible transit options and personal mobility aids.

Central to achieving this vision is the transformation of Mid Campus Drive into pedestrian-centric pathways with limited access for service vehicles. This redesigned route will enhance connectivity between the academic campus and the Innovation Campus. To improve safety and accessibility, the plan includes widening sidewalks and reducing road crossings Additionally, strategic landscaping and the introduction of green infrastructure are set to further define these walkways, contributing to a pleasant and environmentally sustainable campus atmosphere.

By reimagining the campus landscape with a focus on pedestrian priorities, Wichita State University is committed to enhancing the health, safety, and well-being of its community. This approach aims to create a more vibrant and engaging campus life and promote sustainable practices that align with the university's forward-thinking values.

LEGEND

Main pedestrian routes

Secondary pedestrian routes

Pedestrian routes



Mobility

Primary Bike and Micro Mobility Routes

Wichita State University's master plan emphasizes improved pedestrian and bicycle access, seeking collaboration with the City of Wichita for seamless integration of campus-city bike infrastructure. As biking becomes an increasingly popular, eco-friendly, and healthy transportation option at WSU, the plan includes enhancements to streetscapes, bike-share programs, ample bicycle parking, and clear sightlines at campus access points to promote navigation and connectivity with the urban environment.

The university plans to cater to the diverse mobility needs on campus by establishing a comprehensive bicycle network, featuring dedicated lanes, cycle tracks, and shared lanes, each designed to suit specific campus areas and support a range of micro-mobility devices. This network aims to accommodate the expected mix of foot and bike traffic, guided by the local terrain and rights-of-way. Key proposals include a wellness loop along the campus perimeter and a multipurpose path by the Innovation Campus ponds, connecting to the Redbud Trail. These efforts aim to foster a safer, more cohesive, and environmentally friendly campus for the WSU community.

LEGEND



On street bike path

A Pedestrian cross walk

5 SYSTEMS



BIG IDEA

As we stand at the crossroads of educational excellence and environmental stewardship, Wichita State University has the unique opportunity to lead by example. With a vision for a campus that educates and demonstrates the power of sustainable living, WSU can inspire its students, community, and corporate partners.

By embedding sustainability into the very fabric of the campus, WSU can create a living laboratory that fosters innovation, attracts eco-conscious talent, and reduces its environmental footprint. Investing in sustainable design isn't just about structures. It's about about building a legacy.

The reality of climate change must be acknowledged. Therefore, a plan that is a plan that is supportive of green measures and balanced against economic considerations is essential.

Here are a few master plan concepts and design elements that foster a successful and enduring campus approach:

MASTER PLAN CONCEPTS

Hazard mitigation: Deliver projects that can mitigate local weather challenges.

Economic viability: Foster a long-term model of cost savings and efficiency.

Community engagement: Emphasis on sustainable design that fosters community and student involvement and aligns with the university's values.

Innovation showcase: Position campus projects as a showcase for innovative, sustainable technology.

Educational integration: Leverage the potential to integrate high performing projects into university's educational programs.

Corporate partnership: Showcase the potential for positive public relations and brand enhancement through corporate partnerships in sustainability.

DESIGN ELEMENTS

Storm-resilient structures: Given the possibility of tornadoes, design choices should include storm shelters and robust building materials.

Energy conservation: Use smart grids and sustainable materials to optimize energy usage thereby maximize payback.

Water management systems: Implementation of rainwater harvesting and efficient irrigation to address drought and flood risks.

Green spaces: Incorporate green roofs and parks for heat mitigation and community wellbeing.

Renewable energy sources: Integration of solar panels and wind turbines for clean energy generation.

Smart campus infrastructure: Employing sensors and artificial intelligence for efficient campus operations, aligning with Wichita's tech-forward image.

The time is now to integrate nature's wisdom into the WSU academic ethos, constructing not just buildings, but a resilient, thriving ecosystem for generations to come. This will increase enrollment via fiscally responsible sustainable planning and design strategies that also increase revenue.







HISTORICAL WINS

Wichita State University has made significant strides in sustainable campus and building design. Key achievements and initiatives include:

Innovation Campus Master Plan

WSU's Innovation Campus transformation is a notable project. The master plan includes the 147,000-squarefoot John Bardo Center, the 134,000-square-foot Woolsey Hall, student housing, mixed-use and hotel spaces, parking expansion, and green spaces. This project exemplifies WSU's commitment to sustainable design and community engagement.

Shocker Success Center

The transformation of Clinton Hall into the Shocker Success Center is a major project under construction, set to be completed by the summer of 2024. This center aims to centralize student services, helping students to stay on course to graduate while setting a new standard for inclusive design. This building underwent adaptive reuse as it once housed the Barton Business School.

