ILLINOIS

THE IMPACT OF PLACE:

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN CAMPUS MASTER PLAN

UPDATED: AUGUST 2018

University of Illinois at Urbana-Champaign Campus Master Plan Update
Updated: August 2018

Prepared by SmithGroup

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- University of Illinois at Urbana-Champaign Facilities & Services
- University of Illinois Core Planning Team, Campus Master Plan
- Planning input also provided by additional stakeholders and professional services consultants credited in a later section

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FOREWORD

The University of Illinois at Urbana-Champaign has a strong campus planning heritage of providing forward-looking vision for its physical development. Since its founding in 1867, the university has understood the value of master planning to help organize and shape the campus environment. With the authorization of a new auditorium in 1905, the first formal master plan was developed to address future campus growth needs. This plan was advanced with the intention of creating a campus core by locating proposed buildings around a large, green quadrangle. Today, the Foellinger Auditorium (seen on the cover of this report) anchors that space, and the Main Quad not only functions as the heart of academic instruction but also serves as an institutional icon whose form is the foundation for all campus planning efforts that followed it.

In 2017, the University of Illinois at Urbana-Champaign celebrates its 150th anniversary. The 2017 Campus Master Plan update pays respect to the early design principles established in the 1905 Campus Master Plan, which outlined the vision for beloved features such as the Main Quad, Illini Union and Foellinger Auditorium yet provides a visionary plan for strategic growth while remaining mindful of environmental impact. This is the first campus master plan in the university's history to address the goals outlined in the Illinois Climate Action Plan (iCAP).

The campus master plan establishes the visionary development guidelines that allow administrators to make informed, coordinated and cost-effective decisions regarding the campus' physical environment. The plan is an opportunity-based tool that is designed to be flexible and adapt to changing enrollment assumptions, fiscal challenges, new opportunities and larger trends in higher education. It is not a mandate to build; rather it is a campus framework for continuous renewal and change. A key goal of the 2017 Campus Master Plan was to support an inclusive and transparent master planning process. This was successfully achieved through a process engaging campus constituents (students, faculty, staff and alumni) and community stakeholders throughout the entirety of the master planning effort through participation in open public forums, focus group sessions, community meetings and the development of a Campus Master Plan website.

Timothy L. Killeen
President
University of Illinois

Robert L. Jones
Chancellor
University of Illinois at Urbana-Champaign

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Illinois

"We need to reinvent or redefine what a public land grant university – an invention of the 19th century – is and should do for the citizens of a 21st century world."

Chancellor Robert J. Jones

INTRODUCTION

The University of Illinois at Urbana-Champaign is the flagship campus for the University of Illinois System. The university is one of the original 37 land-grant institutions created after President Lincoln signed the Morrill Act in 1862. Founded in 1867, the Urbana campus is the oldest and largest of the three institutions in the Illinois system.

Today, the Urbana campus is increasingly a global destination. It is second in the nation's top public institutions in welcoming international students from over 110 countries.

The University of Illinois at Urbana-Champaign is a powerhouse in research, ranking 6th amongst its top ten peers nationally in research expenditures. For the last six years, the university has been awarded more funding from the National Science Foundation than any other university in the nation.

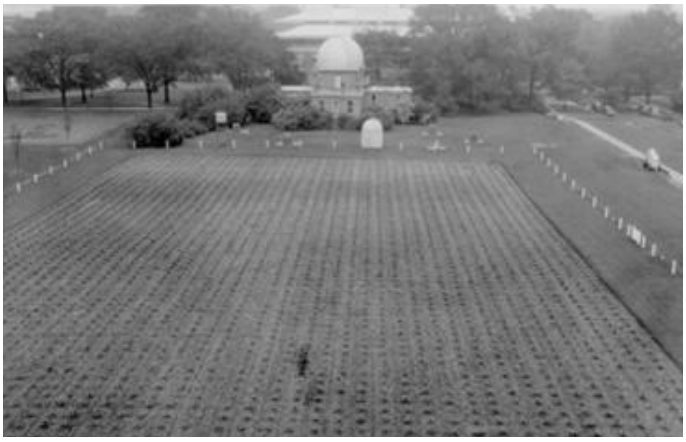
The Urbana campus is home to world-renowned research institutes, with a history of ground-breaking discoveries in the arts and humanities, mathematics, science, engineering, agriculture, business, and the social sciences. The university is a leader in bandwidth and computing power with the National Center for Supercomputing Applications (NCSA) and its Blue Waters supercomputer, the most powerful supercomputer on a university campus in the world.

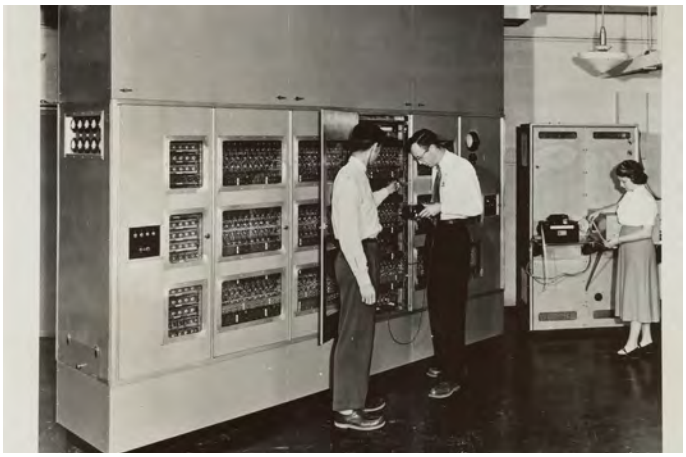
CELEBRATING 150 YEARS

In 2017, The University of Illinois at Urbana-Champaign celebrates its 150th anniversary as an institution and as a place. At this important milestone, it is critical to recognize not only the unique achievements of the university's founders, faculty, students and alumni, but to also recognize the unique contribution that the campus as a place has made to the university's stature as a global leader in learning, discovery, and innovation. From its 19th century roots, pioneering work in agriculture, engineering, physics, mathematics, and the arts sprang from the fertile ground of innovation on the Urbana campus.

LOOKING FORWARD

The first seventeen years of the 21st century has seen dramatic change in the landscape of higher education. The pace of change will not abate. The great research universities for the 21st century must anticipate and lead change. The University of Illinois at Urbana-Champaign is and will continue to be one of the great public research universities that will address today and tomorrow's challenges for the community, the state, the nation and the world.





THE IMPACT OF PLACE

A CAMPUS OF FIRSTS

At its inception, the University of Illinois at Urbana-Champaign has been a leader in its land grant mission. In 1869, the Urbana campus established the first laboratory study for botanists in America. The world's first experimental corn fields were established as part of the Morrow Plots in 1876.

In the 1870's, the first shop for engineering education in the country was built on campus, creating the foundation for the College of Engineering, consistently ranked as one of the top 5 engineering programs in the world. Photovoltaic cells, semiconductors, LEDs, and the world's first automatic, electronic digital computer (ILLIAC I) built and owned by an educational institution are part of the stellar outcomes of this legacy.

In the sciences, the world's first magnetic induction accelerator, the Betatron, led to both the study of atomic particles and to treatments in cancer. In arts, the Urbana campus established the first artist-in-residence program in the country, inviting the choreographer Merce Cunningham to live and teach on campus.

After World War II, the Urbana campus led the world in establishing the first post-secondary support and rehabilitation program for disabled students, to accommodate returning WWII veterans. This has led to over 60 years of breakthroughs and firsts in access to services, facilities and curricula, making the Urbana campus a leader in accessibility and disability resources. The Urbana campus also has a long and proud history of supporting and training both Olympic and Paralympic athletes.

PURPOSE OF THE MASTER PLAN

The primary purpose of this Campus Master Plan is two-fold: first, to protect and celebrate the legacy of the University of Illinois at Urbana-Champaign, in its history, its stature, and its sense of place; second, to look forward and provide a framework to guide campus growth, set collective priorities, and manage future investment.

Philosophically, the Campus Master Plan is an opportunity-based tool and a vision of the future, not a rigid list of mandated implementation projects. The Campus Master Plan needs to remain flexible in the midst of changing enrollment assumptions, fiscal challenges, new opportunities, and larger trends affecting higher education.

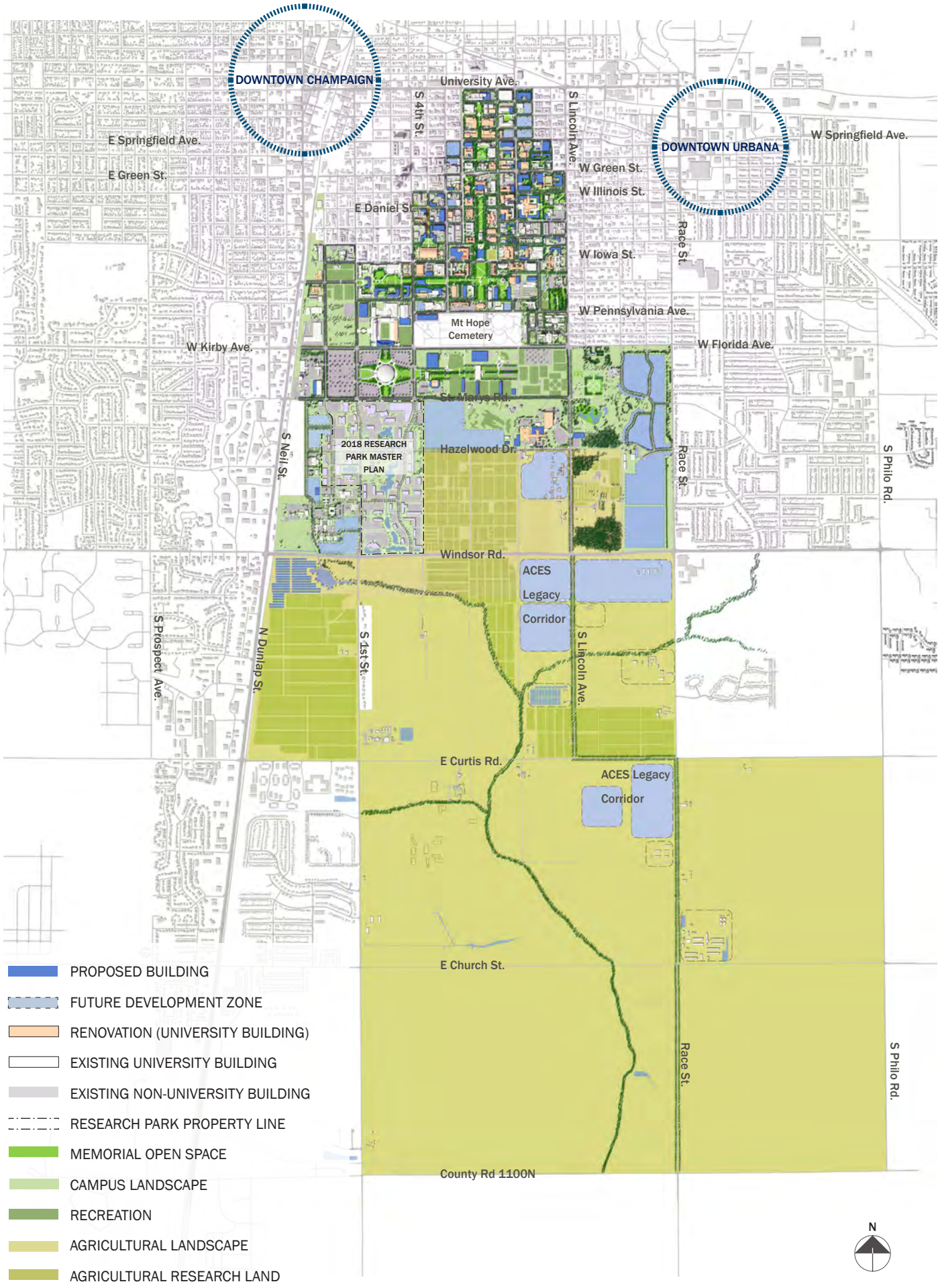
SHARED VISION

Over 23 months, the university community – its administration, faculty, staff, students, alumni, and civic neighbors – has shaped a vision for the Urbana campus to meet current and future challenges and opportunities in learning, research, and innovation. The Campus Master Plan is that vision. It looks beyond what the campus has been, to what it can become. It provides a road map that will guide investment decisions in the physical infrastructure of campus – its facilities, landscape, utilities, and support systems – for decades to come. The Campus Master Plan is a deliberately strategic framework, allowing flexibility for the university to adapt to unforeseen challenges and new disruptors, ensuring its place in the coming decades as a great public research university of local relevance and global impact.

GOALS

Defined in concert with university stakeholders, the Campus Master Plan Goals have helped guide the overall direction of the Campus Master Plan. They are the guiding principles that will help shape the development and improvement of the campus environment and facilities.

EXCELLENCE	Promote excellence in academics, research, student life, and the campus environment through physical planning initiatives and strategic reinvestment efforts.
ACCESS	Maintain accessibility and safety across campus – particularly for pedestrians.
PRIDE	Continue to foster and enhance the overall beautification of campus physical environs.
COLLABORATION	Strengthen connections and partnerships across campus and between campus and community.
EXPERIENCE	Recognize and celebrate the cultural diversity and international quality of the campus.
SUSTAINABILITY	Achieve sustainability goals through better space utilization, increased interdisciplinary collaboration, improved maintenance of facilities, and responsible funding.

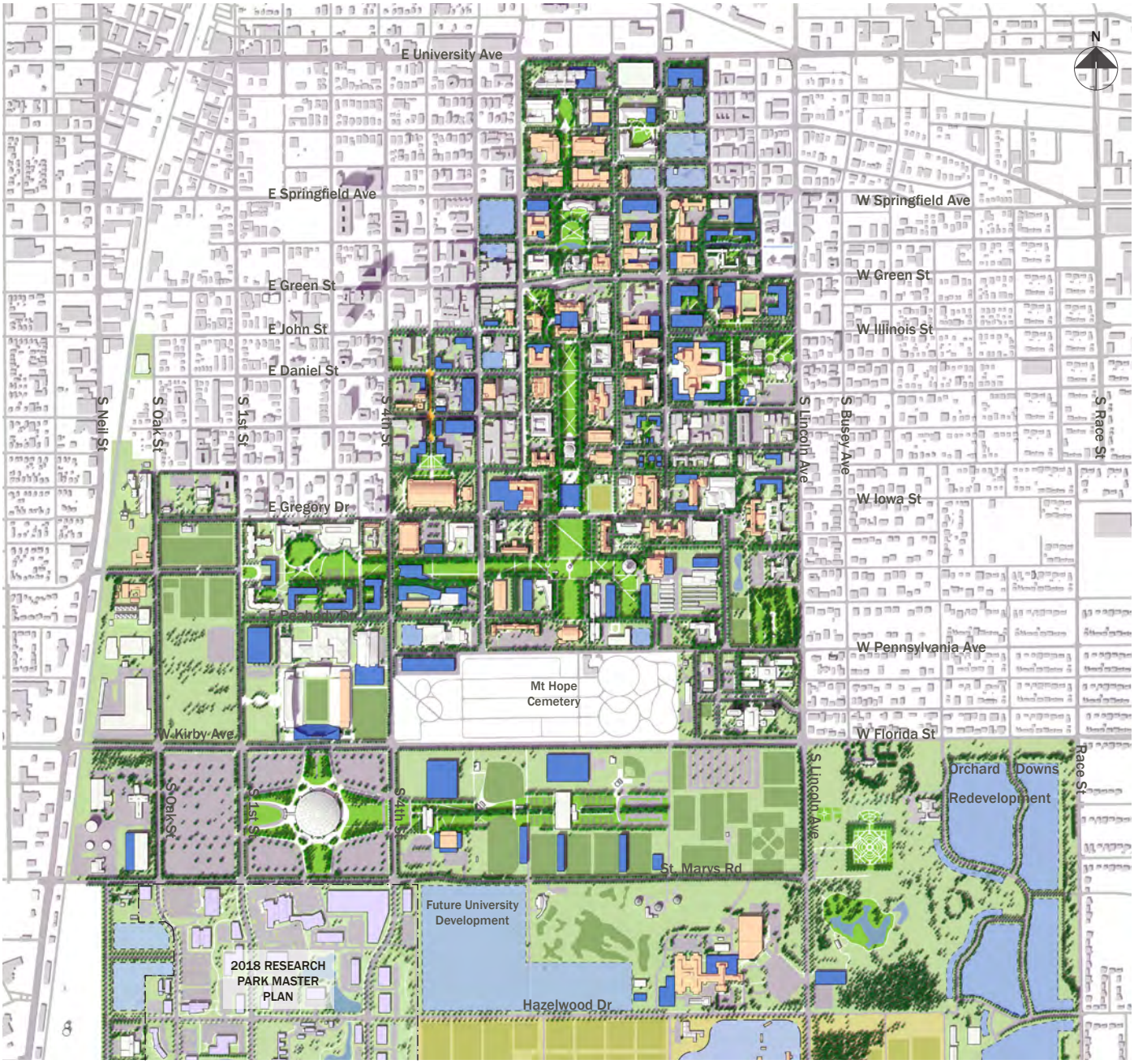

DOWNTOWN CHAMPAIGN
DOWNTOWN URBANA
University Ave.
S 4th St.
S Lincoln Ave.
E Springfield Ave.
W Springfield Ave.
E Green St.
W Green St.
W Illinois St.
E Daniel St.
Race St.
W Iowa St.
W Pennsylvania Ave.
Mt Hope Cemetery
W Kirby Ave.
W Florida Ave.
St Marys Rd.
S Neil St.
2018 RESEARCH PARK MASTER PLAN
Hazelwood Dr.
S Philo Rd.
Windsor Rd.
ACES Legacy Corridor
S Prospect Ave.
N Dunlap St.
S 1st St.
E Curtis Rd.
ACES Legacy Corridor
E Church St.
County Rd 1100N
PROPOSED BUILDING
FUTURE DEVELOPMENT ZONE
RENOVATION (UNIVERSITY BUILDING)
EXISTING UNIVERSITY BUILDING
EXISTING NON-UNIVERSITY BUILDING
RESEARCH PARK PROPERTY LINE
MEMORIAL OPEN SPACE
CAMPUS LANDSCAPE
RECREATION
AGRICULTURAL LANDSCAPE
AGRICULTURAL RESEARCH LAND
N

THE 2017 CAMPUS MASTER PLAN

A FRAMEWORK FOR GROWTH AND RENEWAL

The Campus Master Plan provides recommendations for the entire campus of the University of Illinois at Urbana-Champaign. It anticipates a steady growth in enrollment for students online and on campus over the next ten years, focusing on strategies for physical renewal of campus. Additionally, the Campus Master Plan looks beyond the initial planning horizon to illustrate zones for future replacement space, new development, and reinvestment. The Campus Master Plan is not a mandate to build: it is an opportunities plan and framework for continued renewal and change.

As a framework, the Campus Master Plan establishes development patterns and foundational elements to maintain the university's unique spatial and organizational characteristics, while at the same time identifying potential sites for future building placement and campus place-making. Future program needs and funding sources will ultimately determine the pace and scale of development over time.



KEY THEMES

Enrollment and research growth; the quality and quantity of existing facilities; the distribution and utilization of space across campus; collaboration among disciplines, divisions, and departments; the quality and character of student life; transportation and connectivity; sustainability and infrastructure; and, the continued beautification of campus have been key areas of focus during analysis and formed the key themes of the Campus Master Plan. They are:

iCAP Goal - Net Zero Growth
balances campus growth and renewal in support of Illinois Climate Action Plan (iCAP) goals and fiscal responsibility.

Reinforce the Campus Core
addresses the quality of the academic environment and priorities for reinvestment.

Discovery and Collaboration
concerns the caliber, quality and connectivity of research programs, facilities, and land.

Access and Connectivity
recognizes the university's excellence in providing an accessible campus, and looks for ways to improve connectivity and safety across campus.

Student-Centered Campus
addresses improvements for the university's Student Affairs and auxiliary functions - housing, dining, union, Dean of Student Services, cultural centers, health, recreation, and athletics.

Neighborhood Identity
considers the physical quality and organization of campus, with ways to help beautify and unify campus neighborhoods, gateways, and landscape.

iCAP GOAL - NET ZERO GROWTH

The 2015 Illinois Climate Action Plan (iCAP) is the University of Illinois at Urbana-Champaign's road map for sustainability and achieving carbon neutrality. This is the first Campus Master Plan to incorporate iCAP goals into the planning process. Balancing campus growth and renewal with a policy of no net new square footage has required a different approach to planning. The Campus Master Plan recommends four strategies to help balance this equation:

REDUCE

Reduce the supply of existing space by removing obsolete structures and reserving their square footage as part of a space 'bank' used to offset future construction.

Reduce the demand for additional space through sharing resources and greater utilization of existing classroom, class laboratories, research laboratories, and office space.

RE-USE

Re-use existing facilities through renovation, right-sizing, and enhanced technology to improve the quality of existing space, increase utilization, and create more flexibility to adapt to new pedagogies and technologies.

RECYCLE

Some facilities may need to be re-purposed to a less energy or space-intensive use to create a better functional fit.

RENEW

No net new square footage of space does not mean no new square footage. The university will continue to need new construction, to replace space lost to removal, and to provide new, state-of-the-art facilities for learning and

discovery. Some space categories such as housing, dining, student services, and athletics are population-dependent, and may need to grow as enrollment grows. Balancing growth with no net new square footage will require the implementation of all four strategies.

Modeling a ten-year scenario, the Campus Master Plan comes within 1.5% of the Net Zero Growth target for removal, replacement, and new construction over the next ten years.

REINFORCE THE CAMPUS CORE

REINVESTMENT IN THE ACADEMIC MISSION

A foundational principle of the Campus Master Plan is to meet future needs with greater efficiency and flexibility, emphasizing the adaption of existing facilities to provide the right size, type, and quality of space for learning, working and research, in support of the university's fiscal and sustainability goals.

The majority of existing classrooms are in central campus, close to the Main Quad. The Campus Master Plan illustrates priority facilities for renovation and reinvestment that will enhance the quality of the undergraduate experience, improve classroom utilization, and supply new technology to support active learning. Two proposed Interdisciplinary Classroom Facilities are identified (one north, and one south) to provide replacement space and swing space during renovation, and to address projected shortfalls in class laboratory space. Additional infill sites for academic, research and support uses are identified in the long-term plan for when future programs and funding are identified.

As the academic hub of campus, University Library and the Undergraduate Library are unique resources. The Campus Master Plan reflects the long-term vision to create a library

relevant to the changing academic roles of the 21st century, with reconfiguration of the stacks, state of the art storage and retrieval system, and a new one-story pavilion enclosing the Undergraduate courtyard for a new Special Collections division.

QUADS AND OPEN SPACE

The identity of University of Illinois at Urbana-Champaign is embodied in its Main Quad. As part of unifying and beautifying campus, the Campus Master Plan proposes the creation of a new western quad along the historic Military Axis from the Bell Tower to the proposed Design Center, replicating the spatial qualities, human scale, and richness of landscape found in the Main Quad. Future infill sites front this new open space, creating a vibrant focal point and gathering space for South campus. At its eastern terminus, a smaller quad is proposed south of ACES Library to create an outdoor gathering space for future infill in this part of campus.

REINFORCE THE CAMPUS CORE

1. PRIORITY ACADEMIC/RESEARCH RENOVATIONS/ADDITIONS, TYP.
2. PROPOSED INTERDISCIPLINARY CLASSROOM BUILDING
3. MILITARY AXIS
4. LIBRARY RENOVATION AND INFILL
5. ACES QUAD

DISCOVERY AND COLLABORATION

6. RESEARCH LABORATORY RENOVATION AND ADDITIONS
7. LONG TERM - MEDICAL ENTERPRISE CENTER
8. LONG TERM - DISCOVERY + COLLABORATION PARTNERSHIPS
9. INTERDISCIPLINARY RESEARCH LABORATORY
10. EXPANDED SCIENCES CORRIDOR

ACCESS AND CONNECTIVITY

11. FUTURE GARAGE LOCATIONS
12. MATTHEWS + PEABODY SHUTTLES

STUDENT-CENTERED CAMPUS

13. ILLINI UNION RENOVATION AND EXPANSION
14. RECREATION RENOVATION/REPLACEMENT
15. FUTURE RESIDENCE HALLS + DINING EXPANSION
16. GOODWIN-GREEN HOUSING REPLACEMENT
17. CULTURAL CENTERS
18. STUDENT SERVICES REDEVELOPMENT

NEIGHBORHOOD IDENTITY

19. ILLINOIS EXPERIENCE
20. ACES LEGACY CORRIDOR
21. FIGHTING ILLINI - ATHLETICS CAMPUS
22. ARMORY AND WEST SIDE NEIGHBORHOOD


BECKMAN INSTITUTE
W University Ave
W Clark St
W Main St
W Stoughton St
W Springfield Ave
W Green St
W Illinois St
W California Ave
W Oregon St
W Nevada St
W Iowa St
W Ohio St
W Indiana Ave
W Pennsylvania Ave
S 6th St
S Wright St
Mathews Ave
Goodwin Ave
S Lincoln Ave
S Coler Ave
S Busey Ave
S Dorm Dr
ENGINEERING LIBRARY
ILLINI UNION
ILLINI UNION BOOKSTORE
NOYES LABORATORY
LINCOLN HALL
UNIVERSITY LIBRARY
MORROW PLOTS
CARL R. WOESE INSTITUTE
CRCE
ACES LIBRARY
STOCK PAVILION
NATIONAL SOYBEAN RESEARCH LABORATORY
MT HOPE CEMETERY

Beckman Institute for Advanced Science and Technology

(NCSA) National Center for Supercomputing Applications

(IHSI) Illinois Health Sciences Institute

(IPRH) Illinois Program for Research in the Humanities

(IGB) Carl R. Woese Institute for Genomic Biology

(ISEE) Institute for Sustainability, Energy and Environment

(PRI) Prairie Research Institute

(OVCR) Office of the Vice Chancellor for Research

"The scientific opportunities enabled by convergence – the coming together of insights and approaches from originally distinct fields – will make fundamental contributions in our drive to provide creative solutions to the most difficult problems facing us as a society."

National Research Council, 2014

DISCOVERY AND COLLABORATION

GROUND-BREAKING RESEARCH

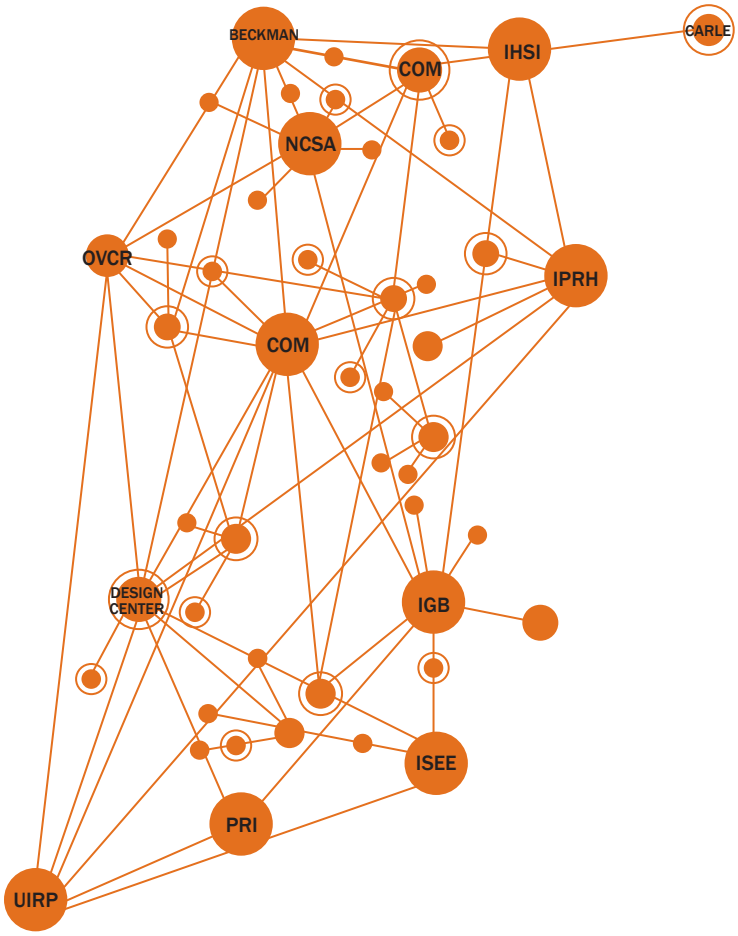
The Urbana campus has a deep history and legacy in research and innovation. Year in and year out, the University of Illinois at Urbana-Champaign is among the top universities in NSF-funded research and development expenditures. World-class facilities and resources in computing, engineering, agriculture, natural and cultural resources, social sciences, disability and veterans' issues, learning resources, and interdisciplinary research institutes are embedded throughout the campus and provide a rich canvas to support the work of prominent faculty and researchers.

A CULTURE OF COLLABORATION

The university's interdisciplinary research institutes and centers are some of the strongest contributors to the research portfolio on campus, responsible for over one-third of total university sponsored research expenditures. The university's' research institutes and centers regularly collaborate across departments, across colleges, and across campus. As the newest college on campus, the Carle Illinois College of Medicine is the first engineering-based college of medicine in the country, and will spark new opportunities for cross boundary collaboration, both on- and off-campus, with its proximity to the Carle Foundation Hospital.

STRENGTHENING THE RESEARCH ECOSYSTEM AT ILLINOIS

Strengthening the research enterprise at the university is one of the primary goals of the Campus Master Plan. Renovation of key facilities, future replacement of outdated buildings, and the expansion and construction of new, state of the art research facilities and infrastructure are proposed to support the research endeavor. The Campus Master Plan also provides opportunities to strengthen existing networks and create new centers and partnerships for Discovery and Collaboration. This includes the university's strategic partnerships with private industry in the nationally acclaimed Illinois Research Park in the southwest quadrant of campus.

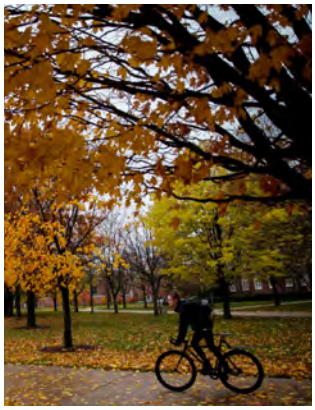


The diagram above conceptualizes the goal of cross-collaboration and convergence among the many research institutes and centers on campus, and anticipates the growth and new relationships that may form with emerging centers of research and discovery. The diagram underscores the importance of strengthening this network, not just virtually but through strengthening physical connections as well. Advances in smart technology combined with the university's outstanding capacity in bandwidth will support further innovation to overcome physical distance on campus. Proposed expansion of the NCSA Blue Waters supercomputer near the Research Park will maintain the university's stature and power in computing capacity, for the university, the state, the nation, and world communities.

AN EXPANDED SCIENCES CORRIDOR

A key opportunity for Discovery and Collaboration is the expansion of the "Sciences Corridor" along South Mathews and Goodwin Avenues. The current science facilities of the College of Liberal Arts and Sciences are land-locked on campus south of West Green Street. The Campus Master Plan proposes the future replacement and relocation of the existing Goodwin-Green apartment complex, freeing up this important corner for future sciences expansion in close proximity to Engineering and Physics departments north of West Green Street. The Campus Master Plan also provides for research and academic additions to Burrill Hall, Roger Adams Laboratory, the Mechanical Engineering Building, and Loomis Laboratory, among others. This will decant existing laboratories into new space, allowing for a more efficient cycle of renovation to existing facilities.

In the long-term, the Campus Master Plan shows future interdisciplinary academic and research expansion from West Green Street to West University Avenue, along South Goodwin Avenue. This zone is a prime candidate for future Carle Illinois College of Medicine ventures, including a potential Medical Enterprise Center, modeled on the interdisciplinary nature of the Seibel Design Center currently under construction on the South campus.



ACCESS AND CONNECTIVITY

A MULTI-MODAL TRANSPORTATION NETWORK

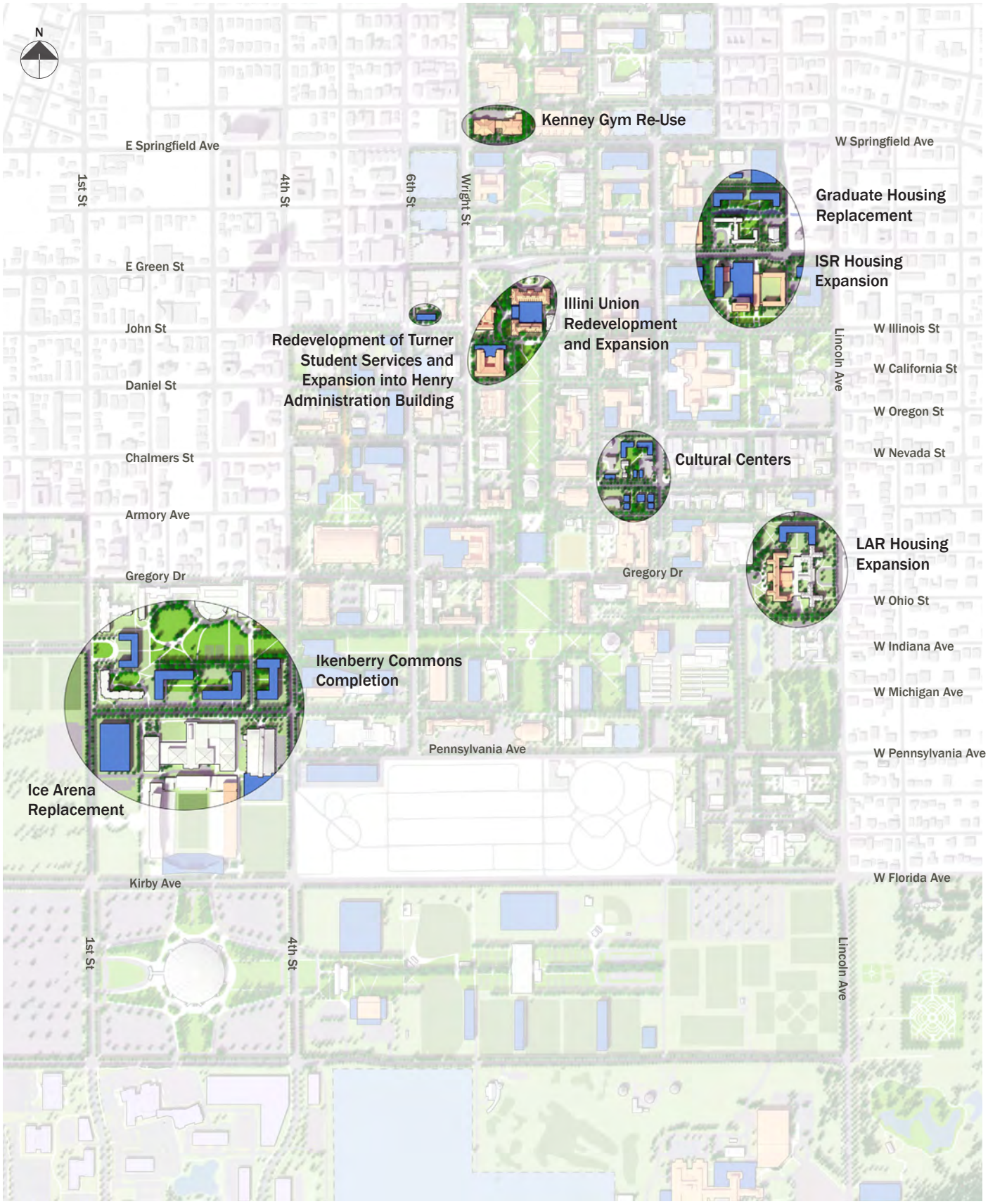
As an institution committed to the safety of its students, employees, and visitors, as well as to meeting its goals for sustainability, the Urbana campus continually strives for excellence in promoting and improving active transportation options. The streets, sidewalks, bikeways, bus stops and parking areas represent a multi-modal transportation network and multi-jurisdictional system with thoughtful and continuous communication between the various entities. Following the 2007 Campus Master Plan, the Urbana Campus adopted a complete streets policy to better accommodate pedestrian, bicycle, transit, and vehicle movements in a more user-friendly way.

The Campus Master Plan seeks to supplement the current multi-modal system with an innovative approach to closing the physical north-south and east-west gaps on campus. With its elongated grid, walking on the Urbana campus can take more than 20 minutes to traverse the academic core. Over time, this has led to a sense of fragmentation and physical separation for students and faculty. Innovative transportation concepts are proposed to help close the distance and better link the campus.

A TWENTY-FIRST CENTURY SOLUTION

In 2017, universities across the country are beginning to experiment with autonomous, self-driving shuttles to solve gaps within the transportation network. The University of Illinois at Urbana-Champaign, with its history of innovation, is a prime candidate to test a pilot program for autonomous shuttles. Two intersecting routes, as simple, linear, “out and back” models are proposed for Peabody Drive on South campus, and for South Mathews Avenue, on the east side of campus. A third route to link the University of Illinois Research Park to the core of campus has also been discussed as a potential opportunity.

The autonomous shuttle program can greatly enhance physical access between academic and student life facilities, as well as increase collaboration among research institutes in both corridors. The routes would also connect parking garages and residential neighborhoods at the periphery of the campus to destinations in the core. As electric vehicles, the shuttles also help support the university’s sustainability goals. Implementation of these concepts will require coordination with the municipalities of both Urbana and Champaign.


N
Kenney Gym Re-Use
E Springfield Ave
W Springfield Ave
1st St
4th St
6th St
Wright St
Graduate Housing Replacement
ISR Housing Expansion
E Green St
John St
Illini Union Redevelopment and Expansion
Redevelopment of Turner Student Services and Expansion into Henry Administration Building
W Illinois St
Lincoln Ave
W California St
Daniel St
W Oregon St
Chalmers St
Cultural Centers
W Nevada St
Armory Ave
LAR Housing Expansion
Gregory Dr
Gregory Dr
W Ohio St
W Indiana Ave
Ikenberry Commons Completion
W Michigan Ave
Pennsylvania Ave
W Pennsylvania Ave
Ice Arena Replacement
Kirby Ave
W Florida Ave
1st St
4th St
Lincoln Ave

STUDENT-CENTERED CAMPUS

The intent of the Campus Master Plan is to provide a physical environment to support students' transformative learning; personal growth and development; global and cultural awareness; engagement and leadership; and, lifelong success. The University of Illinois at Urbana-Champaign has over 4.2 million assignable square feet of student life facilities including residence and dining halls, indoor and outdoor recreation facilities, the Illini Union, and multiple facilities for student services, career services, student health and counseling, cultural centers, and student organizations, all managed by the Division of Student Affairs.

ILLINI UNION

The Illini Union is the symbolic heart of the Urbana campus. Located at the northern boundary of Main Quad, it has the most prominent position of any building on campus. Originally constructed in 1941 to serve a student body of 12,000 students, the size of the Illini Union is no longer sufficient to serve the current demand of over 45,000 students and 1,400 student organizations on campus. Compared to peer institutions, it has the second lowest square foot per student ratio.

The Campus Master Plan reflects the vision established for the renewal and expansion of the Illini Union as the social hub that welcomes all students and alumni. It will be a place to form friendships and connections across cultures, disciplines, and interests. Renovation and infill to the union will add a highly visible and welcoming Student Involvement Center; a new ballroom and pre-function space; multiple dining options; and, technology-enhanced meeting, study, and lounge spaces. These improvements will help re-position the Illini Union as a premier campus union and a key ingredient of the student's Illinois experience.

RECREATION

The university is well-served for student recreation space on the Urbana campus, with over 470,000 square feet in two indoor recreational facilities, the Activities and Recreation Center (ARC) and Campus Recreation Center East (CRCE), containing indoor tracks, basketball and racquetball courts, climbing wall, indoor and outdoor pools, and more. Outdoor recreation fields are concentrated at the Florida and Lincoln Playing Fields on the east side of campus off of South Lincoln Avenue.

The campus has sufficient overall space, but needs to address gaps in distribution. The Campus Master Plan proposes the re-use of Kenney Gym as a recreational satellite facility to serve the students, faculty, and staff on North campus, once the Division of Athletics has relocated its programs to the proposed Performance Arena in South campus. Kenney Gym can also continue to serve as recreation and athletics space for University of Illinois Laboratory High School (Uni High) programs.

The existing Ice Arena has significant facility issues and will need replacement. A future recreational ice arena replacement is proposed just west of the Activities and Recreation Center (ARC), near the majority of campus housing at Ikenberry Commons.

STUDENT SERVICES

To better serve the needs of today and tomorrow's students, the Campus Master Plan proposes expanding and upgrading spaces for Student Services at critical locations on campus. A new north wing addition onto the Henry Administration Building on the Main Quad will allow relocation of some Dean of Students offices and "front of house" functions to be more visible and accessible. The replacement of Turner Student Services Building will in turn allow for consolidation of offices both on- and off-campus thereby improving convenience and providing more space to support growth in student services programs.

HOUSING AND DINING

The University of Illinois at Urbana-Champaign is committed to creating communities that transform student lives. The quality of student housing and its residential life is one of the key factors in students' selection of a university.

The Urbana campus maintains over 9,279 beds for undergraduate and graduate students and 1,121 apartment units as graduate student and family housing. University Housing underwent a Housing Master Plan in 2015 that laid out a vision for the renovation, replacement and renewal of campus housing and dining, to upgrade facilities, add more variety to housing and dining options, and provide more accessible, technology-enabled living learning communities.

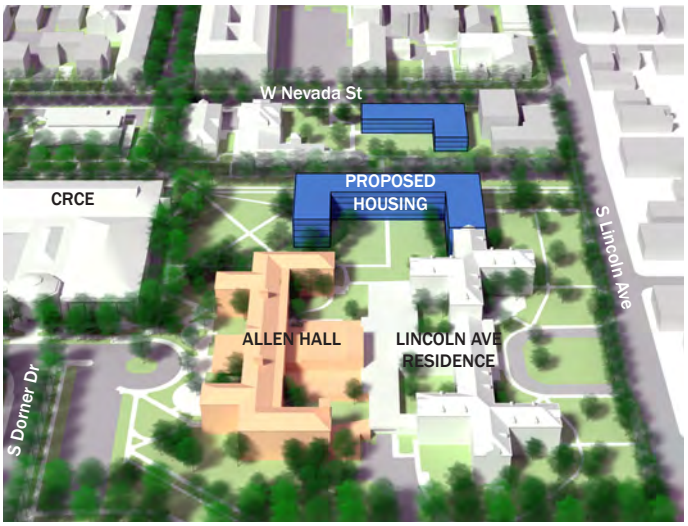
The Campus Master Plan incorporates the major recommendations of that study, and proposes an additional 650 beds of undergraduate housing to accommodate future enrollment growth. This will allow the university to maintain the same capture rate of first time freshmen living on campus over the next decade or more. Dining halls will be renovated and possibly expanded in place to accommodate an increase in beds and growth in the overall student population. The Campus Master Plan also proposes a phased redevelopment of the Orchard Downs and Ashton Woods graduate and family housing complexes on the Orchard Downs site, to retain this important component of student housing and continue to attract graduate students and students with dependents.

COMPLETION OF IKENBERRY COMMONS

The Campus Master Plan proposes the continued implementation of the master plan for housing replacement at Ikenberry Commons, the largest undergraduate neighborhood on campus. The Campus Master Plan proposes four new replacement residence halls organized around a large, central Commons that will maintain the same anticipated capacity as the original plan. Configuration of the future building footprints will help define smaller scale, semi-public courtyards to serve as gathering spaces for the residents of each new residence hall. The Commons open space will provide a seamless visual connection to the new Design Center and quad to the east, with pedestrian walks, active and passive recreation, and gathering spaces in the Commons to build a sense of community and neighborhood.

BUILDING ON EXISTING HOUSING STRENGTHS

To strengthen existing student residential neighborhoods, a new undergraduate residence hall is proposed as an addition to Lincoln Avenue Residence Hall (LAR) on the southeast edge of campus. An ideal location to create more student housing density, this new hall can utilize the dining at LAR and Allen Hall. It is immediately adjacent to the Campus Recreation Center East, close to Nevada Street with the Cultural Centers, and an easy walking distance to Main Quad and the Undergraduate Library.



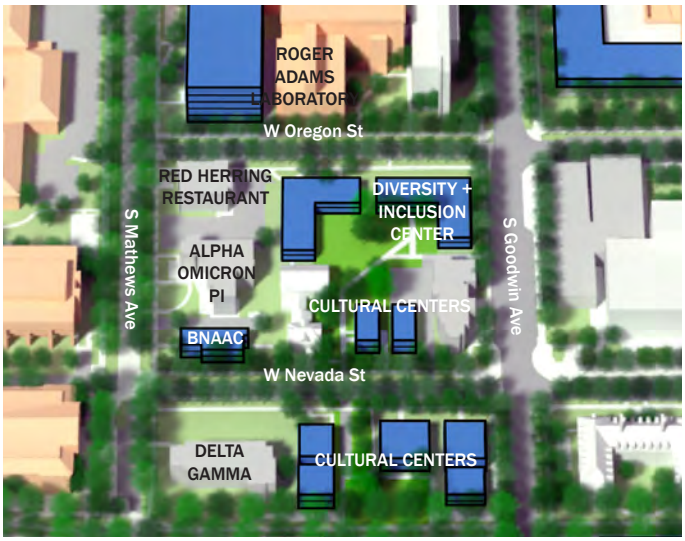
ILLINOIS STREET RESIDENCE HALLS

A re-imagining of the Illinois Street Residence Halls (ISR) complex will improve the student experience and provide more undergraduate and upper division housing for the northeast part of campus, close to engineering, sciences, and the performing arts. A new 8-story residence hall addition will provide more beds, and expansion of the dining hall will offer more variety and new food options.

The Campus Master Plan also proposes replacement and relocation of the Goodwin Green Apartments with a new graduate apartment complex north of Green Street and Daniels Hall. This new apartment complex will front a revitalized Boneyard Creek open space corridor and new greenway that will link to Bardeen Quad and to the City of Urbana recreation trails.

CULTURAL CENTERS

As part of its commitment to diversity and inclusiveness, the university maintains a number of facilities to support minority and underrepresented populations on campus. These Cultural Centers offer the entire campus opportunities to learn about and experience rich traditions of diverse cultures which shape our world. The Campus Master Plan proposes to maintain and strengthen the Cultural Centers in their current location on West Nevada Street. The addition of new centers and indoor/outdoor gathering spaces will create a “mini-campus” and greater sense of place and identity. The addition of a shared Diversity and Inclusion Center will provide shared gathering space, meeting rooms, kitchen, and outdoor courtyard.



NEIGHBORHOOD IDENTITY

THE ILLINOIS EXPERIENCE

History, Science, and Art. Illinois Street spans so many aspects of campus life at the University Illinois at Urbana-Champaign. Transforming this street and pedestrian route into a true visitor experience will provide prospective students, current students, and past alumni the chance to explore and engage with some of the best the Urbana campus has to offer.

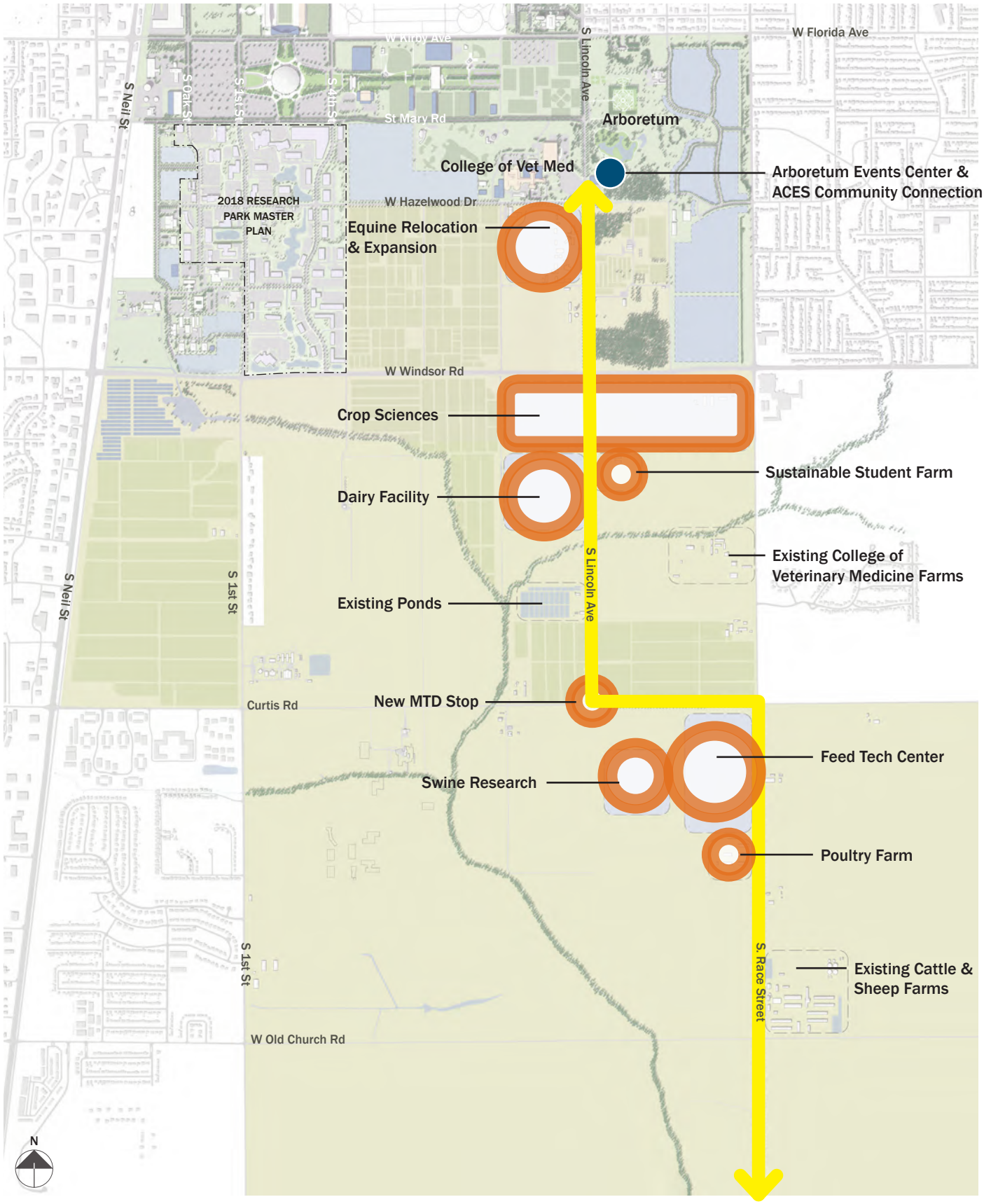
Along this walk, visitors and students can experience Student Life, the Arts and Sciences all on display, through new housing and dining at ISR, a revitalized and renovated Krannert Center for the Performing Arts, future Science Facilities at Goodwin Avenue, and a re-vamped Medical Sciences Building, home of the Carle Illinois College of Medicine.

Continuing into the Main Quad, students and visitors will be greeted by a state of the art Illini Union and iconic views over the historic Main Quad. The Dean of Students and student services programs will be more visible and accessible in a new addition to the Henry Administration Building.

The “Illinois Experience,” a new, urbane and contemporary streetscape with amenities, public art, rich landscape, and interpretive and cultural displays will re-brand this corridor as a major new route into campus. Future development at the corner of Lincoln Avenue will help anchor the walk and create a new Gateway Building and forum for community outreach on the east side of campus.


LOOMIS LABORATORY
DANIELS HALL
W. Green Street
SCIENCES
NEW HOUSING
DINING EXPANSION HOUSING RENOVATION
ISR
FUTURE GATEWAY BUILDING
CHURCH
NATURAL HISTORY
BURRILL HALL
BURRILL HALL EXPANSION
SCIENCES
W. Illinois Street
MORRILL HALL
MEDICAL SCIENCES
IPRH
HALLENE GATEWAY
NOYES HALL
Mathews Avenue
Goodwin Avenue
KRANNERT CENTER FOR THE PERFORMING ARTS EXPANSION & RENOVATION
ARTS PARK
ALUMNI CENTER
Lincoln Avenue
ROGER ADAMS LABORATORY
SPURLOCK MUSEUM
SPURLOCK MUSEUM EXPANSION


KRANNERT CENTER FOR THE PERFORMING ARTS
ILLINOIS STREET RESIDENCE HALLS
HALLENE GATEWAY
Illinois St


W Florida Ave
W Kirby Ave
S Lincoln Ave
S Neil St
S Goodwin Ave
S 1st St
S Wright St
St Mary Rd
Arboretum
College of Vet Med
Arboretum Events Center &
ACES Community Connection Center
2018 RESEARCH
PARK MASTER
PLAN
W Hazelwood Dr
Equine Relocation
& Expansion
W Windsor Rd
Crop Sciences
Sustainable Student Farm
Dairy Facility
Existing College of
Veterinary Medicine Farms
Existing Ponds
S Lincoln Ave
S Neil St
S 1st St
Curtis Rd
New MTD Stop
Feed Tech Center
Swine Research
Poultry Farm
S. Race Street
Existing Cattle &
Sheep Farms
S 1st St
W Old Church Rd
N

ACES LEGACY CORRIDOR

The College of Agricultural, Consumer, and Environmental Sciences (ACES) is the oldest college of the university. In fact, the university owes its geographic location to its agricultural heritage - the towns of Urbana and Champaign were selected for the new university, in part because they sit on some of the richest soils in the world.

Discovery. Translation. Transformation.

To honor the university's land grant legacy, and to celebrate the college's mission of Discovery, Translation, and Transformation, ACES envisions a new "Legacy Corridor" along an extended and improved Lincoln Avenue. Strategic relocation and consolidation of ACES enterprises to the Legacy Corridor will close the loop between research discoveries, the translation of that research to learning environments (both academics and extension services), and the transformation of people's lives through advances in food production, nutrition, agriculture, bioenergy and environmental sustainability.

A proposed Community Connection Center at the Arboretum will serve as a central gathering point and gateway to the Legacy Corridor. People will gather at the Center to experience workshops, extension trainings, social events, etc. that bring the university and community together. As a shared facility with the Arboretum, it can serve as a staging area for visitors to the Legacy Corridor, and for events space for the Arboretum. Shared use of the College of Veterinary Medicine's parking facilities during evenings and weekends will help to offset parking needs for the center.

Improving Lincoln Avenue from Windsor Road to Curtis Road as a paved roadway with bicycle lanes will facilitate tours from the Community Connection Center at the Arboretum to the Student Sustainability Farm, where hands-on training in sustainable food production, nutrition and healthy food preparation will benefit visitors and the community.

Relocation of the Equine Center on Lincoln Avenue south of the College of Veterinary Medicine will create a new gateway animal sciences program in this key entry location. With close proximity to the Veterinary School, this location creates excellent research collaboration opportunities between ACES and the College of Veterinary Medicine faculty and students. Extension and improvement of Hazelwood Drive to Fourth Street will also enhance connectivity and collaboration with University of Illinois Research Park.

THE FIGHTING ILLINI

The renovation, expansion, and replacement of athletic facilities will help the Division of Intercollegiate Athletics grow its prominence and enhance the game day experience for players, students, and guests. Investment in the university's practice and competition venues provide students the opportunity to shine and excel beyond the academic sphere, and to attract a high caliber of student athletes and coaches from around the globe.

The Campus Master Plan envisions the full build-out of the Athletics precinct on campus, consolidating and expanding both indoor and outdoor facilities.

The relocation of ACES programs to the proposed Legacy Corridor opens up future opportunities for long-term redevelopment of the land south of the Athletics campus and east of the University of Illinois Research Park, adjacent to the Demirjian Golf Practice Facility, for potential university expansion or new competitive athletic programs and venues.

Future facilities include:

- A proposed North Performance Building as an extension to the Irwin Indoor Facility for additional training, weight room, sports medicine, offices, and meeting rooms.
- East stadium renovation and an expansion and addition to South Memorial Stadium for additional seating, a new gateway, and Hall of Fame club.
- Renovation and additions to Ubben Basketball Complex to add practice facilities and support space.
- A proposed Performance Center and Olympic Sports Arena (practice and competition) for wrestling, gymnastics, volleyball, and fencing.
- New competition and practice soccer fields with bleacher seating and concourse for lockers and support space.
- Additional practice fields, parking, and support buildings for South Athletics campus.
- A proposed Field House to include a 400-meter track with a turf infield for soccer, baseball and softball practice.

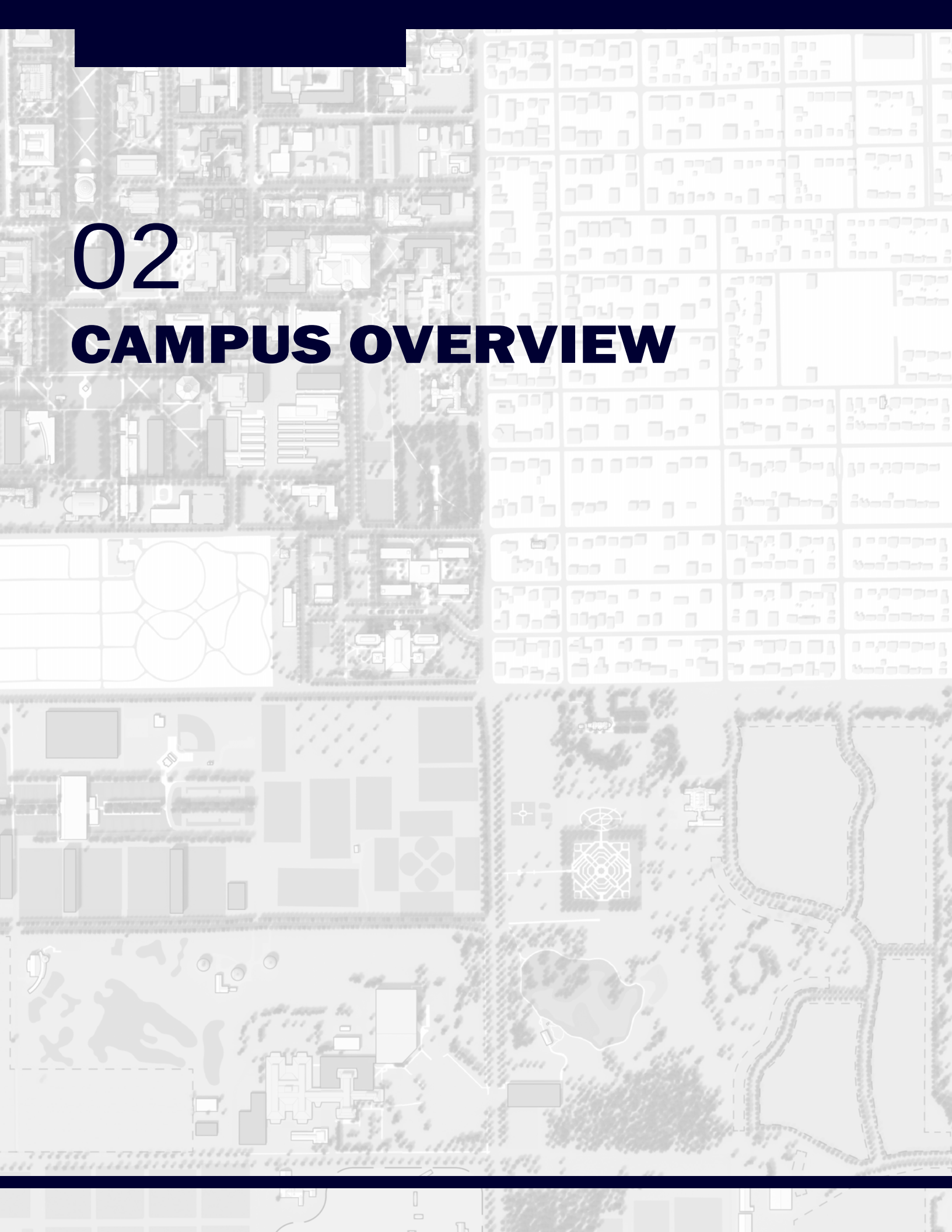
ARMORY AND WEST SIDE NEIGHBORHOOD

Built in 1912, the Armory is one of the most challenging renovation candidates on the campus, currently housing classrooms, offices, military programs, and an indoor track used by the Division of Intercollegiate Athletics.

The Armory has the highest number of classrooms of any building on campus. The Armory is home to multiple colleges and departments, creating an unusual cross section of faculty, students, and athletes that come through the building.

Despite its challenges, the Armory can become an anchor for new learning pedagogies on the west side of campus. As one of the university's oldest buildings, it is getting some of the newest technologies. In fall 2017, the university's Center for Innovation, Teaching and Learning (CITL) has created flexible and innovative teaching spaces outfitted with the latest technology, to test out new pedagogies in learning. With continued renovation and investment, the Armory can become an educational Test Laboratory and center for multi-disciplinary learning and discovery, and an iconic destination for a re-imagined West Side neighborhood on campus.

Campus development in this area has been inconsistent, due to ownership patterns. With strategic infill and solid urban design principles, this area can become a more coherent campus neighborhood focused on innovative learning, scholarship, and interdisciplinary collaboration. Future infill on the existing Ice Arena site can create a stronger campus identity and a new mini-quad and gathering space for this neighborhood.



02
CAMPUS OVERVIEW

INTRODUCTION

CAMPUS HISTORY

CAMPUS BEGINNING

The University of Illinois at Urbana-Champaign was founded in 1867 as one of the original 37 land-grant institutions following approval of the Morrill Land-Grant Colleges Act in 1862. The campus began as a single academic building situated upon 10 acres of land between the central Illinois towns of Urbana and Champaign, with an additional 565 acres of agricultural land holdings located approximately 1 mile south of the Main campus. The early curriculum was narrowly focused around agriculture and engineering programs.

FOUNDING VISION

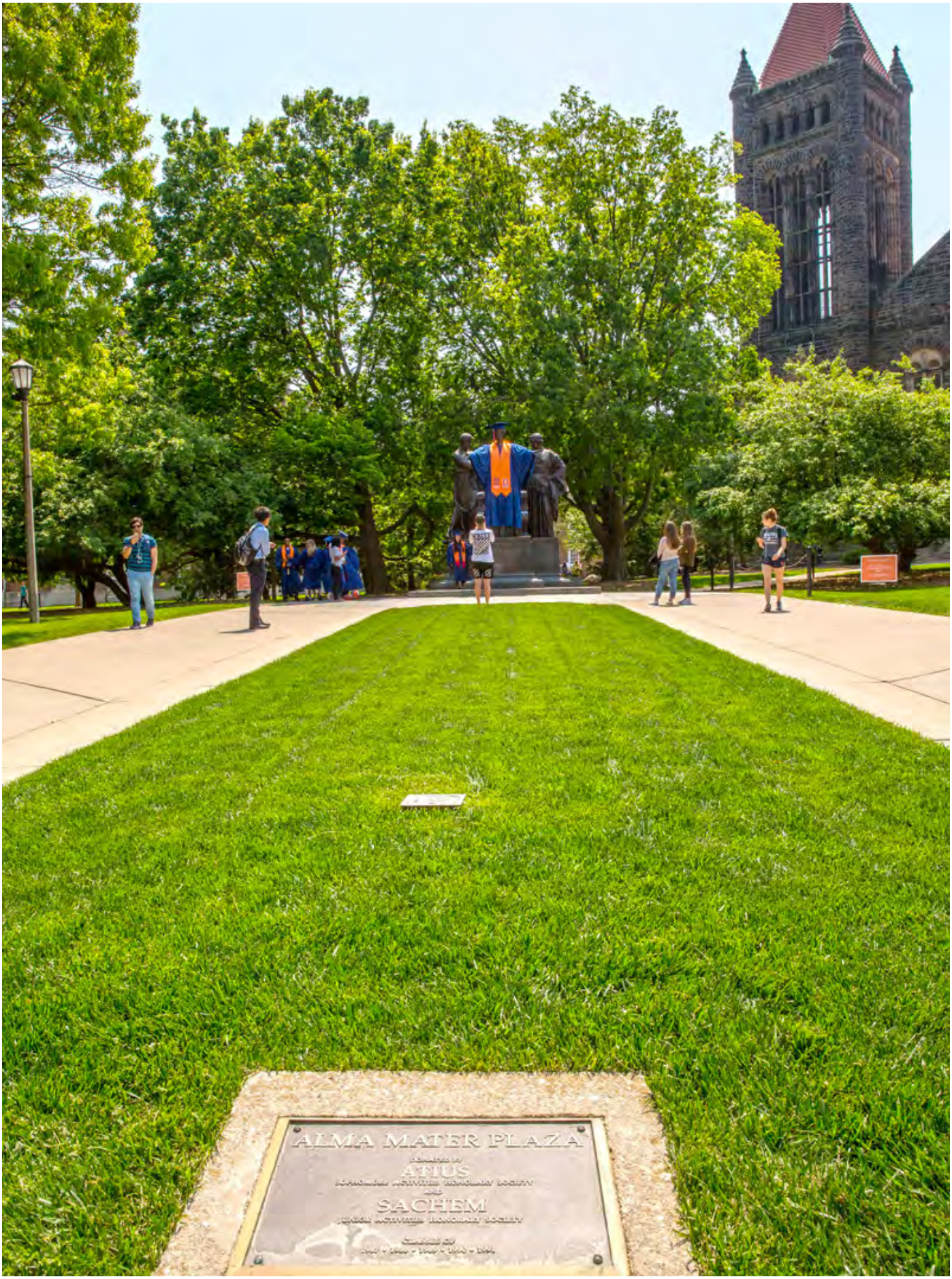
The first university President, John Milton Gregory, had grand visions for the institution and desired to transform it into the "West Point for the working world." His vision did not begin to come to fruition until the early 20th century when the university experienced a period of rapid growth with a significant building boom and expansion of the academic curriculum to include broader fields of study. Many of the buildings and open spaces constructed during this time period helped to establish the campus architectural and open space framework which is still beloved by current faculty, staff, students, alumni, and community members.

ILLINOIS TODAY

Today, the University of Illinois at Urbana-Champaign is regarded as one of the top institutions of higher education across the globe. The university remains focused on its vision as a "world class university with a land-grant mission." The university supports award-winning faculty and outstanding academic resources with one of the largest public university library collections in the world. The university consistently ranks as a top institution for NSF-funded research and remains a leading global destination for top prospective students.

"The University of Illinois at Urbana-Champaign is charged by our state to enhance the lives of citizens in Illinois, across the nation and around the world through our leadership in learning, discovery, engagement and economic development".

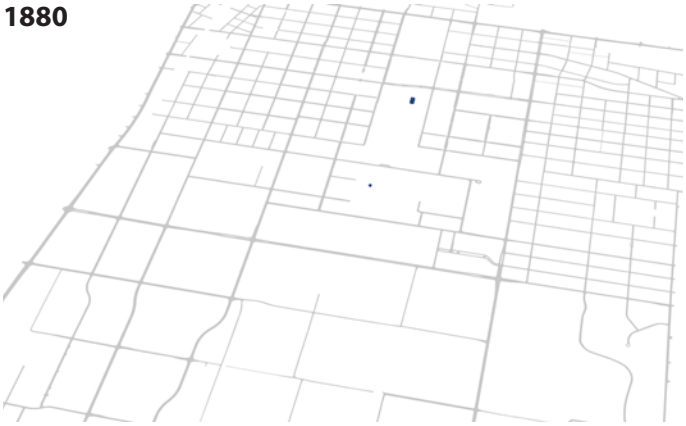
Mission Statement


ALMA MATER PLAZA
ATIUS
SACHEM

CAMPUS EVOLUTION

This series of diagrams shows the transformation of the Urbana campus from its beginnings in 1880 to the dynamic campus environment of today. These diagrams show how the academic core began at the Main Quad. Then, during the first half of the 20th century, the campus expanded in a north-south direction. The post-war era boom propelled growth outwards in all directions from the Main Quad, resulting in the current campus boundary.

1880



1910

1920

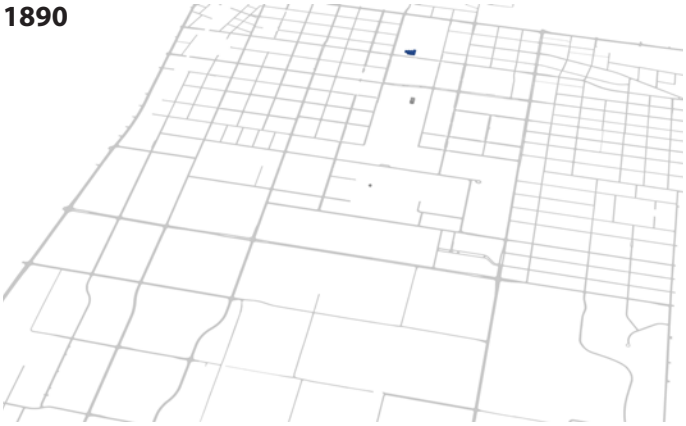
1950

1960

1990

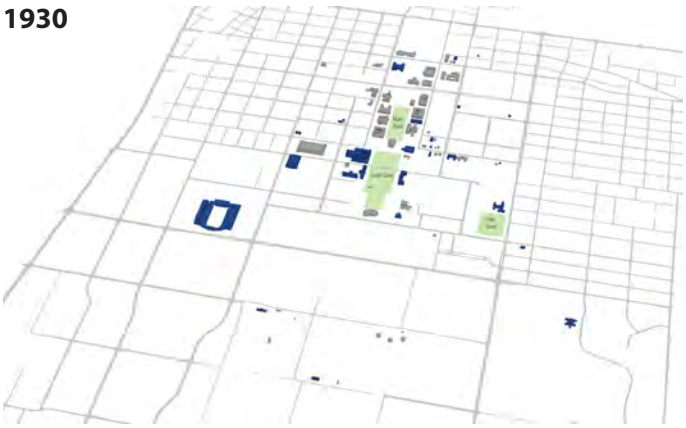
2000

1890



1900

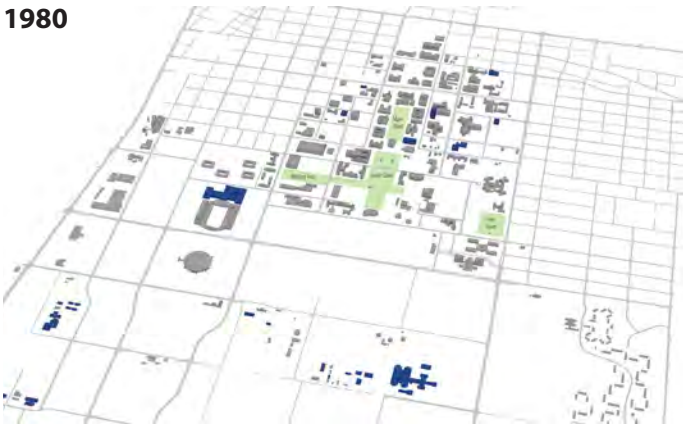
1930



1940

1970

1980



2010

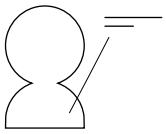
2017

CAMPUS TODAY

POPULATION

In the fall of 2015 there were 43,400 full time equivalent (FTE) students enrolled on campus (Archibus). Student headcount totaled 44,750. The University of Illinois at Urbana-Champaign employed 3,215 faculty members and 10,700 staff.

43,400
FULL TIME EQUIVALENT (FTE)

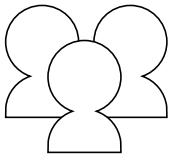


10,700
STAFF

SPACE

Today the university occupies 6,370 acres of land between the City of Urbana, the City of Champaign, and the Village of Savoy. The campus uses approximately 23 million gross square feet (GSF) within 750 owned and leased buildings.

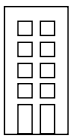
44,750
HEADCOUNT



3,215
FACULTY

ORGANIZATION

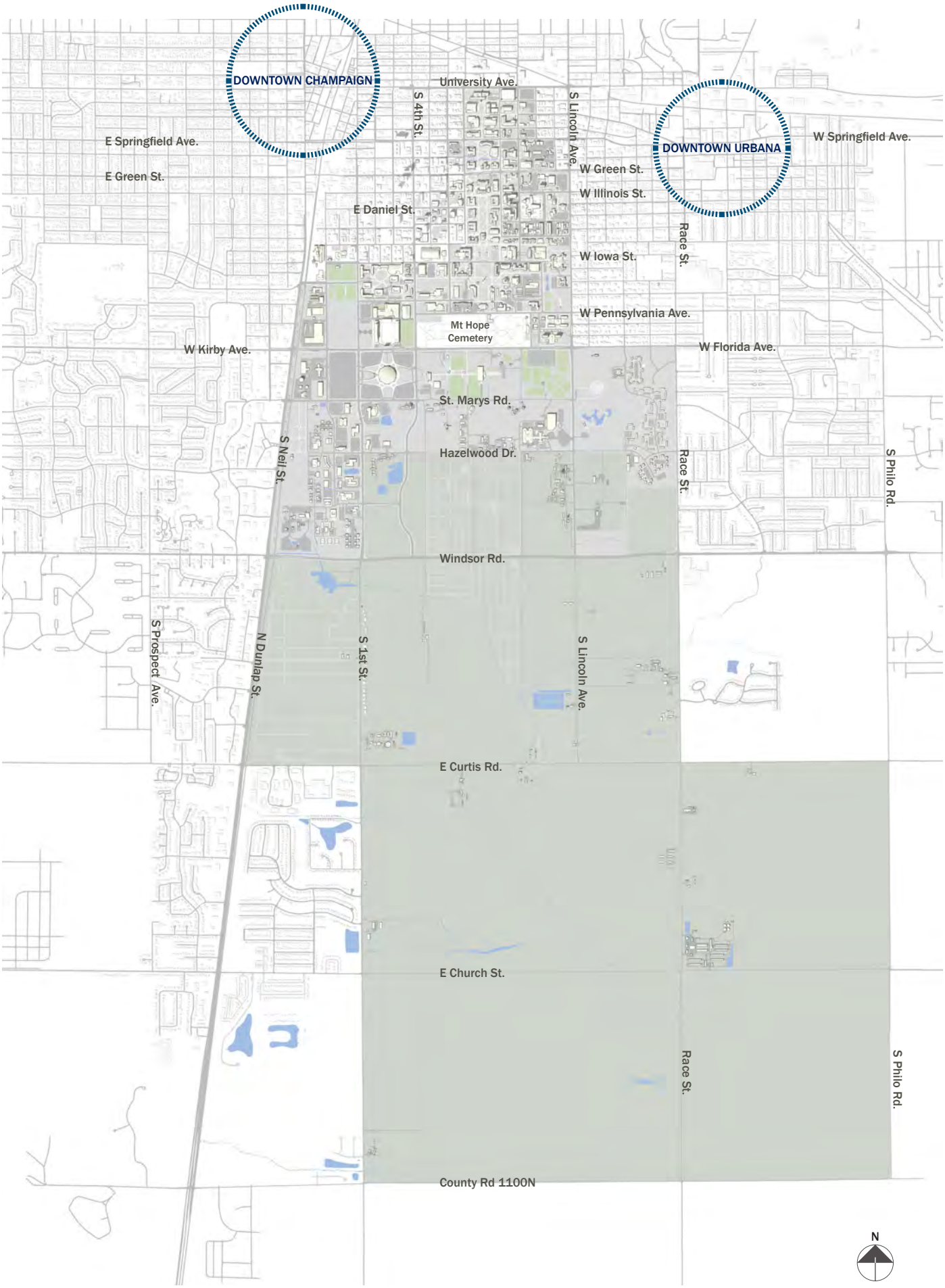
As seen in the map on the right, the core academic functions are located on the northern part of campus between the cities of Champaign and Urbana. Athletic facilities are located to the south of the core academic area. The portion of campus south of the athletics facilities is predominately used for agricultural related education and research.



23 million
GROSS SQUARE FEET (GSF)

750
BUILDINGS (OWNED + LEASED)

6,370
ACRES


DOWNTOWN CHAMPAIGN
DOWNTOWN URBANA
University Ave.
S 4th St.
S Lincoln Ave.
W Springfield Ave.
E Springfield Ave.
E Green St.
W Green St.
W Illinois St.
E Daniel St.
Race St.
W Iowa St.
W Pennsylvania Ave.
Mt Hope Cemetery
W Florida Ave.
W Kirby Ave.
St. Marys Rd.
Hazelwood Dr.
S Neil St.
Race St.
S Philo Rd.
Windsor Rd.
S Prospect Ave.
N Dunlap St.
S 1st St.
S Lincoln Ave.
E Curtis Rd.
E Church St.
Race St.
S Philo Rd.
County Rd 1100N
N

PEER INSTITUTION COMPARISON

The university chose a set of peer institutions with similar enrollment and research missions for comparison to the Urbana campus. The following diagrams show the plan of the Urbana campus and its peers at the same scale. Tables contain metrics for comparison, such as enrollment, acreage and the number of faculty.

The maps reveal the Urbana campus's academic and student life functions are spread over a large land area compared to peers. Only Michigan State University and the University of Wisconsin-Madison's are similarly dispersed. It takes 20 minutes to walk the length of the Urbana campus, making punctuality difficult for students and faculty with 10 minutes between class change.

Another observation from the comparison is the university has the highest faculty to student ratio at 19:1. However, the university is only slightly higher than its peers, as seven of the ten have ratios of 17:1 or 18:1.

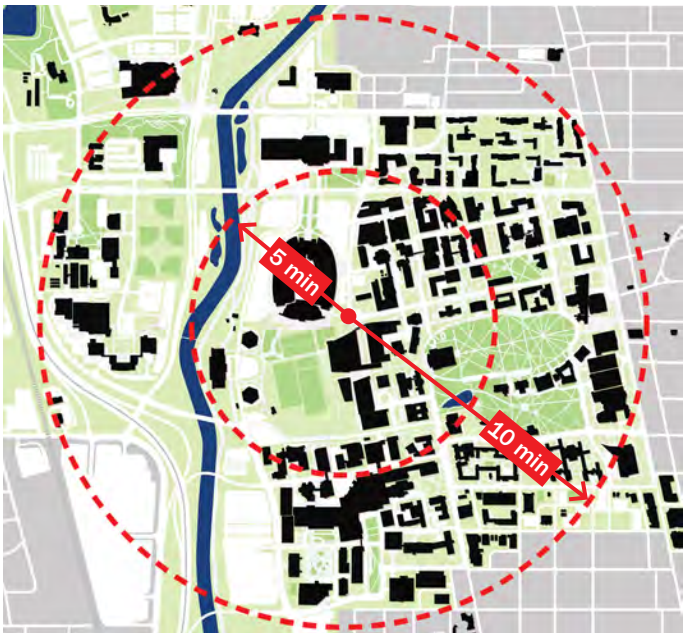
UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN

Data	Illinois
Date Founded	1867
Acreage	6,370
Enrollment	44,750
Undergraduate	31,989
Graduate	13,045
Students: Faculty	19:1
Full-time Faculty	3,215
Part-time Faculty	899

MICHIGAN STATE UNIVERSITY, LANSING

Data	Illinois	Michigan State
Date Founded	1867	1855
Acreage	6,370	5,200
Enrollment	44,750	50,081
Undergraduate	31,989	38,786
Graduate	13,045	11,295
Students: Faculty	19:1	17:1
Full-time Faculty	3,215	3,646
Part-time Faculty	899	529

OHIO STATE UNIVERSITY, COLUMBUS



Data	Illinois	Ohio State
Date Founded	1867	1870
Acreage	6,370	1,592
Enrollment	44,750	58,322
Undergraduate	31,989	44,741
Graduate	13,045	13,581
Students: Faculty	19:1	18:1
Full-time Faculty	3,215	3,688
Part-time Faculty	899	1,511

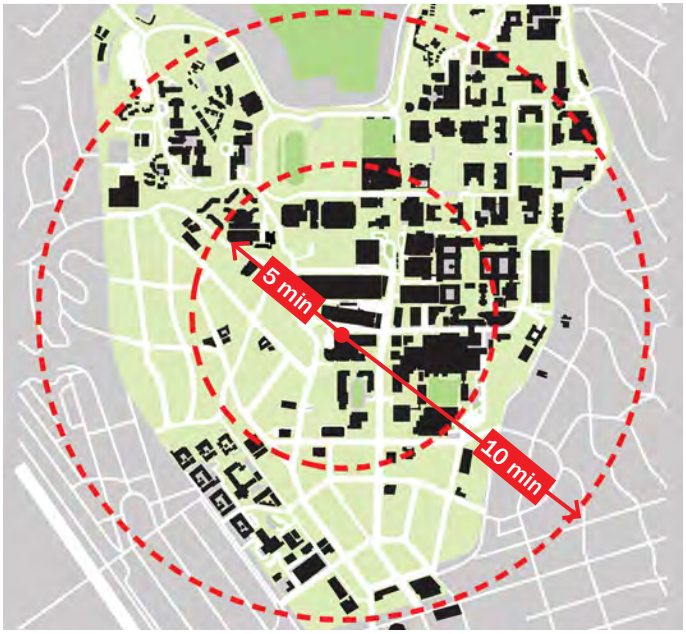
Metrics data source: Integrated Postsecondary Education Data System (IPEDS).
Maps data source: Campus maps were created from aerial imagery.

Note: maps are at equal scales and do not show full campus acreage

UNIVERSITY OF CALIFORNIA, BERKELEY

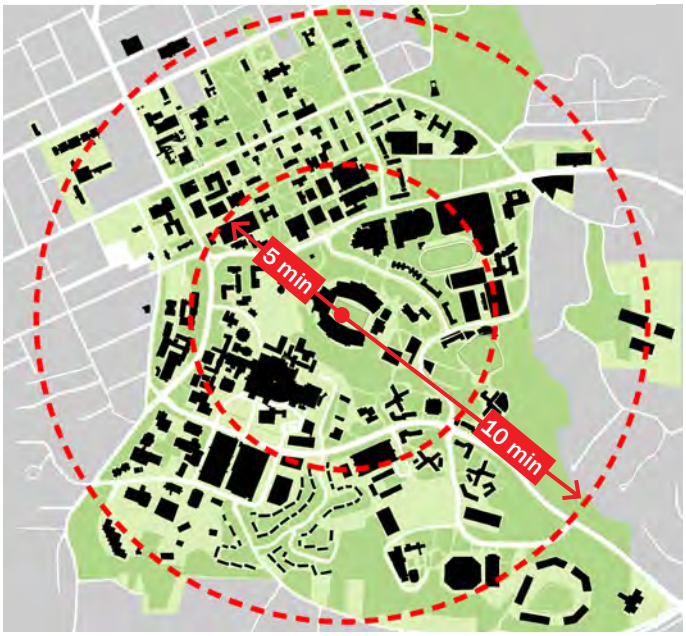
Data	Illinois	UC Berkeley
Date Founded	1867	1868
Acreage	6,370	1,232
Enrollment	44,750	37,565
Undergraduate	31,989	27,126
Graduate	13,045	10,439
Students: Faculty	19:1	17:1
Full-time Faculty	3,215	3,009
Part-time Faculty	899	1,079

UNIVERSITY OF CALIFORNIA, LOS ANGELES



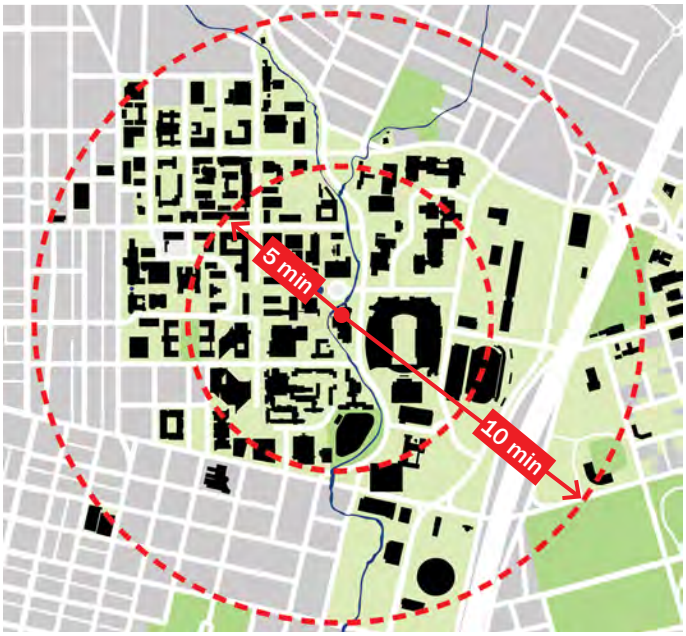
Data	Illinois	UCLA
Date Founded	1867	1919
Acreage	6,370	419
Enrollment	44,750	41,845
Undergraduate	31,989	29,633
Graduate	13,045	12,212
Students: Faculty	19:1	6:1
Full-time Faculty	3,215	4,263
Part-time Faculty	899	1,331

UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL



Data	Illinois	North Carolina
Date Founded	1867	1817
Acreage	6,370	729
Enrollment	44,750	29,135
Undergraduate	31,989	18,350
Graduate	13,045	10,785
Students: Faculty	19:1	13:1
Full-time Faculty	3,215	4,097
Part-time Faculty	899	548

UNIVERSITY OF TEXAS, AUSTIN



Data	Illinois	Texas
Date Founded	1867	1881
Acreage	6,370	431
Enrollment	44,750	51,323
Undergraduate	31,989	39,523
Graduate	13,045	11,790
Students: Faculty	19:1	17:1
Full-time Faculty	3,215	2,745
Part-time Faculty	899	281

UNIVERSITY OF WISCONSIN, MADISON

Data	Illinois	Wisconsin
Date Founded	1867	1848
Acreage	6,370	936
Enrollment	44,750	42,598
Undergraduate	31,989	30,694
Graduate	13,045	11,904
Students: Faculty	19:1	18:1
Full-time Faculty	3,215	4,408
Part-time Faculty	899	1,297

UNIVERSITY OF MARYLAND, COLLEGE PARK

Data	Illinois	Maryland
Date Founded	1867	1856
Acreage	6,370	1,250
Enrollment	44,750	37,610
Undergraduate	31,989	27,056
Graduate	13,045	10,554
Students: Faculty	19:1	18:1
Full-time Faculty	3,215	3,640
Part-time Faculty	899	1,021

UNIVERSITY OF MICHIGAN, ANN ARBOR

Data	Illinois	Michigan
Date Founded	1867	1817
Acreage	6,370	3,177
Enrollment	44,750	43,625
Undergraduate	31,989	15,230
Graduate	13,045	28,395
Students: Faculty	19:1	12:1
Full-time Faculty	3,215	6,068
Part-time Faculty	899	1,436

UNIVERSITY OF WASHINGTON, SEATTLE

Data	Illinois	Washington
Date Founded	1867	1861
Acreage	6,370	703
Enrollment	44,750	44,784
Undergraduate	31,989	30,672
Graduate	13,045	14,112
Students: Faculty	19:1	18:1
Full-time Faculty	3,215	6,073
Part-time Faculty	899	1,950

CAMPUS MASTER PLANS

A FRAMEWORK FOR CHANGE

VALUE OF MASTER PLANNING

A campus master plan is a collection of powerful ideas. Together, these ideas establish a flexible framework for coordinating physical change across campus. The plan represents a unifying vision for the university which aligns the institution's academic mission, vision, strategic plans, and physical development goals into a single document to help guide the future direction of the institution.

Since its founding, the University of Illinois at Urbana-Champaign has understood the value of master planning to help organize and shape the campus environment. The physical framework visible today is the result of many decades of creative planning ideas which have helped to produce a dynamic and vibrant Urbana campus. The following pages provide a sampling of the most notable campus planning changes throughout the decades; this section is not intended to serve as the complete history.

BEGINNING AND EARLY YEARS

The first plan for the Urbana campus divided land into zones for academic, agriculture, and civic uses. As it is today, agriculture land was located in the south while academic development occurred in the north. Construction of the first significant academic buildings occurred between 1880 and 1900. Existing buildings from this time period include Altgeld Hall and Davenport Hall. In the south the land was predominantly farms. Smaller buildings including barns, sheds, and re-purposed residences provided space to conduct agricultural research.

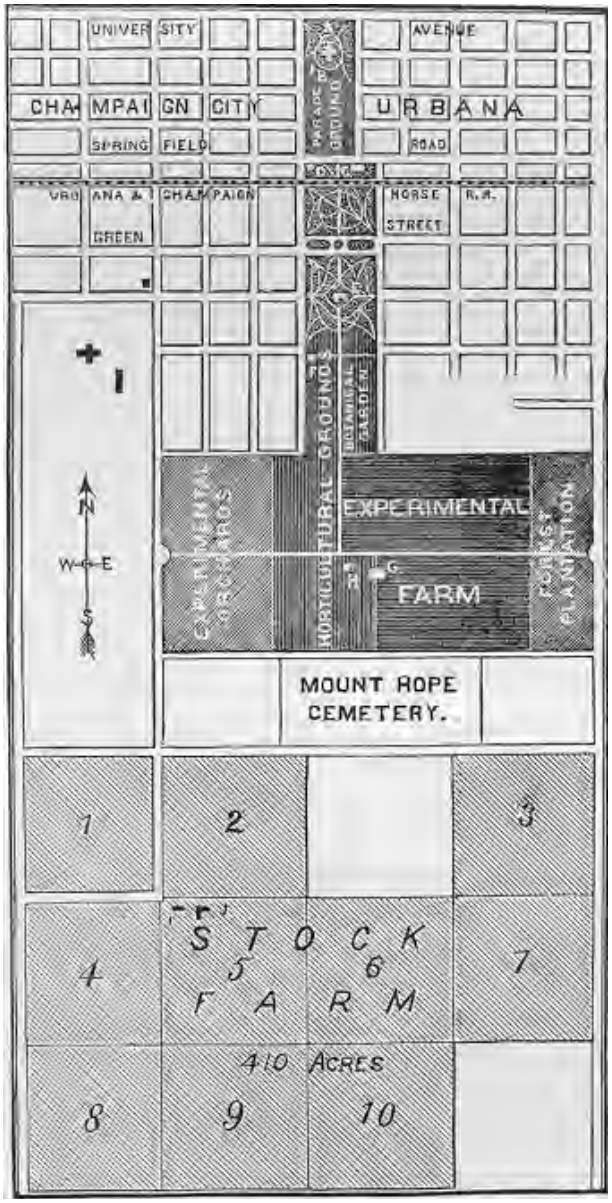
During the turn of the century the university continued to grow and began to plan for future development. In 1905 the university completed its first formal campus master plan. The plan proposed constructing buildings around a central open space, thus creating the Main Quad. Additionally, the 1905 master plan proposed expansion around a second open space to the south of the Main Quad. The South Quad was then created and established a future north-south development pattern for the campus.

The 1905 Campus Master Plan also provided the guiding framework for the long-term development of campus. It introduced the following key organizing principles:

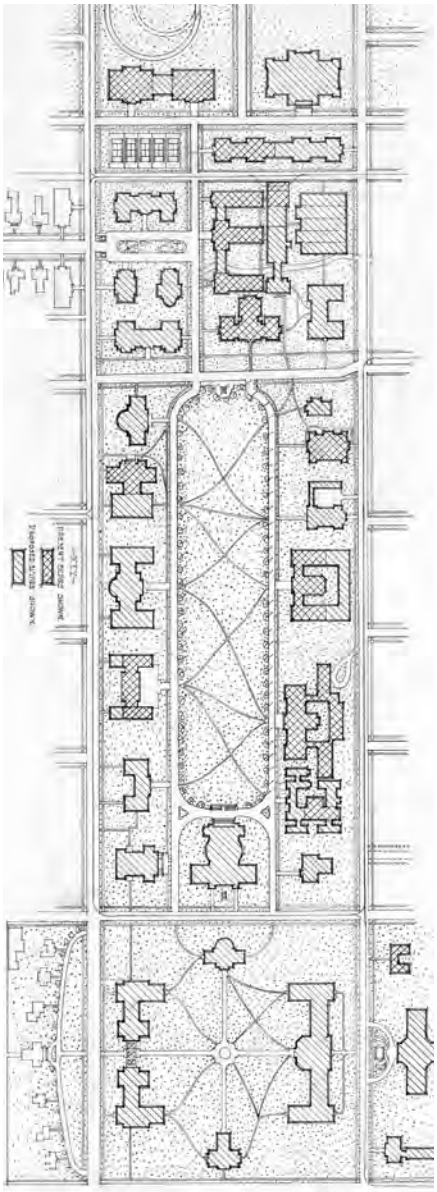
- Align development along a north-south axis
- Locate buildings around quads
- Allow only pedestrians in the campus interior
- Create symmetrical facades and landscapes

Architects from both the university and private design firms created a series of campus master plans from 1905 to 1930. Each master plan built upon the ideas of the one prior, still adhering to the 1905 master plan's key principles. During this time the campus grew and expanded its original boundary.