Environmental initiatives in curriculum and

WSU has enhanced its curriculum offerings around sustainability, including a sustainability minor, an environment and sustainability certificate, and certificates in sustainable energy technology, sustainable materials and design, and sustainable water technology. Additionally, WSU is engaged in research for sustainable 3D printing practices and developing eco-friendly refrigeration and cooling technology.

Woolsey Hall

Sustainability was at the forefront of design at Woolsey Hall. Woolsey Hall is a LEED Gold Certified Building. At Woolsey Hall, WSU is advancing water sustainability in partnership with Water Intelligence (WINT). The building will use measurement tools and artificially intelligent machine learning software to monitor water usage patterns, aiming to reduce waste and advance sustainable practices.

John Bardo Center on the Innovation Campus

The John Bardo Center is a state-of-the-art facility with advanced equipment and collaborative spaces, inspiring creativity and innovation. It is equipped with labs and tools, enhancing WSU's engagement with the community and industry partners. The building houses high-profile programs like WSU GoBabyGo and the Koch Innovation Challenge, fostering an entrepreneurial mindset and teamwork.

The Smart Factory

The Deloitte's Smart Factory @ Wichita showcases the future of manufacturing . Together, Deloitte and Wichita State University are helping companies accelerate their digital transformations. The immersive learning center demonstrates how manufacturers can embrace the next level of technological innovation. The Smart Factory @ Wichita operates sustainability at net-zero energy.

Tobacco-free campus

Wichita State is committed in providing a tobacco-free environment for the health, wellbeing and safety of university students, faculty, staff and visitors.



PARTNERING

Wichita State University has established several public-private partnerships (P3s) that align with a shared vision of sustainability, innovation, and community engagement. These partnerships cover a range of initiatives, from infrastructure development to educational and research collaborations, aimed at benefiting students, the public, and the broader community.

Some key partnerships and initiatives that reflect this shared vision.

The Law Enforcement Training Center: This is a collaborative effort involving the WSU Criminal Justice Program, Sedgwick County Sheriff's Department, and the Wichita Police Department. This partnership represents a commitment to community safety and education.

Airbus Wichita: This partnership between WSU, Airbus, and development firm MWCB LLC, focuses on advancing innovation in the aerospace sector. It exemplifies the university's commitment to fostering industry collaboration and applied learning opportunities.

John Bardo Center: This facility, financed and operated for educational purposes, houses both private companies and a nonprofit organization and the 3D Experience Center with Dassault Systemes. It supports WSU's mission of applied learning by integrating educational activities with industry participation.

Innovation campus partnerships: WSU's Innovation Campus is a hub for various partnerships with businesses and organizations. These collaborations are aimed at generating new applied learning and research opportunities, preparing students for employment, and supporting community development.

Health science collaborations: WSU has also engaged in significant partnerships in the health sciences field, collaborating with entities like the University of Kansas School of Medicine and School of Pharmacy. These partnerships focus on advancing health education and research, underlining WSU's commitment to community health and well-being.

Spirit AeroSystems: Spirit AeroSystems is committed to reducing greenhouse gas emissions with targets based on the Intergovernmental Panel on Climate Change recommendations. They focus on energy efficiency, renewable energy sourcing, and minimizing water consumption and waste. Their core values include safety, quality, innovation, customer focus, and integrity, emphasizing continuous improvement in environmental performance and community engagement.

These are just a few of the many partnerships that demonstrate WSU's dedication to creating a sustainable, innovative, and community-engaged campus environment. Through these collaborations, the university seeks to provide quality educational opportunities and support the economic, health, and cultural needs of its communities.







ASPIRANT PEER CASE STUDIES

Aspirant peer universities with the two highest enrollment rates are Auburn and Clemson University. They have taken significant strides in their sustainability efforts, with each institution focusing on different aspects of sustainability. Here are a list of initiatives to be considered for incorporation into the Wichita State University master plan:

Auburn University

Auburn University's sustainability goals are integrated into various areas of campus life and operations. Key elements of their sustainability plan.

Tree preservation policy: Established to acknowledge the value of trees to the campus community.

Smoke-free campus policy: Aimed at reducing the health and environmental impacts of smoking.

Climate action plan: Targeting climate neutrality by 2050, with ongoing revisions as progress is made.

Energy reduction plan: Focusing on reducing electricity, gas, and water consumption with specific strategies and timelines.

Academic plans: Emphasizing sustainability in curriculum and research.