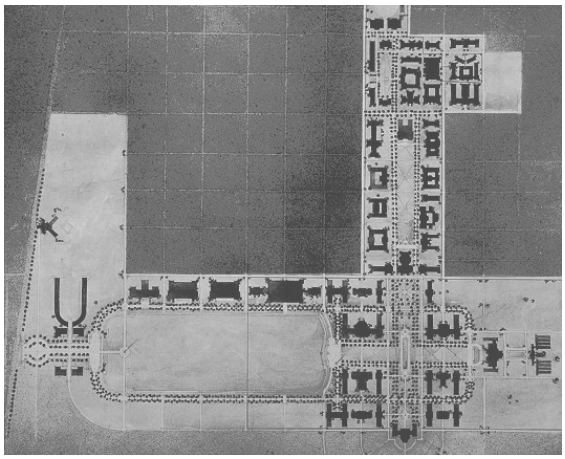
The campus master plans proposed growth along an east-west axis to complement the existing north-south axis. This proposed axis relocated the parade grounds and stadium from north campus to the southwest area of campus. A large open space, today know as the Military Axis, was proposed to the west of the South Quad. It changed in shape and size from master plan to master plan. The 1912 Campus Master Plan shows the open space as a large expanse, over ten city blocks. However, by the 1929 Campus Master Plan, the Military Axis had been reduced to the linear open space present today. The east-west axis established the framework and direction for the future growth of campus.



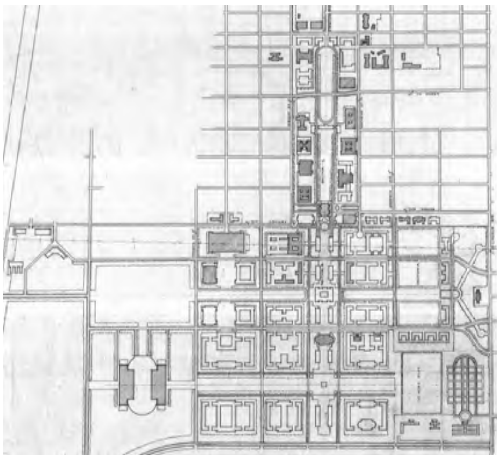
1871 LAND HOLDINGS



1905 CAMPUS MASTER PLAN



1912 CAMPUS MASTER PLAN

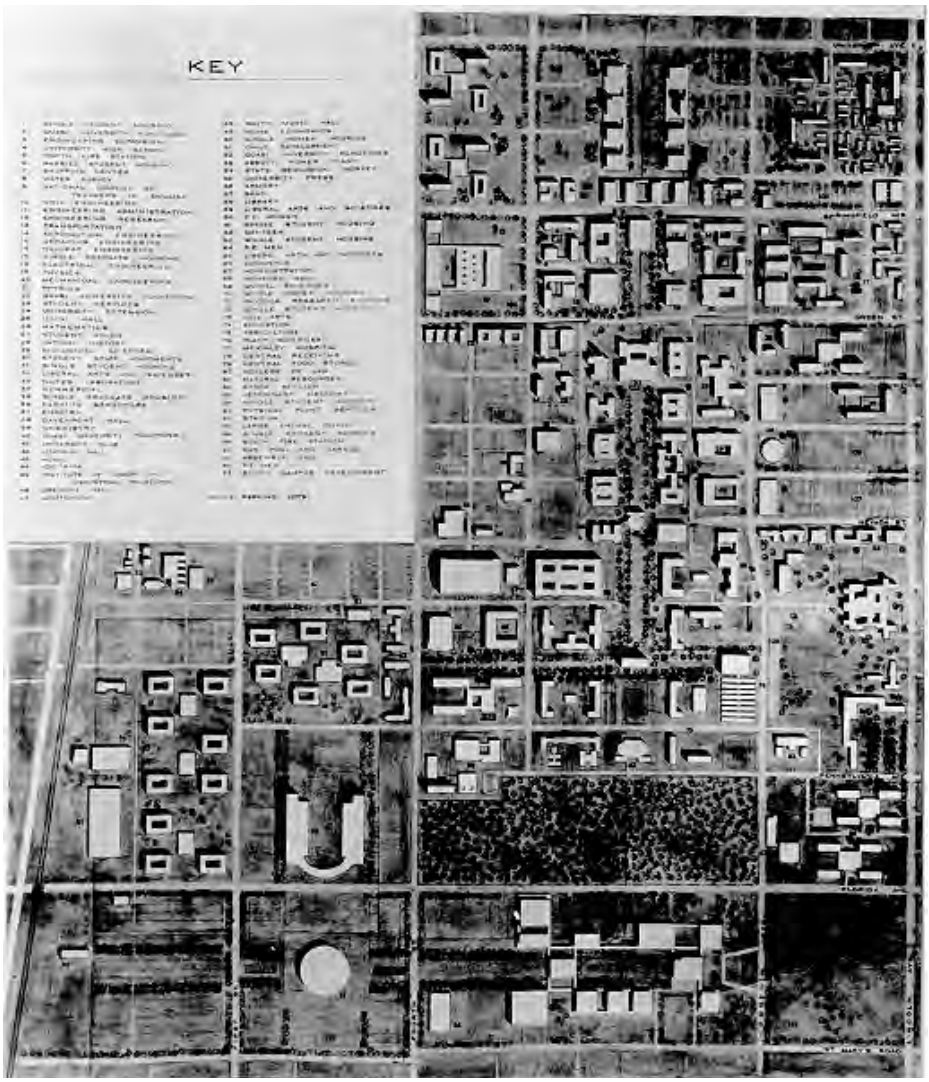


1929 CAMPUS MASTER PLAN

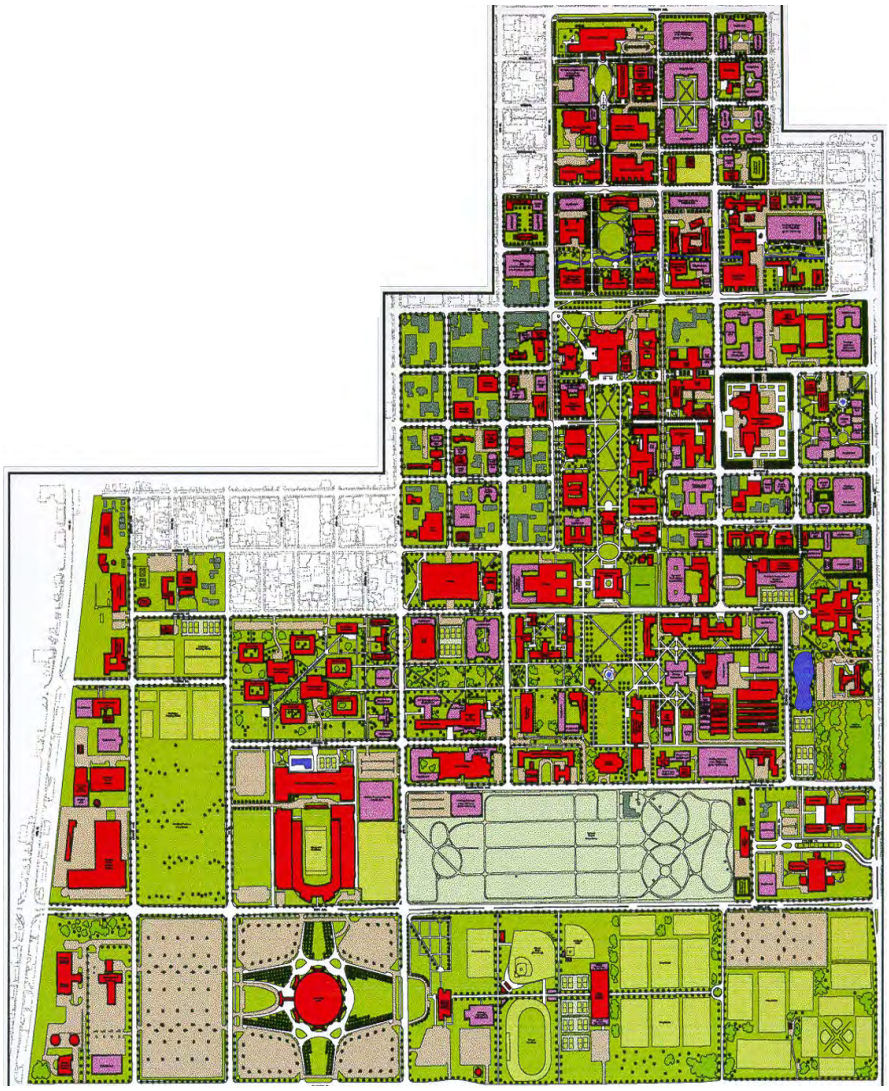
A NEW ERA: MODERNIST PLANNING

The 1958 Campus Master Plan guided development through much of the second half of the 20th century. This master plan was a dramatic departure from the ideas and principles found in prior master plans. It reflected a new modernist philosophy in the design professions. Buildings no longer surrounded quads, they were instead treated as objects in space. The resulting campus landscape was open and sprawling, without distinct quads or open spaces.

During this time period the campus experienced significant growth due to the G.I. Bill and post World War II Baby Boom generation. On-campus housing and Student Affairs became a larger part of the campus with the construction of the Gregory Hall, Florida Avenue Residence Halls (FAR), Illinois Street Residence Halls (ISR) and the Activities and Recreation Center (ARC), among others. Many of these structures still can be found on campus today.



1958 CAMPUS MASTER PLAN



1996 CAMPUS MASTER PLAN

END OF THE 20TH CENTURY

In 1996, the University of Illinois at Urbana-Champaign completed a new campus master plan. This master plan returned to the historic principles from the original 1905 document. Buildings were once again used to frame open spaces and proposed development follows the two primary axis established in early 20th century planning documents. The 1996 master plan emphasizes a development pattern of infill, strategic removals, and replacement of poor quality facilities.

For the first time, future development zones were proposed on both the east and west sides of the northern portion of campus to provide future expansion areas for the university's growing engineering and science programs. Infill development was also shown in areas surrounding the core of campus. The Athletics campus near the southern portion of campus began to take on a stronger linear east-west framework through the expansion of new sports facilities.

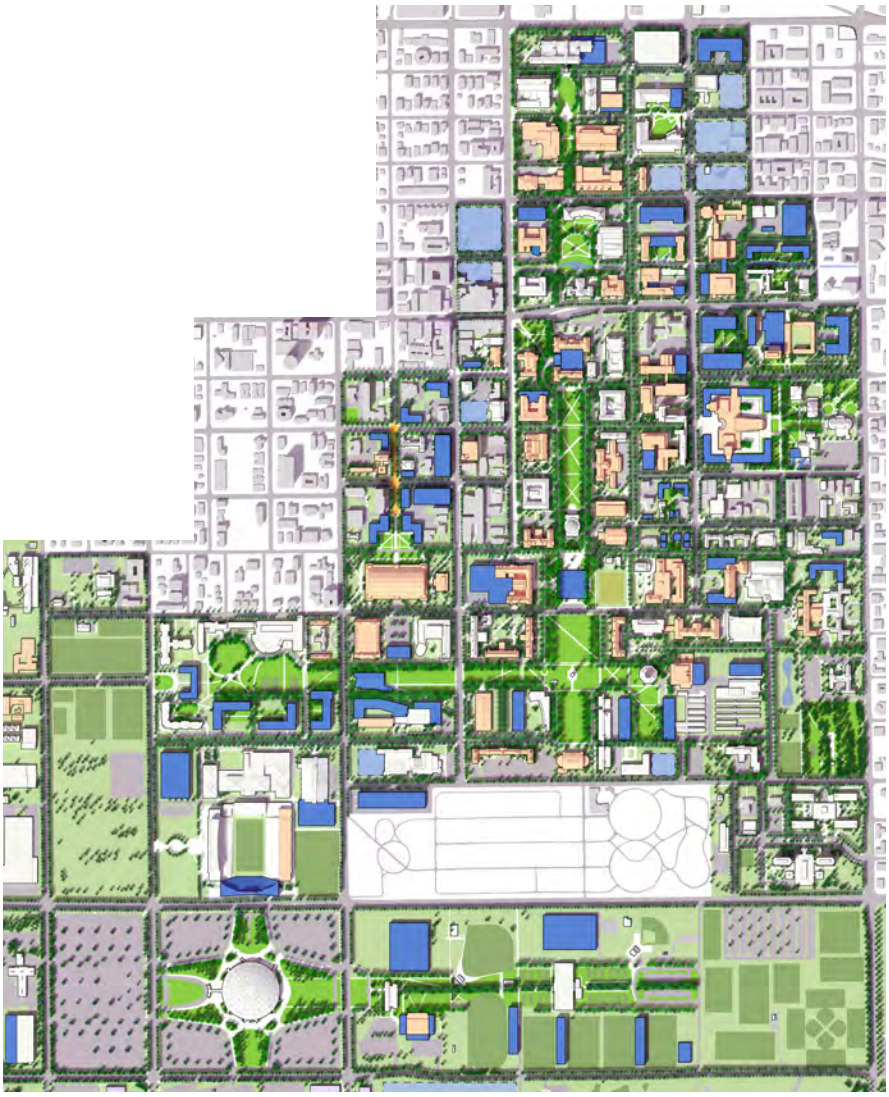
THE BEGINNING OF THE 21ST CENTURY

The 2007 Campus Master Plan reinforced many of the same key organizing principles as found within the 1996 master plan. The beginning of the 21st century was a period of extreme optimism and financial abundance. This master plan reflects that sense of opportunity by highlighting a range of possible locations for future development across campus.

During this time period, sustainability also emerged as an important factor guiding the development of campus. The American College & University Presidents' Climate Commitment (ACUPCC) was rebranded (by Second Nature) in 2015 as "The Carbon Commitment" and in concert with "The Resilience Commitment," which the university signed in 2016, they are "The Climate Leadership Commitments."

This Climate Commitment mandates sustainable interventions on campus to achieve carbon neutrality by 2050. In response, the university then created the Illinois Climate Action Plan (iCAP) in 2010, updated in 2015, to further guide the Urbana campus's transition towards a more sustainable future.

2007 CAMPUS MASTER PLAN



2017 CAMPUS MASTER PLAN

2017 AND BEYOND

The 2017 Campus Master Plan serves as an update to the 2007 Campus Master Plan and continues to build upon many of the fundamental planning principles of earlier documents. This planning effort encompasses all contiguous land holdings of the Urbana campus. It places increased focus upon providing connectivity from north-south and east-west. It also presents realistic, yet visionary solutions to reach the university's future enrollment and development goals.

The 2017 Campus Master Plan is the first planning effort to respond to the iCAP. This commitment mandates sustainable interventions on campus to achieve carbon neutrality by 2050.

In response, the master plan focuses on opportunities to improve space efficiencies, encourage shared resources, re-purpose underutilized space, and remove underperforming facilities in order to meet a goal of "no new net square footage growth" within the 10-year future. The plan also includes recommendations to improve the multi-modal transportation network for increased connectivity to address the iCAP goal to reduce vehicle emissions.

THE 2017 CAMPUS MASTER PLAN: MASTER PLANNING PROCESS

The Campus Master Plan was completed over an 23-month period that consisted of four planning phases. It began in earnest in January 2016 with the Discovery Phase, which was followed by Analysis, Master Planning, and Documentation Phases. The process provided the opportunity to develop a collective vision for the Campus Master Plan, to refine goals and strategies, and then give physical form to them.

I. DISCOVERY

The master planning team worked closely with the Urbana campus to identify goals, establish planning objectives, and collect and review information related to existing campus conditions and future priorities.

II. ANALYSIS

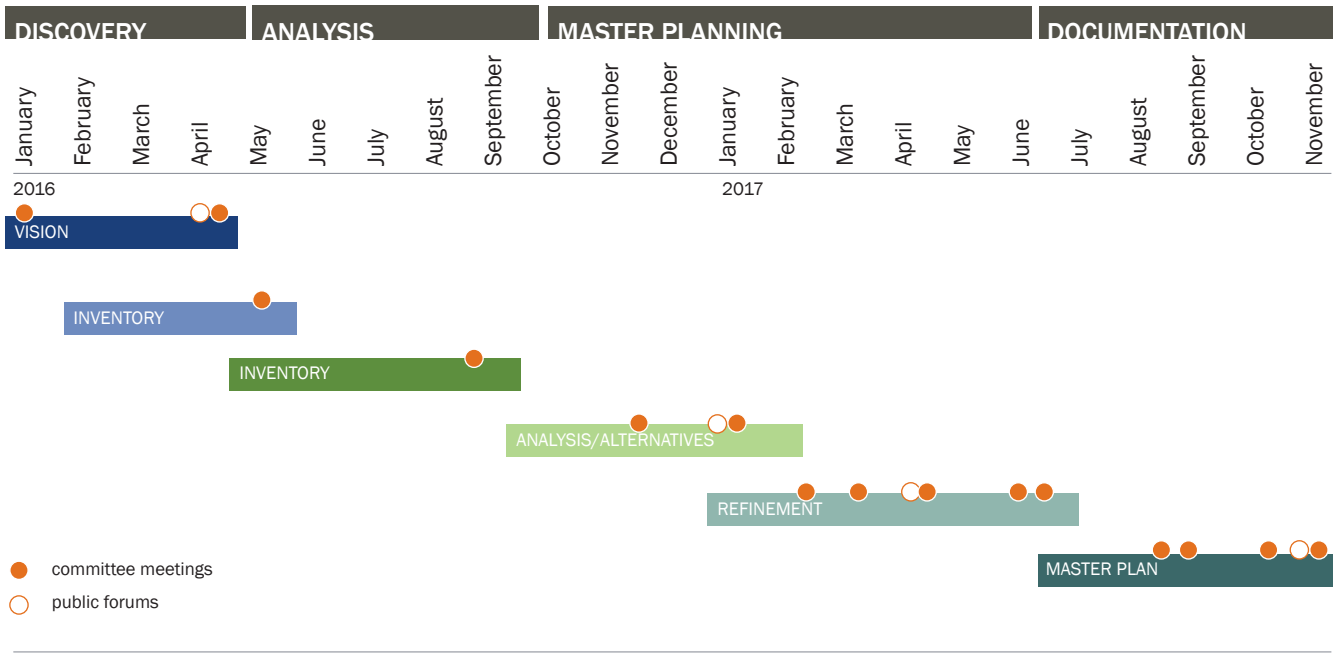
The master planning team then developed graphical and written analyses of campus systems, structures, and academic units to identify critical issues and development opportunities. The master planning team also developed an understanding of space needs and academic priorities to quantify the needs for development on campus based upon future enrollment projections, strategic plans, and program growth.

III. MASTER PLANNING

Several alternative scenarios were developed for each area of campus to test and explore future options for future development. Based upon input from campus and community constituents, the master planning team then prepared a preliminary plan by combining the best components from each scenario into a single vision.

IV. DOCUMENTATION

In the final phase, the master planning team summarized all findings and recommendations to establish the final Campus Master Plan report for approval by the Board of Trustees. This document represents a summary of the key aspects of the master planning process, as well as showcases development of the final physical plan. Implementation strategies related to the iCAP are also highlighted in the final technical document.


DISCOVERY
ANALYSIS
MASTER PLANNING
DOCUMENTATION
January
February
March
April
May
June
July
August
September
October
November
December
January
February
March
April
May
June
July
August
September
October
November
2016
2017
VISION
INVENTORY
INVENTORY
ANALYSIS/ALTERNATIVES
REFINEMENT
MASTER PLAN
committee meetings
public forums

OPEN
INCLUSIVE
TRANSPARENT

CAMPUS AND COMMUNITY ENGAGEMENT

DECISION-MAKING STRUCTURE

A key goal of the Campus Master Plan was to maintain an inclusive and transparent process. This was successfully achieved by engaging individuals from all facets of the campus community throughout every planning phase. The process required on-going commitment from university leadership and committee members, as well as active participation from students, faculty, staff, alumni and the regional community. A decision-making structure was established at the very outset of the project to provide clarity for all participants as to the input and approvals process. A wide range of dedicated individuals from both the campus and community provided thoughtful input to help guide the master planning process.

BUILDING CONSENSUS

An important aspect of the master planning process was to build consensus for the recommendations found within the Campus Master Plan. The master plan is rooted in the university's mission, vision, and strategic priorities. As a tool for building consensus, the master planning process included numerous open public forums, workshops, focus group sessions, committee meetings, and design charrettes. Feedback was solicited at every major decision point within the process.

MASTER PLAN WEBSITE

One unique tool developed for this planning effort was an interactive website. This is the first time in the university's planning history that technology was embraced in this way. The website was established at the very beginning of the planning process to allow individuals to remain connected and up-to-date on current activities throughout the entirety of the effort. The website also allowed users to provide feedback and comment on uploaded content. It helped to engage a much larger audience for the master planning process than has previously been possible.

ACKNOWLEDGEMENTS

In addition to the individuals, committees, and organizations listed on these pages, the University of Illinois at Urbana-Champaign would like to express its gratitude to the numerous students, faculty, staff, alumni, and community members who provided thoughtful input to guide the Campus Master Plan. The inclusive and consensus-based process yielded ideas that define a forward-thinking vision for the university.

Executive Leadership:

- Timothy L. Killeen, President, University of Illinois System
- Robert J. Jones, Chancellor, University of Illinois at Urbana-Champaign
- Barbara Wilson, Executive Vice President and Vice President for Academic Affairs
- John Wilkin, Interim Provost
- Edward Feser, Past Interim Provost
- Avijit Ghosh, Interim Chief Financial Officer
- Walter Knorr, Past Chief Financial Officer
- Mike Devocelle, Past Special Assistant to the President
- Mike Bass, Senior Associate Vice President and Deputy Comptroller
- Joe Vitosky, Past Senior Assistant Vice President (retired)
- Sean Reeder, Interim Director, University Office of Capital Programs and Real Estate Services
- Mike DeLorenzo, Senior Associate Chancellor for Administration and Operations
- Helen Coleman, Interim Executive Director of University Facilities & Services

Campus Core Planning Committee:

- Ted Christy, Associate Director for Project Planning (Co-Chair)
- Kevin Duff, Past Assistant Director, University Planning and Design (retired)
- Brian Farber, Executive Assistant to the Associate Vice Chancellor for Student Affairs
- Kevin Hinders, Associate Professor, Architecture
- Brent Lewis, Landscape Architect, University Facilities & Services
- Qu Kim, Assistant Director, Capital Programs Administration (Co-Chair)
- Jill Maxey, Associate Director for Space Management
- Lowa Mwilambwe, Associate Vice Chancellor for Student Affairs & Director of Auxiliary Services
- Ed Slazinik, Past Associate Vice Chancellor for Student Affairs & Director of Auxiliary Services (retired)
- Matthew Tomaszewski, Associate Provost for Capital Planning
- Mary Jukuri, SmithGroupJJR, Vice President, Lead Campus Planner
- Lauren Leighty, SmithGroupJJR, Project Manager and Campus Planner
- Tony LoBello, SmithGroupJJR, Principal, Lead Architect
- Andy Vazzano, SmithGroupJJR, Vice President, Lead Research Strategist

Committees:

- Architectural Review Committee
- Campus Advisory Committee
- Campus Core Planning Committee
- Campus Facilities Planning Committee
- Chancellor's Capital Review Committee
- Chancellor's Design Advisory Committee
- Community Advisory Committee
- Faculty Research Group Committee
- Master Plan Public Forums (Campus & Community)
- Senate Committee on Campus Operations Committee
- Student Focus Group Meeting Attendees
- Vice Chancellors/Provost Group Committee

Colleges:

- Carle Illinois College of Medicine
- College of Agricultural, Consumer and Environmental Science (ACES)
- College of Applied Health Sciences
- College of Business

- College of Education
- College of Engineering
- College of Fine & Applied Arts
- College of Law
- College of Liberal Art & Sciences
- College of Media
- College of Veterinary Medicine
- Division of General Studies
- Graduate College
- School of Information Science
- School of Labor & Employment Relations
- School of Social Work

Institutes:

- Beckman Institute for Advanced Science and Technology
- Carl R. Woese Institute for Genomic Biology
- Fire Service Institute
- Institute for Sustainability, Energy, and Environment
- Prairie Research Institute

University Units:

- Arboretum
- Campus Recreation
- Center for Innovation in Teaching & Learning
- Disability Resources and Educational Services
- Division of Intercollegiate Athletics
- Facilities & Services Executive Leadership
- Illini Union
- McKinley Health Center
- National Center for Supercomputing Applications
- Office of Business and Financial Services
- Office of Capital Programs and Real Estate Services
- Office of the Dean of Students
- Office of Inclusion and Intercultural Relations
- Office of Public Safety
- Office of Undergraduate Admissions
- Student Affairs Executive Leadership
- Student Representatives
- Technology Services
- University Housing (including Dining)
- University Library
- University of Illinois Research Park

Non-University Units:

- Champaign-Urbana Mass Transit District
- Champaign Urbana Urbanized Area Transportation Study Advisory Committees
- City of Champaign Planning Department
- City of Urbana Planning Department
- Illinois Department of Transportation
- Local Developers
- Village of Savoy Planning Department
- Walker Parking

Campus Master Planning Team:

- Brailsford & Dunlavey
- Middleton Consulting
- Paulien and Associates
- Primera Engineers
- SmithGroupJJR
- STR Partners
- Urban Interactive

03
SPACE ASSESSMENT

EXISTING SPACE

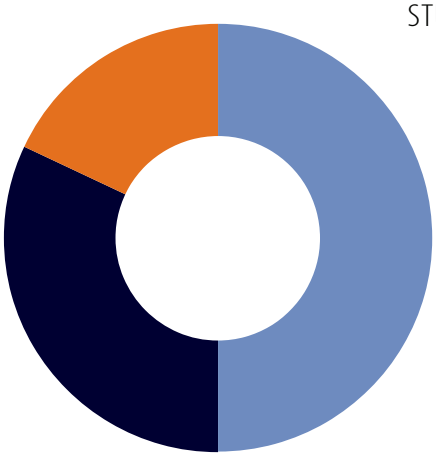
BY THE NUMBERS

44,750
STUDENT HEADCOUNT

43,400
STUDENT FTE

3,215
FACULTY

10,700
STAFF



23 MILLION
GROSS SQUARE FEET (GSF)

14.9 MILLION
NET ASSIGNABLE SQUARE FEET (NASF)

7.68 MILLION
ACADEMIC / RESEARCH NASF

2.3 MILLION
ADMINISTRATION NASF

4.96 MILLION
AUXILIARY NASF

CURRENT SPACE INVENTORY

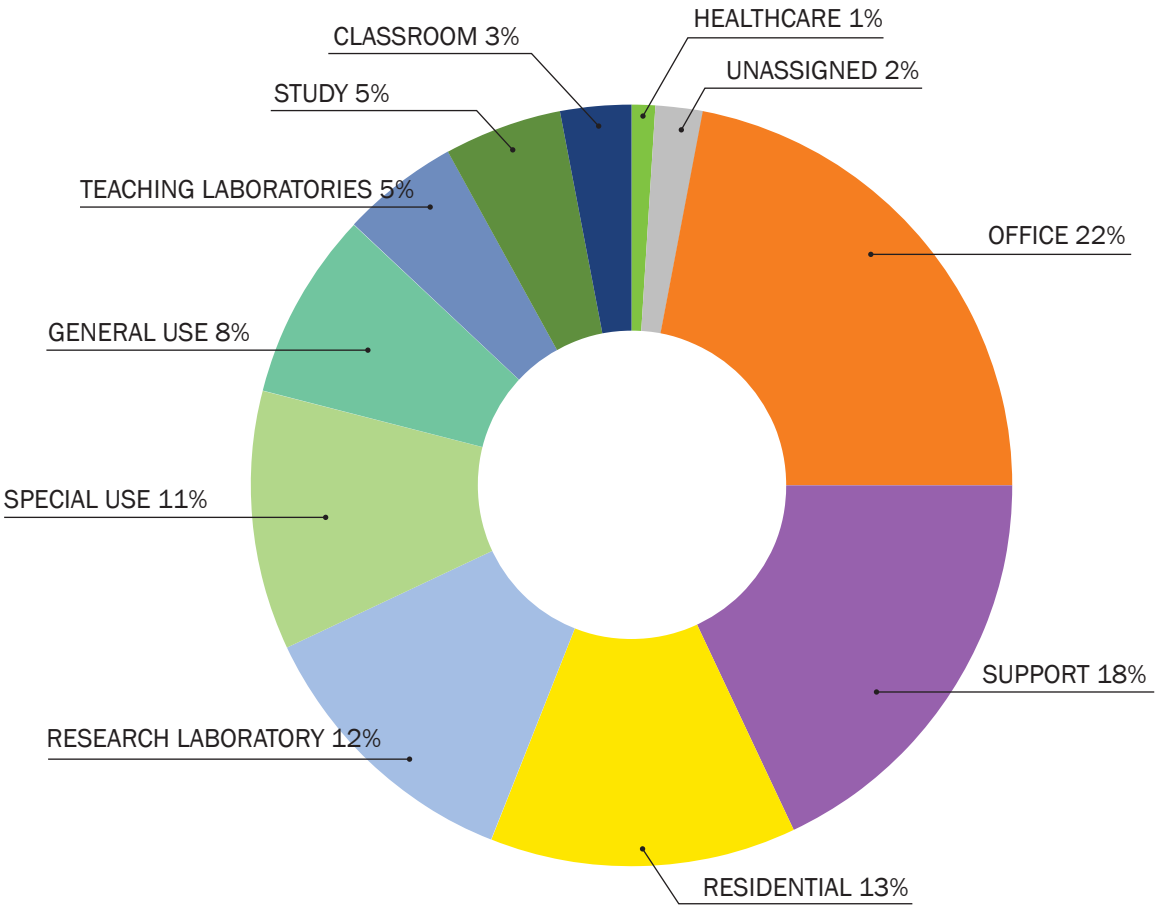
THE URBANA CAMPUS

As of Fall 2015, the University of Illinois at Urbana-Champaign enrolled over 44,750 students (equal to 43,400 Full Time Equivalent students, or FTE) and had 3,215 FTE faculty and over 10,700 FTE staff, bringing the campus population to over 57,000 people, without visitors. The Urbana campus occupied over 23 million gross square feet (GSF) of facilities in over 750 owned and leased buildings, on 6,370 acres that spans the municipalities of the City of Urbana, the City of Champaign, and the Village of Savoy (some of the University of Illinois at Urbana-Champaign land is within unincorporated areas of Champaign County).

CAMPUS SPACE COMPOSITION

Of the more than 23 million GSF, approximately 51.5% of space supports the academic and research enterprise, 15.5% supports both university and system-wide administration functions, and 33% consist of auxiliary functions such as housing, dining, student services, athletics, and parking structures.

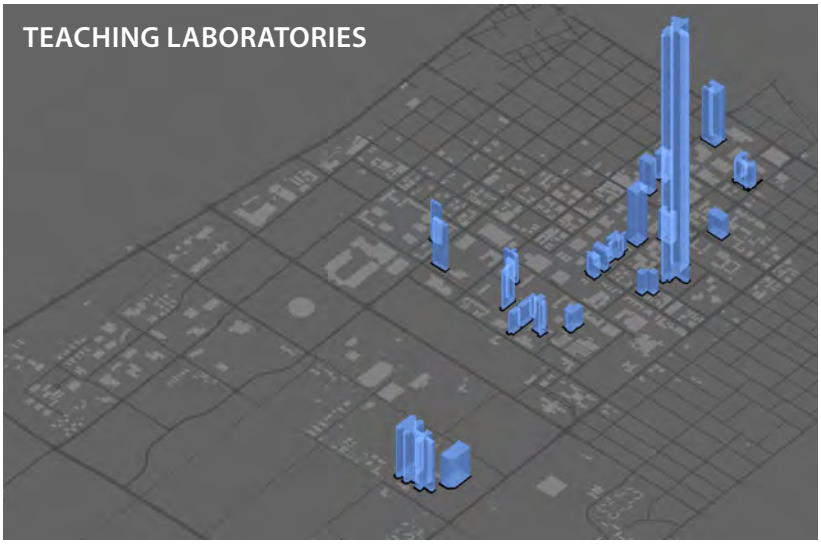
2015 SPACE TYPE BY PERCENTAGE - 14,944,00 NASF TOTAL

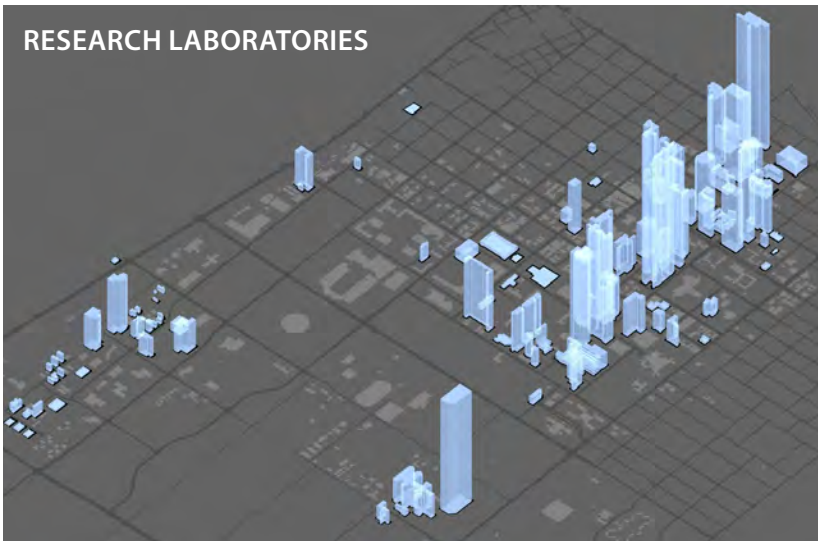


NASF BREAKDOWN BY SPACE TYPE

As of Fall 2015, The Urbana campus had a total of over 14.9 million net assignable square feet (NASF) of space. GSF of space includes all interior space of a building, including interior circulation, restrooms, mechanical support, etc, as well as the calculation to the exterior face of exterior walls. The NASF of a building is all of the space that can be scheduled for a specific use, and does not include the above building support spaces. For peer comparison and utilization analyses, NASF is used.

Categories of occupied space include Classroom, Class Laboratory, Research Laboratory, Office, Study, Special Use, General Use, Support, Healthcare, Residential/Dining, and Unassigned. Office space comprises the majority of space, totaling 22% of NASF. The next largest category is support such as storage space, accounting for 18% of the NASF. Residential and dining comprise the third largest use of space at 13%, followed by research space at 12%. Instructional space including Classroom, Class Laboratory and Study space total 13% of all campus space.





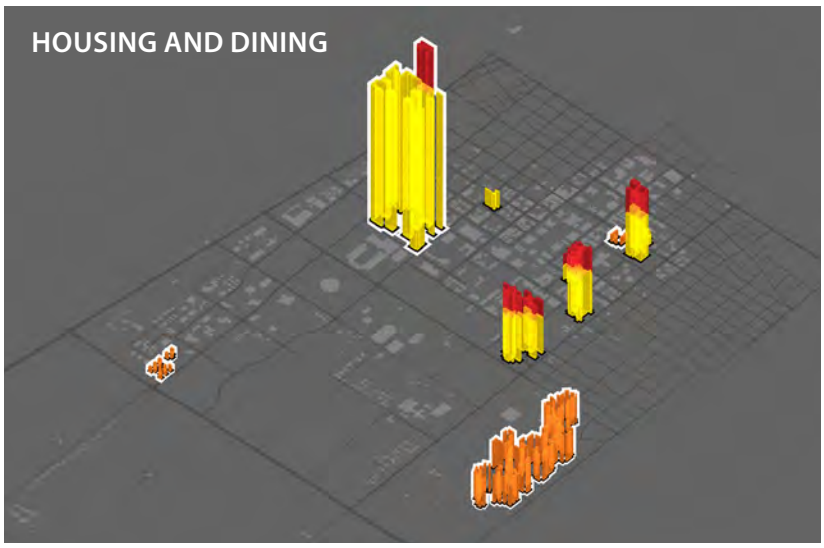
SPACE DISTRIBUTION

The maps in this section show the location and density of a particular space type found within buildings across the Urbana campus. Building footprints were extruded vertically based on the amount of assignable square feet (ASF), or density, of that space type in the building. Classrooms and academic office space are well distributed across most of the campus. Whereas teaching laboratories are clustered heavily in fewer facilities, including Krannert Center for the Performing Arts (tallest bar) and the College of Veterinary Medicine. Research laboratory space is clustered primarily on the east and south sides of campus, with a smaller cluster in the area containing many facilities operated by the Prairie Research Institute.

The diagram for housing and dining shows only the on-campus residence hall complexes, with red highlighted for those which contain dining facilities. The concentration of beds seen in the lower left corner of the image represents the Ikenberry housing complex on the west side of campus. The buildings highlighted in orange depict university apartment units for graduate students and students with families.


OFFICE: ACADEMIC


OFFICE: ADMINISTRATIVE


HOUSING AND DINING

COMPARATIVE SPACE ANALYSIS

UNIVERSITY SELECTED PEERS

The master planning team conducted a comparative space analysis, making direct comparisons with other similar public, research intensive universities in order to understand existing space allocation. Comparing campus facilities in this manner allows the university to consider what additional space might be needed to bring the university nearer their peers, and to identify what spaces are currently sufficiently similar to peer institutions.

Most institutions that participated agreed to sharing their name; however, one institution chose to remain anonymous. Institutions benchmarked included:

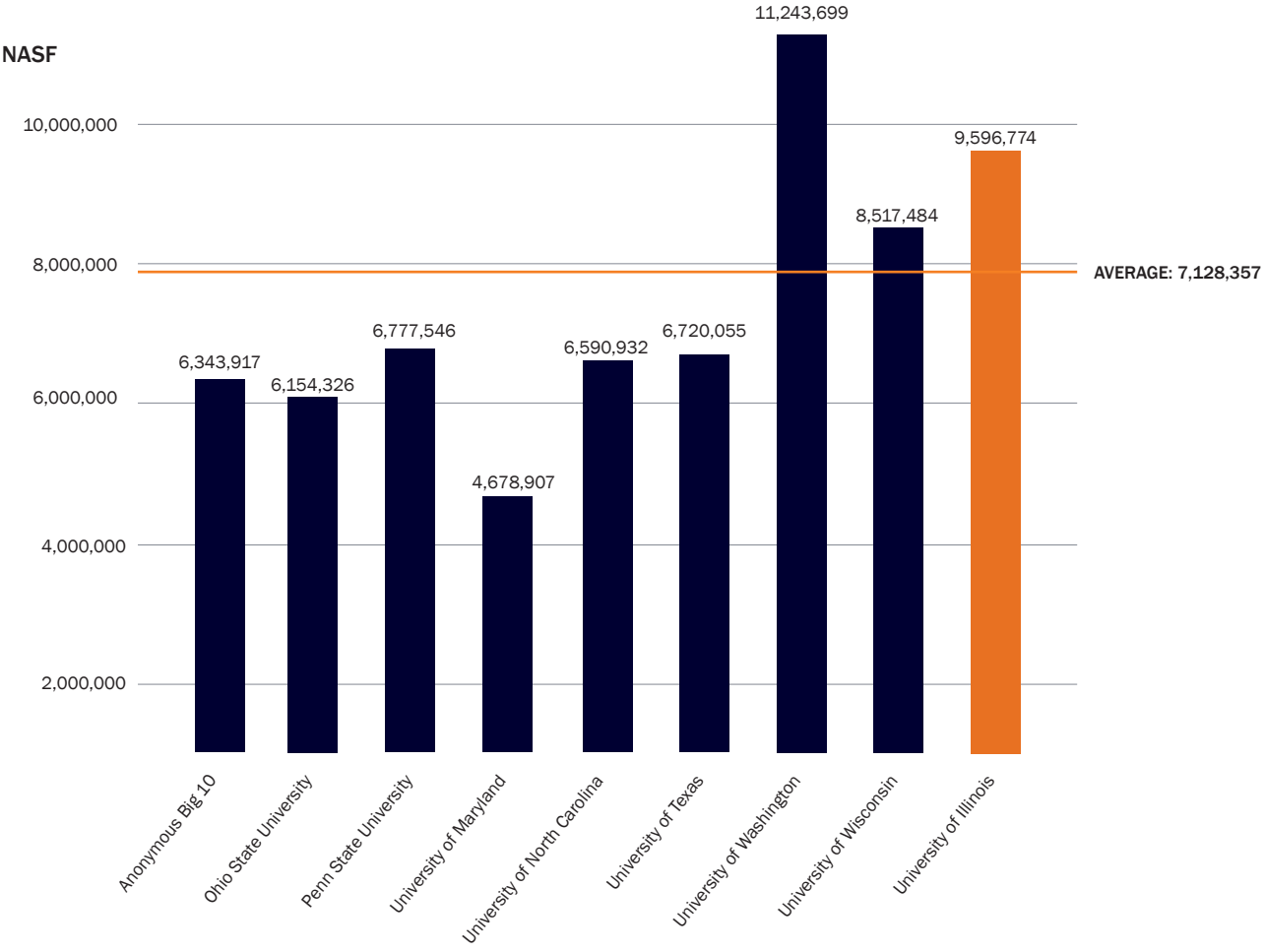
- Anonymous Big Ten University
- Pennsylvania State University
- The Ohio State University
- University of Maryland
- University of North Carolina Chapel Hill
- University of Texas Austin
- University of Washington
- University of Wisconsin-Madison

Space needs vary by program, and no two institutions will have the same set of programs or even the same emphases in the same program. Campus-level comparisons should primarily be considered a general indicator of how institutions with similar enrollment and composition compare on a broad scale.

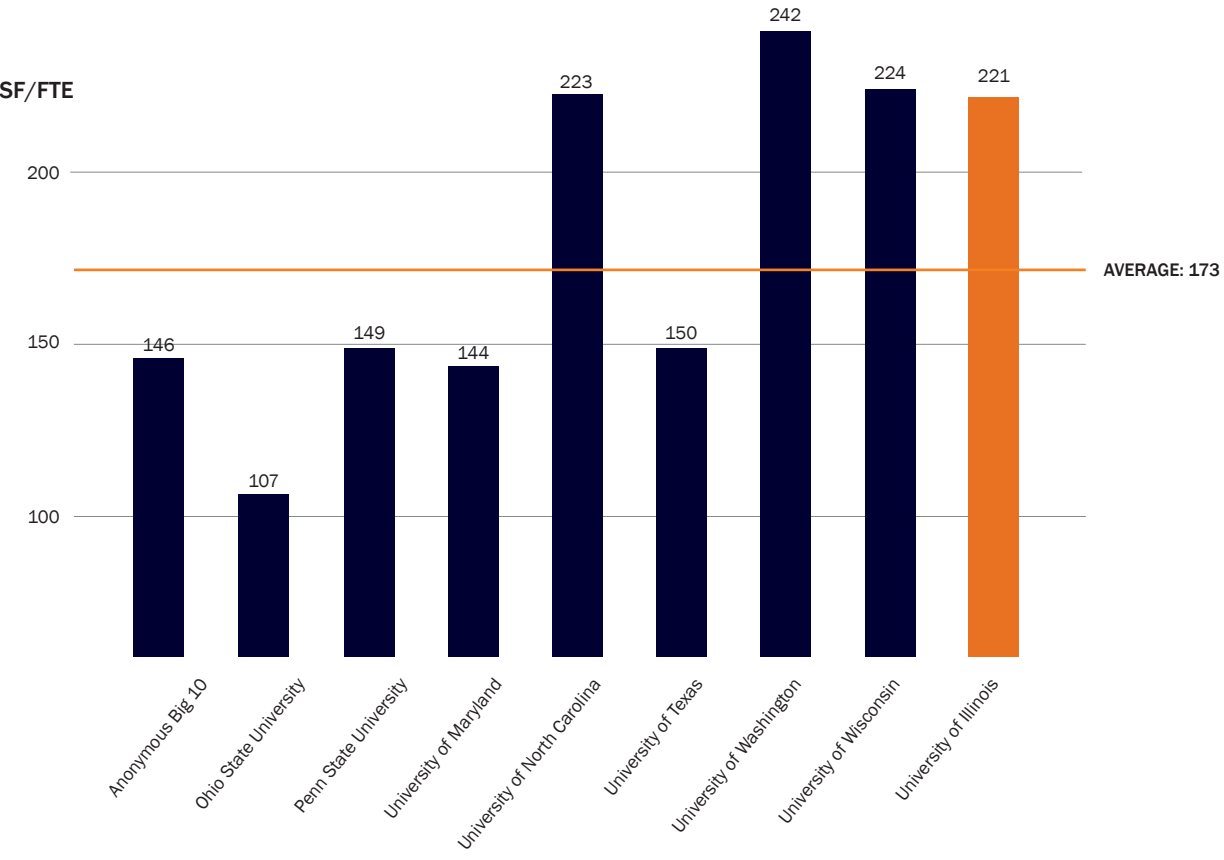
SUMMARY FINDINGS

Fall 2015 data was utilized for benchmarking across institutions. At an overall institutional level, the University of Illinois at Urbana-Champaign is higher than the average, with the second highest total NASF for all academic and research space (auxiliary space was not included in the totals). The average NASF per Student FTE for all institutions is 173 NASF/FTE. The university is higher than the average at 221 NASF/FTE, but still within the norm for some peers.

TOTAL NASF



TOTAL NASF/FTE



PEER COMPARISONS

SPACE BREAKDOWN BY STUDENT FTE

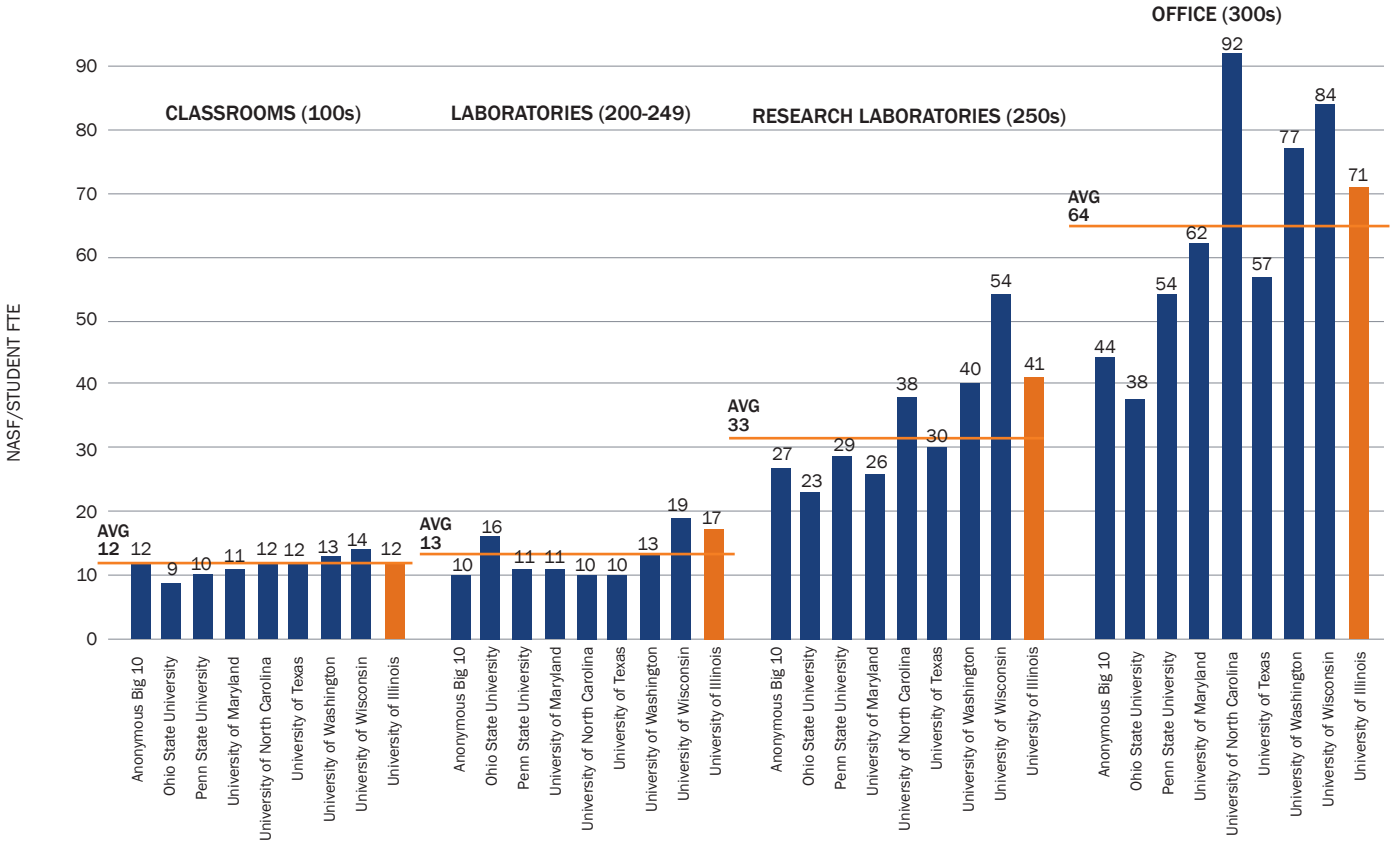
The space comparison analysis at the institutional level also compared assignable space per student FTE in the following categories:

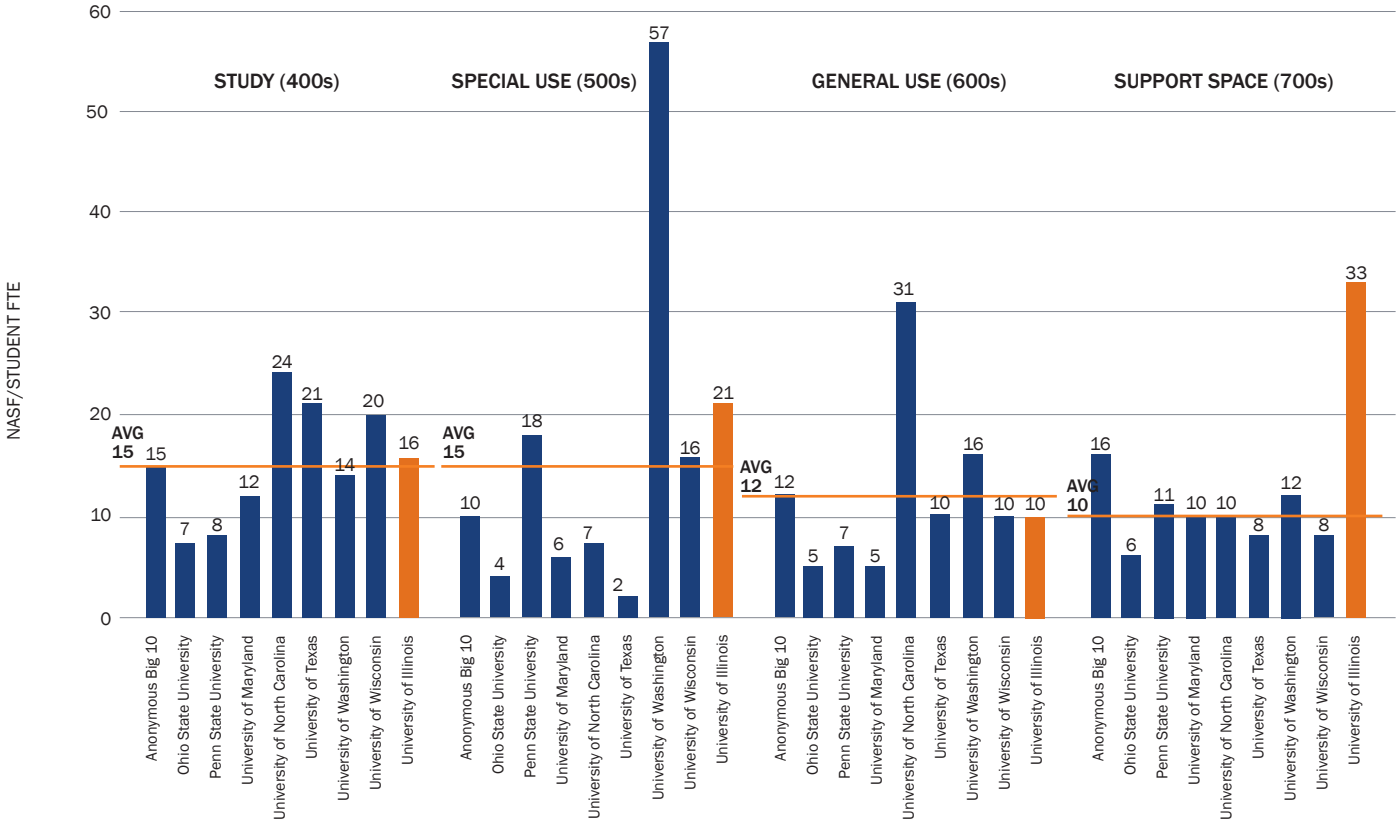
- Classrooms
- Teaching Laboratories
- Open Laboratories
- Research Laboratories
- Office
- Study
- Special Use
- General Use
- Support Space

Residential space, health care space, and athletic space were not included in this analysis.

Overall, for most space categories, the University of Illinois at Urbana-Champaign was at or above the peer average in ASF per student FTE for categories such as classrooms, class laboratories, and study space, and just above peer average for research laboratory, office, and special use space. This suggests that the university has a healthy overall ASF per FTE that is generally within the range of the selected peers, with two exceptions.

In the general use space category, the university was somewhat below the peer average. However, since general use covers such a wide range of space use, this does not in itself indicate a space constraint. For the support space category, the university had three times the average square foot per student. Support space typically includes storage space--for all colleges and institutes, including the Prairie Research Institute and its significant collections--as well as facilities and grounds maintenance space.


OFFICE (300s)
CLASSROOMS (100s)
LABORATORIES (200-249)
RESEARCH LABORATORIES (250s)
NASF/STUDENT FTE
AVG 12
AVG 13
AVG 33
AVG 64
Anonymous Big 10
Ohio State University
Penn State University
University of Maryland
University of North Carolina
University of Texas
University of Washington
University of Wisconsin
University of Illinois


STUDY (400s)
SPECIAL USE (500s)
GENERAL USE (600s)
SUPPORT SPACE (700s)
NASF/STUDENT FTE
AVG 15
AVG 15
AVG 12
AVG 10
Anonymous Big 10
Ohio State University
Penn State University
University of Maryland
University of North Carolina
University of Texas
University of Washington
University of Wisconsin
University of Illinois

ACADEMICS

ACADEMIC PROGRAMS

The University of Illinois at Urbana-Champaign has 16 colleges and instructional units that provide more than 150 undergraduate programs and more than 100 graduate and professional programs. As of Fall 2015, these programs are supported by over 3,215 faculty.

SCHOOLS AND COLLEGES

- College of Agricultural, Consumer and Environmental Sciences
- College of Applied Health Sciences
- College of Business
- College of Education
- College of Engineering
- College of Fine and Applied Arts
- Division of General Studies
- Graduate College
- School of Labor and Employment Relations
- College of Law
- College of Liberal Arts and Sciences
- School of Information Sciences
- College of Media
- Carle Illinois College of Medicine
- School of Social Work
- College of Veterinary Medicine

ENROLLMENT AND NASF BY COLLEGE

In the fall of 2015 the College of Liberal Arts and Sciences had the highest enrollment of any college with almost 14,000 students. The College of Engineering was the second largest with just over 10,000 students. There were a number of colleges with 2,000 to 4,000 students enrolled: Fine and Applied Arts, Applied Health Sciences, Business, and Agriculture, Consumer and Environmental Sciences (ACES). A number of smaller colleges had enrollment below 2,000, such as Veterinary Medicine, the School of Information Sciences, Media, and Education, among others. As a new college, the Carle Illinois College of Medicine was not yet enrolling students in the fall of 2015.

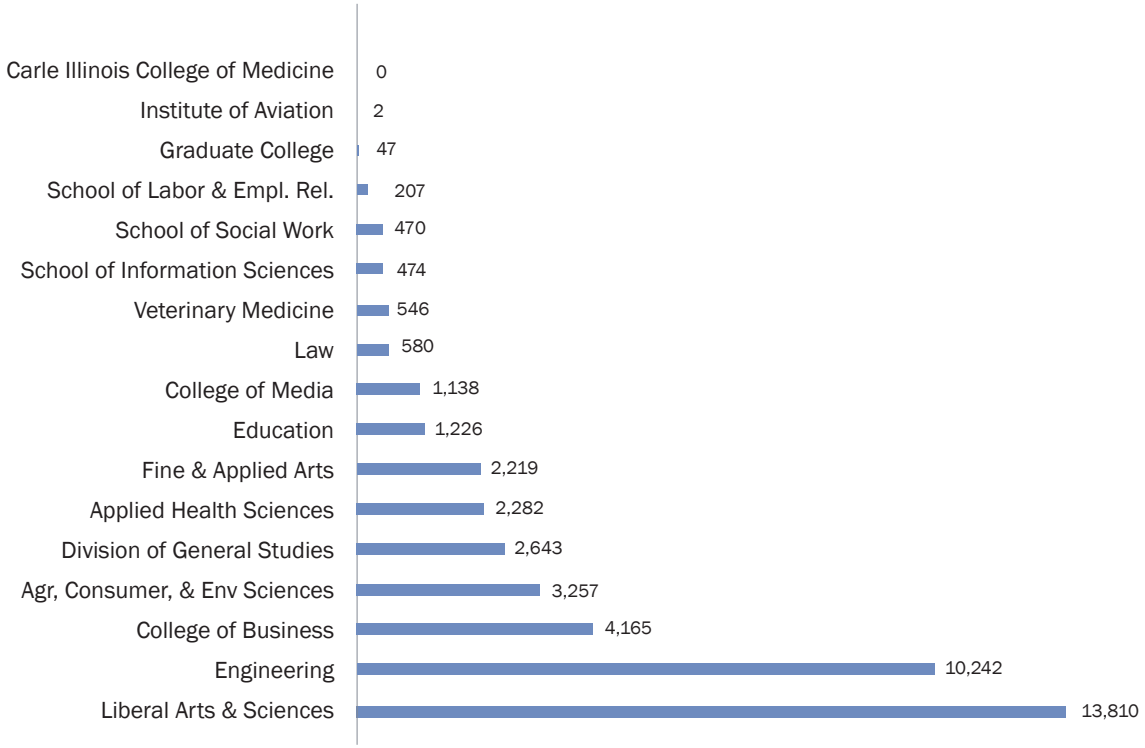
The top three colleges with the highest overall NASF are, in order: ACES, the College of Engineering, and the College of Liberal Arts and Sciences. Each of these programs have over one million NASF. Considering the nature of their programs and the amount of research conducted, this is not surprising. The College of Fine and Applied Arts and the College of Veterinary Medicine are the next two largest.

The five colleges with the lowest overall square footage include the Graduate College, the School of Labor and Employment Relations, the School of Information Sciences, the School of Social Work, and the College of Media. The new Carle Illinois College of Medicine is currently occupying space in the existing Medical Sciences Building.

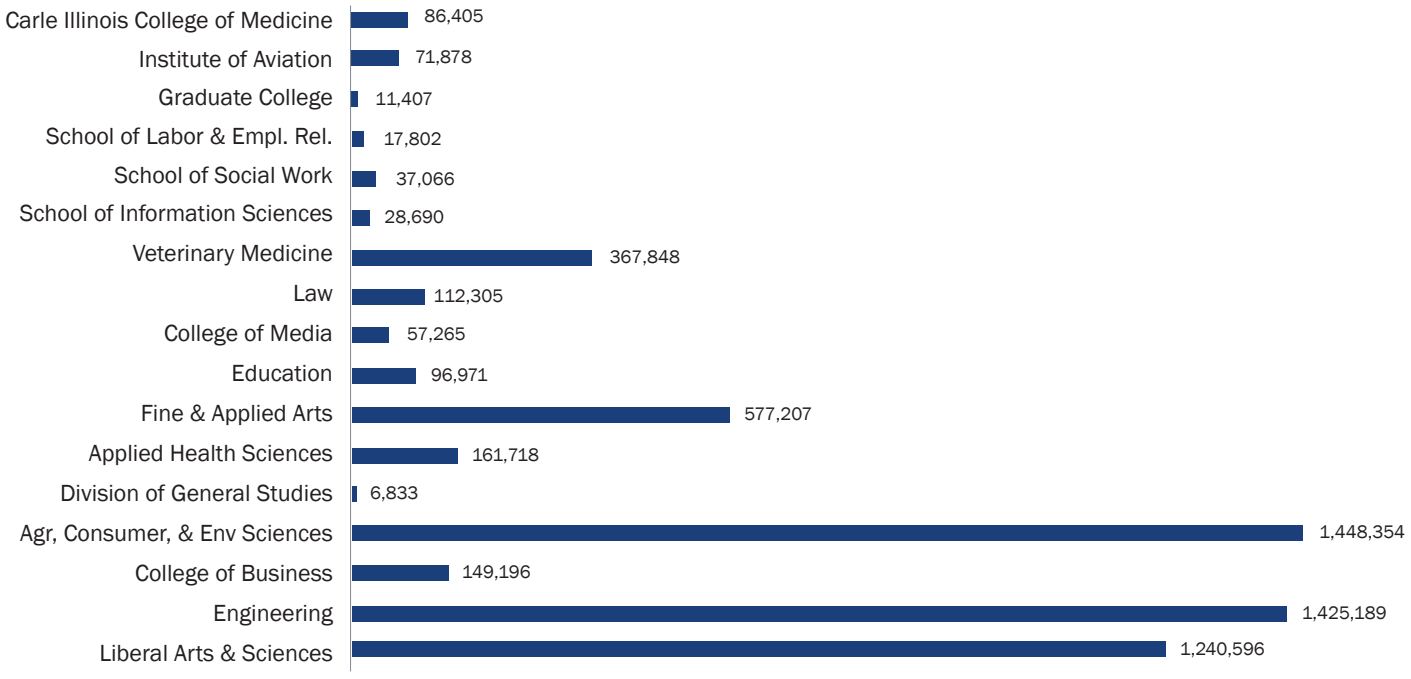
Scholarship, discovery and innovation are the heart of Illinois. We must attract and retain the intellectual, human power to make them happen. This is the future of the university — where it all starts for us.

The Illinois Strategic Plan

ENROLLMENT FTE BY COLLEGES/INSTITUTES



NASF BY COLLEGE/INSTITUTE/UNITS - 7,683,000 NASF TOTAL



FUTURE ACADEMIC GOALS

In order to better understand the future academic goals for each of the colleges and instructional units, individual one-on-one interviews were held with each of the Deans and their leadership teams during the initial phase of the master planning process. This section summarizes the key opportunities, challenges, and program goals identified during each of these sessions which helped to guide the long-term vision for the Campus Master Plan.

SCHOOLS AND COLLEGES

COLLEGE OF AGRICULTURAL, CONSUMER, AND ENVIRONMENTAL SCIENCES (ACES)

The College of ACES expects to continue to grow in enrollment over the next ten years due to an increased focus on programs and research related to natural resources and environmental sciences. The primary challenge facing the college is the need for appropriate infrastructure to enable research. Many existing facilities are in very poor condition such as the Feed Mill and Swine Research Center. There is an increasing desire to co-locate facilities along a 'Legacy Corridor' and to find ways to partner with the private sector to realize shared goals.

COLLEGE OF APPLIED HEALTH SCIENCES (AHS)

As health trends continue to evolve from a reactive model to a more proactive approach, the College of AHS sees the potential for expansion of research efforts and modest enrollment growth. The new Carle Illinois College of Medicine also presents exciting new opportunities for collaboration. One key limitation to AHS's future success is the widespread distribution of facilities across campus. The college wishes to consolidate activities and grow into a new space.

COLLEGE OF BUSINESS

The College of Business envisions future growth in its MBA program, both through online and on-campus curriculum to supplement its already strong undergraduate business programs. There is also a desire to encourage increased interdisciplinary collaboration, particularly with the College of Engineering, to help drive focus on entrepreneurship. One current challenge to growth is the current student-to-faculty ratio which is high compared to peers. Additional faculty, as well as academic and office space, will be needed to realize future enrollment and program goals.

COLLEGE OF EDUCATION

The College of Education desires to maintain a relatively small enrollment in order to continue to allow students to learn in a research intensive environment. The most significant change over the next decade is expected to be the growth in online education. This will drive a need to update classroom technology and spatial configurations. A long-term future goal is to have one consolidated facility to provide space for both research and instruction. Research facilities are currently spread out across the community.

COLLEGE OF ENGINEERING

The College of Engineering continues to be one of the top destination academic units on the Urbana campus. With significant enrollment demand, the Dean has established a goal to grow strategically over the next decade to ensure that appropriate class sizes are sustained and programs align with current resources. A primary area of focus for the college is improved utilization of existing facilities, as well as targeted removals and replacements. Two new buildings, an Integrated Research Facility and an Interdisciplinary Instructional Facility, are envisioned to meet future needs.

COLLEGE OF FINE AND APPLIED ARTS (FAA)

The College of FAA is organized into three main parts: performing arts, visual arts, and environmental arts. The college has witnessed some enrollment declines over the past ten years but sees an opportunity to grow, primarily within the environmental and visual arts programs. The college is one of the most geographically distributed academic units on the Urbana campus. FAA's primary future goal is to consolidate space from numerous aging buildings into a single state-of-the-art facility, possibly through expansion of the Krannert Center for the Performing Arts.

DIVISION OF GENERAL STUDIES

The Division of General Studies provides services to nearly every academic unit on campus. Freshman and sophomore undergraduate students who have not declared a major are assigned to this unit. The division's current space in the Illini Union Bookstore is considered adequate. However, the Director maintains a broader vision for the Urbana campus with a goal to create a centrally located Student Success Center to support learning and study skills.

GRADUATE COLLEGE

The Graduate College is a central service unit, not an academic college. However, growth of the Graduate College directly relates to changes in future student enrollment. All graduate students are required to visit their offices within Coble Hall at least once. The college is currently dispersed and desires to consolidate all activities within Coble Hall to provide an easily identifiable destination for students.

SCHOOL OF LABOR AND EMPLOYMENT RELATIONS (LER)

The School of LER is small with an enrollment which tends to fluctuate based upon economic cycles. However, recent years have witnessed a general trend upward in growth. The school occupies space within both the Labor and Employment Relations Building, as well as the Armory. Consolidation into a single facility would be a key differentiator from peer institutions. Additional instructional space is also desired in the future to allow for increased interdisciplinary education.

COLLEGE OF LAW

The College of Law expects to maintain a relatively steady enrollment over the next decade, with the possibility of minor declines based upon national trends in legal education. The current focus of the college remains on providing the best academic facilities in order to remain competitive with peer institutions. Existing space capacity is expected to be adequate for the future but interior updates are needed to create additional instructional spaces for active learning and improved technology.

COLLEGE OF LIBERAL ARTS AND SCIENCES (LAS)

As of Fall 2015, the College of LAS supported the highest enrollment of any academic unit on the Urbana campus. While the college has recently felt the national trend of declining enrollments in the humanities, it has continued to experience growth overall due to increased interest in the sciences, data sciences, and economics. However, continued expansion of these programs is limited by constraints on existing available space. Growth in science research is anticipated, but the college will not be able to respond if quality laboratory space is not made available soon. Large lecture halls are also desired to allow for bigger class sizes for high-demand undergraduate courses.

SCHOOL OF INFORMATION SCIENCES

The School of Information Sciences supports a single, nationally renowned graduate degree program. The next decade is expected to be a period of very rapid change for the school with goals to create a new Master of Science in Information Management degree and possibly an undergraduate program. Online programs represent another source of growth potential for the school. The Dean desires to remain in their current building and allow for expansions into the adjacent building as needed.

COLLEGE OF MEDIA

The College of Media anticipates very few changes to current enrollment numbers over the next decade. Instead, the Dean's focus is on strengthening strategic partnerships and improving existing facilities. One potential alliance that would provide new opportunities for the college and promote shared resources would be with the Illinois Media Group which currently supports the university newspaper and radio station. However, current facilities limit the ability to make changes to adapt to new technologies and teaching models. Media laboratories are a key missing resource for the college.

CARLE ILLINOIS COLLEGE OF MEDICINE

The newest academic unit on the Urbana campus is the Carle Illinois College of Medicine. It was made possible by a newly established partnership between Carle Health System and the university. It will be the first engineering-based College of Medicine in the world. At the time of this report, the college had not yet admitted its first cohort of students. However, a small class size is anticipated to allow for highly specialized curriculum with overlap between the College of Engineering and College of Medicine. The college is currently planned to be located in existing buildings, but a new facility may need to be considered as the college grows.

SCHOOL OF SOCIAL WORK

The School of Social Work is a small graduate program with limited growth anticipated over the next ten years. The Dean envisions the academic curriculum will shift towards a blended program of online and in-person learning. The school is the only academic unit found entirely in leased space. The space has recently been re-designed to increase efficiency and accommodate growth within the existing footprint. A key strategic goal is for office space to be co-located in a single facility while instructional space be located across campus to allow for better integration.

COLLEGE OF VETERINARY MEDICINE

The College of Veterinary Medicine projects future growth of 15% beyond their current student cohort. To accommodate this increase, the college will also need to grow faculty and staff. One key future academic goal for the college is the expansion of the Equine Sports Medicine program over the next decade. This is anticipated to increase the college's national standing. Additional space is needed within the Veterinary Hospital and Clinic, as well as updates to aesthetics and wayfinding to improve the experience for regional visitors.

UNIVERSITY LIBRARY

While the University Library is not considered one of the university's 16 college or instructional units, it does serve a strategic role in the academic mission of the institution and deserves mention within this section. The University Library will continue to implement their recent master plan with consolidation of existing libraries into five major buildings on campus. This includes renovation to the Main and Undergraduate Libraries to allow for more flexible learning and research spaces, as well as improved technology. Additional storage will be needed to house the university's vast collection of print materials as the current off-site storage facility on Oak Street is nearly full.

COLLEGE AND SCHOOL DISTRIBUTION

The adjacent diagram graphically depicts the geographic distribution of each college and instructional unit on the Urbana campus. The majority of academic units are clustered together. However, units such as the College of Media, College of Applied Health Sciences, and College of Fine and Applied Arts are noticeably dispersed across campus. There are eight buildings on campus which support multiple academic units which are noted below with their associated units. The Armory represents the most interdisciplinary in character of all buildings on campus. For individual enlargements of the diagrams for each academic unit, please refer to the Appendix.

COLLEGES AND SCHOOLS

- CARLE ILLINOIS COLLEGE OF MEDICINE
- COLLEGE OF VETERINARY MEDICINE
- COLLEGE OF MEDIA
- COLLEGE OF LAW
- COLLEGE OF EDUCATION
- COLLEGE OF APPLIED HEALTH SCIENCES
- COLLEGE OF FINE AND APPLIED ARTS
- COLLEGE OF ACES
- COLLEGE OF BUSINESS
- COLLEGE OF ENGINEERING
- COLLEGE OF LIBERAL ARTS AND SCIENCES
- GRADUATE COLLEGE
- GENERAL STUDIES
- SCHOOL OF LABOR & EMPLOYMENT RELATIONS
- SCHOOL OF INFORMATION SCIENCES
- SCHOOL OF SOCIAL WORK

BUILDINGS SHARED BY MULTIPLE COLLEGES AND SCHOOLS

1 ARMORY

COLLEGE OF LIBERAL ARTS AND SCIENCES
COLLEGE OF MEDIA
COLLEGE OF EDUCATION
COLLEGE OF APPLIED HEALTH SCIENCES
COLLEGE OF FINE AND APPLIED ARTS
COLLEGE OF BUSINESS

2 GREGORY HALL

COLLEGE OF LIBERAL ARTS AND SCIENCES
COLLEGE OF MEDIA

3 MUMFORD HALL

COLLEGE OF FINE AND APPLIED ARTS
COLLEGE OF ACES

4 MADIGAN LABORATORY

COLLEGE OF LIBERAL ARTS AND SCIENCES
CARLE ILLINOIS COLLEGE OF MEDICINE
COLLEGE OF ACES

5 PLANT SCIENCES LABORATORY

COLLEGE OF LIBERAL ARTS AND SCIENCES
COLLEGE OF ACES

6 ILLINI UNION BOOKSTORE

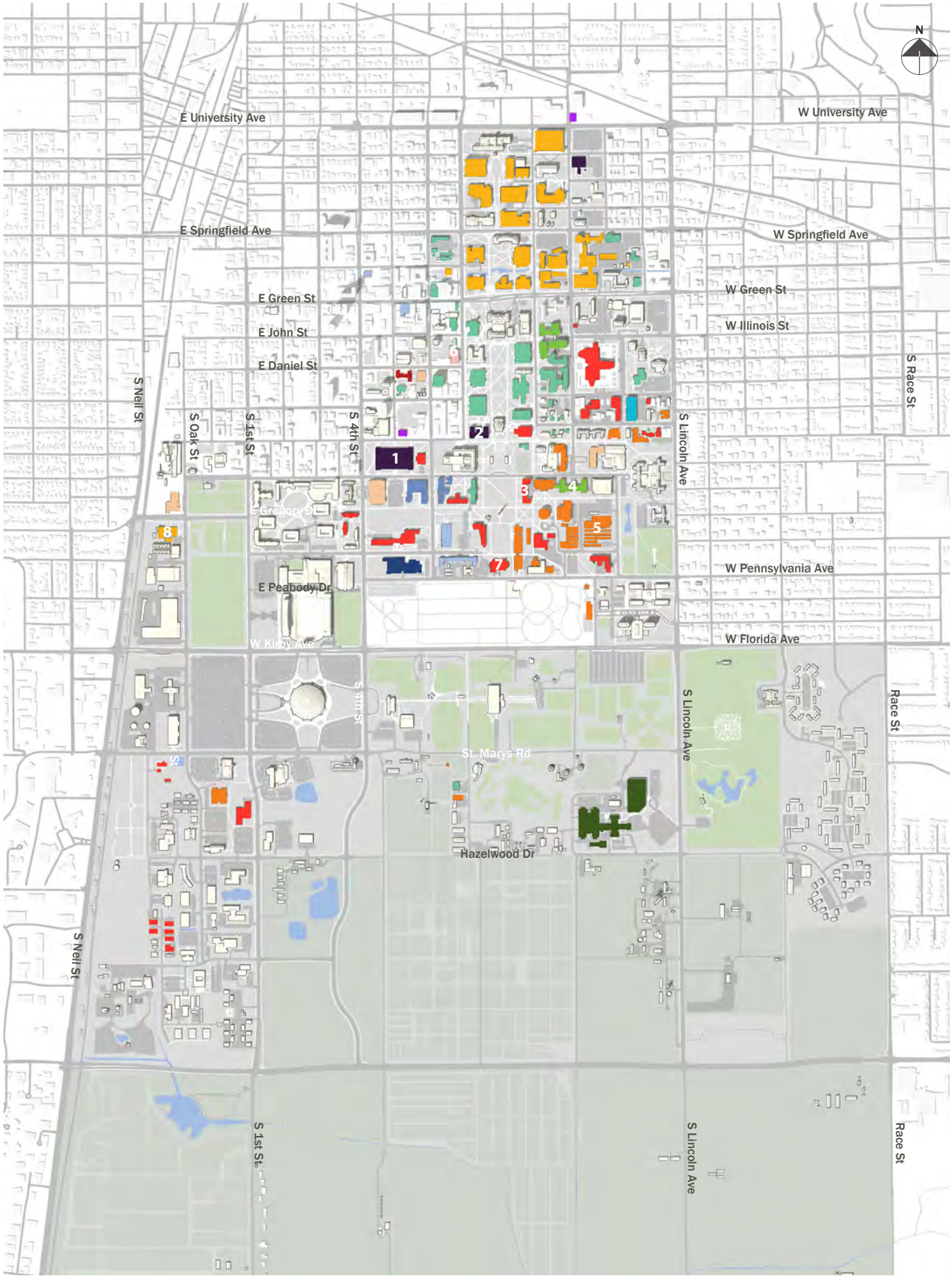
COLLEGE OF LIBERAL ARTS AND SCIENCES
GRADUATE COLLEGE
GENERAL STUDIES

7 STOCK PAVILION

COLLEGE OF ACES
COLLEGE OF FINE AND APPLIED ARTS

8 NUCLEAR PHYSICS LABORATORY

COLLEGE OF ENGINEERING
COLLEGE OF LIBERAL ARTS AND SCIENCES


N
E University Ave
W University Ave
E Springfield Ave
W Springfield Ave
E Green St
W Green St
E John St
W Illinois St
E Daniel St
S Neil St
S Oak St
S 1st St
S 4th St
S Lincoln Ave
S Race St
1
2
3
4
5
6
7
8
S Gregory Dr
E Peabody Dr
W Kirby Ave
W Pennsylvania Ave
W Florida Ave
St. Marys Rd
Hazelwood Dr
Race St

RESEARCH PROGRAMS

RESEARCH PROFILE

RESEARCH EXPENDITURES AND SPACE

The university ranks in the top 25 of national R1 research universities at 21st with over $743 million annually in research expenditures in 2013-2015. Space dedicated for research totaled over 3 million NASF which equates to 2,730 NASF per principal investigator (PI) and 265 NASF per total research staff. Research space includes laboratory, laboratory support, core laboratory, research office, and shared resource space such as vivaria, and greenhouses. Research space utilized in University Research Park with corporate partners is not included in this total.

RESEARCH FACULTY

University faculty totaled 3,000 individuals, including 1,450 research faculty in the academic colleges and research institutes. The 1,450 is the total number of faculty engaged in research at the university. PIs totaling 1,140 research faculty is the subset of research faculty with grant funded studies as classified by the National Science Foundation (NSF). The total staff involved in research at the university exceeds 11,800 individuals.

RESEARCH INSTITUTES AND CENTERS

The University of Illinois at Urbana-Champaign has several established and emerging interdisciplinary research institutes and centers. Together, they are some of the strongest contributors to the research portfolio on campus, responsible for over one-third of total campus sponsored research expenditures.

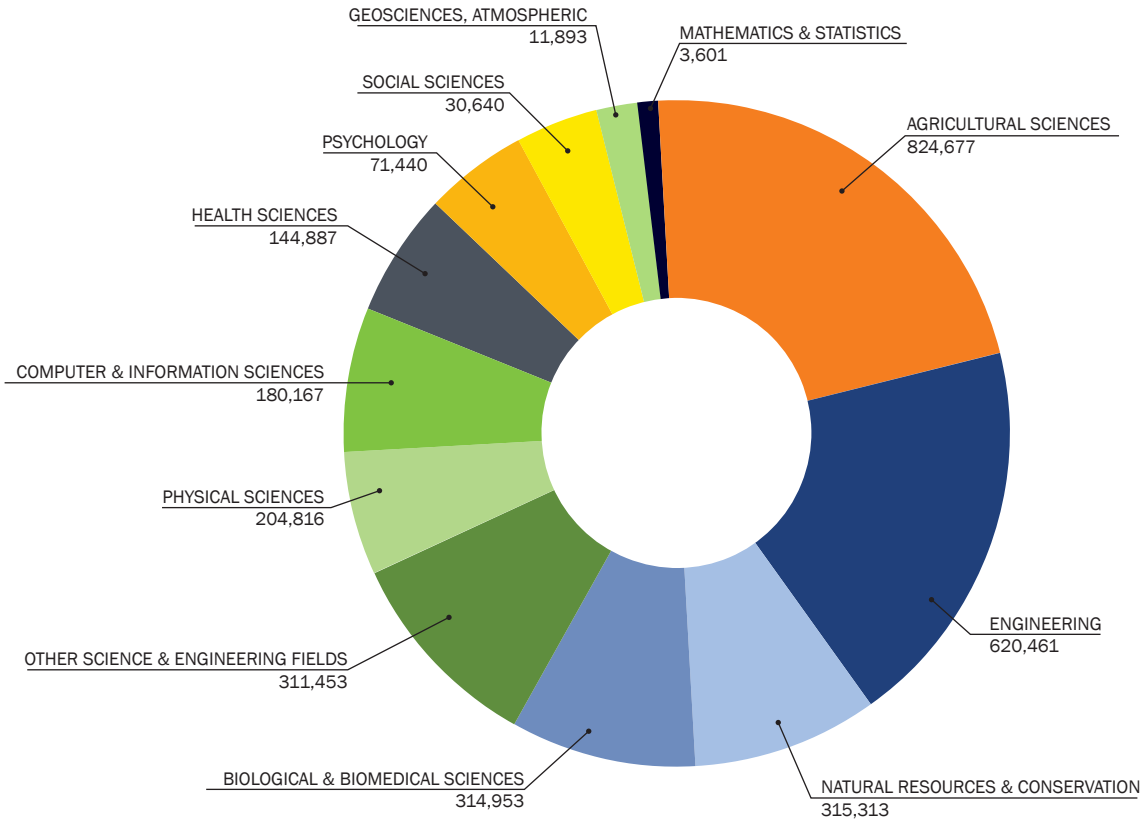
These institutes report to the Office of the Vice Chancellor for Research and include:

- Beckman Institute for Advanced Science and Technology
- National Center for Supercomputing Applications (NCSA)
- Illinois Health Sciences Institute (IHSI)
- Illinois Program for Research in the Humanities (IPRH)
- Carl R. Woese Institute for Genomic Biology (IGB)
- Institute for Sustainability, Energy and Environment (ISEE)
- Prairie Research Institute (PRI)

SPACE BREAKDOWN BY SCIENCE

The College of Engineering and College of Agriculture, Consumer and Environmental Sciences have the most assigned space, followed by Natural Resources, Biological and Biomedical and other science and engineering fields. In addition, the university houses the State of Illinois Natural History, Archaeological, Geological and Water Survey collections in the Prairie Research Institute, with approximately 400,000 NASF.

3,034,301 NASF - BY SCIENCE



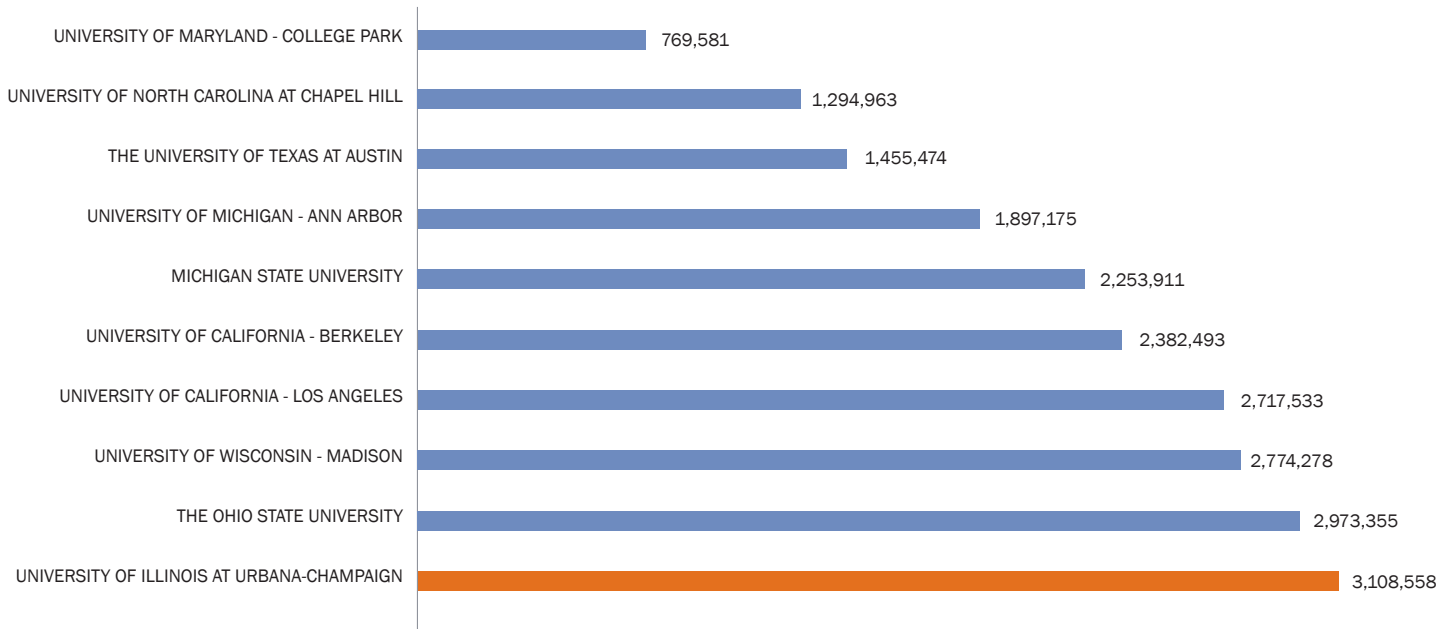
RESEARCH SPACE COMPARISON

BENCHMARKING ANALYSIS

A benchmarking analysis of peer R1 universities indicated that the university has the most research space of any of the peers identified. A further comparison of universities with similar research programs involving agriculture and engineering showed this amount of research space was within the mean average in those research fields.

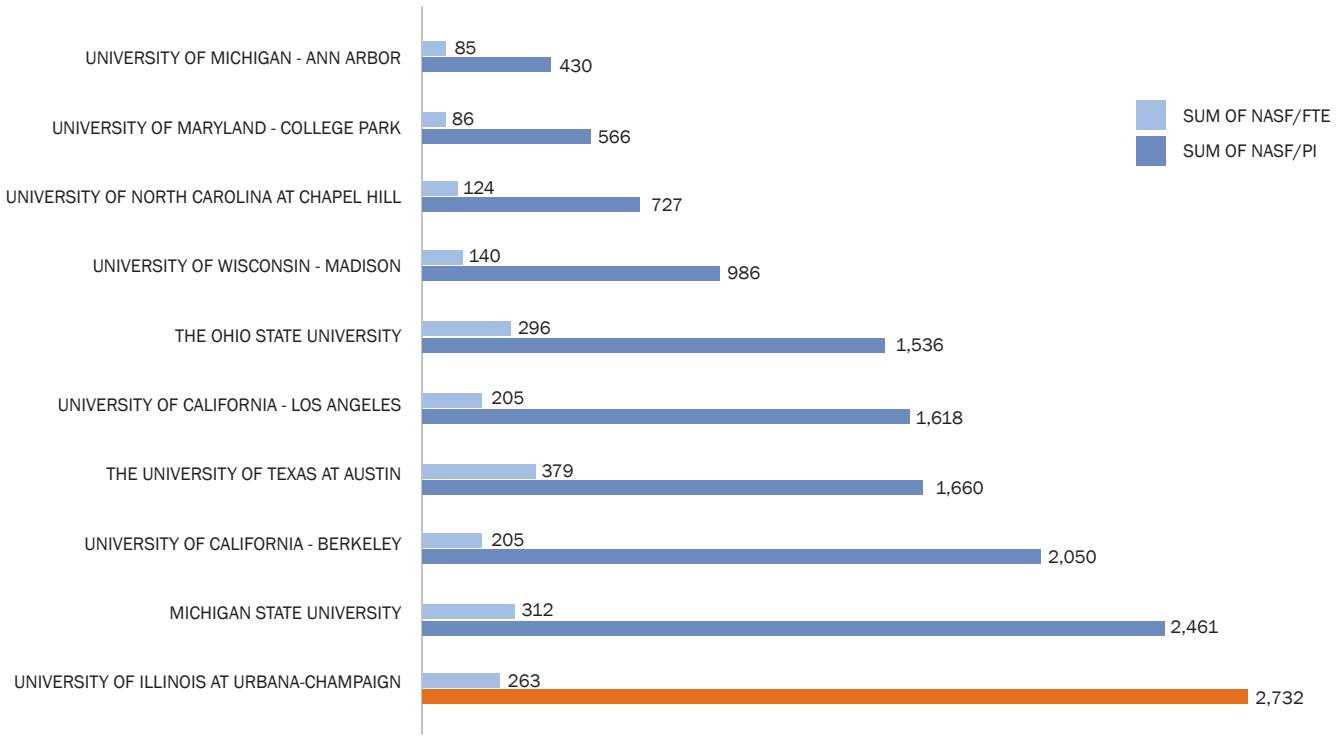
RANK	NAME	CITY
2	University of Michigan	Ann Arbor
4	University of Wisconsin	Madison
9	University of North Carolina at Chapel Hill	Chapel Hill
10	University of California	Los Angeles
20	The Ohio State University	Columbus
21	University of Illinois at Urbana-Champaign	Champaign
23	University of California-Berkeley	Berkeley
30	The University of Texas at Austin	Austin
35	Michigan State University	East Lansing
40	University of Maryland	College Park

TOTAL RESEARCH NASF



STATE	NASF	TOTAL EXPEND	PI'S	EXPEND/PI	NASF/PI	POST DOC	OTHER STAFF	TOTAL STAFF	NASF/ FTE
MI	1,897,175	$1,375,117,000	4,407	$312,030	430	1,787	16,032	22,226	85
WI	2,774,278	$1,123,501,000	2,815	$399,112	986	1,042	15,925	19,782	140
NC	1,294,963	$973,007,000	1,782	$546,020	727	991	7,698	10,471	124
CA	2,717,533	$966,659,000	1,680	$575,392	1,618	1,335	10,249	13,264	205
OH	2,973,355	$793,373,000	1,936	$409,800	1,536	672	7,428	10,036	296
IL	3,108,558	$743,487,000	1,138	$653,328	2,732	700	9,982	11,820	263
CA	2,382,493	$727,002,000	1,162	$625,647	2,050	1,419	9,052	11,633	205
TX	1,455,474	$634,132,000	877	$723,070	1,660	389	2,574	3,840	379
MI	2,253,911	$515,707,000	916	$526,999	2,461	503	5,803	7,222	312
MD	769,581	$491,998,000	1,359	$362,029	566	471	7,072	8,902	86

NASF/PI COMPARISON



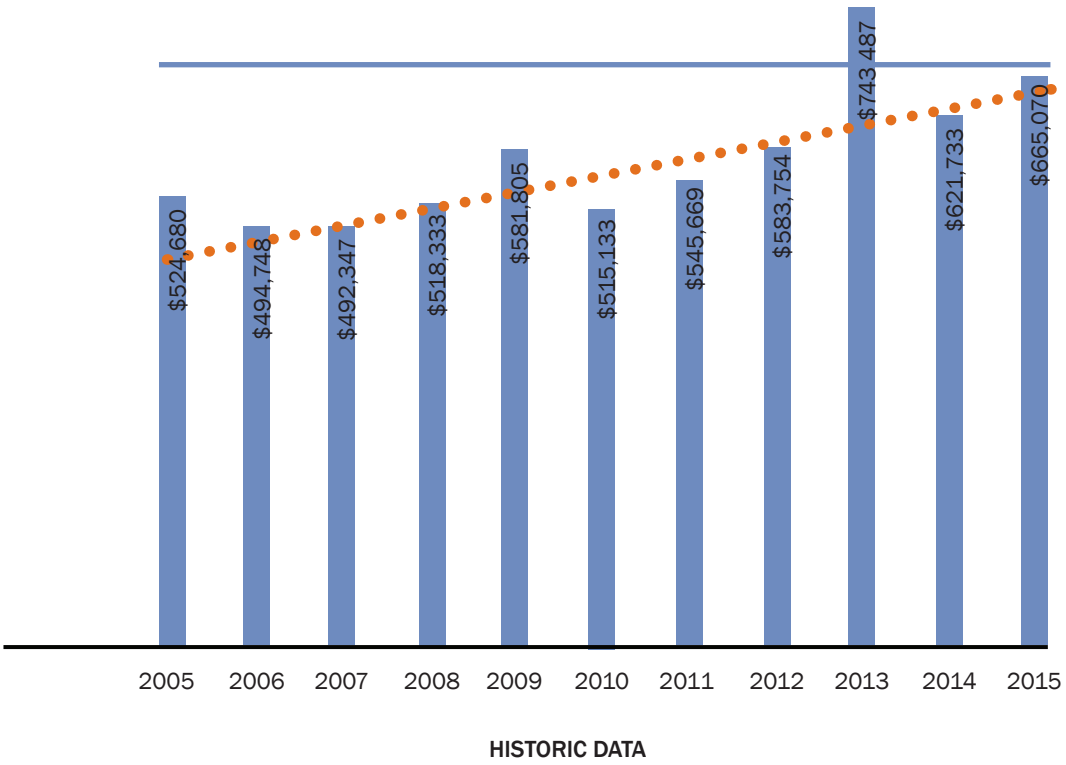
RESEARCH PROJECTIONS

An analysis of research expenditures over the past ten years showed a steady growth of 2.5% annually through that period. Based on trend analysis of projections for the next ten years, research expenditures can be expected to increase in a range of $735 to $850 million. Given the current average expenditures per research PI this may result in an additional need for 80 PIs. Additional required space can be in the range of 182,500 NASF to 220,700 NASF, or 305,000 GSF to 367,800 GSF.