Partnership with the Sustainable Development Solutions Network (SDSN): Engaging in global sustainability challenges and amplifying the impact of Auburn's expertise.

STARS reports and climate commitment progress reports: Documenting Auburn's sustainability performance and progress toward climate neutrality.

The university has implemented a detailed sustainability action plan through Auburn University's Office of Sustainability.

Clemson University

Clemson University's sustainability initiatives are outlined in its Sustainability Action Plan.

Reduction in GHG emissions: Achieved a significant reduction in emissions per user from 2006 to 2018.

Net-zero goal by 2030: Recommitted to becoming a net-zero campus by 2030.

Energy efficiency: Aiming to increase energy sourcing from renewables and implementing large-scale solar projects.

Sustainable food and dining practices: Utilizing compostable materials and promoting vegan dining options.

Green building practices: With many buildings meeting LEED Silver or Gold standards.

Transportation initiatives: Including electric vehicle charging stations and a focus on reducing Scope III

National sustainability trajectory

Nationally, universities are increasingly focusing on sustainability in areas such as energy efficiency, waste management, sustainable transportation, and incorporating sustainability into their academic programs.

These universities demonstrate a strong commitment to sustainability, each approaching it from different angles but all with the common goal of reducing their environmental impact and educating their communities about sustainable practices thereby increasing enrollment and operational efficiency.

MASTER PLAN FRAMEWORK

In persuading corporations to adopt environmentally respectful designs on university campuses, it's essential to approach the conversation strategically, considering both the business and academic perspectives. Here is an example of a few tailored strategies and a holistic sustainable urban design framework to help guide considerations for a sustainable master plan.

Understand corporate objectives: Begin by understanding each corporation's unique objectives, values, and challenges. Corporations often value brand image, shareholder interests, and long-term viability. Frame the conversation in terms of how sustainable campus designs align with these objectives.

Educate on the benefits: Clearly articulate the benefits of sustainable designs, such as energy savings, lower long-term operational costs, and potential for positive PR. Emphasize how these designs can enhance the corporation's reputation as a socially responsible entity.

Highlight collaboration and innovation: Stress the opportunity for corporations to be seen as leaders in innovation and collaboration with academia. Point out that this partnership can be a platform for showcasing cutting-edge sustainable technologies and practices.

Leverage academic expertise: Utilize the expertise and credibility of university leaders and researchers to present data-driven arguments. This can include recent studies on sustainability, environmental impact assessments, and examples of successful green projects on campuses.

Customize the Appeal: Tailor your approach to each corporation's specific industry and interests. For instance, a tech company might be more interested in the latest sustainable technologies, while a consumer goods company might focus on social impact and branding.

Future workforce considerations: For many corporations, university campuses are a source of future talent. Highlight how sustainable campus designs can attract top students who are increasingly environmentally conscious, thereby aiding their future recruitment efforts.

Risk Mitigation: Discuss how sustainable designs can mitigate risks associated with climate change and environmental regulations. This includes potential future cost savings and avoiding the risks of being perceived as environmentally negligent.

Showcase success stories: Share examples of other corporations that have successfully implemented sustainable designs on campuses and the positive outcomes they've achieved. This can provide a concrete demonstration of the potential benefits.

Facilitate open dialogue: Create opportunities for open dialogue between corporate leaders, university officials, and students. This inclusive approach can foster a deeper understanding and commitment to sustainability goals.

Offer ongoing support and partnership: Assure them of ongoing support and collaboration in implementing and maintaining sustainable designs. This can include forming joint committees or working groups to oversee the project.

Throughout these process, it's crucial to maintain a balance between logical arguments (cost savings, risk mitigation) and emotional appeals (corporate responsibility, innovation, legacy). A successful approach involves adaption based on feedback, while confidently and clearly conveying the importance and benefits of sustainable campus designs.

SUSTAINABLE URBAN DESIGN FRAMEWORK

TOPIC AREAS IN URBAN DESIGN Organized by Scale	REGION & CITY	DISTRICT & NEIGHBORHOOD	BLOCK & STREET	PROJECT & PARCEL
1 Energy Use & Greenhouse Gas (Transportation & Land Use)	1.10 Compact Development (For Density & Proximity) 1.11 Robust Transit Networks 1.12 Robust Bicycle Networks 1.13 Balanced Vehicular Networks 1.14 Regional Land Use Mix	Robust Pedestrian Networks 1.201 Small & Defined Blocks 1.202 Street Network Connectivity 1.21 High-Density Zoning & Platting 1.22 District-Scale Parking Mgt & Design 1.23 High District Land Use Mix	Multimodal Street Design 1.301 Pedestrian-Friendly Streets 1.302 Bicycle-Friendly Streets 1.303 Transit-Friendly Streets 1.304 Limiting Motor Vehicle Impact 1.31 Dense & Street-Activating Bldgs 1.32 Site-Scale Parking Design	1.40 Active Street Edges 1.41 High Internal Connectivity 1.31 Dense & Street-Activating Buildings 1.32 Site-Scale Parking Design
2 Water	2.10 Compact Development (For Limited Impact on Natural Systems) 2.11 Avoid Flood Prone Areas	2.20 Robust Stormwater Networks 2.21 Daylight & Restore Waterways	2.30 High Surface Permeability2.31 Robust Urban Forest2.32 Green Stormwater Infrastructure	Rainwater Capture & Reuse Surface Permeability Robust Urban Forest Green Stormwater Infrastructure
3 Ecology & Habitat	3.10 Compact Development (For Limited Impact on Natural Systems) 3.11 Avoid Ecologically Sensitive Areas 3.12 Robust Ecological Networks	3.20 Ecological Corridors & Patches3.21 Daylight & Restore Waterways3.11 Avoid Ecologically Sensitive Areas	3.30 High Surface Permeability 3.31 Robust Urban Forest 3.32 Microhabitat Creation 3.321 High Vertical Complexity 3.322 Native Vegetation 3.33 Wildlife Crossings 3.34 Robust Ecological Area Buffers 3.35 Limited Light Pollution	3.30 High Surface Permeability 3.31 Robust Urban Forest 3.32 Microhabitat Creation 3.321 High Vertical Complexity 3.322 Native Vegetation 3.33 Wildlife Crossings 3.34 Robust Ecological Area Buffers 3.35 Limited Light Pollution
4 Energy Use & Production (Non-Transportation)	4.10 Compact Development (For Limited Embodied Energy in Infrastructure)	4.20 Street & Block Orientation 4.21 High-Density Zoning & Platting	4.30 Dense & Energy- Efficient Building Types 4.31 Urban Microclimates 4.311 Cool & Green Surfaces 4.312 Robust Urban Forest 4.313 Street Ht-to-Width Ratio	4.40 Infill Development 4.30 Dense & Energy-Efficient Building Types
_	+ See Energy Use & Greenhouse Gas (1.10 - 1.41): To Maximize Access, Affordability, Activity, Safety, and Social Mobility			
5 Equity & Health	5.10 Compact Development (For Proximity, Access & Reduced Infrastructure Cost) 5.11 Equitable Distribution of Uses & Services	5.20 Balanced Block Size 5.21 High-Density Zoning & Platting 5.22 Limited Location of Point Source Pollution 5.23 Mix of Housing Unit Types 5.11 Equitable Distribution of	5.30 Active & Attractive Open Space 5.31 Robust Urban Forest 5.32 Affordable Housing Typologies 5.33 Site Design For Community Safety & Inclusion 5.23 Mix of Housing Unit Types	5.40 Infill Development 5.23 Mix of Housing Unit Types 5.30 Active & Attractive Open Space 5.32 Affordable Housing Typologies 5.33 Site Design For Community Safety & Inclusion

Image courtesy of The Sustainable Urban Design Handbook by Nico Larco and Kaarin

REFLECTIONS

Wichita State University has the chance to shape its campus into a beacon of sustainability and innovation. This project isn't just about buildings. It's about about a commitment to a better world. This is a unique opportunity to make a difference and lead by example. Creating a sustainability plan involves outlining a comprehensive approach to integrating sustainable practices into an organization or community.

Here's a typical framework for a sustainability plan:

1. Introduction

Purpose of the Plan: Define the objectives and the importance of sustainability for the organization.

Scope: Clarify the areas or aspects that the plan will

Scope: Clarify the areas or aspects that the plan will cover (e.g., environmental, social, economic).

Stakeholders: Identify the key stakeholders involved in the plan.

2. Current sustainability assessment

Baseline analysis: Document current sustainability practices and performance.

Challenges and opportunities: Identify existing challenges and potential opportunities for improvement.

3. Sustainability goals

Long-term goals: Outline the long-term sustainability objectives.

Short-term targets: Set specific, measurable, achievable, relevant, and time-bound (SMART) goals for the short term.

4. Key focus areas

Environmental sustainability: Strategies for reducing carbon footprint, waste management, energy efficiency.

Social responsibility: Community engagement, employee well-being, diversity and inclusion initiatives. Economic sustainability: Cost-effective practices, sustainable procurement, long-term financial planning.

5. Strategies and action plans

Action Items: Detailed steps to achieve each goal and target.

Responsible parties: Assign roles and responsibilities for implementing the plan.