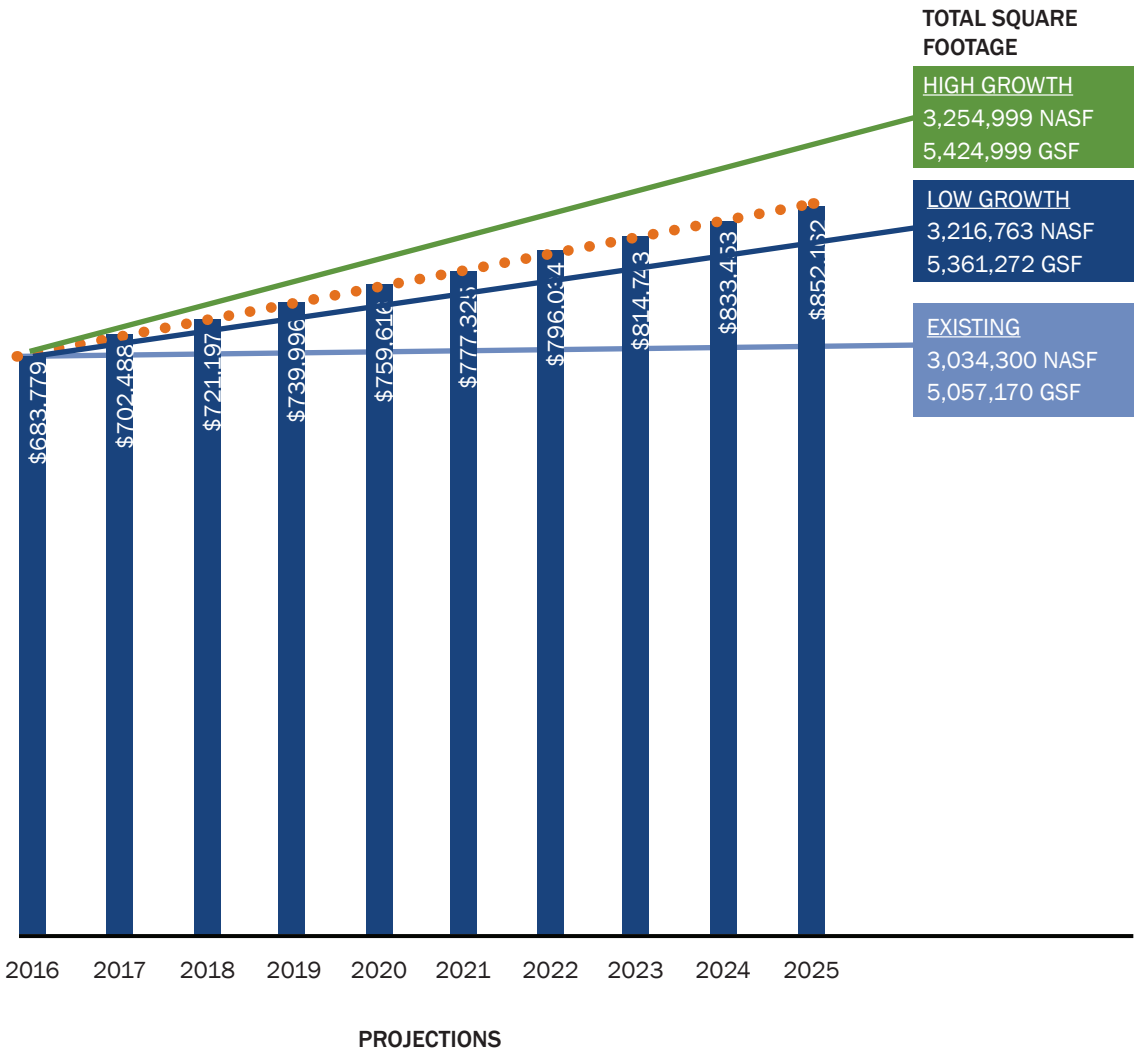
SPACE UTILIZATION

An analysis of research space indicated that the majority of the existing laboratory space is configured as closed laboratories, with fixed casework separated by block wall partitions with embedded utility services. This configuration limits flexibility and adaptability for future programs, as well as the ability to improve space utilization and share space. Space is primarily allocated to individual colleges, as well as the research institutes which accommodate research faculty.

To achieve a net zero growth based on the projections for additional space ,a 6% increase in space utilization would need to be achieved. However, this increase in utilization will be difficult without significant investment and may not be achievable solely through renovation of existing space, due to the limited flexibility and adaptability of existing facilities. The goal would be a combination of renovated space for improved net efficiency and new laboratory facilities to replace obsolete laboratory space.



The dollars represent past and projected research expenditures, in 1000s.


TOTAL SQUARE FOOTAGE
HIGH GROWTH
3,254,999 NASF
5,424,999 GSF
LOW GROWTH
3,216,763 NASF
5,361,272 GSF
EXISTING
3,034,300 NASF
5,057,170 GSF
$683,779
$702,488
$721,197
$739,996
$759,616
$777,325
$796,034
$814,743
$833,453
$852,162
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
PROJECTIONS

STUDENT LIFE

BY THE NUMBERS

198,300
GSF OF DINING SPACE

4,086
DINING HALL SEATS

35
DINING VENUES

8
RESIDENCE HALLS

9,279
RESIDENCE HALL BEDS

1,121
APARTMENT UNITS

560,000
GROSS SQUARE FEET (GSF)
OF INDOOR RECREATION

305,000
GROSS SQUARE FEET (GSF)
OF ILLINI UNION

CURRENT SPACE INVENTORY

OVERVIEW

The University of Illinois at Urbana-Champaign has a robust mix of student life offerings on campus from the historic Illini Union to over half a million GSF of indoor student recreation space. For fall of 2016 there were over 9,200 bed spaces available within residence halls in addition to over 1,100 apartment units primarily for graduate students and students with families. Over 35 permanent dining venues were offered on campus plus one mobile food truck. Over 70% of the dining square footage was within the six residential dining halls.

PEER BENCHMARKING

The Campus Master Plan completed a student life peer benchmarking exercise on ten institutions selected by the university. A demographic comparison of the schools shows the Urbana campus is slightly above the average headcount enrollment among the peers selected:

- Indiana University
- The Ohio State University
- Purdue University
- University of California at Berkeley
- University of California at Los Angeles
- University of Iowa
- University of Maryland at College Park
- University of North Carolina at Chapel Hill
- University of Texas at Austin
- University of Washington

STUDENT HOUSING

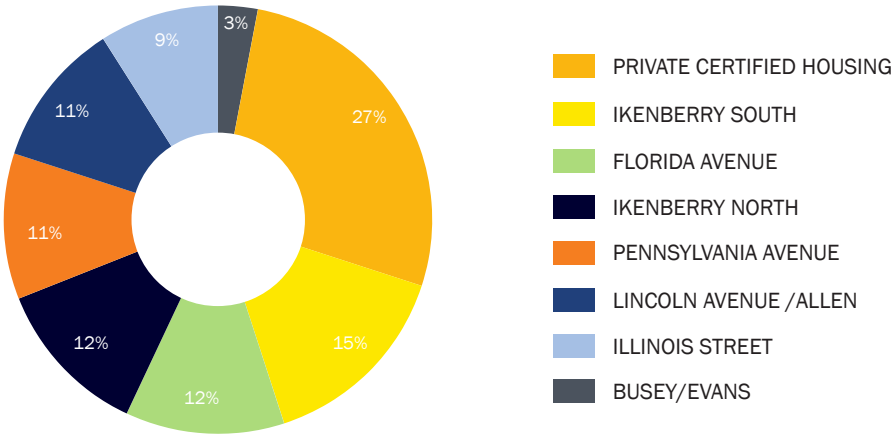
The University of Illinois at Urbana-Champaign supports eight residence hall complexes, totaling 9,279 beds. The diagram below shows the distribution of freshman across the campus residence halls based upon Fall 2016 data. Approximately 37% of residence hall occupants are non-freshmen. In addition, nearly a quarter of freshman live in the 15 private certified housing options available across campus.

The peer benchmarking comparison completed for student housing showed that the university's housing capacity is below the peer average. The Urbana campus is only able to house 28% of the undergraduate population versus an average of 33% undergraduate student housing capacity at peer institutions.

A high proportion of the residential hall units available are traditional style units, meaning double loaded corridors with community bathrooms. This is higher than is found at other peer institutions. Many other universities offer more suite-style units which offer additional bed and bath privacy making them more desirable for upper division students.

In addition, the Urbana campus provides 1,121 apartment units targeted at graduate students and students with families. These are found within three housing complexes: Orchard Downs, Ashton Woods, and Goodwin Green. Upper division and graduate/family apartment units are in high demand but have significant deferred maintenance issues. Replacement would likely require either an increase in rental rates, subsidization across the auxiliary system, or additional revenue streams to support new construction.

FRESHMAN HOUSING BREAKDOWN
(% OF FRESHMAN RESIDENTS BY COMMUNITY)



DINING

A variety of dining choices exist across the Urbana campus supported by multiple operators. In addition to the traditional residence hall dining venues, the campus also includes options such as coffee shops, convenience stores, and grab-n-go kiosks. Opportunities for consolidation may be available and are currently being assessed by university leadership.

CAMPUS RECREATION

With two fairly new recreation facilities, the Urbana campus offerings compare well with peer institutions for both indoor and outdoor spaces. While the findings do not suggest any current space shortfalls, future enrollment growth, an active student body, and potential facility issues may drive the need for expansion or renovation within ten years. It is also worth considering additional recreational facilities in geographically underserved areas such as North campus.

ILLINI UNION

Based on peer benchmarking, the Illini Union is undersized in several key areas when compared to similar facilities at other institutions. The Illini Union is one of only two peers that does not have a dedicated theater or auditorium space. The amount of food service area is also slightly less than the benchmarked average. In addition, the quality of the current food venues and seating areas found within the cramped lower level of the Ilini Union presents a concern. The findings suggest that student organization space is also undersized. In order to meet the current and future needs of campus, additional student union space will be needed.

DEAN OF STUDENTS

The majority of services related to the Dean of Students are located within the Turner Student Services Building. A smaller portion of space can be found within the Illini Union or scattered across other locations both on- and off-campus. Limited space within the Turner Student Services Building has necessitated some other student service departments to be spread across campus and housed in leased space. In summary, there are multiple different facilities housing the student life departments under the Dean of Students creating challenges from a programmatic and operational standpoint. Since the Turner Student Services Building is fully occupied, it does not allow any additional room for departments to grow or to accommodate larger, collaborative events within the facility.

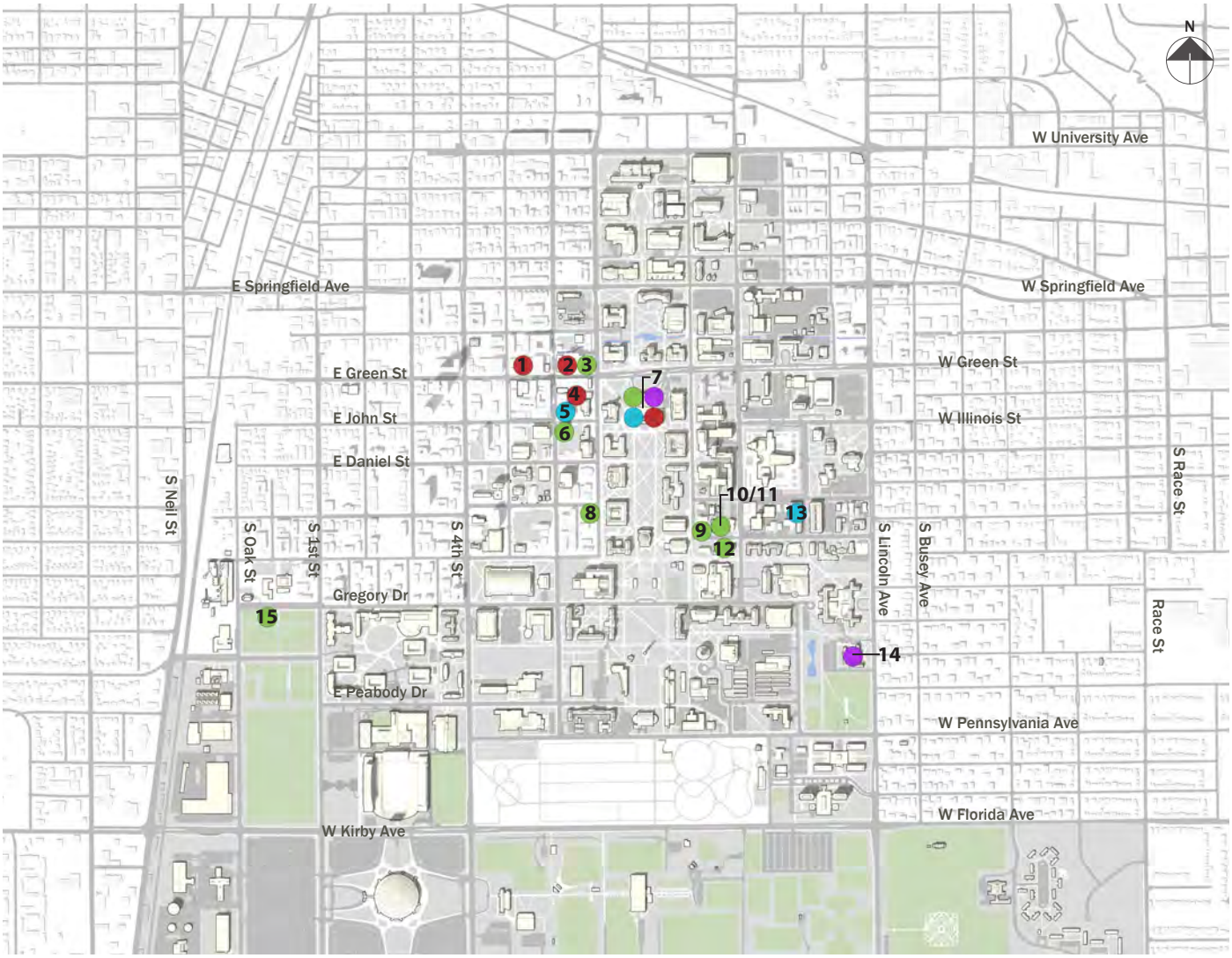
MCKINLEY HEALTH CENTER

McKinley Health Center is located in the southeast corner of the Core campus along Lincoln Avenue and serves the entire campus population. The current facility provides limited opportunities for growth, especially as it relates to space for telemedicine and counseling services. A small satellite facility s also located in the Illini Union. A possible expansion to the satellite facility, either in its current location or nearby, is desired in the future to better serve the student population. A feasibility study for possible expansion is planned within the next five years.

INCLUSION AND INTERCULTURAL RELATIONS

The Cultural Houses are predominantly located in individual structures along East Nevada Street in Urbana. This approach is strongly preferred by campus and community constituents following significant stakeholder input. However, deferred maintenance issues, along with ADA accessibility limitations present a concern to the long-term viability of the existing structures. In addition, a shared space to accommodate larger gatherings is desired.

HEALTH, COUNSELING, & WELLNESS
INCLUSION & INTERCULTURAL RELATIONS
CAREER/LEADERSHIP
DEAN OF STUDENTS



STUDENT LIFE FACILITIES

1 512 E. GREEN ST.: COUNSELING CENTER (LEASED SPACE)

2 616 E. GREEN ST.: CAREER CENTER (LEASED SPACE)

3 616 E. GREEN ST.: WOMEN'S RESOURCE CENTER (LEASED SPACE)

4 STUDENT SERVICES ARCADE BUILDING: CAREER CENTER

5 TURNER STUDENT SERVICES BUILDING:
- OFFICE OF THE DEAN OF STUDENTS
- STUDENT ASSISTANCE CENTER
- VETERANS SUPPORT SERVICES
- STUDENT CONFLICT RESOLUTION
- CAMPUS COMMUNITY STUDENT SERVICES
- THE COUNSELING CENTER
- NEW STUDENT PROGRAMS
- EMERGENCY DEAN
- OFFICE OF MINORITY STUDENT AFFAIRS
- FRATERNITY AND SORORITY AFFAIRS

6 SWANLUND ADMINISTRATION BUILDING
- OFFICE OF INCLUSION & INTERCULTURAL RELATIONS
- VICE CHANCELLOR FOR STUDENT AFFAIRS' OFFICE

7 ILLINI UNION
- ILLINI LEADERSHIP CENTER
- LGBT RESOURCE CENTER
- VETERAN STUDENT LOUNGE
- STUDENT LEGAL SERVICES
- TENANT UNION
- MCKINLEY HEALTH RESOURCE CENTER

8 UNIVERSITY YMCA: DIVERSITY AND SOCIAL JUSTICE EDUCATION (LEASED SPACE)

9 BRUCE D. NESBITT AFRICAN AMERICAN CULTURAL CENTER
- PREVIOUS LOCATION OF THE AFRICAN AMERICAN CULTURAL CENTER

10 ASIAN AMERICAN CULTURAL CENTER

11 NATIVE AMERICAN HOUSE

12 LA CASA CULTURAL LATINA

13 701 S. GREGORY ST.: OMSA EAST (LEASED SPACE)

14 MCKINLEY HEALTH CENTER: UNIVERSITY MEDICAL SERVICES

15 CAMPUS RECREATION OUTDOOR CENTER (TEMPORARY LOCATION OF THE BRUCE NESBITT AFRICAN AMERICAN CULTURAL CENTER)

FUTURE GROWTH

ENROLLMENT PROJECTIONS

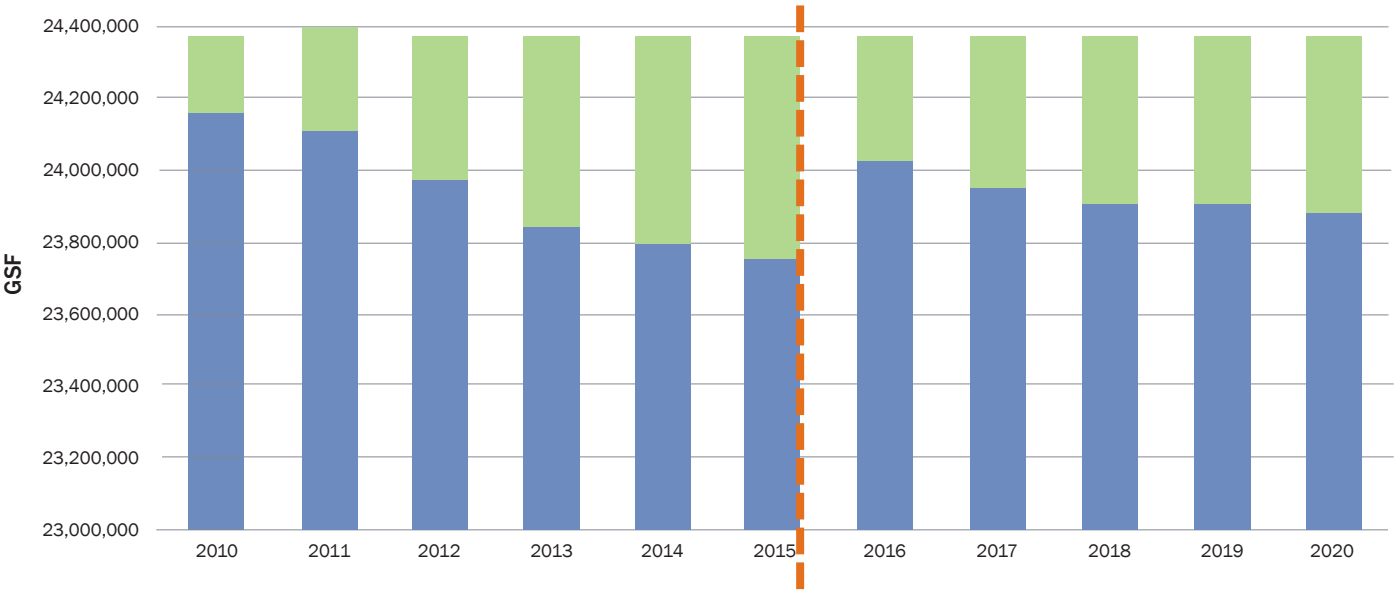
ENROLLMENT PROJECTIONS

The university's Office for Enrollment Management has projected a stable enrollment growth for the next decade. They anticipate the on-campus population will increase about 1% annually, on average. This equates to a future enrollment projection of almost 48,000 FTE students, an additional 4,540 students above current FTE. For campus planning purposes, the office has focused on the growth of students physically present on campus, and has not included growth in online enrollment.

ICAP AND NET ZERO GROWTH

In accordance with the Climate Leadership Commitments, the University of Illinois at Urbana-Champaign developed its own Illinois Climate Action Plan (iCAP) in 2010. A key goal is to reduce the campus' greenhouse gas emissions to zero as soon as possible and no later than 2050. As part of implementing the iCAP recommendations, the university adopted a "Net Zero Growth" (no net new square footage) policy in 2015. The policy's objectives are threefold: 1) to reduce energy usage and carbon emissions through conservation measures; 2) to limit the overall campus footprint by balancing new construction with the removal of obsolete buildings; and, 3) increase the utilization of existing space on campus.

TOTAL ADJUSTED GSF AND SPACE BANK FOR 2010 - 2020



THE SPACE BANK

As of 2015, the university established a space bank, an amount of square footage "banked" from the recent demolition of several outdated campus facilities. The space bank, administered by the Provost's office, provides the university with some flexibility to add facilities in the future. This number will fluctuate over the years as buildings are completed or removed. Currently, the space bank has approximately 626,000 GSF to apply to future construction on campus.

GROWTH WITH BUSINESS AS USUAL

If the campus continued to build at the same square foot per student ratio it has today, it would require an additional 1.6 million GSF of space, including research space, but not including residential space, to accommodate an increase of over 4,500 students. If the university held to the same square footage on campus that it has today, but increased its enrollment, it would bring the overall square foot per student ratio down to approximately 200 NASF per student, still above, but closer to the average ratio for peer institutions.

BALANCING GROWTH WITH ICAP

Balancing campus growth and renewal with a policy of no net new square footage requires a different approach to thinking about campus. It will require an emphasis on the renovation of existing space, the increased utilization of existing space, and the ability to share space and resources across units and across campus. However, Net Zero Growth does not mean no new growth. Identifying those facilities that are in poor or critical condition and removing them will add to the space bank, creating a reserve of space for construction of more state of the art, flexible, and energy efficient buildings.

POPULATION DEPENDENT PROGRAMS

There are some space categories that are sensitive to increases in student enrollment that will need to grow, particularly in Auxiliary units. For example, future housing needs are heavily dependent on the incoming freshman enrollment. Any significant increases will result in a shortfall of bed spaces, forcing other non-freshman students into the off-campus market. In order to maintain the same percentage of freshman and undergraduate students living on-campus, the university will need additional on-campus residence halls. Food options, recreation, and student services are all space categories that will also need to grow with enrollment.

04

FACILITIES AND CAMPUS ANALYSIS

ANALYSIS OVERVIEW

The University of Illinois at Urbana-Champaign was founded in 1867 following President Abraham Lincoln's approval of the Morrill Land-Grant Colleges Act. Today, the university celebrates its sesquicentennial and much has changed since its founding 150 years ago. The Urbana campus has transformed into a thriving institution of higher education with a dynamic campus environment supporting a daily population of over 57,000 administrators, faculty, staff, and students.

As a result of this decades long growth, the university faces unique complexities related to historic structures, iconic open spaces, aging infrastructure, and campus connectivity. In order to better comprehend the Urbana campus's unique identity, the master planning team completed a thorough analysis exercise to gain an understanding of the challenges and opportunities facing campus facilities, infrastructure, and systems in the future.

The analysis text and diagrams which follow provide a summary of the existing conditions present on the Urbana campus today. This analysis combines information gained from technical assessments and reports provided by the university with findings uncovered by the master planning team. It is also informed by significant anecdotal information gained through numerous meetings and public forums conducted throughout the master planning process.


ILLINOIS
ILLINOIS

CAMPUS CONTEXT

CAMPUS ORGANIZATION

BUILDING AND LAND USES

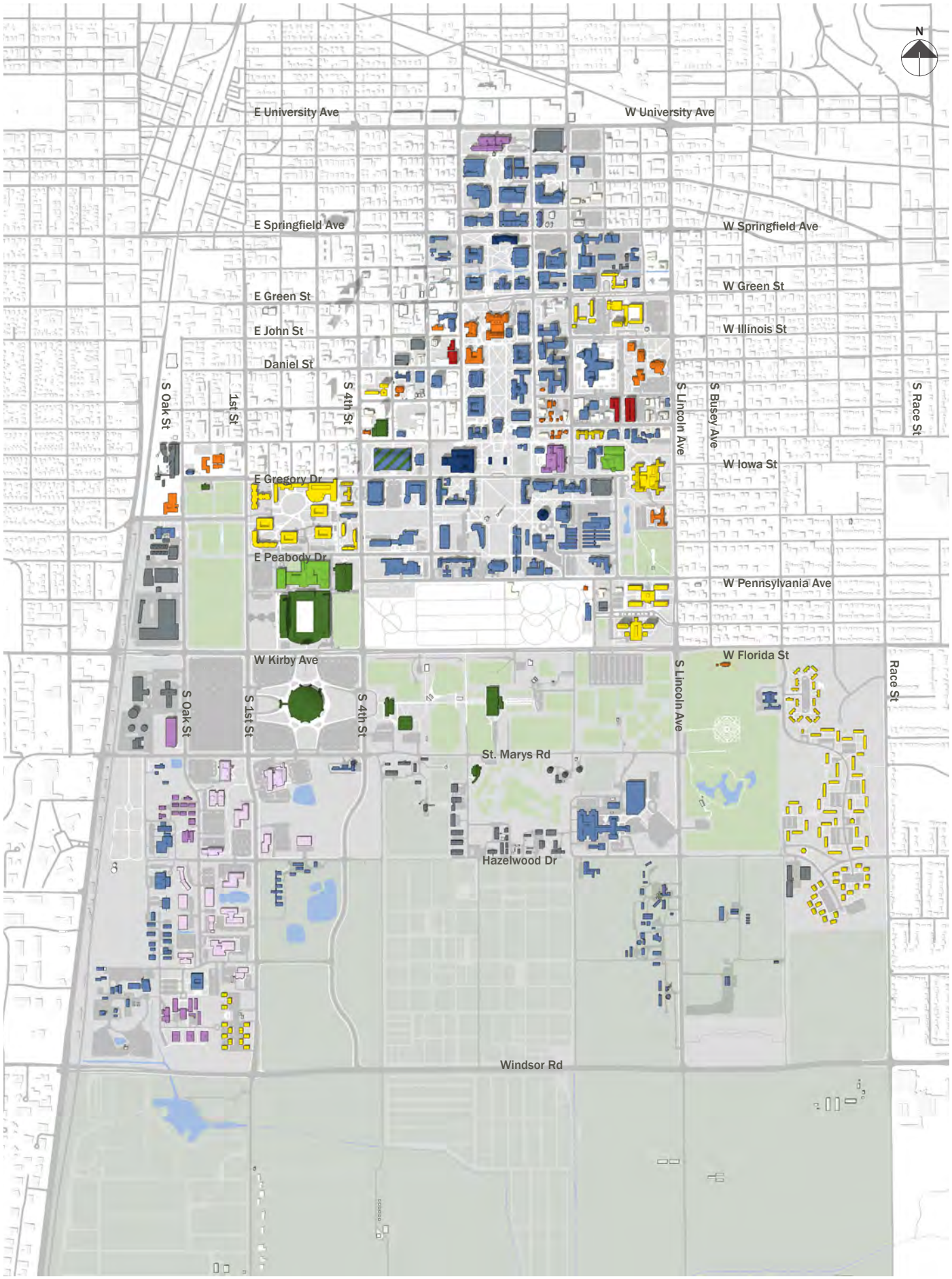
The University of Illinois at Urbana-Champaign occupies 6,370-acres between the cities of Urbana and Champaign. The Urbana campus supports approximately 23 million gross square feet (GSF) of facilities. It is generally well organized with academic uses clustered within the Campus Core and balanced by research, administrative, student affairs, and athletics and recreation space. Student services are located primarily within the center of campus.

The northern portion of campus, across Green Street, primarily supports academic and research functions with a large majority of buildings occupied by the College of Engineering. There is currently only one university managed student housing complex north of Green Street. The core of campus is organized around the historic Main Quad with academic and research facilities fronting on this open space. The quad is anchored on its northern end by the most iconic student life facility on campus, the Illini Union.

Undergraduate student housing is available on the campus within eight residential complexes primarily located in the four corners of campus. Graduate student and family housing is available within three apartment complexes on campus. Two are located more than a mile south from the center of campus and one is prominently positioned along Green Street. The majority of dining is available within the residence halls and the Illini Union.

Athletics and recreation are primarily clustered in the southern portions of campus. The Department of Intercollegiate Athletics maintains several facilities along the West Kirby Avenue/West Florida Avenue corridor. Facilities associated with the Research Park are located further south in the southwest zone of campus while the College of Veterinary Medicine and the College Agricultural, Consumer and Environmental Sciences (ACES) related facilities are located in the southeast portion of campus. The remaining southern lands support active agricultural research plots.

- ACADEMICS AND RESEARCH
- RESEARCH INSTITUTES
- STUDENT LIFE
- HOUSING AND DINING
- LIBRARY
- RECREATION
- ATHLETICS
- RESEARCH PARK
- MIXED USE
- SUPPORT, STORAGE AND PARKING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FACILITY CONDITION

BUILDING CONDITION AND PERFORMANCE

In 2011, the University of Illinois at Urbana-Champaign contracted an outside consultant to perform a facility condition assessment on 163 buildings on the Urbana campus. The purpose of the assessment was to identify "catch-up" costs associated with deferred maintenance and to also calculate the building's Facility Condition Index (FCI). The FCI identifies the ratio of deferred maintenance to the current replacement value. The lower the FCI, the better the condition of the building. The campus map illustrates the condition of buildings based on a 5-tier scale that ranges between excellent and critical. The 163 buildings were selected based on greatest potential need.

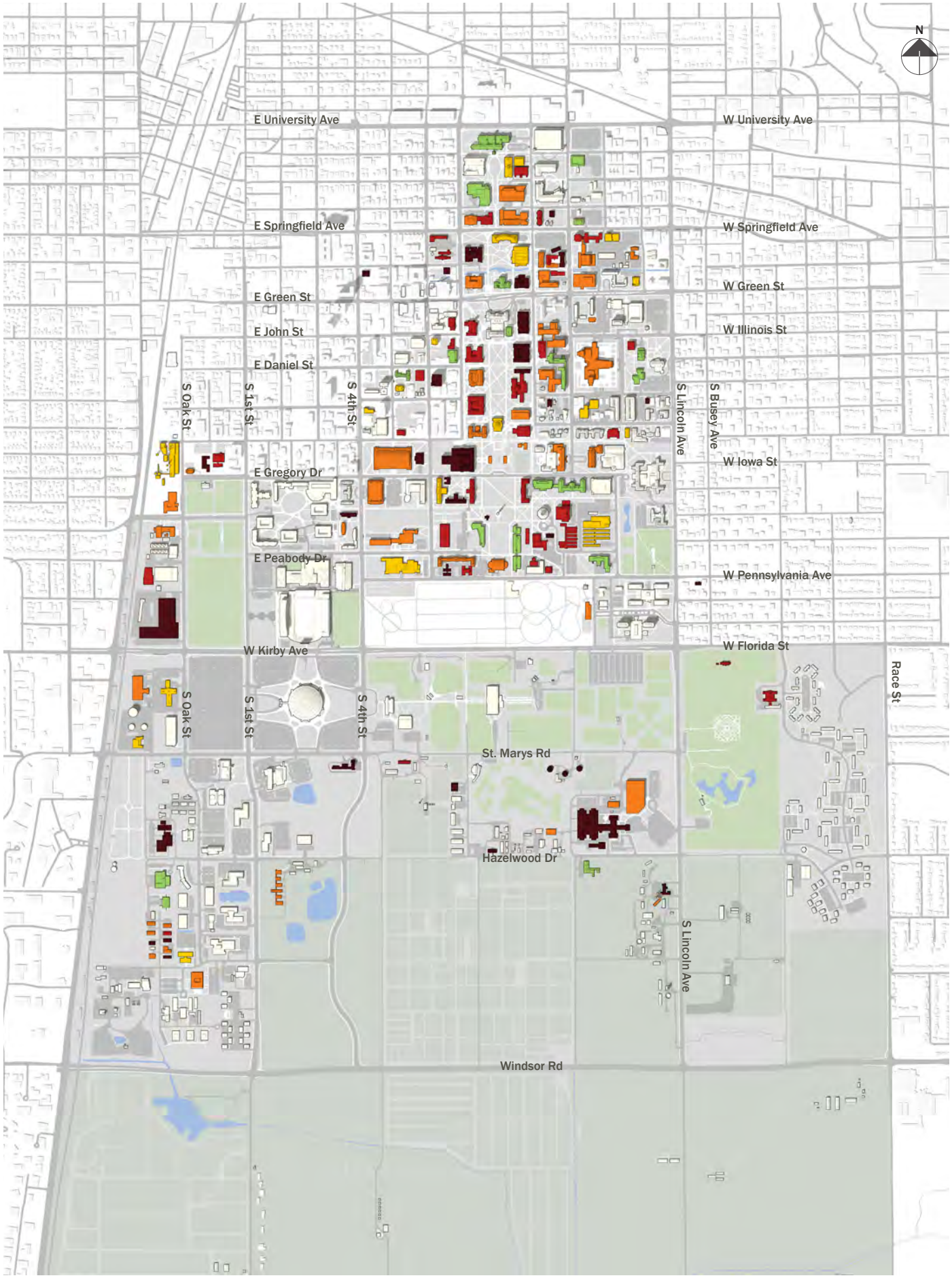
As can be seen from the diagram, the FCI assessment helps to prioritize the need for renovations. Given the age of the campus, there is a wide range in terms of the building assessment. Many larger buildings including the Armory, Huff Hall, Krannert Center for the Performing Arts, and the Stock Pavilion have been provided a fair assessment with an FCI that ranges from 10-30%. These buildings like many others on campus are shared by multiple colleges and are heavily utilized.

Many of the newer buildings on campus are identified as green and have been provided an FCI rating of 0-5% which equates to a excellent assessment. As can be seen from the map, these buildings are typically located on the perimeter of the Main Quad or infill in the adjacent quad areas. Some of the buildings within this category include: Temple Buell Hall, Beckman Institute, and Electrical and Computer Engineering Building which are all relatively new.

Buildings surrounding the Main Quad have been provided an assessment rating that ranges from good to critical. These ratings, while influenced by the age of the building, are impacted also by the overall maintenance. Many of the buildings surrounding the Main Quad are historic buildings to Urbana campus that date back to the beginning of the twentieth century and require significant care to maintain.

Renovations completed since 2011 are not reflected within this diagram. The map reflects only information from the 2011 Facility Condition Assessment. It is recommended that the campus database be updated to reflect all recent renovations to provide a more comprehensive understanding of building condition.

FCI	ASSESSMENT
0-5%	I EXCELLENT
5-10%	I GOOD
10-30%	I FAIR
30-50%	I POOR
50%+	I CRITICAL
RENOVATION/ REDEVELOPMENT CANDIDATE	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WATER USE INTENSITY

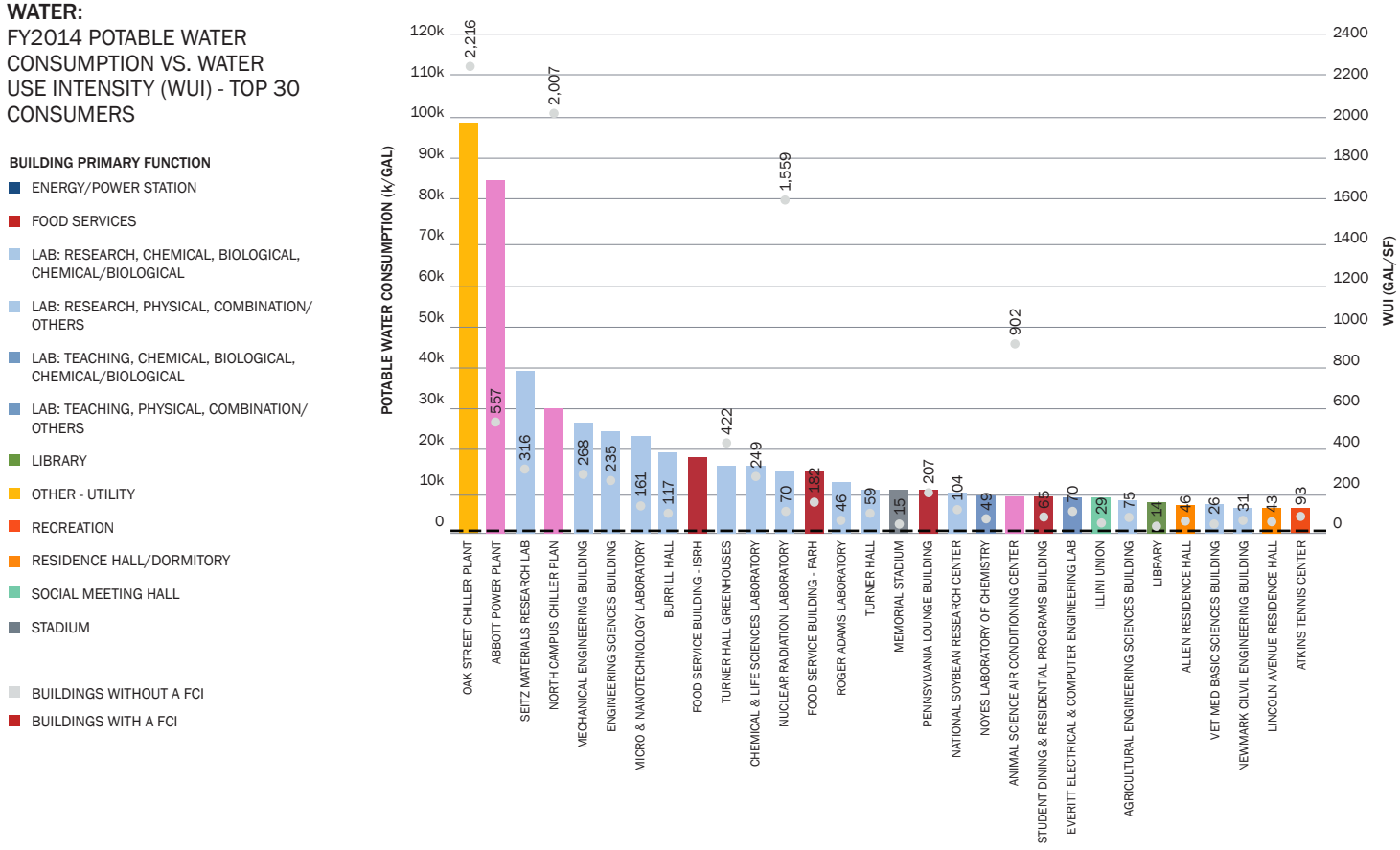
Fiscal Year 2014 water consumption data was tabulated, separated into four equal groups (quartiles), and mapped in graph below. Those buildings whose water consumption puts them in the 4th quartile tend to be either large in size and/or have high water use intensity.

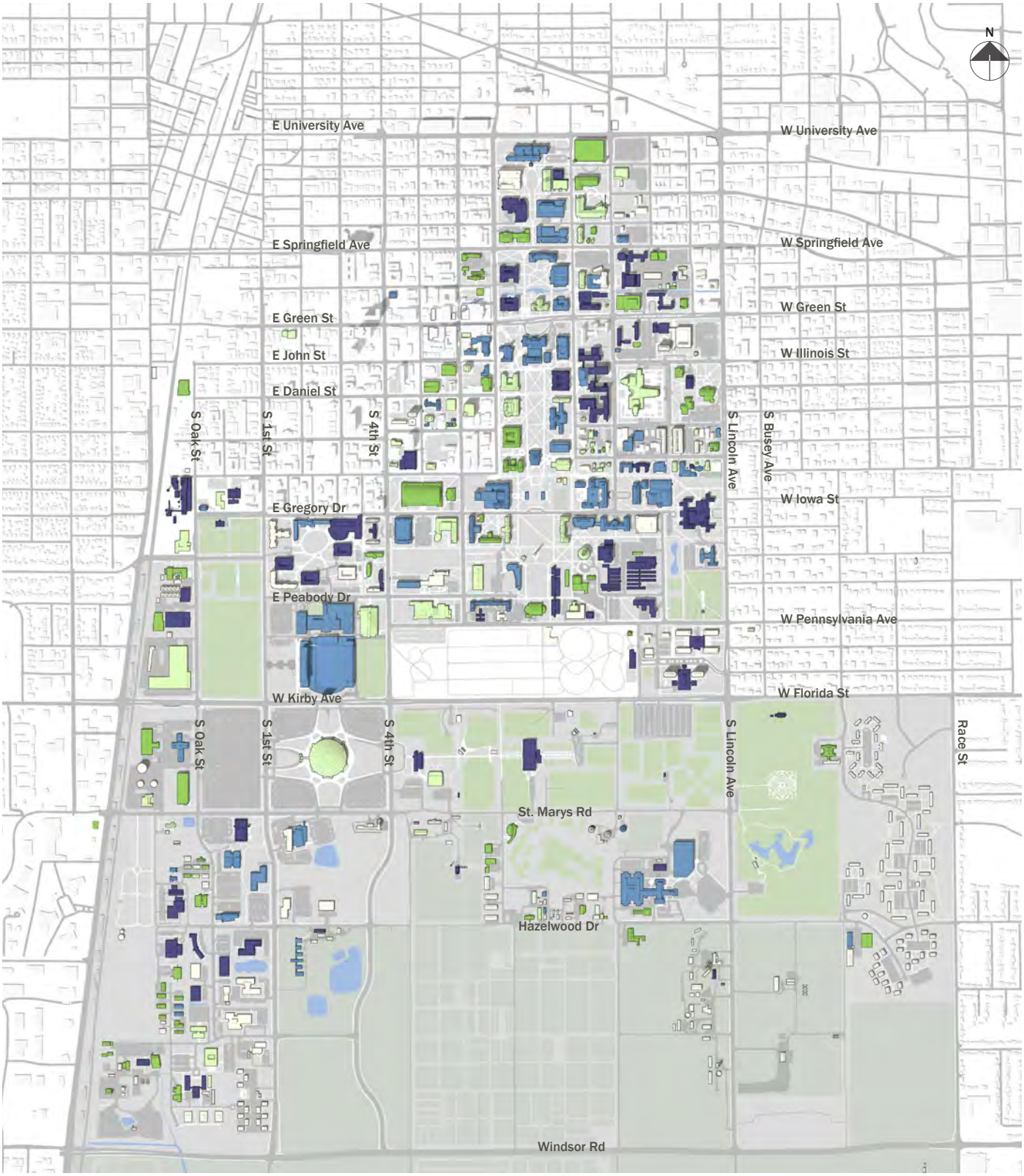
To better understand the water use intensity of campus buildings, water consumption was divided by building area, grouped into quartiles and mapped. One can begin to see that high water consumption does not necessarily correlate to high water use intensity (i.e., Memorial Stadium).

The top 30 water consumers were identified and their consumption plotted against their use intensity. With a campus of this scale and a data set of almost 300 buildings, the top 30 water consumers represent 70% of potable water consumed. Power and chiller plants collectively represent the largest consumers on campus followed by research laboratories and food service.

It shall be noted that 10 of the top 30 water consumers did not undergo a facility condition assessment. Four of those 10 buildings are categorized as food service, as indicated by a red bar in the graph below.

WATER:
FY2014 POTABLE WATER CONSUMPTION VS. WATER USE INTENSITY (WUI) - TOP 30 CONSUMERS





QUARTILE	GAL/GSF
1ST	4
2ND(MEDIAN)	10
3RD	32
4TH(MAX)	5186

$$WUI = \frac{Potable\ Water\ Consumption\ x\ 1000}{Building\ Area}$$

ENERGY USE INTENSITY

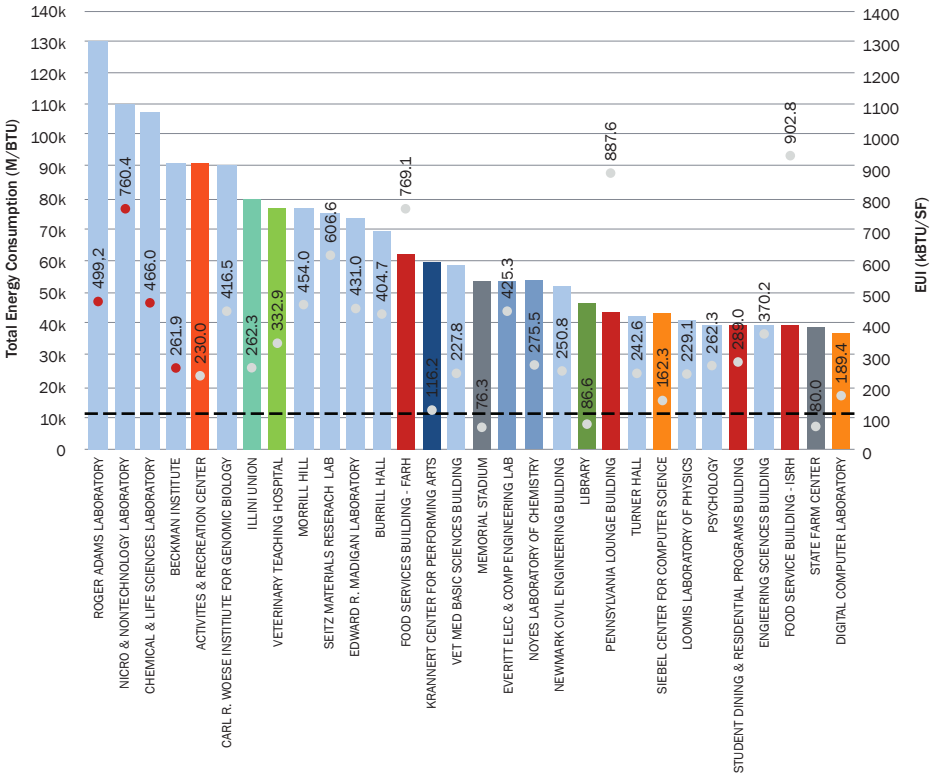
Fiscal Year 2014 total site energy consumption by quartile is presented in graph below. The data represents energy consumed by buildings and comprises district steam, district chilled water, natural gas, and electricity. District energy producers, such as Abbott Power Plant or campus Chiller Plants, are not reflected in the graph.

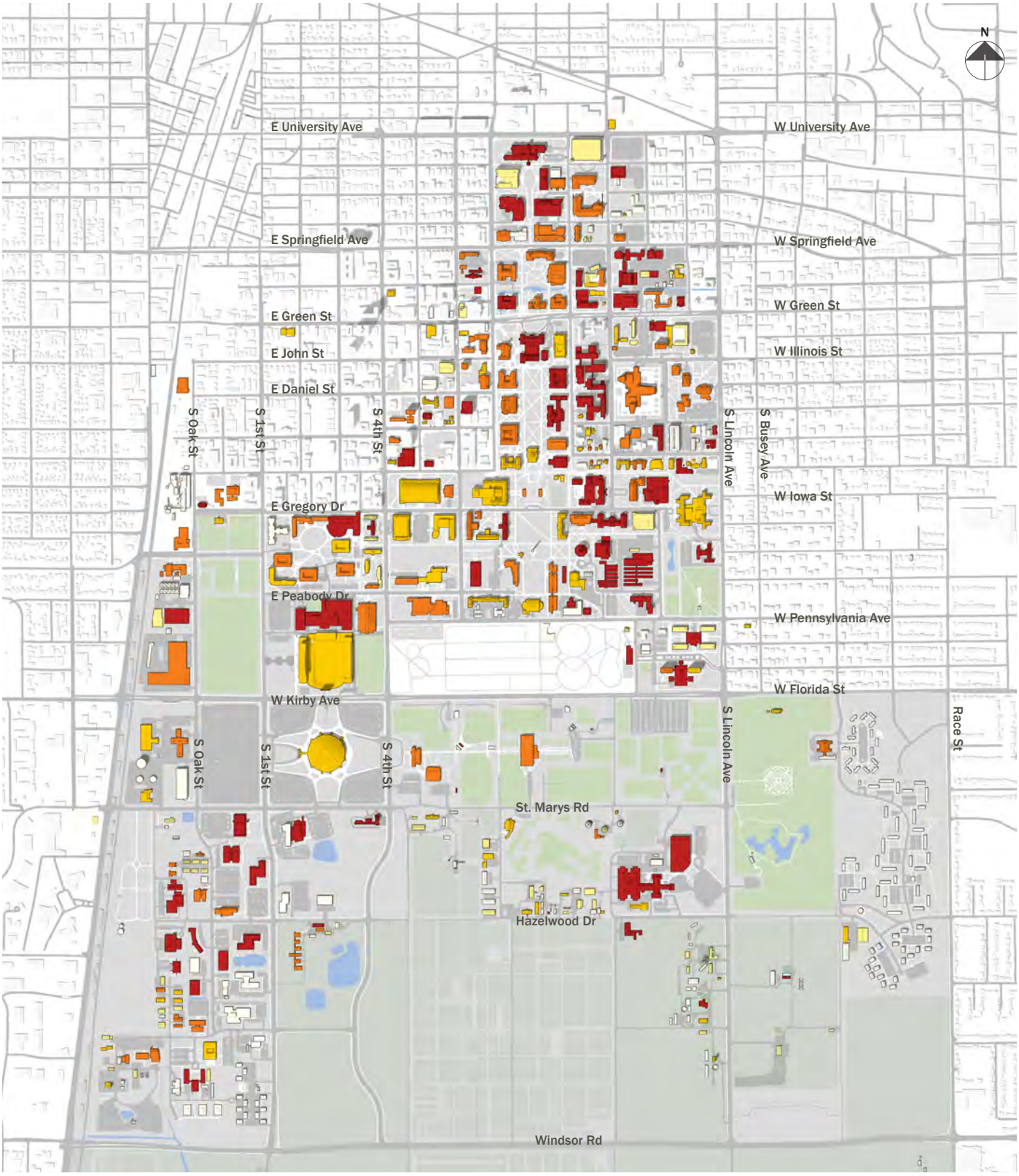
Energy use intensity, or EUI, is similarly mapped by quartile. Comparing this graph with the previous one for energy consumption, it becomes apparent that many of the larger energy consumers have relatively low energy use intensity on account of the relatively large ratio of buildings dedicated to sports. This is particularly true for stadiums and field houses, for example.

The top 30 energy consumers were identified and their consumption plotted against their use intensity. With a campus of this scale and a data set of almost 400 buildings, the top 30 energy consumers represent 50% of building energy consumed. Research laboratories are the predominant building type in this chart followed by buildings with food service. With their high ventilation rates and plug loads, research laboratories often consume five to ten times more energy per square foot than a typical commercial office building.

Similar to the water graphic, 10 of the top 30 energy consumers did not undergo a facility condition assessment. The same four buildings with food service that fell within the top 30 water consumers also appear in the top 30 energy consumers –Florida Avenue Residence (FAR) Dining, Pennsylvania Avenue Residence (PAR) Dining, Student Dining and Residential Programs (SDRP), and Illinois Street Residence (ISR) Dining. Auxiliary service buildings, in general, are some of the highest energy and water consumers on campus. In order to achieve their Illinois Climate Action Plan (iCAP) goals, the university needs to develop a policy and/or incentivize auxiliary services to employ similar strategies such as facility condition assessments, energy audits, and retro-commissioning to achieve meaningful reductions in energy and water.

ENERGY:
FY2014 TOTAL ENERGY CONSUMPTION VS.
ENERGY USE INTENSITY (EUI) -
TOP 30 CONSUMERS





QUARTILE	I kBTU / GSF
1ST	I 57
2ND(MEDIAN)	I 115
3RD	I 210
4TH(MAX)	I 2553

$$EUI = \frac{Total\ Energy\ Consumption\ x\ 1000}{Building\ Area}$$

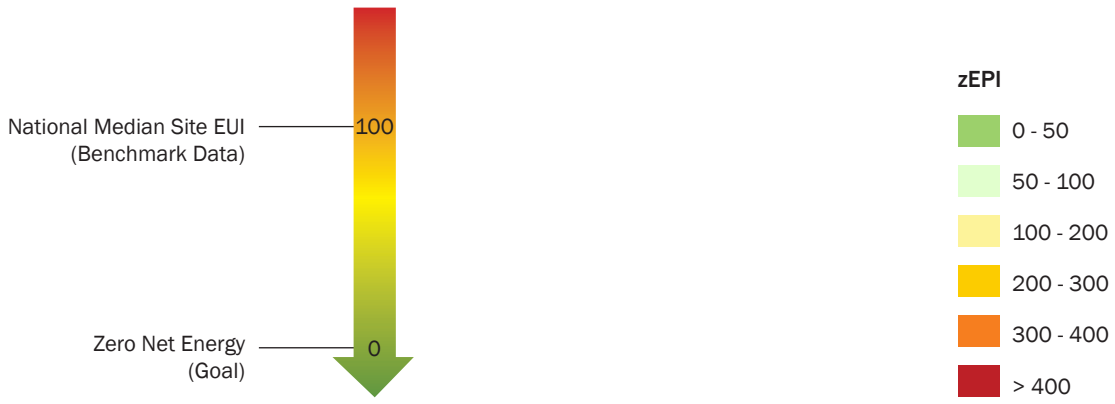
ZERO ENERGY PERFORMANCE INDEX

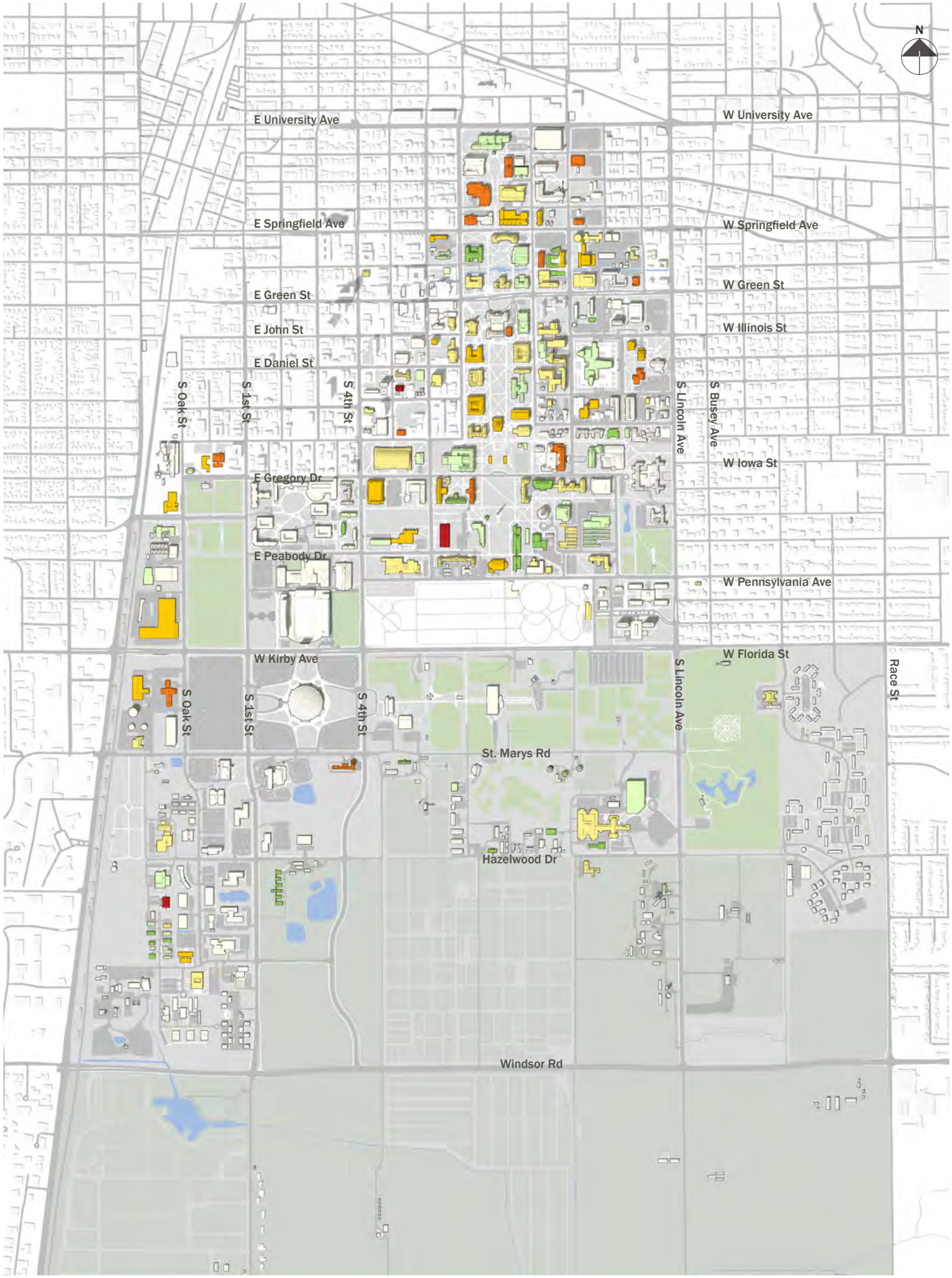
The university's commitment to achieving carbon neutrality requires that building energy performance play a crucial role in developing renovation and replacement recommendations, as well as informing decisions to perform energy audits, retro-commission, and/or implement energy conservation measures (ECMs). In order to understand how well a building is performing, the master planning team applied the concept of "Zero Energy Performance Index", or zEPI, as developed by the New Buildings Institute.

The zEPI scale establishes a constant goal of zero net energy (score of 0). A score of 100 represents a building with an annual site EUI equal to the median site (EUI) of a comparable building nationally, according to the 2003 Commercial Buildings Energy Consumption Survey (CBECS). If a building has an EUI two times that of the national median for that building type, it would have a zEPI score of 200. If a building has an EUI equal to half of the national median for that building type, it would have a zEPI score of 50. The zEPI scale can be used to compare efficiency levels for different building types.

The CBECS dataset, while it does include laboratory buildings, does not address them adequately for laboratory benchmarking purposes. For example, it does not collect data on this high energy use intensity building type in a manner that includes facility parameters that are key drivers of energy use, such as laboratory area ratio, laboratory type(s), biosafety level (BSL) category, etc. For this reason, the master planning team used Labs21 Benchmarking Tool data to establish a median EUI for peer laboratory buildings with similar functional requirements and climate. However, since Labs21 Benchmarking Tool continues to accept and store data, the median EUI is representative of peer buildings within the data set at a given time. Furthermore, while the Labs21 dataset is larger than the CBECS dataset, it is still not considered a statistically representative sample of U.S. laboratory building stock. While the application of zEPI and the use of the Labs21 Benchmarking Tool for assessing laboratory performance has limitations, it offers a means of "initial screening" not otherwise available without more rigorous benchmarking methodologies.

This analysis strategy allows the university and the master planning team to more easily identify outliers in energy performance on both a campus-wide basis, as well as for a particular building type. In the adjacent diagram, those buildings highlighted in gold, orange, and red consume energy at a higher rate than the national median for that property type. The process of calculating zEPI was performed only for those buildings for which an facility condition index (FCI) was available (i.e., about half of the buildings on campus).

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CLASSROOM/CLASS LABORATORY QUALITY ASSESSMENT

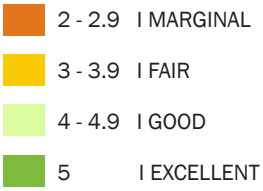
As part of the master planning process, 83 buildings were evaluated to identify their educational adequacy rating. The review encompassed all of the primary academic facilities on the Urbana campus which contain classrooms and class laboratory spaces. Each building was evaluated by the same consultant team during the quiet summer period to ensure full access to facilities.

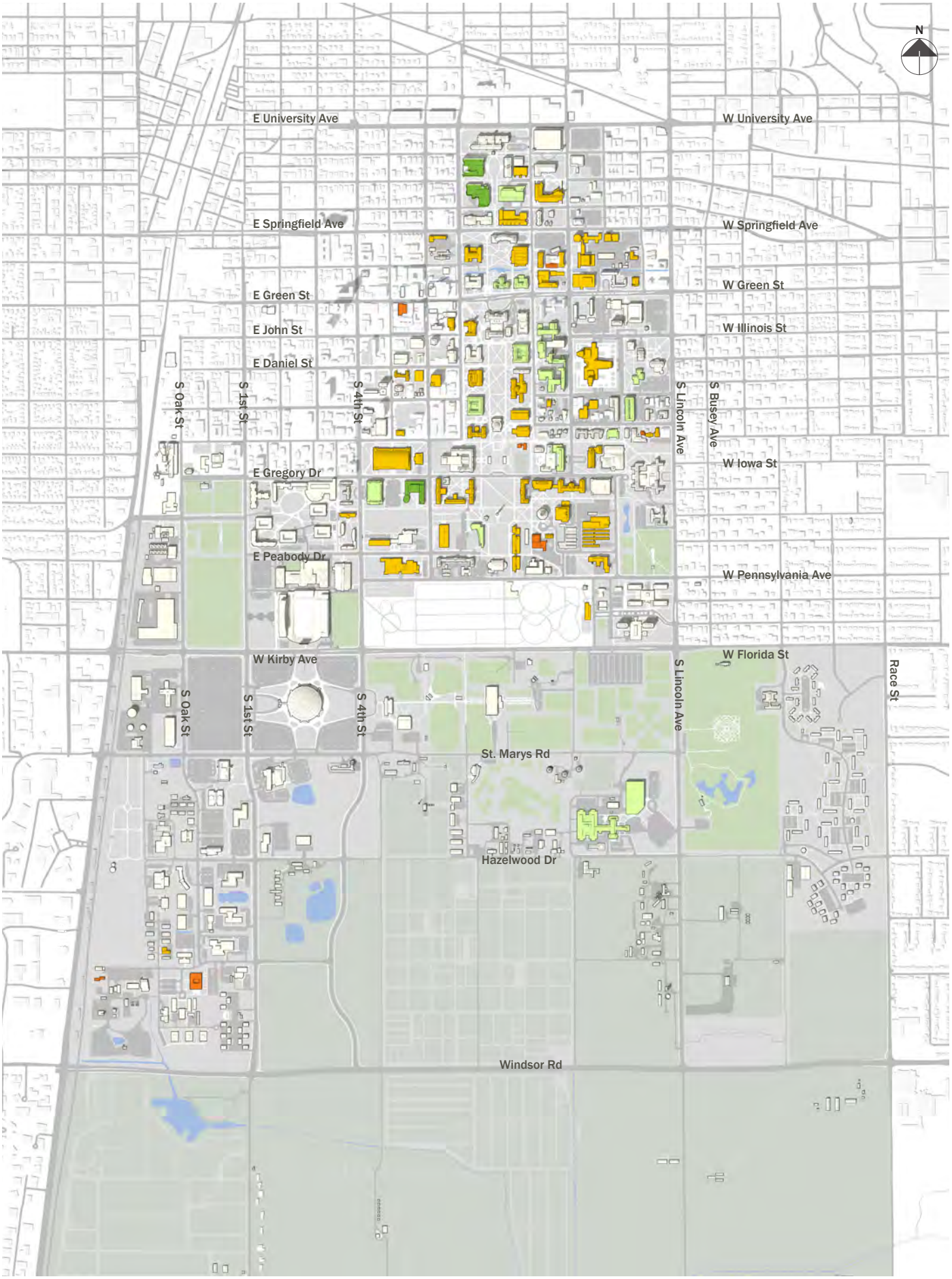
There are five buildings on campus with more than twenty classrooms. These buildings also have significant wayfinding issues making them difficult to navigate for students. These include the Armory, David Kinley Hall, English Building, Foreign Languages Building and Gregory Hall.

The evaluation revealed that the building architecture of many facilities does not allow for the inclusion of active learning or flexible classrooms. These include Altgeld Hall, Lincoln Hall, the Business Instructional Facility, and David Kinley Hall. In reviewing the campus architecture for active learning and flexible learning, the team identified only a few examples of spaces transformed in this way such as in the Education Building. The geometry of many of the older buildings simply precludes these improvements.

The quality assessment uncovered that the university is sending many of its students through the least desirable classroom buildings on campus. Those buildings with low Facility Condition Index (FCI) ratings also often have large amounts of classrooms and poor education adequacy. David Kinley Hall is an exception due to recent renovations. For example, improvements to the Education Building and Foreign Languages Building would have a dramatic impact.

There is an opportunity for strategic renovations to the worst performing classroom and class laboratory spaces which would have a transformative effect upon the student experience. In addition, those buildings which are architecturally suitable for active learning interventions should be prioritized for future improvement projects.

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CLASSROOM AND CLASS LABORATORY UTILIZATION

CLASSROOM UTILIZATION

In the fall of 2015 there were 448 classrooms in 57 buildings on campus. As part of the Campus Master Plan, the master planning team conducted a classroom utilization analysis to determine the capacity and utilization of existing classrooms and class laboratories on campus. At an overall average of 25 weekly room hours (the average hours of scheduled instruction for a classroom), classroom utilization is lower than expected. Benchmarked against peers, the master planning team has targeted 35 weekly room hours as a guideline. However, student station occupancy (SSO, the percent of seats filled by classroom, to measure capacity) is at 63%, closer to the guideline of 65%.

Assignable square feet (ASF) per station can vary for peer institutions, from 15 to 30 ASF per station. Typically, lower ASF per station represents more traditional lecture halls. Newer, active learning pedagogies are targeting a higher ASF per station to allow for more flexibility and technology-enabled learning. The university is on the low end of this range at 17 ASF per station on average, reflecting the large amount of lecture halls and more traditional learning layouts of existing classrooms.

CENTRALIZED OR DEPARTMENTAL SCHEDULING

Of all classrooms, 70% are centrally scheduled, with an average utilization of 27 weekly room hours. Departmentally controlled classrooms have an average utilization of 22 weekly room hours, lower than the centrally scheduled classrooms and significantly lower than the 35 weekly room hour guideline.

CLASSROOM METRIC	ILLINOIS	GUIDELINE
Weekly Room Hours	25	35
Student Station Occupancy	63%	65%
ASF/Student Station	17	22

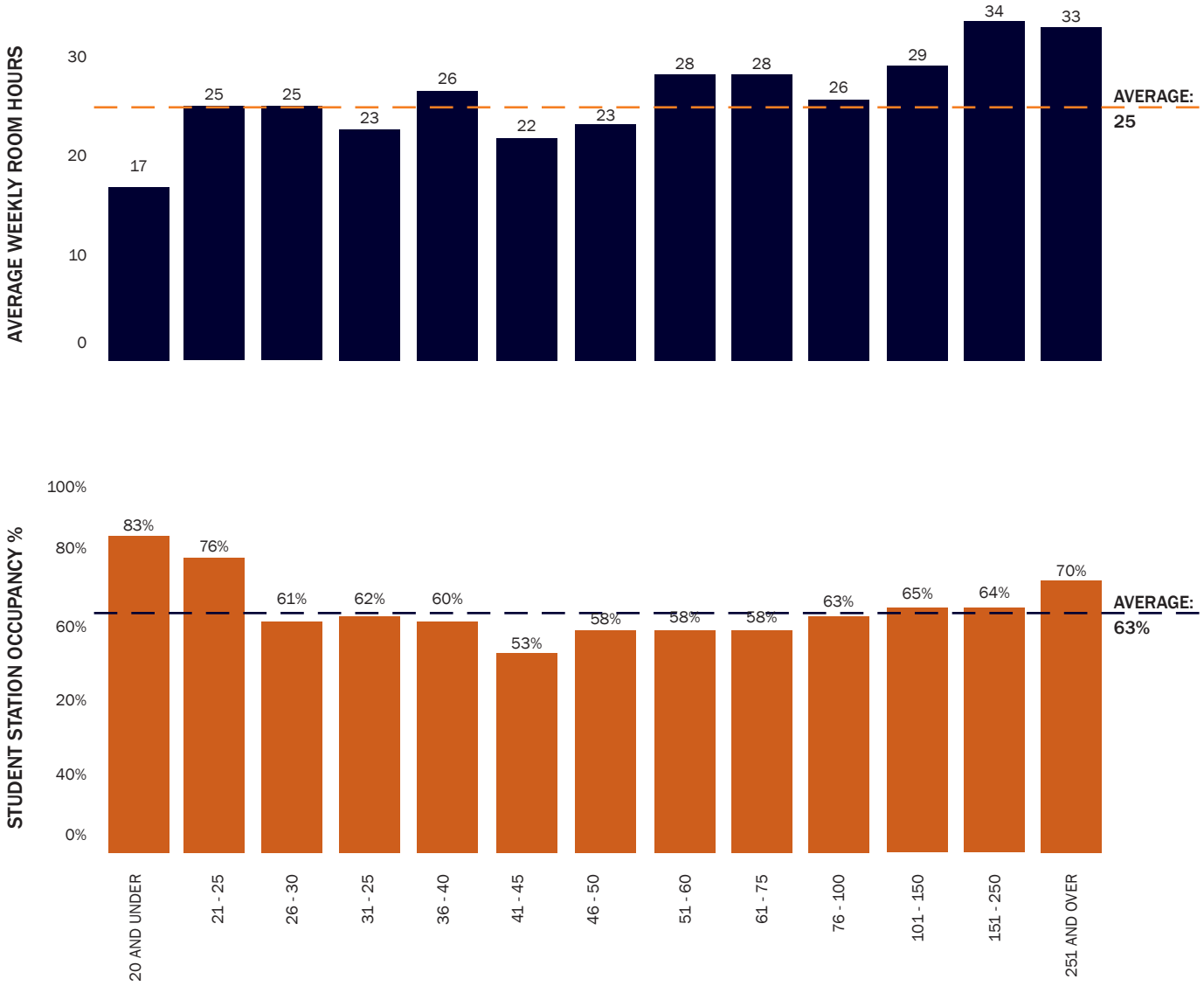
These findings imply that the university has an excess capacity of classroom space that could be utilized more, particularly with more centralized scheduling and scheduling classes outside of peak hours. However, classroom size, configuration, and typology may not be the right fit for introducing more active learning. It is a question not just of quantity, but of quality of space.

By capacity, the smallest (25 seats and under), and the largest (251 seats and over) had the greatest student station occupancy, from 70% to 83%, well above the campus average. Classrooms in the 41 to 45, and 46 to 50 seat capacity groups had both low student station occupancy and low weekly room hour use, suggesting a class size issue in this room type that could be leveraged for smaller group sizes with more active learning pedagogies.

CLASS LABORATORY UTILIZATION

The utilization study also included an analysis of teaching laboratories on campus. The study evaluated 188 laboratories in 46 buildings. The campus averaged 19 weekly room hours at 69% SSO, against a guideline of 20 weekly room hours and 80% SSO. While an 80% SSO is most used in guideline targets, occupancy for institutions of this size typically range between 60% and 75%. As enrollment is expected to grow over the next decade, there could be a shortfall in teaching laboratory space.

CLASSROOM UTILIZATION BY CLASSROOM SIZE



CLASSROOM DISTRIBUTION AND FCI

CLASSROOM DISTRIBUTION

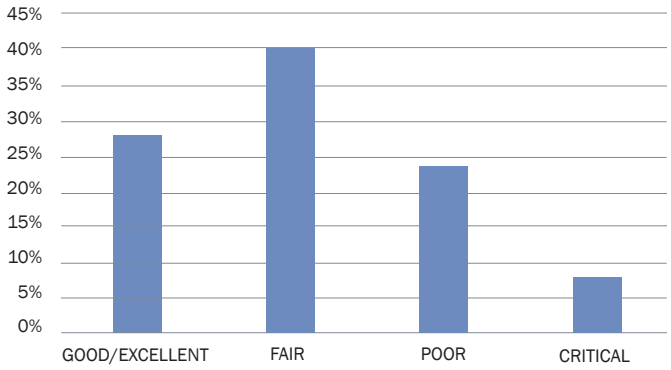
The majority of classrooms are in Central campus (58%) between Green Street and Gregory Drive. 17% of all classrooms are in North campus, north of Green Street, and approximately 25% are in South campus, south of Gregory Drive.

18 of the 57 buildings had more than ten classrooms, the equivalent of two-thirds of classrooms in one-third of all academic buildings. Five buildings have more than 20 classrooms: Armory, David Kinley Hall, English Building, Foreign Languages Building, and Gregory Hall. Lincoln Hall and Altgeld Hall have 19 or more classrooms each, followed by the Business Instructional Facility at 18, and Davenport Hall at 17 classrooms. The majority of these buildings are older facilities in fair to poor building condition, with the exceptions of the newer Business Instructional Facility and recently renovated Lincoln Hall and David Kinley Hall.

CLASSROOM SIZE, USE, AND FCI

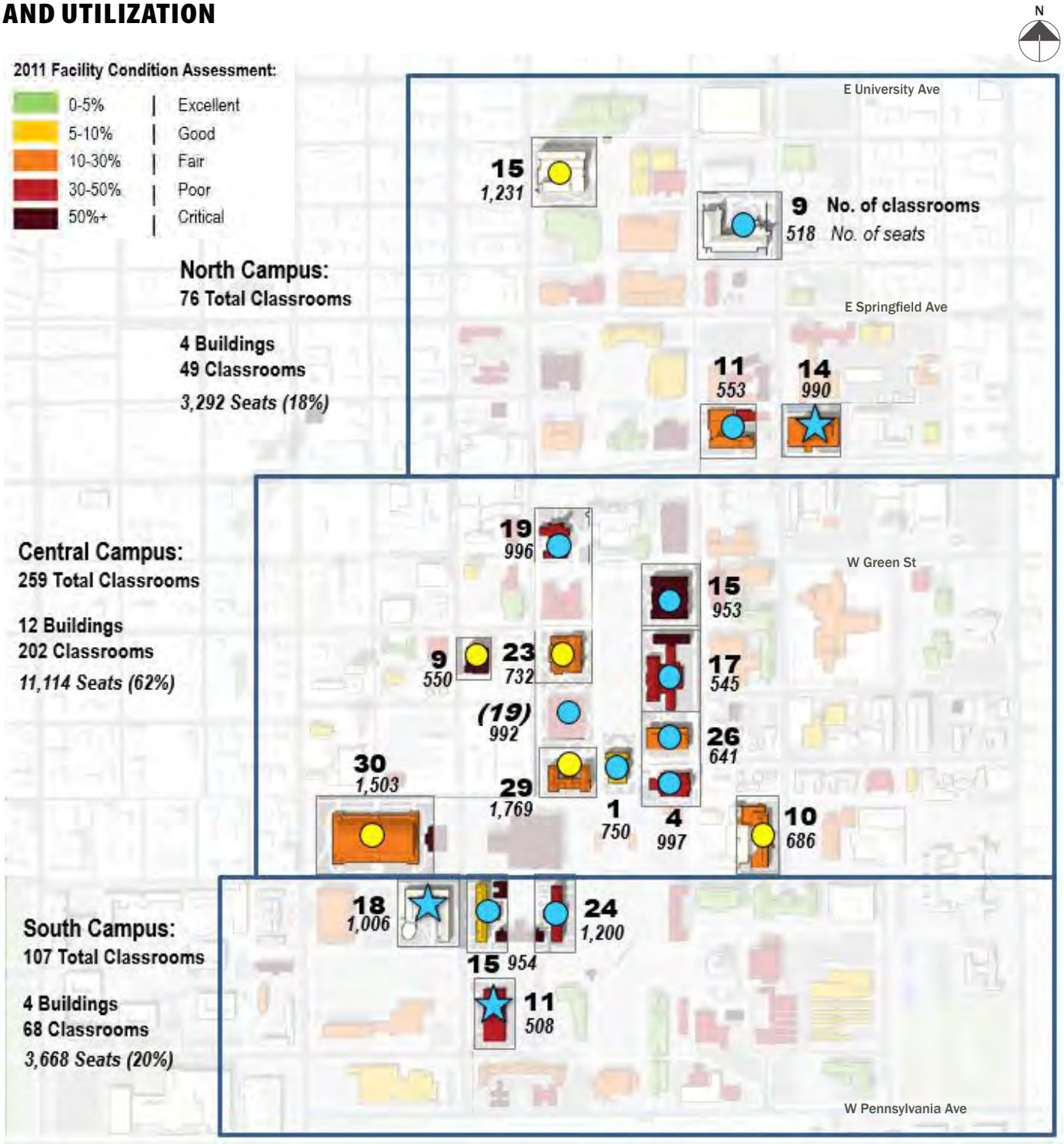
28% of all classrooms are in facilities that are in good or excellent building condition (including new or renovated space), and 40% are in fair condition. However, one-third of all classrooms are in facilities that have been rated in critical or poor condition, with the majority of these in the oldest buildings with higher concentrations of classrooms.

PERCENT OF CLASSROOMS BY FACILITY CONDITION



CLASSROOM UTILIZATION

BUILDINGS WITH TEN OR MORE CLASSROOMS BYFCI AND UTILIZATION



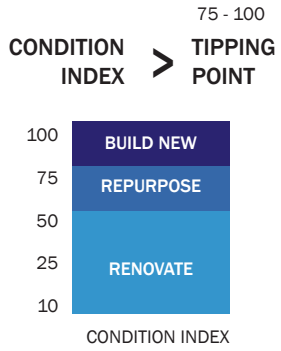
RESEARCH LABORATORY QUALITY ASSESSMENT

Several facilities were identified by the college deans for a qualitative assessment of their laboratory space. The laboratory facilities evaluated included:

- Agricultural Bioprocess Laboratory
- Altgeld Hall
- Ceramics Building
- Burrill Hall
- Children's Research Center
- Hydrosystems Laboratory
- Dairy Facilities
- Digital Computer Laboratory
- Loomis Laboratory
- Madigan Laboratory
- Materials Science and Engineering Building
- Mechanical Engineering Building
- Micro and Nanotechnology Laboratory
- Morrill Hall
- Natural Resources Building and Studies Annex
- Nathan Newmark Civil Engineering Laboratory
- Nuclear Physics Laboratory
- Psychology Building
- Roger Adams Laboratory
- Shelford Vivarium
- Seitz Materials Research Laboratory
- Transportation Building
- Water Survey Research Center #3

The master planning team reviewed reports, evaluated floor plans, and walked through the facilities. Research laboratory quality was evaluated on several factors, including age, facility condition, systems deficiencies, energy use intensity, energy performance, utilization, flexibility and adaptability. Building floor plans were also reviewed to determine the potential for adapting laboratories to modern laboratory modules.

Facilities with a FCI of 50 or above are candidates for major renovation and upgrades, or repurposing. Facilities with FCI of 75 or above are candidates recommended for replacement.



A comparative assessment of existing data was conducted and mapped on the matrix to the right, comparing the laboratories' facility condition with their energy performance. The majority of the research facilities evaluated fell into the least desirable quadrant, with poor energy performance and poor to critical facility condition, which includes underperforming systems capabilities that cannot accommodate emerging technologies. Several other facilities were in poor or critical facility condition, but had reasonable energy performance for their laboratory type.

Recommendations for minor renovation, major renovation, potential conversion, and/or demolition and replacement were then determined for each facility, as part of the Campus Master Plan recommendations.

CONDITION-ENERGY MATRIX (Lab Buildings with UIUC Feedback and FCI Only)

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN ASSESSMENT

- GOOD
- POOR
- CRITICAL

PHYSICAL SYSTEMS

CIRCULATION AND TRANSPORTATION

A primary goal of the Campus Master Plan is to enhance connections on campus through the already robust multi-modal transportation network. The University seeks to provide healthy, efficient, economic, and sustainable forms of transportation for students, employees, and campus visitors. The essence of the challenge is finding ways to facilitate travel to, on, and around campus as safely and efficiently as possible, without compromising personal safety, the quality of campus life, the environmental setting of the campus, and the academic mission of the University.

The Urbana Campus has instituted a transportation policy to give highest emphasis to pedestrian, bike, and transit movement, in that order and de-emphasize vehicular traffic in the University District. With accessible pedestrian routes, bike network improvement plans, high frequency bus routes, and continued efforts for the reduction of automobiles in the core campus, the overall multi-modal transportation network is generally working well.

However, the existing network does have some gaps, disconnections, and areas of concern regarding safety and efficiency of travel. The following pages contain descriptions and analyses of each of the current travel networks on campus: street, pedestrian, bicycle, and bus, as well as campus parking areas.

STREET JURISDICTION

The jurisdiction of streets within and adjacent to campus is divided between the City of Champaign, City of Urbana, Illinois Department of Transportation, and the University of Illinois. A majority of the streets in the central and northern parts of the core academic campus (the areas north of Gregory Drive) are controlled by the City of Champaign and the City of Urbana.

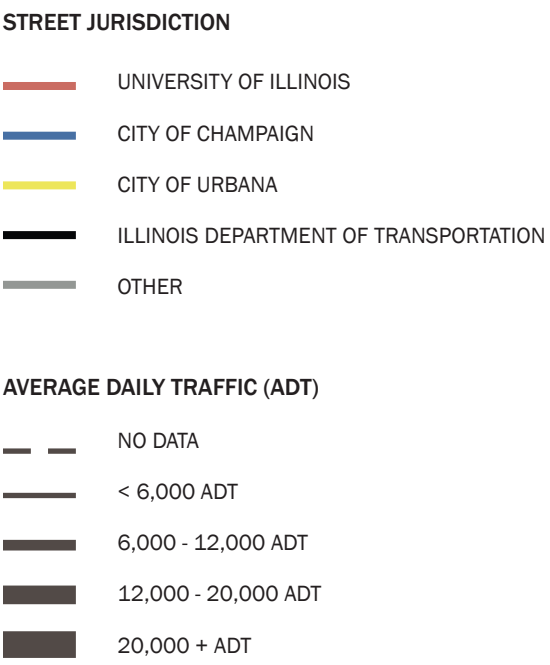
The Illinois Department of Transportation has jurisdiction over three major streets which surround campus, including Neil Street and parts of University and Springfield Avenues.

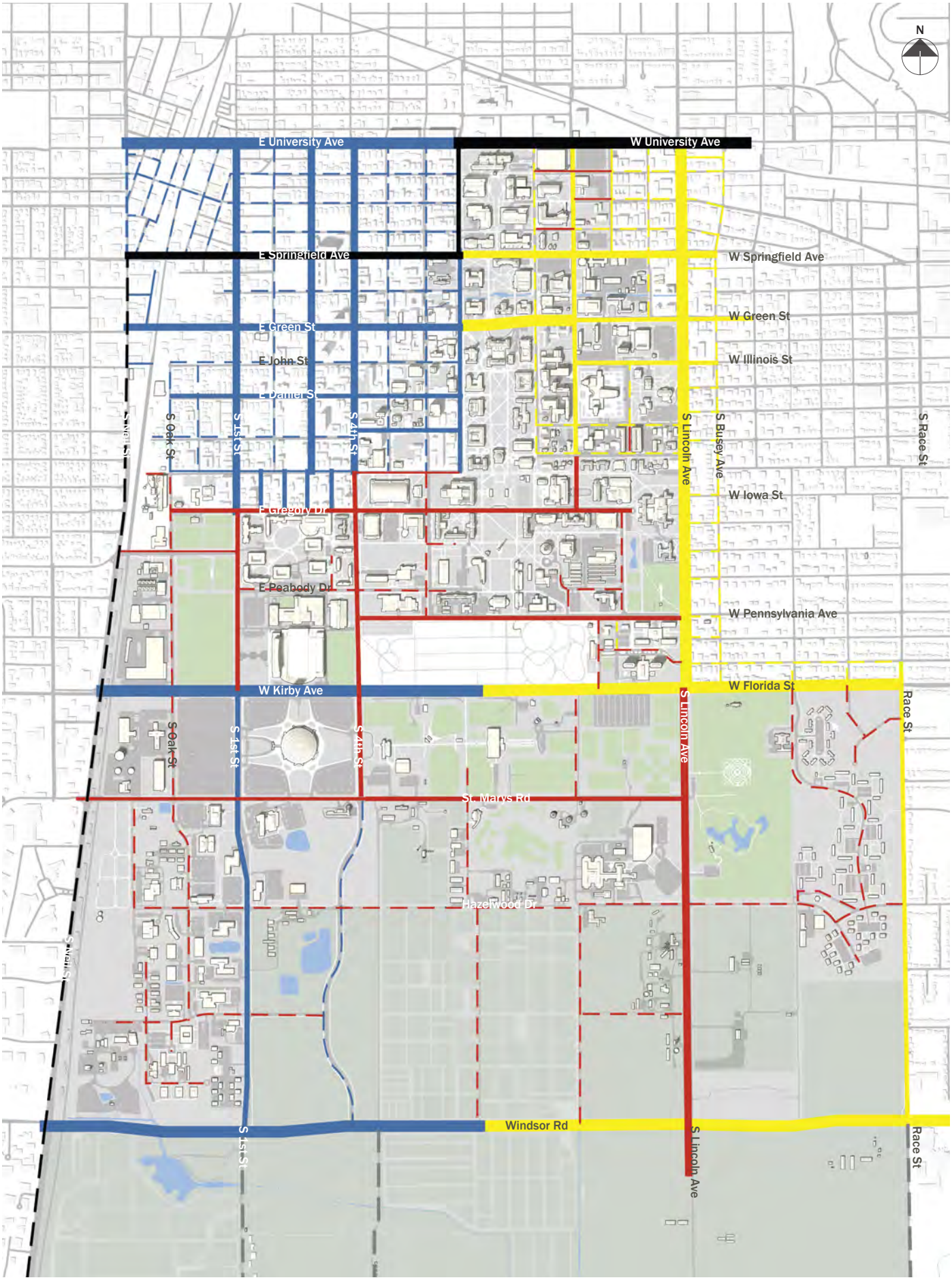
TRAFFIC VOLUMES

The highest volume streets with over 20,000 average daily traffic (ADT) are major thoroughfares for both the university and the cities of Champaign and Urbana, such as; University Avenue, Green Street, Kirby Avenue, and Florida Avenue.

Streets with 12,000 to 20,000 ADT are secondary thoroughfares, including Springfield Avenue, Lincoln Avenue south of Kirby Avenue, and 4th, 3rd, and 1st Streets north of Gregory Drive.

The last two categories have ADTs of 6,000 ADT to 12,000 and <6,000. These streets are minor connectors, service corridors, bus-only streets, and rural roads.

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PEDESTRIAN NETWORK AND ACCESSIBILITY

The complete streets policy "to better accommodate pedestrian, bicycle, transit, and vehicle movements in a more user-friendly environment," emphasizes pedestrian safety. To that end, the Urbana campus consistently implements traffic-calming principles throughout the University District, high-visibility crosswalks, narrowed crossing distances at intersections, and accessibility improvements for exterior pedestrian routes.

In review of the current pedestrian network, pedestrian counts, and crash history, there are four main areas of concern. One is along Green Street between Wright Street and the Illini Union. Another is along Green Street at Lincoln Avenue. A third is at the corner of 4th Street and Gregory Drive and the fourth is along Springfield Avenue near the Grainger Engineering Library.

The first two areas of concern along Green Street are being addressed by the Multimodal Corridor Enhancement (MCORE) project. The Illinois Department of Transportation is implementing the MCORE project, which provides improvements to Wright Street and Green Street. A goal of the MCORE project is to improve pedestrian safety, so a reduction in vehicular to pedestrian crashes in the first two areas of concern is anticipated.

The third area of concern is at the corner of 4th Street and Gregory Drive. High volumes of students walking from residence halls and private housing to campus creates conflicts with buses and personal vehicles. A similar situation exists along Springfield Avenue as shown in the picture to the right. The Campus Master Plan recommends these areas continue to be reviewed to identify additional measures to improve pedestrian safety.

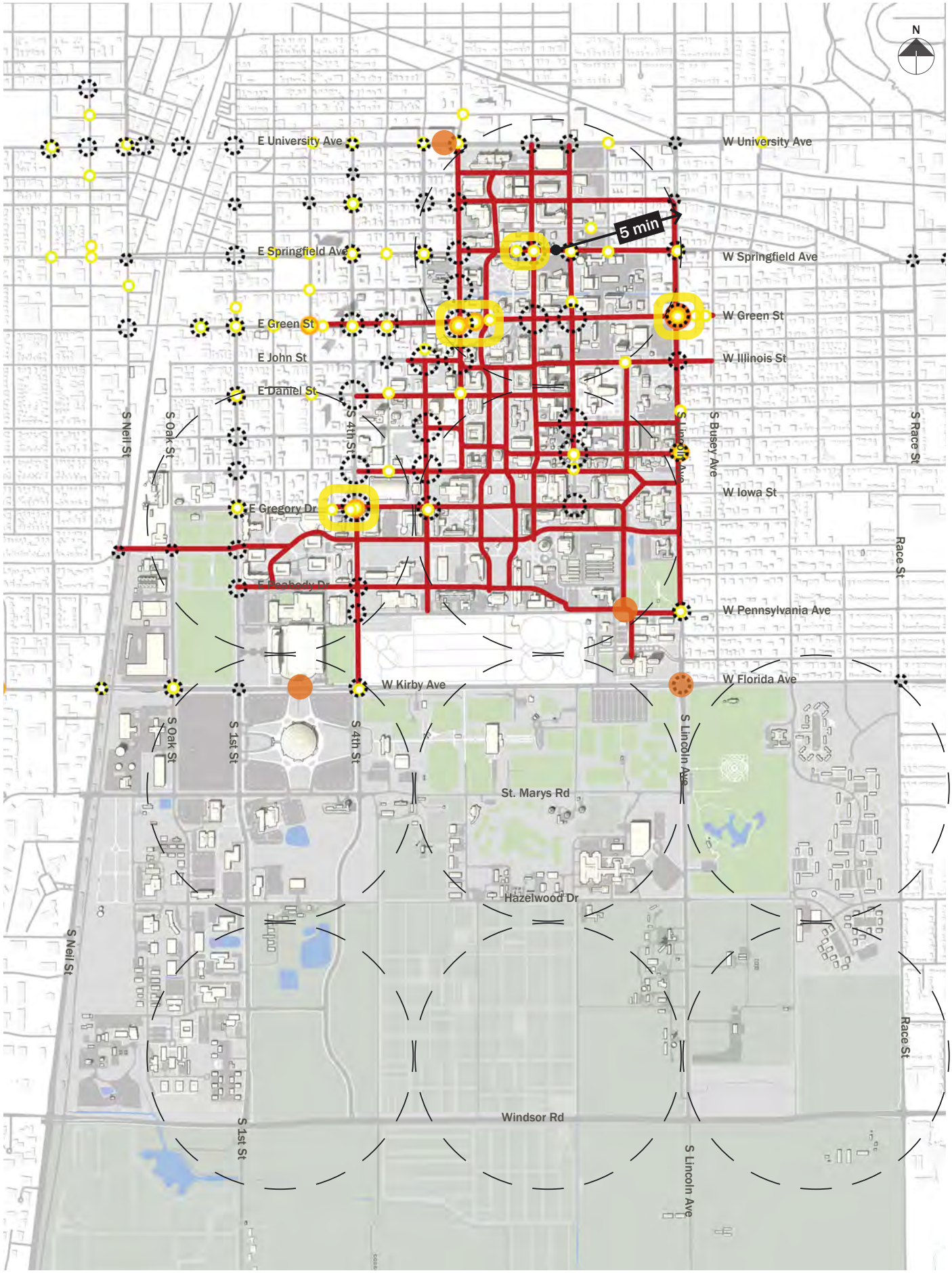
Crash data from 2012, source: Sustainable Choices 2040: Long Range Transportation Study, 2015, Champaign Urbana Urbanized Area Transportation Study (CUUATS)

Pedestrian crossing data from 2016, source: 2016 Traffic Counts, Champaign Urbana Urbanized Area Transportation Study (CUUATS)

Area of Concern: View south towards Grainger Engineering Library Information Center showing a stream of students using the Springfield Avenue crossing during class change.