Resources required: Identify the resources needed (financial, human, technological).

6. Monitoring and evaluation

Performance indicators: Establish metrics to track progress.

Reporting mechanisms: Outline how progress will be documented and reported.

Review schedule: Set regular intervals for reviewing and updating the plan.

7. Stakeholder engagement and communication

Internal communication: Plan for engaging employees and internal stakeholders.

External communication: Strategies for involving external stakeholders and the community.

Feedback mechanisms: Create channels for receiving feedback and suggestions.

8. Training and capacity building

Training programs: Outline training needs for staff to implement sustainability practices effectively.

Awareness campaigns: Plan for raising awareness about sustainability within the organization.

9. Partnerships and collaboration

Collaboration opportunities: Identify potential partners (e.g., NGOs, government bodies, other businesses) for joint sustainability initiatives.

10. Appendices and supporting documents supporting information

Include any additional documents, data, or resources that support the plan.

This outline provides a structured approach to developing a comprehensive sustainability plan, ensuring that all critical aspects of sustainability are addressed effectively. The plan should be a living document, adaptable to changing circumstances and new insights.





Traffic

FINDINGS

- Along 21st Street North, between Hillside Street and Oliver Street, there are four traffic signals. One signal is pedestrian crossing. The other signals are located at Yale Avenue and Mike Oatman Drive. Adequate traffic signalization along 21st Street North is present.
- Along 17th Street North, there is one pedestrian signal between Fairmont Street and Vassar Avenue.
- Along Hillside and Oliver, there are traffic signals at the intersections of 21st Street and 17th Street.
- WSU campus has Perimeter Road that provides circulation on the west side of campus with Mike Oatman Drive providing a connector to the east side of campus.

RECOMMENDATIONS

- It is recommended to realign Perimeter Road, connecting to the east side of campus and installing a traffic circle at the intersection of Perimeter Road and Innovation Blvd.
- It is also recommended to perform a traffic study for the corridor along 17th Street to determine which locations warrant a signal.



Utilities and Infrastructure

WATER INFRASTRUCTURE

FINDINGS

- A 24-inch water main extends through the eastern half of campus. The line begins at the existing water tower and extends to 21st Street North.
- Campus buildings predominantly rely on a network of 8-inch diameter water mains, predominantly on the western side of campus. Meanwhile, the buildings in the Innovation Campus are supplied by a combination of 12inch and 8-inch mains.
- The existing water system on campus contains a series of looped water systems.
- Since the previous master plan studies, various water system improvements were completed to increase available fire flow within the campus in various locations. Available fire flows on campus are adequate.

RECOMMENDATIONS

- As part of the masterplan, additional improvements on campus would be based on the location of the proposed developments and the proximity to water system infrastructure.
- It is recommended fire hydrant coverage for new construction be evaluated for adequate coverage with City of Wichita Fire Department.

SANITARY SEWER INFRASTRUCTURE

FINDINGS

- WSU campus primarily consists of 8-inch sewer mains along with 10 and 12-inch mains.
- The campus system primarily discharges into the City of Wichita's 15-inch interceptor sewer south of 17th Street.
- The west and north areas of campus discharge into existing 8-inch sewer main along Hillside and 21st Street North.

RECOMMENDATIONS

- It is recommended that as new building infrastructure gets added to the campus, verifications of capacity of the City of Wichita's system should be verified.
- It is also recommended various 8-inch mains discharging into the 15-inch main along 17th Street North be upsized to 12-inch mains to reduce the potential of surcharging as the campus expands.

STORM WATER

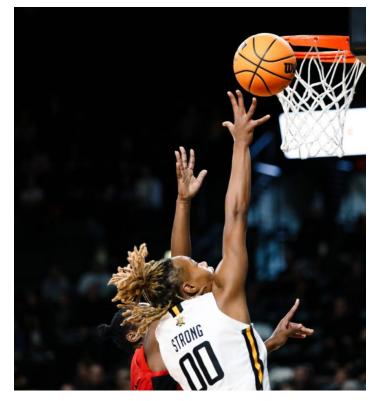
FINDINGS

- Storm water runoff generated by the campus is currently managed by a network of multiple underground storm sewer pipe systems, with water quality devices installed as the campus has expanded.
- Storm sewer networks are being installed on the west half of campus as Innovation Campus has added new building infrastructure.

RECOMMENDATIONS

- It is recommended as new infrastructure and hard surfaces are added to the campus, the runoff flow is evaluated so the storm sewer existing and future is sized appropriately.
- As new storm sewer is installed across campus, water quality devices will need to be installed and discussed with the City of Wichita Stormwater Department.
- New storm sewer will also result in new permitting with the City of Wichita and KDHE.