PEDESTRIAN CRASHES AND DAILY CROSSINGS

- 3 VEHICLE TO PED. CRASHES PER YEAR
- 2 VEHICLE TO PED. CRASHES PER YEAR
- 1 VEHICLE TO PED. CRASHES PER YEAR
- AREA OF CONFLICT (ILLINOIS STAFF + COMMUNITY IDENTIFIED)
- 1491 - 3204 PEDESTRIAN CROSSINGS
- 813 - 1490 PEDESTRIAN CROSSINGS
- 135 - 812 PEDESTRIAN CROSSINGS
- 0 - 134 PEDESTRIAN CROSSINGS
- AREA OF CONCERN
- MAIN PEDESTRIAN ROUTE
- 5 MINUTE WALKING RADIUS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BICYCLE NETWORK

Bicycling is an excellent mode of transportation in Urbana-Champaign. The University of Illinois at Urbana-Champaign is recognized as a bronze-level Bicycle Friendly University by the League of American Bicyclists. Beyond campus, the City of Champaign has been recognized as bronze-level Bicycle Friendly Community by the League and Urbana has been recognized as a gold-level Bicycle Friendly Community.

A bicycle friendly campus has many benefits. As a mode of transportation, bicycles provide solutions in the areas of safety, sustainability, cost savings, mobility, health, and well-being. The University of Illinois at Urbana-Champaign was one of the first campuses in the nation to adopt a bikeway network when the first bicycle paths were constructed here in the 1950s. Since that time, funding cutbacks have led to degraded and disconnected pathways, outdated and insufficient bicycle parking, and limited support for bicycle services and programs. Despite these setbacks, bicycle ridership has grown at the University of Illinois in the last decade and is expected to continue to grow in the future, creating a great need for re-emphasis on engineering, education, enforcement, encouragement, and evaluation for bicycle-friendly improvements.

The bicycle network analysis evaluated the proposed state of the university and city networks. When considering the city and university plans as one network, the analysis revealed gaps in the proposed state. Gaps are located both within the university and in the adjacent city streets.

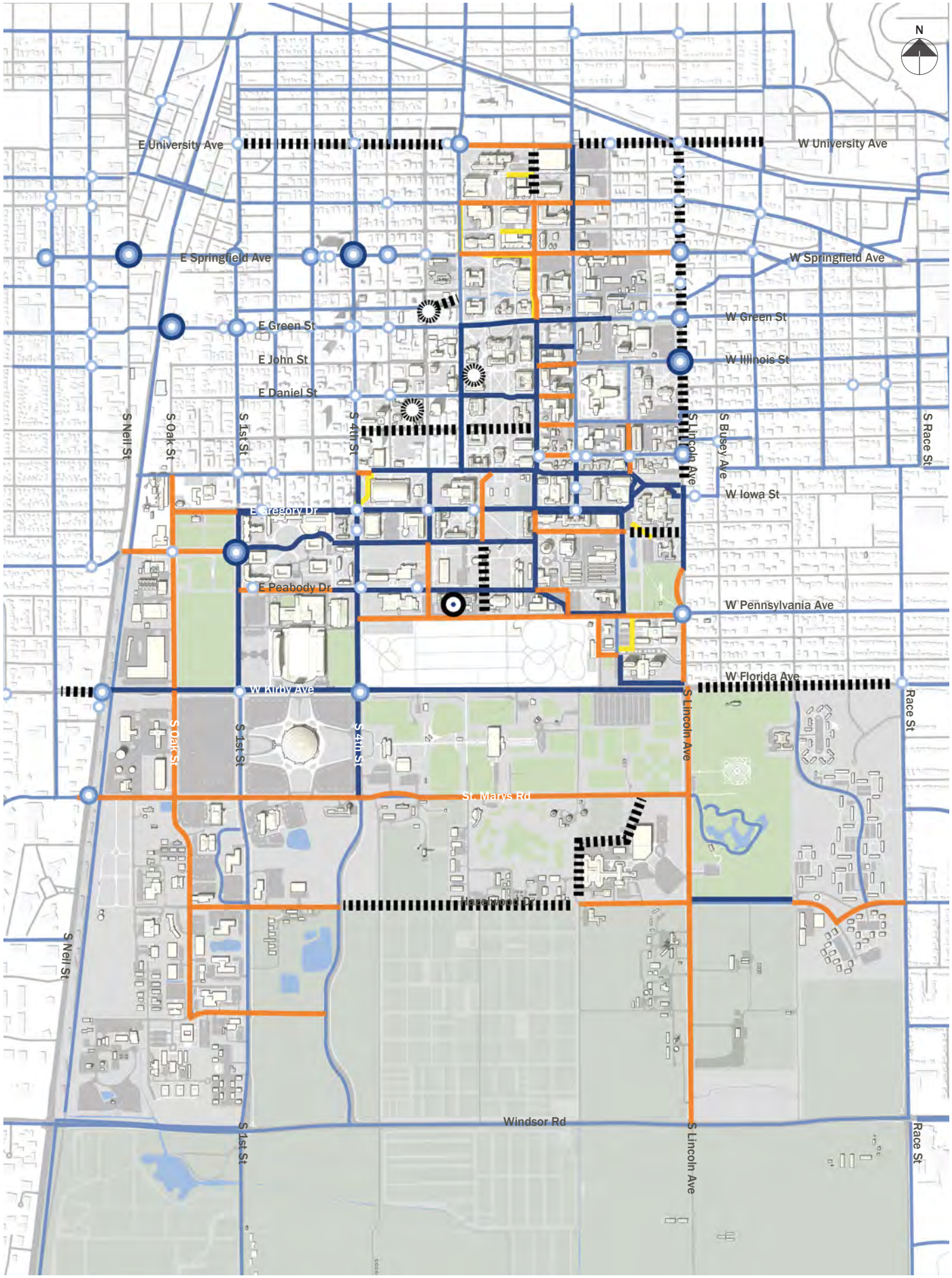
Data Sources: 2014 University of Illinois Campus Bicycle Plan; 2016 Urbana Bicycle Master Plan from the City of Urbana; 2008 Champaign Bicycle Master Plan from the City of Champaign; Sustainable Choices 2040: Long Range Transportation Study, 2015, Champaign Urbana Urbanized Area Transportation Study; SCIL Report 2007 - 2011

Within Central Campus, there are two disconnected east-west routes. One connects through the Main Quad and one follows the Stoughton Street corridor. East-west connections are important because they connect the cities of Champaign and Urbana to the campus and to each other.

To further strengthen the connection between the university, Champaign, Urbana, and Savoy there are opportunities to fill in gaps along University Avenue, Lincoln Avenue, Florida Avenue, and 1st Street. Addressing the gap along University Avenue will improve safety for bicyclists living in the new student-focused private apartments on the north side of the street. Filling in the Lincoln Avenue gap is important because it connects to the City of Urbana. Additionally, high amounts of vehicle to bicycle accidents along this road make bicycle infrastructure key for increasing safety. Florida Avenue is of concern because it connects the campus to the City of Urbana and the Orchard Downs campus housing. Providing a 1st Street bicycle path from Windsor Road to Curtis Road will improve safety for bicyclists commuting to campus from the Village of Savoy.

EXISTING AND PROPOSED BICYCLE NETWORK

- EXISTING BICYCLE ROUTE (UNIVERSITY)
- PROPOSED BICYCLE ROUTE (UNIVERSITY)
- TO BE REMOVED BICYCLE ROUTE (UNIVERSITY)
- EXISTING + PROPOSED BICYCLE ROUTE (CITY OWNED)
- GAP IN BICYCLE NETWORK
- CAMPUS BICYCLE CENTER
- BICYCLE REPAIR CENTER
- 3 VEHICLE TO BICYCLE CRASHES PER YEAR
- 2 VEHICLE TO BICYCLE CRASHES PER YEAR
- 1 VEHICLE TO BICYCLE CRASHES PER YEAR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UNIVERSITY AND CITY BUS NETWORKS

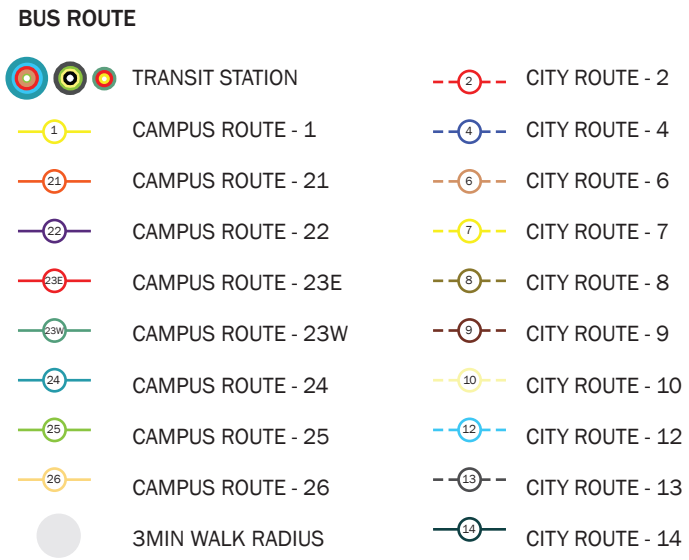
The Urbana campus has worked with the Champaign-Urbana Mass Transit District (MTD) since 1989 to establish excellent transit service on campus. Since 1999, all University iCard holders have enjoyed free access to the community-wide MTD service. In 2014, campus and MTD upgraded the campus routes to provide high-frequency service with connections to both downtown Urbana and downtown Champaign.

The bus network analysis consisted of an evaluation of the campus coverage and ease of transit using both campus and city networks. Both the campus and the community routes are run by MTD. Approximately 10 percent of employees and 30 percent of students use MTD as their primary mode of transportation.

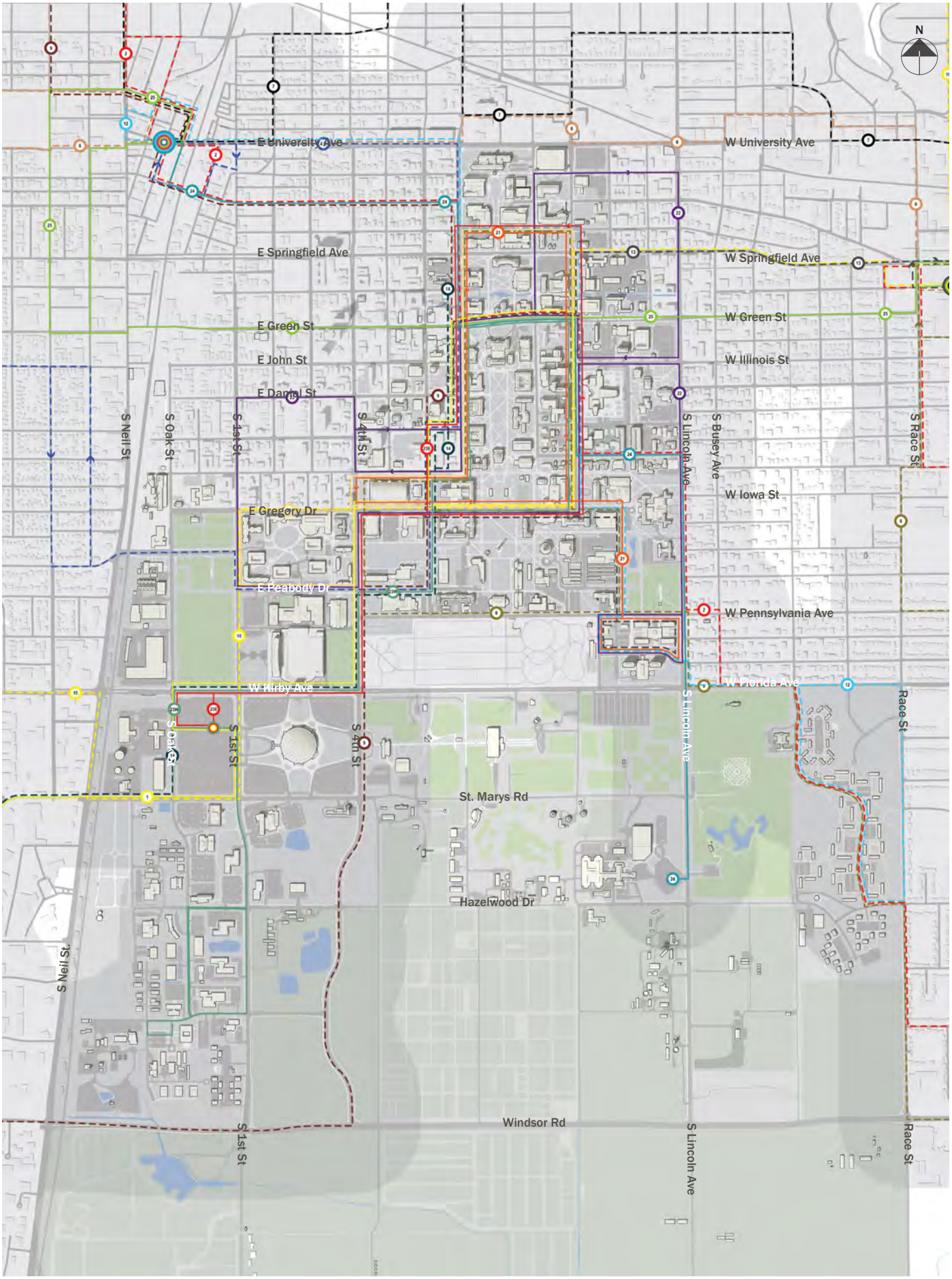
There are four primary campus routes that run in a box pattern connecting the four corners of campus with the downtown areas of Champaign and Urbana. The four routes run at a frequency of 10 minutes to during peak hours and at varying frequencies at lower-demand times of day. The city bus routes connect the two cities to the university, and vary in frequency depending on demand and time of day.

Most campus destinations in Central Campus and surrounding neighborhoods are within a 3 minute walk to a bus line. Gaps in coverage include parts of the Athletics campus, the South Farms area and part of the Veterinary Medicine complex.

Some students commented on the difficulty of getting to class on time, especially when classes were on opposite ends of campus and scheduled back-to-back. It is not possible to travel between buildings on opposite ends of campus in the 10 minutes between classes. Students indicated North Campus, by Bardeen and North Quads, feels isolated from the rest of campus. The South Quad, Florida Avenue Residence Halls/Pennsylvania Avenue Residence Halls, Ikenberry Commons areas in South Campus also feels distant from the Main Quad and northern quads. A stronger north-south and east-west connector is needed to better unite the entire Urbana campus.



Data Source: Champaign-Urbana Mass Transit District bus route and schedule maps.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PARKING

Concurrent with the Campus Master Plan, the university conducted a separate Parking Master Plan, prepared by Walker Parking Consultants. The purpose of the Parking Master Plan was to assess existing utilization, evaluate fees and operational structure, and provide tactical guidance for the day-to-day operational functions of parking on campus. The parking data shown here is from the Parking Master Plan report. Currently there are 15,602 parking spaces on campus. 2,472 of the parking spaces are located within five structures in the core of campus. The remaining 13,130 spaces are scattered in 166 surface lots across campus. The effective supply of parking spaces totals 14,982, which accounts for mis-parked cars, parking restrictions, minor construction, and temporary storage of materials such as snow and mulch.

The Parking Master Plan divided the campus into six zones to evaluate utilization. Walker Parking Consultants calculated the percent adequacy, which is the utilization of the effective supply of parking spaces, by parking zone. The western half of campus has a higher percent adequacy than the eastern half. Zones A , C and E percent adequacy are 92%, 94% and 87%, respectively. The eastern half, Zones B, D, and F, have percent adequacies of 64%, 84%, and 71%, respectively. The same six zones were then used by the Campus Master Plan to evaluate future development impact.

Of the five parking structures, the northeast and southeast garages, B4 on University Avenue and F29, on W. Gregory Drive, are underutilized compared to capacity, providing parking reserves for future development.

The two parking structures, C7 and C10 serve the center of campus, including the Illini Union and Bookstore, and are the most utilized parking structures on campus. The two structures were both identified in need of significant repair, and likely in need of long-term replacement. The Parking Master Plan recommended either significant repair or future replacement for these structures, in close proximity to their current location, in order to maintain a supply of parking close to the core of campus.

ZONE: A

EFFECTIVE SUPPLY: 420
ADEQUACY: 92%

ZONE: B

EFFECTIVE SUPPLY: 2,516
ADEQUACY: 64%

ZONE: C

EFFECTIVE SUPPLY: 1,092
ADEQUACY: 94%

ZONE: D

EFFECTIVE SUPPLY: 1,6530
ADEQUACY: 84%

ZONE: E

EFFECTIVE SUPPLY: 5,725
ADEQUACY: 87%

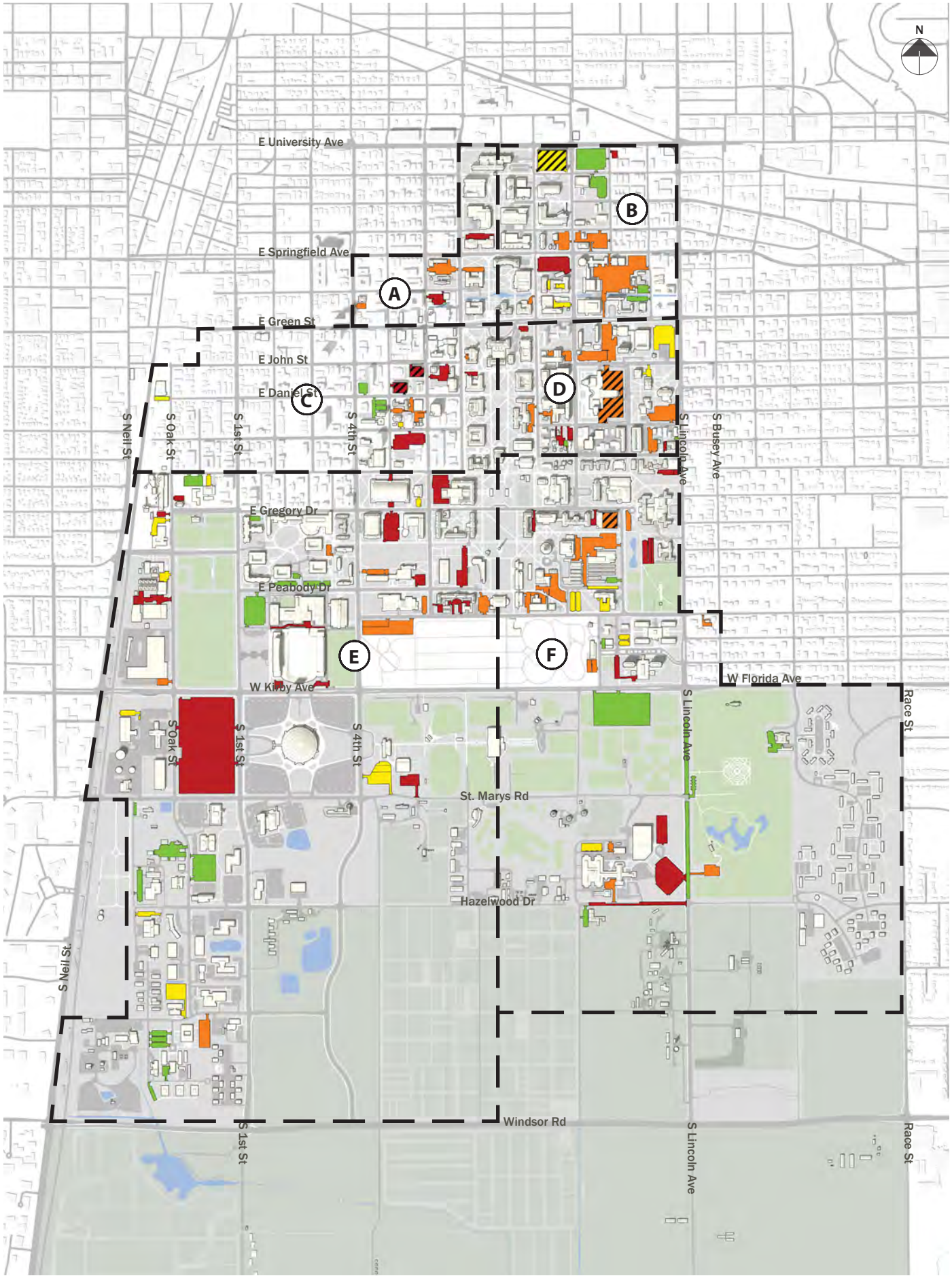
ZONE: F

EFFECTIVE SUPPLY: 3,589
ADEQUACY: 71%

Percent adequacy is the utilization of the effective supply of parking spaces.

CURRENT PEAK ADEQUACY

- > 90%
- 75 - 90%
- 60 - 75%
- < 60%
- STRUCTURED PARKING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CAMPUS LANDSCAPE

LANDSCAPE DISTRICTS AND GATEWAYS

DEFINING THE EDGES

For the landscape and gateway assessments we began our assessment by dividing the campus into districts. The districts were proposed to be defined by their typology and land use on campus. For instance, the Main Quad is considered a sacred landscape, the 'Crown Jewel', an iconic quadrangle that is synonymous with the University of Illinois at Urbana-Champaign, with its boundaries defined by the academic buildings flanking its tree lined lawn. This approach was used across the entirety of the campus to better understand the alignment of typologies within or beyond a district boundary. Defining the spaces by districts, overlaid with the landscape typology, allowed a relatable scale to emerge and for a context to emerge that rationalizes the understanding and relationship between the overlap or distinction between the campus spaces.

The review of the gateways to campus were evaluated on their ability to service the multiple modes of transportation utilized (i.e. walking, cycling, and autos). Evaluations were looking at the ability of each location to identify the university and provide a level of safe service. Gateways were determined not just by physical manifestation, but instead looking at navigational routing from regional visitors. By combining the existing physical gateway assets already in-place, with the de facto gateways created by virtue of the various web based driving applications, the definition and location of gateways changed greatly.

1. MAIN QUAD
2. SOUTH QUAD
3. ENGINEERING QUAD
4. URBAN - CAMPUS
5. URBAN - TOWN AND GOWN
6. IKENBERRY QUAD
7. ATHLETICS
8. RESEARCH PARK
9. AGRICULTURE
10. INDUSTRIAL

1

6

2

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10

LANDSCAPE QUALITY ASSESSMENT

An assessment of the campus landscape was conducted utilizing a qualitative assessment form. The form allowed the analysis of the physical landscape to be graded a number so that the assessment would become a qualitative score to level the comparison from space-to-space. The annotated and scored quality assessment forms were analyzed to find the averages for all categories. The categories ranged from hardscape to softscape and worthiness of a space to be photographed and posted to online social media platforms. To that end the analysis of the landscape quality was also reviewed online for what presence the exterior environment has from a visual analysis, what images show up, are they of a quality that is defining, and matching or exceeding that of your peer institutions.

At the conclusion of this analysis the collected data was then translated into three distinct categories, Preserve, Enhance and Transform to summarize the overall qualities of each district. Within each district a composite score was determined based on an evaluation of all the categories assessed. From there a composite score or rank was rationalized. Green, Preserve: Great space, and should be preserved; Yellow, Enhance: Good, but could use improvement; and, Red, Transform, needs to be reconsidered, or redeveloped.

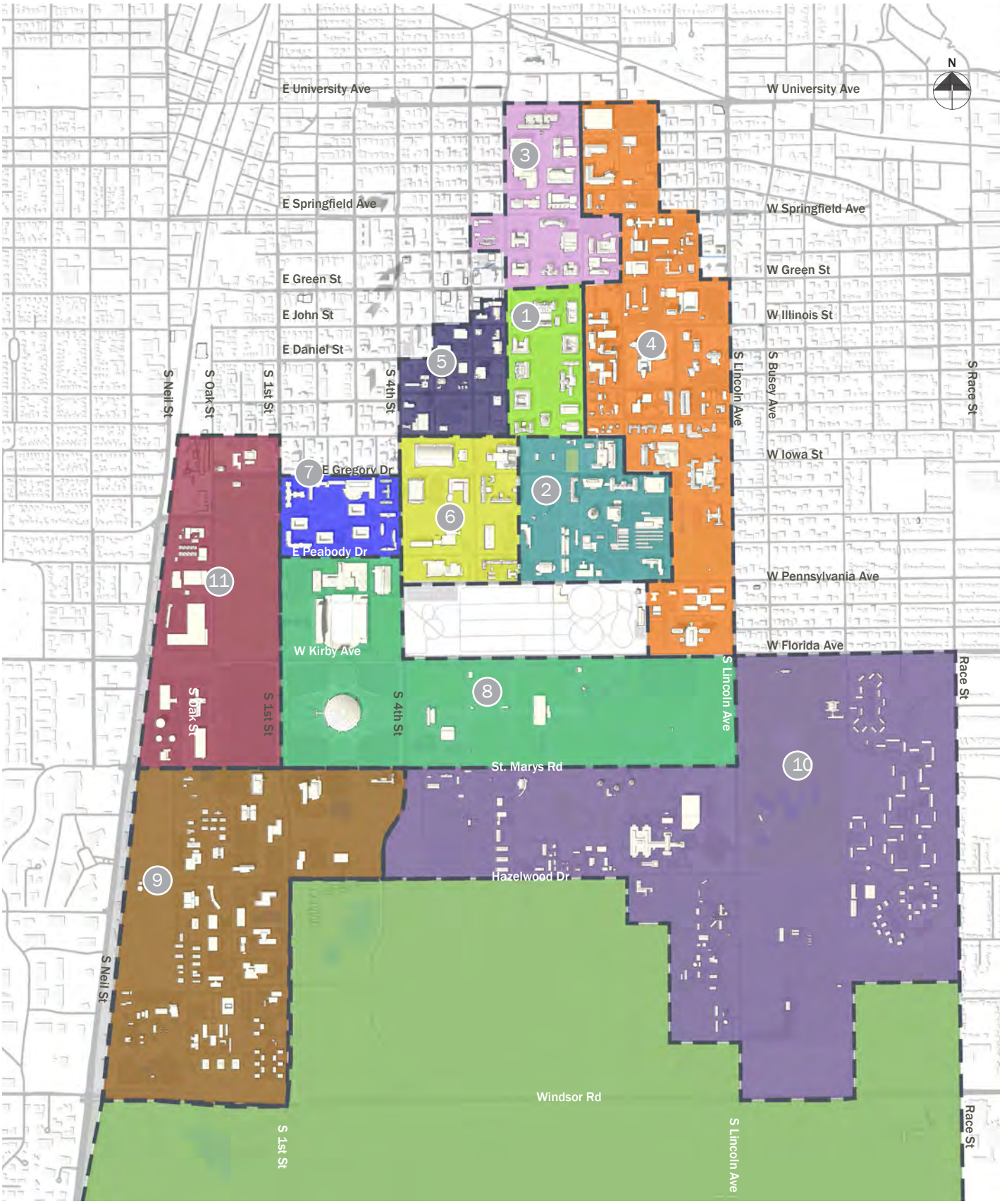
The overall landscape quality varies from district to district. The primary difference is most noticeable in the quality and health of the lawns. Diversity of the plant species across campus is not apparent to the casual observer and is only distinguishable at entry ways and in other high visibility areas. The approach to the landscape should be to utilize broader strokes, this is not to say we should not have plant diversity, the plant palette should be simplified into larger massings, or broader strokes. Not dissimilar to what is seen in the Main Quad with simplified plant massings.

PRESERVE
GREAT, AND SHOULD BE PRESERVED

ENHANCE
GOOD, BUT COULD USE IMPROVEMENT

TRANSFORM
NEEDS TO BE RECONSIDERED, REDEVELOPED

1 MAIN QUAD
2 SOUTH QUAD
3 ENGINEERING QUAD
4 URBAN - CAMPUS
5 URBAN - TOWN AND GOWN
6 MILITARY AXIS
7 IKENBERRY QUAD
8 ATHLETICS.....(NOT EVALUATED)
9 RESEARCH PARK
10 AGRICULTURE.....(NOT EVALUATED)
11 INDUSTRIAL.....(NOT EVALUATED)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GATEWAY QUALITY ASSESSMENT

The gateways assessed for this report were defined by research using online mapping/direction tools (i.e. as Google maps) showing every route to campus from surrounding cities such as Chicago, Indianapolis, St. Louis, Springfield, and Peoria. With a focus on the multiple modes of transportation used these days and the outgrowth of the campus over the years, the gateways to campus became a focus to ensure each location could identify the university and provide a level of safe service.

Similar to the evaluation of the landscape, the gateway analysis utilized a qualitative assessment form to establish an overall score for each gateway based upon the visual quality and landscape features of the space. What was found is that the campus gateways have become either hidden or transparent, very non-descript or an overall missed opportunity. Items that inhibited gateways from scoring higher were limited pedestrian access, no brand recognition, and little to no standardization of materials and furnishings.

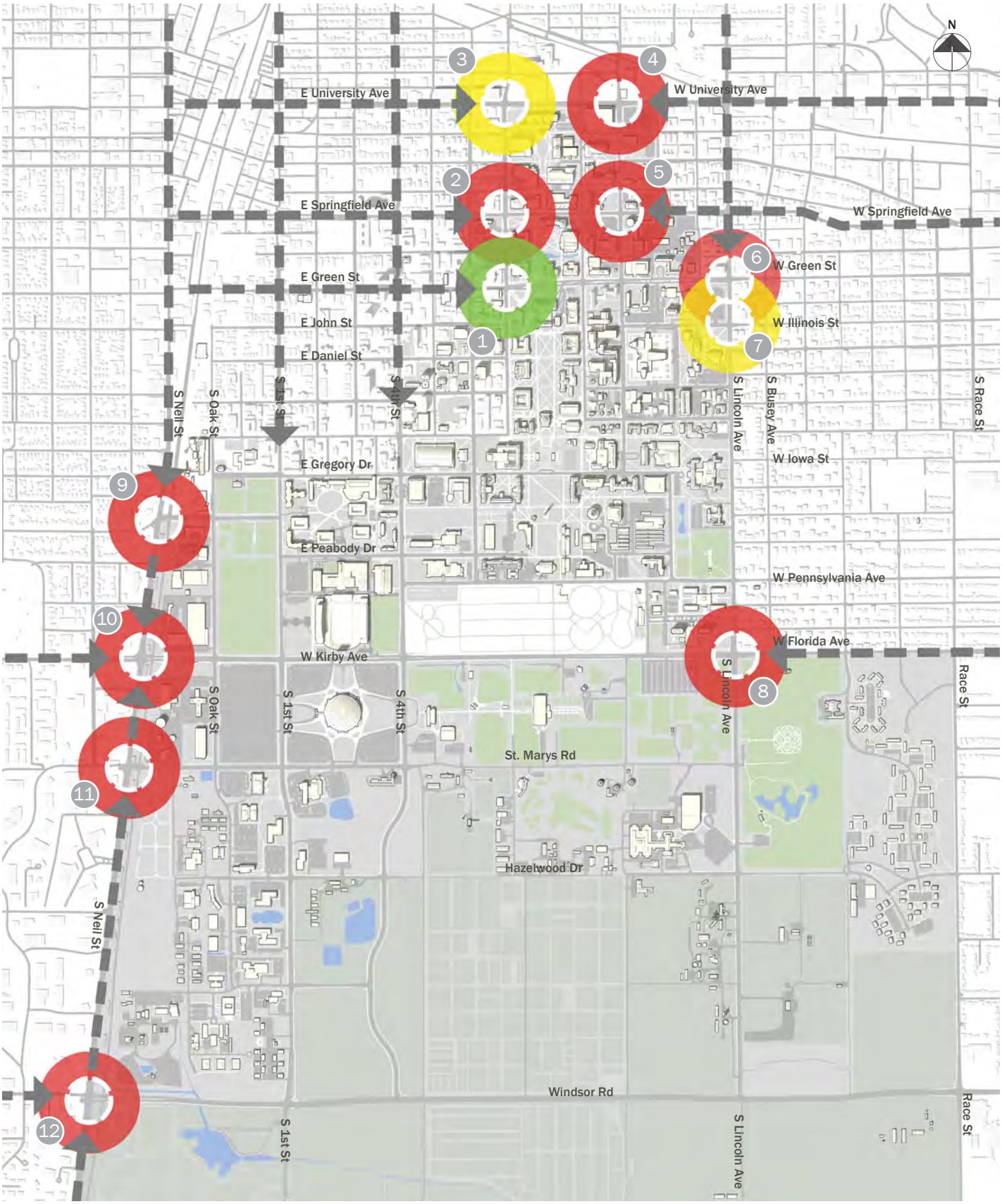
Overall, the gateways to campus are non-existent from an experience standpoint. While the physical campus is recognizable the edges of campus quickly bleed into the surrounding community and blur the lines of where you are. The adherence to campus standards would help with identification of campus boundaries and a pronounced identification of arrival. With an increase in off campus housing, a focus on pedestrian access to and from campus through the gateways should be prioritized.

PRESERVE
GREAT, AND SHOULD BE PRESERVED

ENHANCE
GOOD, BUT COULD USE IMPROVEMENT

TRANSFORM
NEEDS TO BE RECONSIDERED, REDEVELOPED

1. GREEN STREET AND WRIGHT STREET
2. SPRINGFIELD AVENUE AND WRIGHT STREET
3. UNIVERSITY AVENUE AND WRIGHT STREET
4. UNIVERSITY AVENUE AND GOODWIN AVENUE
5. SPRINGFIELD AVENUE AND GOODWIN AVENUE
6. GREEN STREET AND LINCOLN AVENUE
7. ILLINOIS STREET AND LINCOLN AVENUE
8. KIRBY AVENUE AND LINCOLN AVENUE
9. STADIUM DRIVE AND NEIL STREET
10. KIRBY AVENUE AND NEIL STREET
11. ST MARY'S ROAD AND NEIL STREET
12. WINDSOR ROAD AND NEIL STREET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STORMWATER

The Urbana campus has a relatively flat topography with some isolated areas of moderate slopes. The campus is generally divided by Florida Avenue/Kirby Avenue with the northern portion of campus draining towards the Boneyard Creek, which is located just north of Green Street. The south portion of campus drains to the Embarras River.

The native soils are predominantly clay and loam which are characteristic of the region. The north portion of campus is comprised of mostly poor draining soils with a high groundwater table. The south portion of campus has moderate to well draining soils. A series of stormwater studies have been completed for campus over the past decade; however, none have looked comprehensively at the campus-wide stormwater system. To date, the studies have focused on the campus core, Main Quad, Ikenberry Commons, and the Research Park.

An opportunity exists to complete a comprehensive stormwater analysis to assess infrastructure campus-wide. This will also assist in determining future initiatives which can be implemented to progress towards meeting the iCAP goals for rainwater harvesting and implementing green infrastructure throughout the Urbana campus. Best management practices such as the use of permeable pavements and bioswales should be considered for implementation as part of any future development project to help reduce flood potential and improve water quality.

VIEW OF BONEYARD CREEK

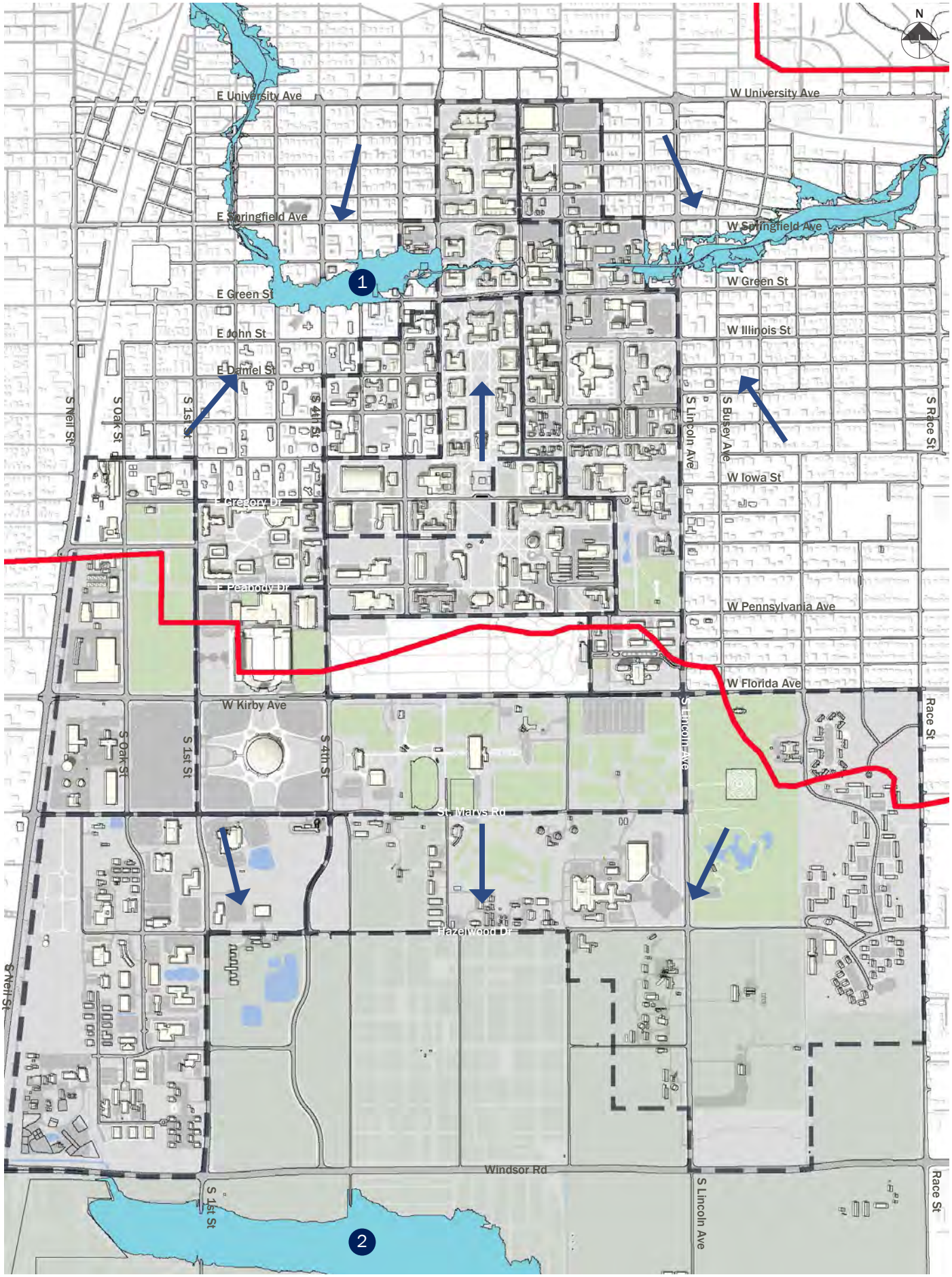
1 BONEYARD CREEK FLOODPLAIN

2 EMBARRAS RIVER FLOODPLAIN

BONEYARD WATERSHED

SUB-WATERSHED

FLOODPLAIN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UTILITIES

In 2015, the university completed a campus-wide Utilities Production and Distribution Master Plan. Given that this document was completed so recently, the Campus Master Plan was asked to summarize the analysis and findings rather than complete an additional evaluation.

UTILITIES PRODUCTION AND DISTRIBUTION

Abbott Power Plant (APP) generates approximately 275,000 megawatt hours (MWH) of electricity each year through the use of a high efficiency cogeneration process. The existing APP operation supplies approximately 50% of the total Urbana campus electricity. APP supplies 100% of the steam to the university which is used primarily for building heating purposes, but also used for hot water heating, in dining services, and also for research.

The central chilled water systems is comprised of five different chilled water plants and a thermal energy storage tank and are all interconnected by 27 miles of underground piping. The current campus cooling system meets the chilled water demand with firm capacity generated by electric driven chillers, but also includes steam driven chillers that can be utilized as well. In addition, the campus cooling system includes a thermal energy storage tank that is utilized to minimize operating costs as well as reduce generating capacity requirements.

The existing campus utility distribution system includes approximately 300 miles of electrical cable, 30 miles of steam piping and 27 miles of chilled water piping distributed throughout the university. The existing distribution system allows the campus utility demand to be met through interconnected central plants. In general, central plants require less generating capacity due to load diversity between buildings. The smaller total capacity and the centralized location reduce the cost of maintaining the equipment and allow the campus utility needs be met in a more cost effective manner.

ELECTRICAL DISTRIBUTION

The import capacity of the existing electrical distribution system is limited to 60 megawatt (MW). The campus peak electrical demand was 80 MW in the summer of 2014, requiring APP to generate any demand above 60 MW. A project is currently underway to increase the import capacity from 60 MW up to 90 MW, which when complete will also increase the system reliability, enhance the operational flexibility, and reduce the overall utility costs. The campus electrical distribution system supplies electricity to a majority of university buildings via multiple distribution centers and load centers located across the university and provides direct connections to university buildings.

SANITARY SEWER SYSTEM

The university operates a sanitary sewer system and a separate storm water sewer system. The sanitary sewer system serves most buildings on the main campus. However, due to proximity to Champaign and Urbana, new buildings may be connected to sanitary sewer systems operated by these municipalities. The sanitary sewer systems are tributary to the Urbana Champaign Sanitary District (UCSD) and they operate waste water treatment plants for this region. Connection permits are required for new buildings and additions to buildings, and there are connections fees based on flow from the subject building.

STORM WATER SEWER SYSTEM

The university operates a storm water system that serves most university buildings. The Urbana campus is focused on sustainable practices, including the storm water system. As projects develop, there is a requirement to limit discharge of

storm water to the existing site discharge predevelopment. In addition, the university is supporting best management practices for storm water. Connection to storm water systems may be to systems operated by Urbana and Champaign due to their proximity to the university. Storm water management includes submission of a Storm Water Pollution Prevention Plan during project construction.

WATER DISTRIBUTION SYSTEM

The university operates a water distribution system, classified by the Illinois Environmental Protection Agency (Illinois EPA) as a private water system. This includes distribution of water to a majority of university buildings, fire protection hydrants located throughout the university, and includes approximate 40 miles of piping. The water distribution system is required to perform a wide variety of required tests, to ensure safe and quality water. This water system is classified as a consecutive system, meaning all water is delivered to the system by the local water public utility, Illinois American Water Corporation. The components of the campus water system vary greatly in age and some piping may be all most 100 years old. In spite of the age of portions of the system, water outages are held to a minimum and the system is reliable.

NATURAL GAS SYSTEM

The university is served by natural gas systems operated by Ameren and the university. Generally, Ameren serves the university north of Florida Avenue, mostly for laboratory purposes, as the major source of heat is steam from APP. A small number of university buildings are heated by natural gas. The university's natural gas system generally serves buildings south of Florida Avenue, APP, the Research Park, and the South Farms areas.

The university's natural gas system is supplied by a transmission pipeline from just north of Lodge Park in Monticello and is routed to a regulator station at Curtis Road the Canadian National Railroad tracks. The transmission pipeline operates at a maximum allowable pressure 858 pounds per square inch (PSI), the regulator station at Curtis Road regulates the pressure to 400 PSI, which is routed to APP. The university's natural gas distribution system operates at a maximum allowable pressure of 100 PSI. Metering stations at each building regulate the pressure to that required by the building, and provide metering for billing and energy management purposes.

SOLAR FARM

Starting production in December 2015, the 20.8-acre solar farm is located along the south side of Windsor Road between 1st Street and the existing railroad tracks. The Solar Farm produces an estimated 7.86 million kilowatt-hours (kWh) annually or approximately 2% of the electrical demand for the Urbana campus making it one of the largest university solar arrays in the country.

As part of the Illinois Climate Action Plan (iCAP), the Urbana campus would like to implement an additional 50-acres of solar arrays to meet the iCAP objectives for solar electricity. The goal is to generate 25,000 MW hours per year through campus solar production.

The most cost effective solution is to construct 50 contiguous acres. However, a few smaller plots can also provide an economical solution. An additional feasibility study will be needed to determine the optimal location(s) for future solar arrays on the Urbana campus. It will require input from all related stakeholders.