Mechanical Infrastructure

FINDINGS

The main Wichita State University campus can roughly be divided into two areas.

- The portion of campus that is west of Mid Campus Drive
- The portion of Campus east of Mid Campus
 Drive

The west side of campus is supported by a centrally located heating and cooling plant located across Perimeter Road just south of the NIAR building. The central plant houses equipment that provides chilled water for cooling and steam for heating throughout the west side of campus.

Campus Chilled Water System

(Refer to mechanical figure 1)

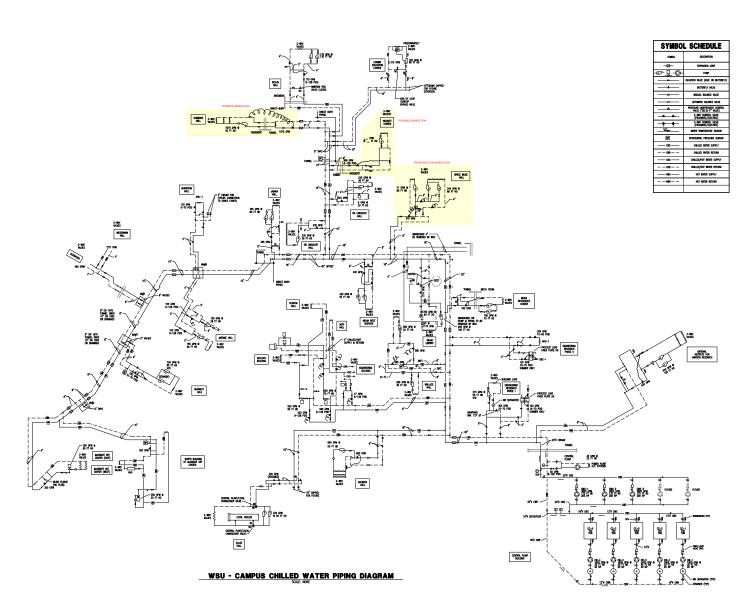
The chilled water plant consists of the following main pieces of equipment.

- Four 750-ton TRANE Centrifugal Chillers and one 1,000-ton TRANE Centrifugal Chiller. Based on previous utility studies, this available capacity is approximately 77% of the total connected load, meaning there is no chiller redundancy for the system.
- Five primary chiller pumps (CW-1 through CW-5, one for each chiller) pumping a hydraulically independent primary loop.

- Three hydraulically independent secondary pumps (CWD-1 through CWD-3) that pump the campus chilled water loop. Note: It is reported that all three pumps must operate on a design cooling day. This means there is no pumping redundancy for the secondary loop.
- Two custom built, 1974 vintage, ceramic tile cooling towers reject heat from the chilled water system to the outdoors. Total capacity of the custom towers is unknown, however experience shows that both towers must operate on a design cooling day. This means that there is no redundancy in the cooling tower system.

Chilled water is conveyed throughout the west side of campus in tunnels as well as with direct buried piping. Much of the piping was originally installed in the early 1970s and is approaching or beyond its useful service life and is in need of repair or replacement. University personnel indicate that some portion of the service valves are frozen and no longer function, making maintenance difficult.

Each building receiving campus chilled water has its own tertiary building loop and pump. The tertiary pump is typically located in the building's mechanical room and uses a variable volume pumping strategy. Bypass piping allows for the tertiary pump to be hydraulically separated from the secondary pumping loop. Typically, an automatic valve is installed in the supply piping from the secondary loop into the building that regulates flow from the secondary loop to the building.



Mechanical figure 1



Mechanical Infrastructure

FINDINGS

Campus Steam System

(Refer to mechanical figure 2)

- The steam heating plant is comprised of three 31,000 lb/hr boilers as well as support equipment for an overall capacity of 90,000+ lb/hr. The boilers are of 2006 vintage.
- Based on previous utility studies, the connected load is 134,127 lb/hr representing a diversity factor of 67%. Based on past data analysis as well as university personnel experience, a single boiler is able to carry the campus load for a significant majority of the annual hours. Based on this information and experience, the steam boiler plant does have redundancy.
- Steam is produced at 90+ PSI during the peak heating season and is routed throughout the west side of campus via piping in the tunnels as well as direct buried piping. The piping in the tunnels was originally installed in the early 1970's and is approaching or beyond its useful service life and is in need of repair/replacement. Portions of the steam and condensate return piping systems have jumped out of their piping guides due to thermal expansion and need to be reset. Expansion joints throughout the system are in need of replacement due to age.
- Steam is utilized for generating heating hot water via steam to water heat exchangers, space heating via steam coils in air handling units (AHU), domestic water heating via steam to hot water heat exchangers, humidification via steam injection into AHU airstreams, and for heating of the pools at the Heskett Center.

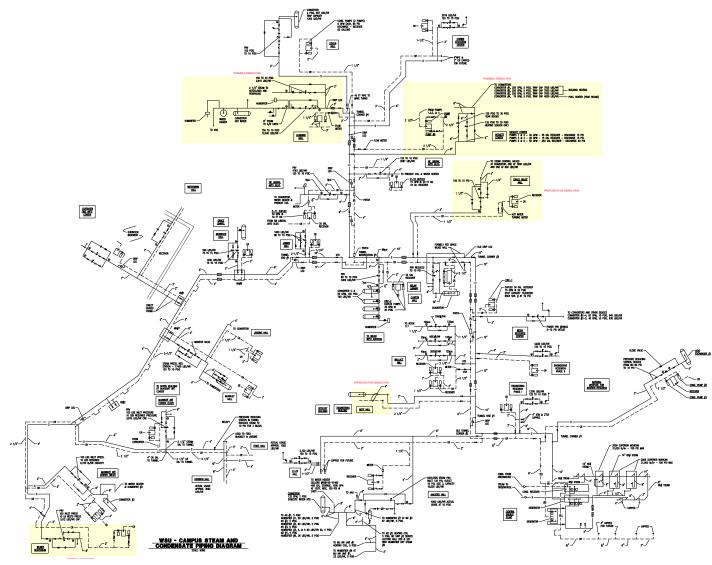
 Typically, the 90+ PSI steam is reduced to around 10 PSI at each building, where it is used as a heat source. Condensed steam is routed to atmospherically vented receiver tanks that then pump the condensate back to the central plant via piping in the tunnels as well as direct buried piping

Tunnel System

 Portions of the tunnel system have significant amounts of moisture present. This moisture causes significant corrosion of piping, piping supports, and metal roof decking. While some tunnels have had water proofing projects completed over the years, there remains significant lengths of tunnel that have not been addressed.

Innovation Campus

- Heating and cooling systems for Innovation
 Campus are not connected to the campus central plant. Each building is supported by HVAC systems specific to that building. Systems in use vary and include but are not limited to the following:
 - Four pipe boiler or chiller system boiler or chiller systems
 - Heat pumps with boilers and cooling towers
 - Furnace/split systems



Mechanical figure 2

Mechanical Infrastructure

RECOMMENDATIONS

Chilled water system

- Due to the age of the equipment, it is recommended that the university begin budgeting for replacement of the chilled water system. This includes the chillers, primary chiller pumps (CP-1 through 5), secondary chiller pumps (CWP-1 through CWP-3) piping, and cooling towers.
- Given the experience that 4,000 tons of cooling satisfies the summer load condition (though just barely), it is recommended that the five existing chillers be replaced with 1,000-ton chillers. This results in four chillers covering the campus load with a fifth chiller available as backup or to use in extreme weather.
- Replacement of the secondary CWD pumps should include an additional pump or pumps to provide redundancy.
- Chilled water piping is at or beyond its useful service life and is recommended to be replaced.
- The existing two cell cooling tower has capacity for the campus load but does not provide redundancy.
 Any replacement project should consider additional tower cells to provide redundancy.

Steam boiler system

- Due to the age of the boilers, it is recommended that the university begin budgeting for replacement of the three boilers as well as the support equipment such as the deaerator, boiler feed system, and stack economizers.
- Steam and condensate return piping is at or beyond its useful service life and is recommended to be replaced.

Tunnel system

- Replacement of the piping in the tunnel presents significant challenges to the operation of the chilled water and steam plants. Replacing sections of piping will require that all buildings downstream of the replacement be without chilled water or steam at some point. Minimizing disruptions must be considered for any replacement project.
- While piping is being replaced in the tunnel system, damaged or corroded pipe supports and pipe guides are recommended to be replaced.
- Water intrusion within the tunnels should be addressed at this time as well.



RAMIFICATIONS OF BUILDING REMOVAL

Consideration was given earlier in this report to the demolition of certain existing buildings on campus. If the building in question is connected to campus chilled water and steam, this would result in that building's capacity being available to the balance of west side of campus. Following is a list of buildings that could be demolished as well as their associated chilled water and steam consumption.

Neff Hall (approved demolition)

- Chilled Water = Not connected to campus chilled water.
- Steam = 1,136 lb/hr

Grace Wilkie Hall and Annex (proposed demolition)

- Chilled water = 252 GPM
- Steam = 1,608 lb/hr

Hubbard Hall (possible demolition)

- Chilled water = 860 GPM
- Steam = 8,067 lb/hr

Heskett Center (possible d`emolition)

- Chilled water = 733 GPM
- Steam = 6,968 lb/hr

Wilner Auditorium (possible demolition)

- Chilled water = Not connected to campus chilled water.
- Steam = 1.080 lb/hr

Total potential chilled water savings

=1,845 GPM or approximately 540 tons. Total potential steam savings = 18,860 lb/h







Electrical Infrastructure

FINDINGS

Power

 With the development of the Innovation Campus, Evergy has updated service to the east part of campus to allow for capacity for the Innovation Campus and redundancy to the remainder of campus. The idea being that utility side service outages are minimized and extended downtimes due to any work in the area or of equipment failures are minimized as well.

Telecommunications

Again, with the construction of the Innovation
 Campus, the telecommunications infrastructure
 has also been updated to allow connectivity
 between the main campus and the Innovation
 Campus. Bandwidth is available for any facility
 additions and redundancy has also been taken
 into account via two separate telecommunications
 trunks consisting of fiber optic cabling that have
 been routed at north and south ends of campus.

RECOMMENDATIONS

Power

 As part of this master plan, it would be beneficial to WSU and Evergy to understand possible areas of growth and power density needs. This will allow Evergy to continue to monitor current and potential loading on service lines.

Telecommunications

 No current recommendations. The current infrastructure is flexible and has capacity for facility changes and updates.





Security Infrastructure

FINDINGS

 Camera systems are not currently prevalent on the campus. Camera systems that are in use are localized to certain buildings and to certain end users or tenants.

RECOMMENDATIONS

- With the anticipation of growth of pedestrian as well as vehicular traffic and with possible additions of buildings, a campus plan for use of security cameras is recommended.
- System should have the ability for analytics (i.e. facial recognition, license plate reading, etc) to assist Wichita State University Police Department.



METROPLEX COMPLEX

Introduction

Metroplex Complex

Existing facilities

The Eugene M. Hughes Metropolitan Complex is situated on a 27-acre site approximately 1 mile north of Wichita State University's main campus. This 75,000 square-foot facility houses university offices, alongside versatile conference and meeting rooms available for public use and rental. The complex's strategic location near major highways (K-96, I-135, and I-235) enhances its accessibility, complemented by ample surface parking, making it a preferred venue for a broad spectrum of events and functions.

The metroplex's diverse spaces include the 1,750-seat Roger D. Lowe Auditorium, equipped with professional sound and lighting, as well as smaller boardrooms for more intimate gatherings. These facilities serve a wide range of purposes from conferences to board meetings. Additionally, the metroplex hosts academic and community outreach programs, featuring a black box theater and other facilities.

A dedicated 2-acre section of the site houses the Advanced Education in General Dentistry (AEGD) building, a cornerstone of the College of Health Professions' dental residency program. Opened in 2011, this state-of-the-art facility supports comprehensive training in general dentistry.

The remainder of the metroplex site is devoted to recreation, including two soccer fields and a practice field, spanning 7.5 acres, which accommodate intramural and club sports activities.

Proposed development

The master plan proposes a strategic consolidation of community service functions — including meeting spaces, continuing education classrooms, and recreational fields — to the main campus. This initiative aims to invigorate the main campus throughout the day and evening, enhancing community engagement and awareness of the university's offerings.

Anticipated community-oriented facilities include a new 1,000-seat assembly space within the Braeburn Square expansion, a central community facility on the main campus, and a replacement for the black box theater as part of a new practice facility in the historic district. These developments reflect a commitment to enriching the university's cultural and educational landscape.

In the long term, the master plan suggests the phased disposition of the metroplex complex. Originally constructed as a church in the mid-1990s and acquired by WSU in the early 2000s, the building's design falls short of university standards. Despite ongoing maintenance, its nearly 30-year lifespan signals an approaching end to its utility. In the interim, the metroplex will provide valuable transitional space as new facilities are developed on the main campus.

Conversely, the masterplan advocates for continued investment in the AEGD building, including a 15,000-square foot expansion to support the dentistry program's growth and patient services. This facility, serving the community's dental needs, will remain a crucial asset, benefiting from its accessibility and distinct function separate from the main campus' daily activities. The recreational fields, compatible with club sports schedules, represent a sustainable long-term use of the metroplex site, aligning with the university's vision for community engagement and wellness.



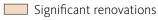
Existing conditions



New conditions

LEGEND

Existing buildings





607 APPENDIX