05
THE MASTER PLAN

OVERVIEW

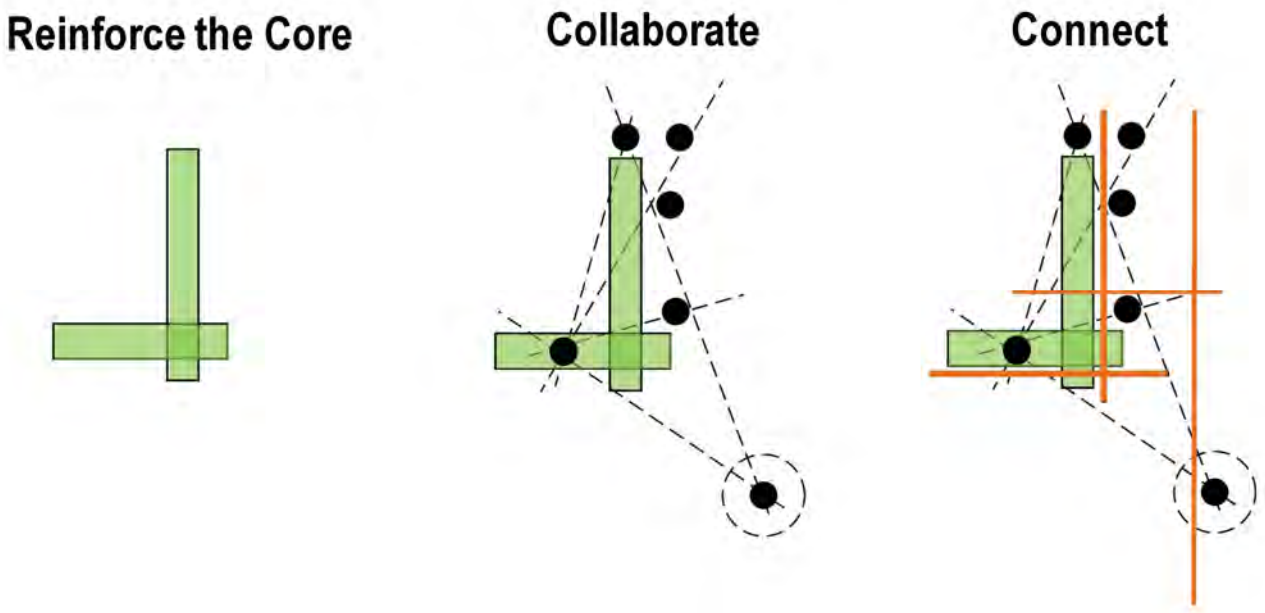
CAMPUS FRAMEWORK PLAN

The Campus Framework Plan demonstrates key design principles and planning opportunities unique to the University of Illinois at Urbana-Champaign. It distills the overarching ideas and broader vision underlying the Campus Master Plan into an easily understandable series of diagrams to highlight important patterns of development and organizing strategies.

The Campus Framework Plan reinforces many of the key organizing principles found within the historic 1905 campus planning document. It builds upon the existing strengths of the current campus by embracing elements such as the dynamic north-south axis and open space network in order to extend those features into other areas of campus.

In contrast, the Illustrative Campus Master Plan, included later in this document, presents an additional level of plan refinement and detail. It provides a holistic vision for the future development of the Urbana campus by identifying implementation recommendations and strategies related to campus facilities, infrastructure, and systems.

It is anticipated that the specific planning initiatives presented in the Illustrative Campus Master Plan will likely change with time as priorities shift and funding models evolve. However, the Campus Framework Plan is intended to be enduring in its organizing principles. Therefore, the Campus Framework Plan represents an important diagrammatic view of development, renewal, preservation priorities, and organizing strategies which will serve as an important long-term reference to guide all future planning initiatives at the university.



DESIGN PRINCIPLES

01.
Focus the undergraduate experience along the Main Quad.

02.
Locate common and collaborative functions along major north-south and east-west campus axes.

03.
Support interdisciplinary collaboration and resources.

04.
Strengthen and define the primary western axis (commonly referred to as the “Military Axis”).

05.
Enhance east-west pedestrian connections to Main Quad.

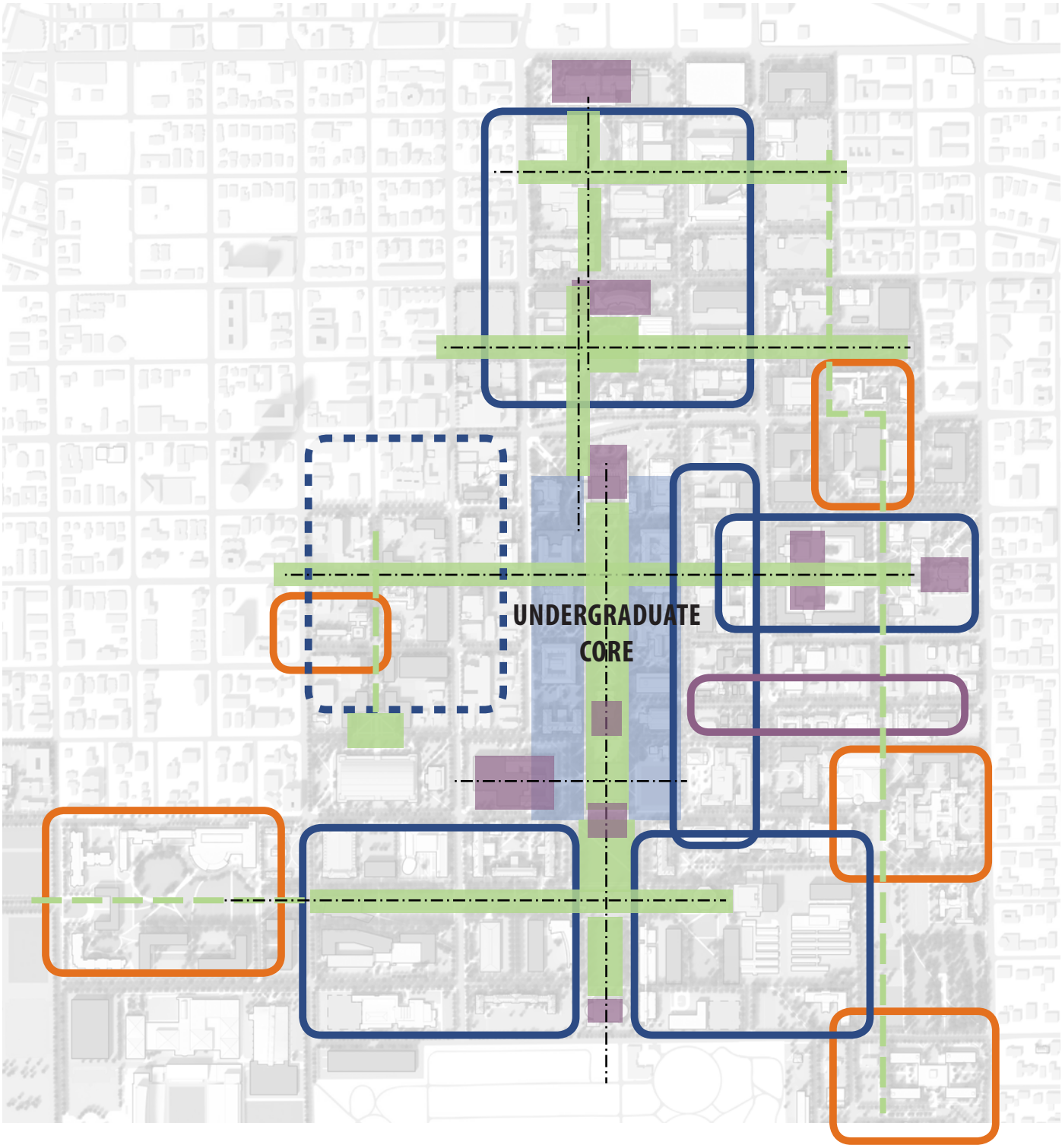
06.
Respect the campus structure and character to define and connect existing and emerging districts.

07.
Create new quads and public spaces as district focal points.

08.
Increase density in districts adjacent to the core.

09.
Integrate student and residence life into the campus fabric.

CAMPUS FRAMEWORK PLAN



KEY THEMES

Enrollment and research growth; the quality and quantity of existing facilities; the distribution and utilization of space across campus; collaboration among disciplines, divisions, and departments; the quality and character of student life; transportation and connectivity; sustainability and infrastructure; and, the continued beautification of campus have been key areas of focus during analysis and formed the key themes of the Campus Master Plan. They are:

iCAP Goal - Net Zero Growth

balances campus growth and renewal in support of Illinois Climate Action Plan (iCAP) goals and fiscal responsibility.

Reinforce the Campus Core

addresses the quality of the academic environment and priorities for reinvestment.

Discovery and Collaboration

concerns the caliber, quality and connectivity of research programs, facilities, and land.

Access and Connectivity

recognizes the university's excellence in providing an accessible campus, and looks for ways to improve connectivity and safety across campus.

Student-Centered Campus

addresses improvements for some university's auxiliary functions - housing, dining, union, student services, cultural centers, health, recreation, and athletics.

Neighborhood Identity

considers the physical quality and organization of campus, with ways to help beautify and unify campus neighborhoods, gateways, and landscape.

REINFORCE THE CAMPUS CORE

1. PRIORITY ACADEMIC/RESEARCH RENOVATIONS/ADDITIONS, TYP.
2. PROPOSED INTERDISCIPLINARY CLASSROOM BUILDING
3. MILITARY AXIS
4. LIBRARY RENOVATION AND INFILL
5. ACES QUAD

DISCOVERY AND COLLABORATION

6. RESEARCH LABORATORY RENOVATION AND ADDITIONS
7. LONG TERM - MEDICAL ENTERPRISE CENTER
8. LONG TERM - DISCOVERY + COLLABORATION PARTNERSHIPS
9. INTERDISCIPLINARY RESEARCH LABORATORY
10. EXPANDED SCIENCES CORRIDOR

ACCESS AND CONNECTIVITY

11. FUTURE GARAGE LOCATIONS
12. MATHEWS + PEABODY SHUTTLES

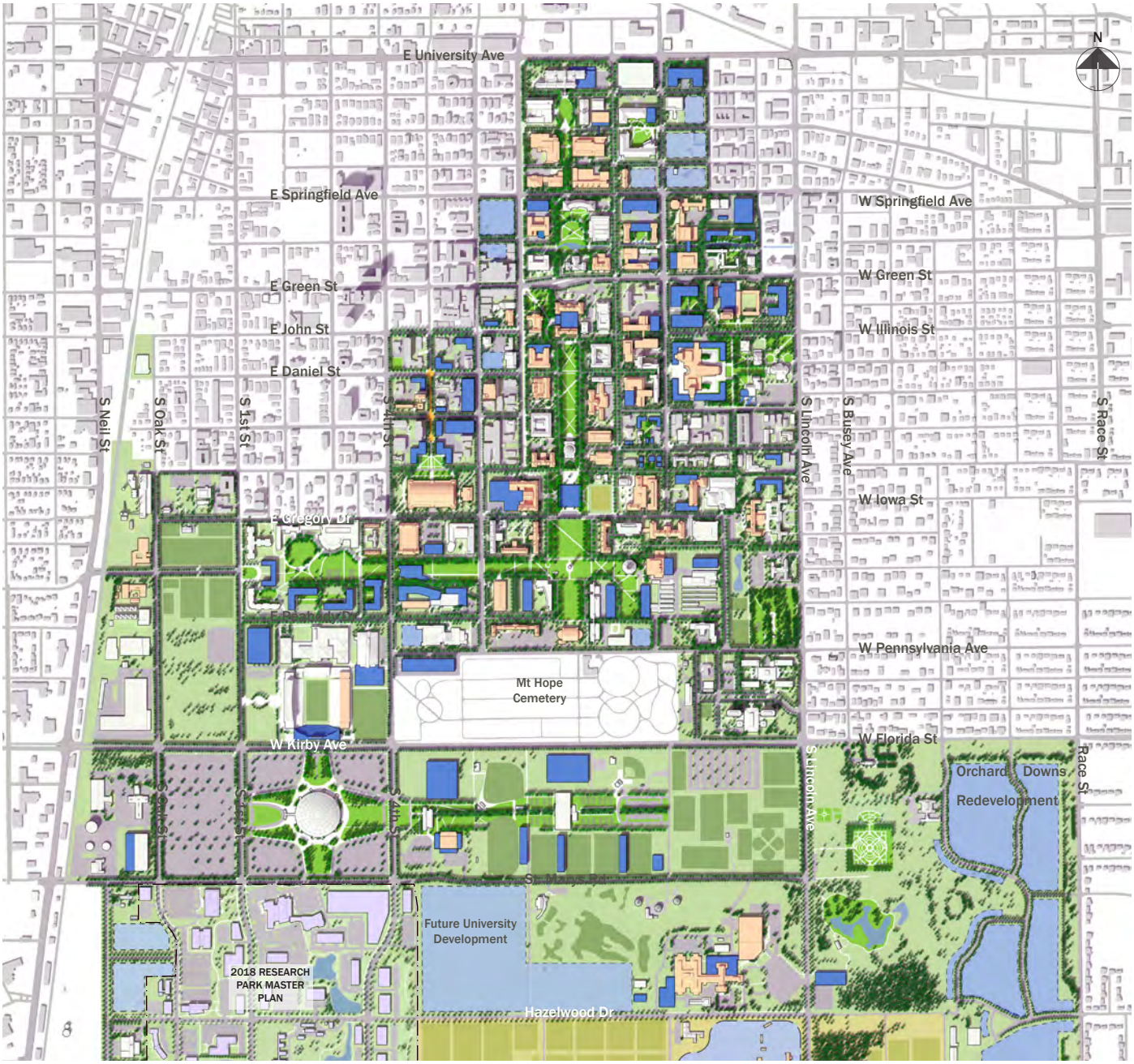
STUDENT-CENTERED CAMPUS

13. ILLINI UNION RENOVATION AND EXPANSION
14. RECREATION RENOVATION/REPLACEMENT
15. FUTURE RESIDENCE HALLS + DINING EXPANSION
16. GOODWIN-GREEN HOUSING REPLACEMENT
17. CULTURAL CENTERS
18. STUDENT SERVICES REDEVELOPMENT

NEIGHBORHOOD IDENTITY

19. ILLINOIS EXPERIENCE
20. ACES LEGACY CORRIDOR
21. FIGHTING ILLINI - ATHLETICS CAMPUS
22. ARMORY AND WEST SIDE NEIGHBORHOOD


BECKMAN INSTITUTE
W University Ave
W Clark St
W Main St
W Stoughton St
W Springfield Ave
W Green St
W Illinois St
W California Ave
W Oregon St
W Nevada St
W Iowa St
W Ohio St
W Indiana Ave
W Pennsylvania Ave
S 6th St
S Wright St
Mathews Ave
Goodwin Ave
S Lincoln Ave
S Coler Ave
S Busey Ave
S Dorm Dr
ENGINEERING LIBRARY
ILLINI UNION
ILLINI UNION BOOKSTORE
NOYES LABORATORY
LINCOLN HALL
UNIVERSITY LIBRARY
MORROW PLOTS
CARL R. WOESE INSTITUTE
CRCE
ACES LIBRARY
STOCK PAVILION
NATIONAL SOYBEAN RESEARCH LABORATORY
MT HOPE CEMETERY

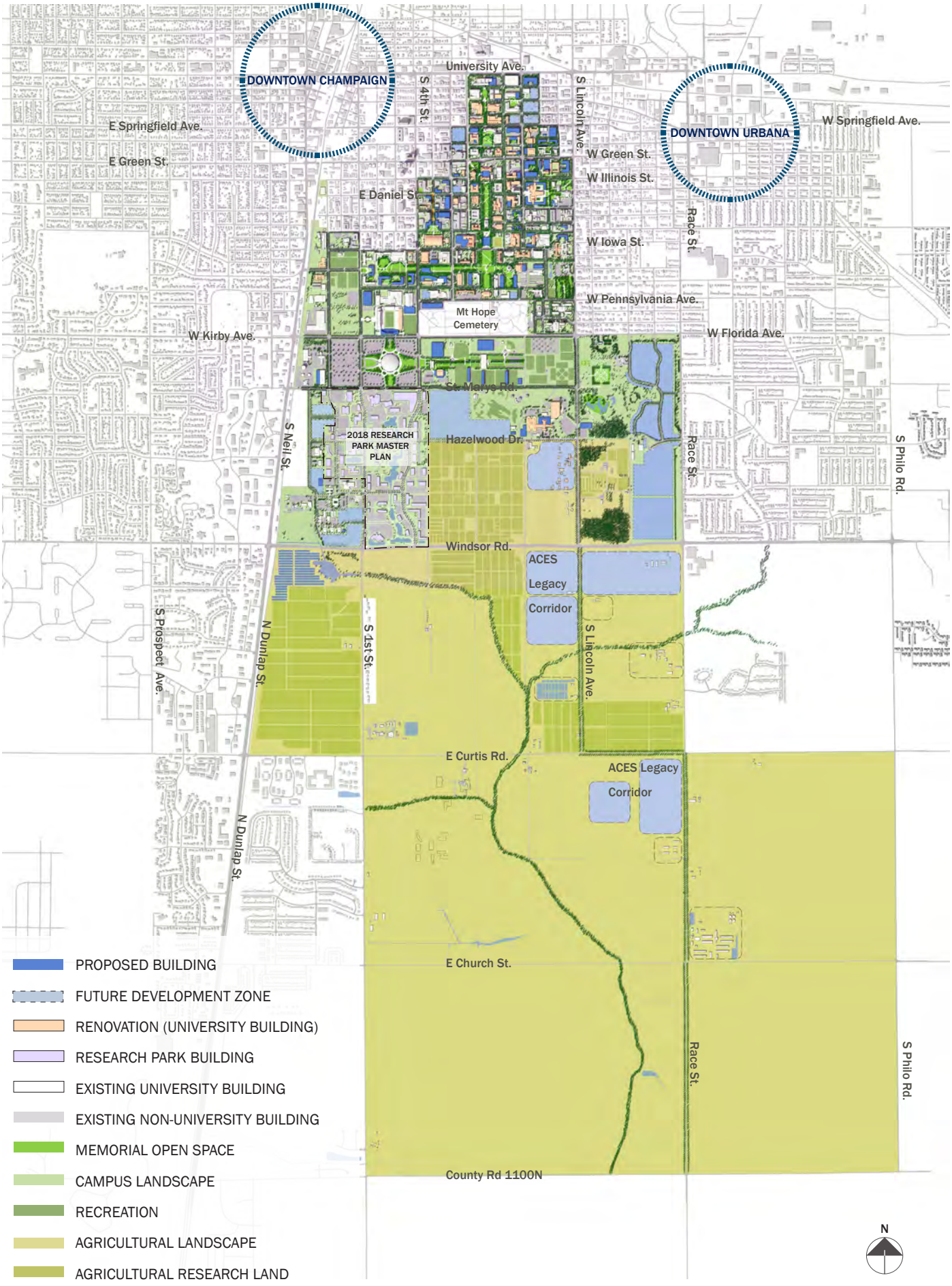


THE 2017 CAMPUS MASTER PLAN

A FRAMEWORK FOR GROWTH AND RENEWAL

The Campus Master Plan provides recommendations for the entire University of Illinois at Urbana-Champaign. It anticipates a steady growth in enrollment for students online and on-campus over the next ten years, focusing on strategies for physical renewal of buildings, infrastructure, and open space. However, the Campus Master Plan looks beyond the initial planning horizon to illustrate zones for future replacement space, new development, and reinvestment. The Campus Master Plan is not a mandate to build, rather it is designed as an opportunities plan for continued campus renewal and change.

As a framework, the Campus Master Plan establishes development patterns to maintain the university's unique spatial and organizational characteristics, while at the same time identifying potential sites for future building placement and campus placemaking. Future program needs and funding sources will ultimately determine the pace and scale of development over time. Many of the concepts illustrated in the Campus Master Plan are multi-step initiatives that may require more than one project to achieve. They are designed to optimize institutional resources and academic adjacencies.


DOWNTOWN CHAMPAIGN
DOWNTOWN URBANA
University Ave.
S 4th St.
S Lincoln Ave.
E Springfield Ave.
W Springfield Ave.
E Green St.
W Green St.
W Illinois St.
E Daniel St.
Race St.
W Iowa St.
W Pennsylvania Ave.
Mt Hope Cemetery
W Kirby Ave.
W Florida Ave.
St Marys Rd.
2018 RESEARCH PARK MASTER PLAN
Hazelwood Dr.
S Neil St.
S Philo Rd.
Windsor Rd.
ACES Legacy Corridor
S Prospect Ave.
N Dunlap St.
S 1st St.
E Curtis Rd.
E Church St.
County Rd 1100N
PROPOSED BUILDING
FUTURE DEVELOPMENT ZONE
RENOVATION (UNIVERSITY BUILDING)
RESEARCH PARK BUILDING
EXISTING UNIVERSITY BUILDING
EXISTING NON-UNIVERSITY BUILDING
MEMORIAL OPEN SPACE
CAMPUS LANDSCAPE
RECREATION
AGRICULTURAL LANDSCAPE
AGRICULTURAL RESEARCH LAND
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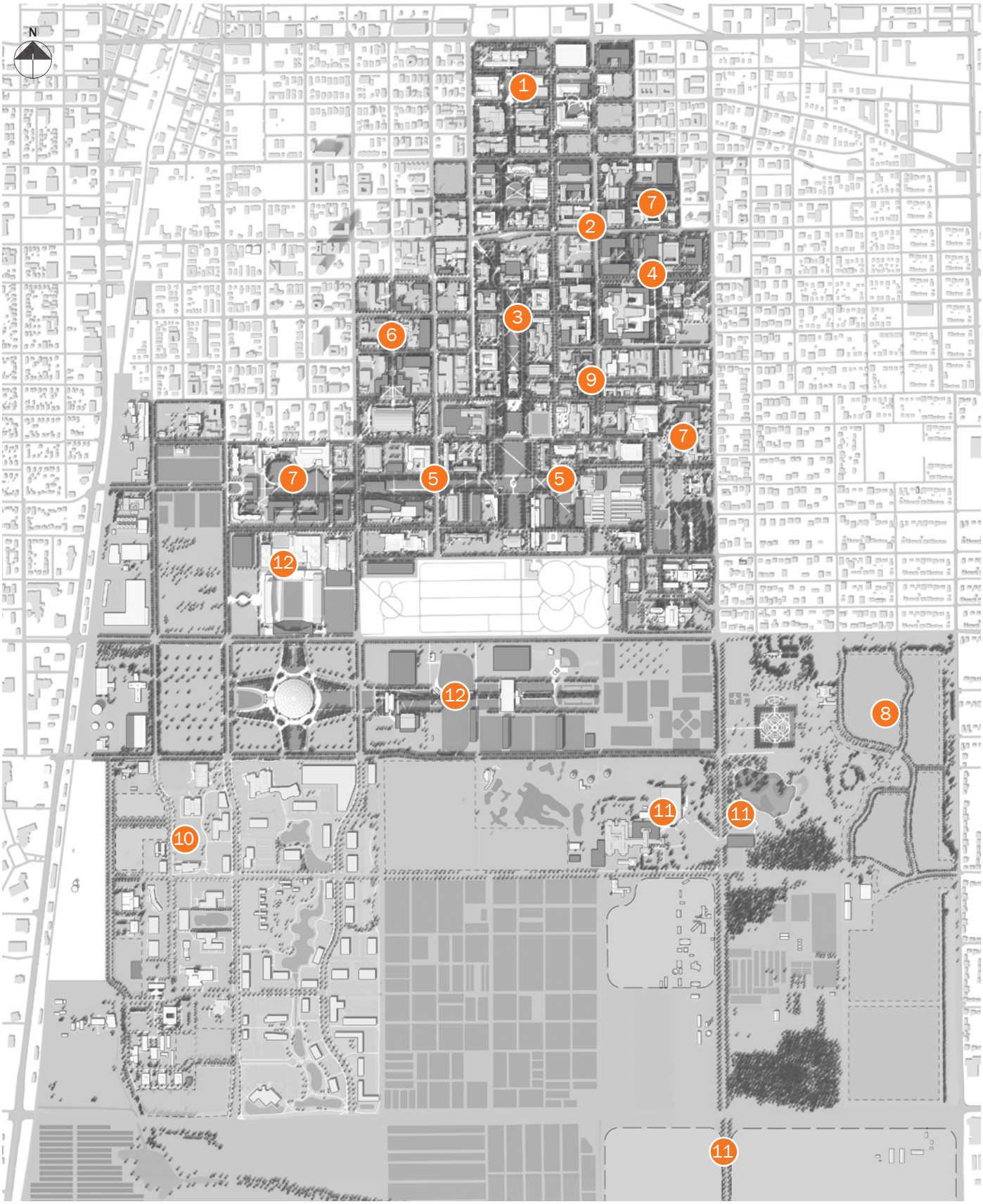
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MASTER PLAN

CAMPUS RECOMMENDATIONS

The Illustrative Campus Master Plan represents an ideal future vision for the University of Illinois at Urbana-Champaign. The plan interprets design principles, key analysis objectives, and campus systems recommendations, developed during the master planning process, into a composite graphic for the Urbana campus.

The Campus Recommendations translate the guiding principles and key themes into an illustrative framework to aid the Urbana campus's future decision making process. It is intended to serve as a roadmap for the institution. The recommendations embody ideas related to campus enhancement, preservation, and transformation opportunities that will strengthen the overall campus environment.

Both short- and long-term opportunities for the continued growth and development of the university are represented within the plans. On a detailed level, the Campus Master Plan proposes the placement of new features such as future buildings, roadways, pedestrian corridors, open spaces, and parking areas. However, the fundamental function of the Campus Master Plan is to suggest a principle-driven framework for managing future opportunities.

The Campus Master Plan has been divided into several districts (shown at left) to describe proposed initiatives in more detail.

1. NORTH CAMPUS
2. SCIENCES CORRIDOR
3. CENTRAL CAMPUS
4. THE ILLINOIS EXPERIENCE
5. SOUTH CAMPUS AND MILITARY AXIS
6. ARMORY AND WEST SIDE
7. STUDENT LIFE AND HOUSING
8. ORCHARD DOWNS REDEVELOPMENT
9. WEST NEVADA STREET AND CULTURAL CENTERS
10. SOUTHWEST CAMPUS AND RESEARCH PARK
11. ACES LEGACY CORRIDOR AND VETERINARY MEDICINE
12. DIVISION OF INTERCOLLEGIATE ATHLETICS

NORTH CAMPUS

The North campus (from West Green Street to West University Avenue) is home to many College of Engineering programs and buildings, with academic, research, parking, and community uses such as the University Laboratory High School (Uni High), which shares the historic Kenney Gymnasium facility with Athletics. This district has unique campus resources, including the Beckman Institute for Advanced Science and Technology, the National Center for Supercomputing Applications (NCSA), and the Grainger Engineering Library.

The Beckman Institute for Advanced Science and Technology is one of the university's most prestigious institutes for interdisciplinary research, anchoring the north end of campus. Beckman Institute has a vision to expand biomedical imaging within the Institute, as the basis for broadening partnerships with the Carle Medical Center and the new Carle Illinois College of Medicine, requiring a future physical expansion to the Institutes's facility.

The College of Engineering has a number of existing facilities, both old and new, containing academic, office, and research space for its programs. The university plans to reinvest in older facilities to increase utilization, and remove and replace outdated facilities to open opportunities for new construction. As with many parts of campus, the North campus could use more space that is team-based, technologically integrated, and interdisciplinary. With its population density, the North campus could also use more Student Life amenities such as a satellite recreation facility, more dining options, and gathering spaces.

Pedestrian safety is a concern with North campus especially with the heavily used mid-block pedestrian crossings on West Springfield Avenue and West Green Street. Pedestrian traffic counts have not recently been conducted for these mid-block crossings. The Campus Master Plan recommends further study for this area to address ease and safety of pedestrian movement to and from North campus.

Specific Recommendations include:

1. Beckman Institute for Advanced Science and Technology – Extend the eastern section of the building to accommodate expansion in biomedical imaging and associated laboratory support, vivarium and research space. Improve north façade to add a north entry and welcoming presence on University Ave.
2. Civil Engineering Hydrosystems Laboratory renovation, addition, and pedestrian bridge to Newmark Civil Engineering Laboratory for greater collaboration.
3. Expansion to NCSA.
4. Renovation to existing academic/research facilities.
5. Re-use of Kenney Gymnasium as satellite recreation facility and amenity space.
6. Uni High and future expansion.
7. Address pedestrian safety at mid-block crossings.
8. Proposed Integrated Instructional Facility.
9. Renovation and south infill of Talbot Laboratory.
10. Long-term redevelopment of former Shelford Vivarium and Computing Application Building block, as possible Public Private Partnership (P3) opportunity.
11. Future redevelopment of Parking Lot A-9, possible P3 opportunity.
12. Proposed Interdisciplinary Research Facility as mixed-use with student amenities.
13. Renovation and conversion of Transportation and Ceramics Buildings to less intensive use, with future research infill to connect the two buildings.
14. Continue Boneyard Creek restoration and greenway.
15. Renovation and expansion to Mechanical Engineering Building.
16. Proposed pedestrian corridor and landscape.

MAJOR PEDESTRIAN CORRIDOR

ACTIVE BUILDING EDGE

BUILD-TO LINE

P PARKING

SCIENCES CORRIDOR

The east side of campus, particularly along South Mathews and Goodwin Avenues, contains a number of academic and research facilities for the physical sciences, chemistry, biology, engineering, agriculture, and environmental science. The College of Liberal Arts and Sciences (LAS) has the majority of its existing science programs and facilities in this corridor. Unfortunately, LAS facilities have become land-locked with limited room to expand.

The Campus Master Plan proposes the strategic relocation of the Goodwin and Green apartment complex to a site north of Daniels Hall on the Boneyard Creek. This opens up the southeast corner of Goodwin Avenue and Green Street for redevelopment as future interdisciplinary science uses. The site becomes a critical building block to create the Sciences Corridor, providing new growth opportunities and ways to physically connect multiple facilities. This corridor links Madigan Laboratory and the Institute for Genomic Biology to the south, with Roger Adams Laboratory, Chemical and Life Sciences, Morrill and Burrill Hall and Medical Sciences in Central campus, and with Loomis Laboratory for Physics, Seitz Materials Research Laboratory and engineering programs in the north part of campus.

North of West Green Street, the 2007 Campus Master Plan had shown the potential for future university development on land east of Goodwin Avenue. While no specific program has been identified to date for this area, the 2017 Campus Master Plan retains this area for future campus development, maintaining flexibility to accommodate future interdisciplinary uses as programs and partnerships develop. The current surface parking lot on the block fronting West University Avenue is a prime location that can help bridge the Sciences Corridor with the Carle Medical Center to the east, and the Beckman Institute for Advanced Science and Technology two blocks to the west. This site has been identified as a potential home for a future Medical Enterprise Center, an interdisciplinary program incorporating the Carle Illinois College of Medicine with multiple university programs and institutes and private partners. The Medical Enterprise Center could become the catalyst for new interdisciplinary discovery and learning involving health care, science, humanities, engineering, and the arts.

Reinvestment in existing facilities is of critical importance in this corridor. Renovations to the Medical Sciences Building are underway to accommodate the new Carle Illinois College of Medicine. Strategic additions to Roger Adams Laboratory and to Burrill Hall will provide new laboratory swing space, allowing a more ordered cycle of renovations within the buildings.

P PARKING

Specific recommendations include:

1. Carle Medical Center provides opportunity for engaging with health care and translational research.
2. Public transit should be strengthened along West University Avenue to support collaboration.
3. Potential location for future Medical Enterprise Center.
4. Land reserved for future university development as programs and funding become available.
5. Renovations to Seitz Materials Research Laboratory and Engineering Sciences Building.
6. Renovation and expansion to Loomis Laboratory for Physics. Renovation should include a new link to Seitz Materials Laboratory to allow the continuation of Boneyard Creek and proposed greenway.
7. Proposed Interdisciplinary Sciences facilities. Surface parking to be relocated to proposed parking structure at West Springfield Avenue and South Gregory Street.
8. Renovations to Burrill and Morrill Halls and laboratory addition to Burrill Hall.
9. Renovation to Medical Sciences Building.
10. Renovation and laboratory addition to Roger Adams Laboratory.
11. Renovations for Institute for Genomic Biology.
12. Renovation to Madigan Laboratory.
13. Proposed parking structure to replace parking displaced by proposed development on east side of campus.

CENTRAL CAMPUS

The Main Quad of the Urbana campus is one of the most iconic university campus spaces in the United States. The original cluster of academic buildings around a signature open space of lawn and mature shade trees provides visitors and students at University of Illinois at Urbana-Champaign with some of their most memorable experiences of campus. This is the heart of the Urbana campus and should continue to be treasured.

The Campus Master Plan proposes the continued renovation and reinvestment in the academic fabric of the Central campus. The university has undergone several renovations to the buildings flanking the Main Quad, including Lincoln Hall and the Natural History Building. Core to the undergraduate experience on campus, renovations are proposed to several academic buildings, including Altgeld Hall, English Building, Davenport Hall, Gregory Hall, the Foreign Languages Building, Smith Memorial Hall, and Henry Administration Building.

The Illini Union is a landmark at the north end of Main Quad and the hub of student activity. It is also undersized and lacks space for additional programs, student organizations, and dining options. The Illini Union has prepared a separate Feasibility Study for the renovation and expansion of the Union. The Campus Master Plan has incorporated and reflects the recommendations of that study.

The Campus Master Plan proposes a north addition onto the Henry Administration Building to accommodate the Dean of Students and Student Services functions that require daily interaction with students. This addition will complete the original architectural footprint for the Henry Administration Building and provide the counterpoint to the architectural massing of Noyes Laboratory to the east.

The University Library and Undergraduate Library are campus-wide resources that anchor the south end of Main Quad with Foellinger Auditorium. The University Library's 2009 Master Plan laid out a series of short- and long-term recommendations that included demolition of the

stacks area to allow new infill with an automated retrieval system, additional study and instructional space, offices, and learning resources. The Library Master Plan proposed locating the Special Collections to the Undergraduate Library, and enclosing its sunken courtyard with a one story, glassy pavilion that includes additional study and gathering space.

Specific recommendations include:

1. Illini Union renovation and center infill.
2. Renovations to Altgeld Hall.
3. Long-term replacement of Turner Student Services Building.
4. Renovations to Henry Administration Building and new infill to accommodate Dean of Students and Student Services functions from Turner Student Services Building.
5. Renovation to Davenport Hall.
6. Renovation to English Building.
7. Renovation to the Foreign Languages Building.
8. Renovations to Gregory Hall.
9. Renovations to Smith Memorial Hall.
10. Renovation, demolition, and new infill to University Library.
11. Construction of new pavilion at Undergraduate Library.

ACTIVE BUILDING EDGE

BUILD-TO LINE

THE ILLINOIS EXPERIENCE

West Illinois Street on the Urbana campus is a somewhat nondescript corridor of campus, yet it provides a wonderful transect of academics, research' and student life programs that showcase the arts, sciences, and humanities at the university. With strategic infill and a new public space identity, Illinois Street can be transformed into the Illinois Experience.

The Campus Master Plan envisions Illinois Street as a new eastern gateway for visitors and first-time students entering campus. The Office of the Registrar, located at 901 West Illinois Street, hosts student orientations and is the launching point for prospective student tours of campus. The Illinois Experience can be an exciting, urban, academic and social environment to draw people into campus and showcase the best the university has to offer.

The Illinois Experience begins with a new signature building proposed as a gateway and prominent face to the community on Lincoln Avenue between Illinois and Green Streets. The streetscape, transformed into an urban, linear sculpture park becomes a walk of discovery past the newly renovated Illinois Street Residence Hall and dining expansion. The Illinois Program for Research in the Humanities (in Levis Faculty Center), the Krannert Center for the Performing Arts, and future infill for sciences and research at the corner of Illinois Street and Goodwin Avenue will show the interplay of arts, humanities and sciences.

Across Goodwin Avenue, Burrill and Morrill Halls, the Medical Sciences Building, and the new home to the College of Medicine, creates a sciences gateway with the historic Noyes Laboratory. From there, one arrives at the Illini Union on the Main Quad, with sweeping views across the expanse of green lawn. The Dean of Students offices in a new wing of the Henry Administration Building, the Illini Union Bookstore, and redevelopment of the Turner Student Services site complete the Illinois Experience west of Main Quad.

Specific recommendations include:

1. Future signature building/community face to campus on South Lincoln Avenue between West Green and West Illinois Streets.
2. New pedestrian gateway and urban linear park as a Walk of Discovery into campus. Illinois Street is proposed to be narrowed to gain more landscape and pedestrian space, with traffic remaining open to access the garage under Krannert. The street could be designed to allow restricted access for special events.
3. Renovations to Illinois Street Residence Hall units.
4. Major expansion of the dining hall at the Illinois Street Residence Hall.

MAJOR PEDESTRIAN CORRIDOR

ACTIVE BUILDING EDGE

BUILD-TO LINE

5 New bed tower of eight stories next to Illinois Street Residence Hall.

6 Future sciences and research infill on Goodwin Avenue at Illinois and Green Streets.

7 Renovations and laboratory addition to Burrill Hall.

8 Medical Sciences Building renovation.

9 Illini Union renovation and infill, including refurbished outdoor terrace and courtyard.

10 Henry Administration Building north wing for Dean of Students functions.

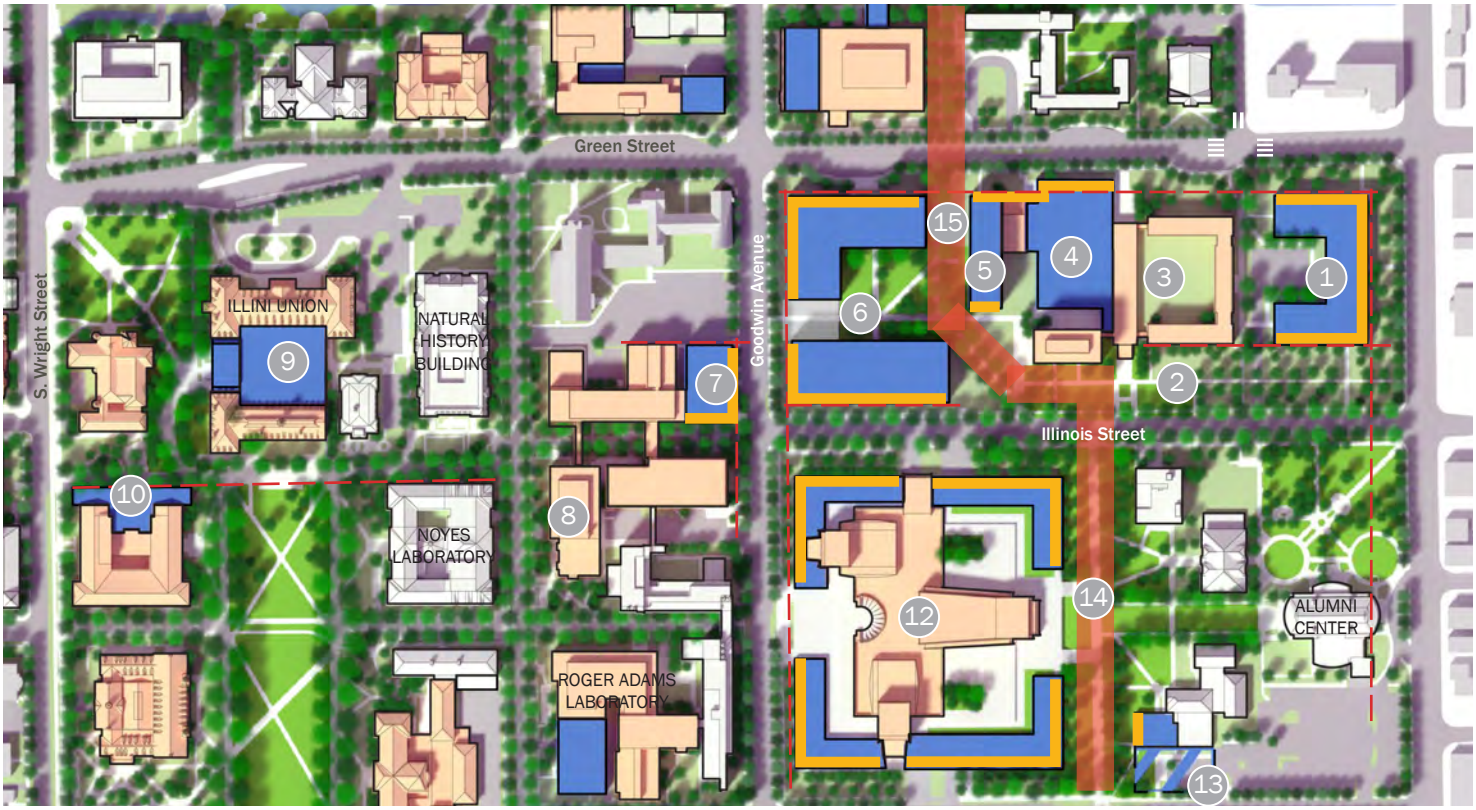
11 Future replacement of Turner Student Services Building.

12 Krannert Center for the Performing Arts renovation and additions to consolidate dance studios, add class laboratory, practice, and study space, and create a more mixed-use, active urban cultural events center.

13 Additions and collections storage for Spurlock Museum.

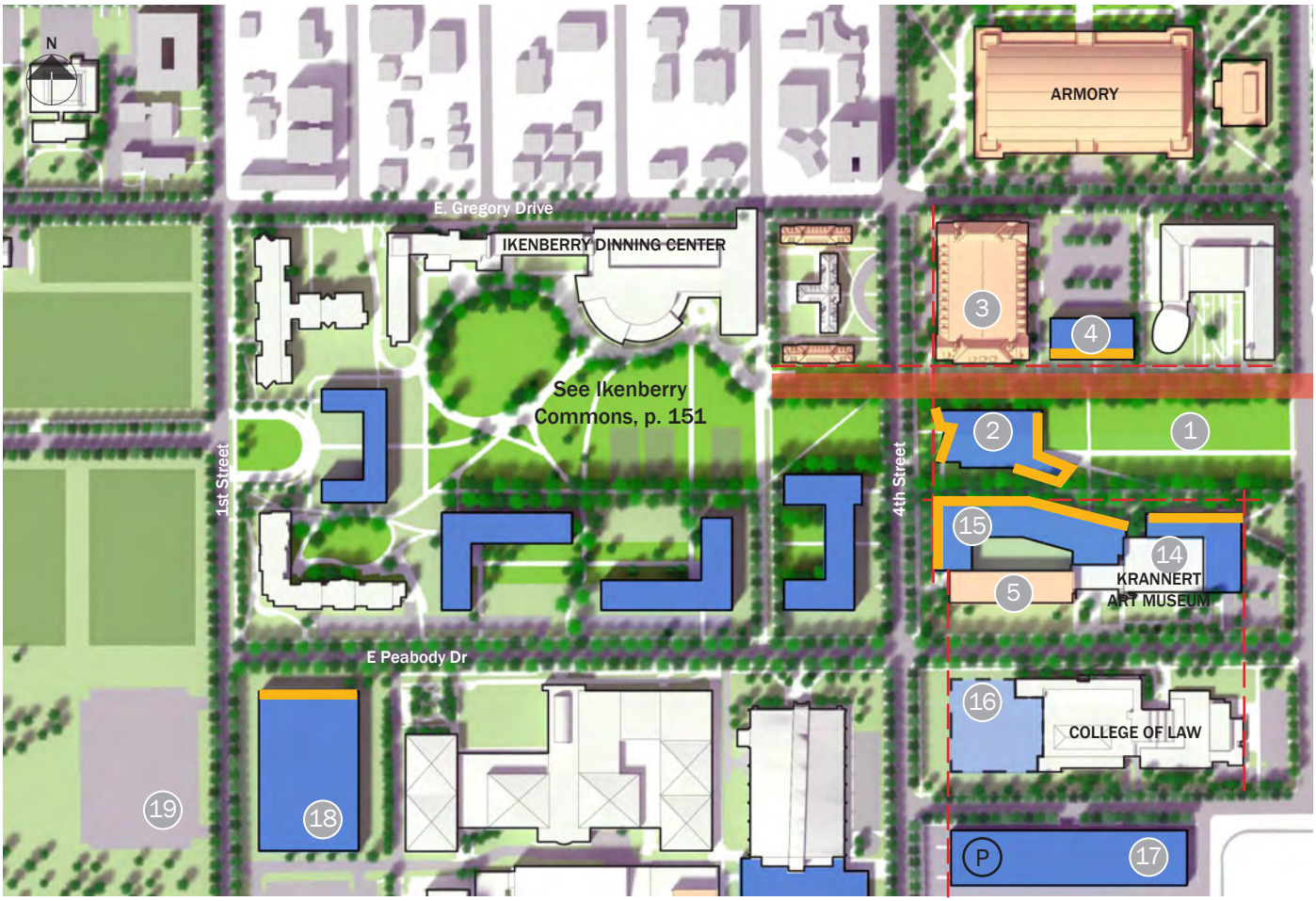
14 Closure of Gregory Street for one block, create new Art Walk and sculpture park.

15 Proposed pedestrian promenade up to Boneyard Creek. Explore feasibility of additional pedestrian crossings on Green Street east of Goodwin Avenue and at Gregory Street.



SOUTH CAMPUS AND MILITARY AXIS

The South campus and Military Axis will be transformed over time to create a major new campus open space and quad that will replicate the scale and building orientation of Main Quad. As new infill occurs, the Campus Master Plan establishes basic urban design guidelines for overall building placement, build-to lines, and active edges to ensure future buildings will respect sight lines and form spatial boundaries. Architectural and landscape design should incorporate sustainability and follow the design guidelines. This is an important space to include stormwater management, native plantings, and additional canopy trees. A variety of ideas have been considered for the space such as a learning laboratory with native Illinois plantings, carbon sequestration canopy. The Military Axis provides a significant opportunity for further design to determine the optimal landscape treatment for the Military Axis.



Specific recommendations include:

1. Military Axis – Major new campus quad and pedestrian promenade. Relocate surface parking, restore landscape, extend new walkways, and consider underground stormwater detention in open space.
2. Proposed Design Center (in design).
3. Huff Hall Renovation – Renovate for Applied Health Sciences and academic use as Athletics moves functions to the Athletics Campus.
4. Future Academic/Research Infill.
5. Proposed Renovations.
6. Renovation, partial demolition, and new construction for University Library.
7. Undergraduate Library renovation and proposed one-story pavilion with study and gathering space.
8. Future Freer Hall expansion opportunity.
9. Proposed Pedestrian Mall with new landscape, underground stormwater detention, and pedestrian amenities.
10. Renovation and expansion of Turner Hall for academics/ research.
11. Proposed College of Agriculture, Consumer, and Environmental Science (ACES) Quad centered on ACES Library.
12. Proposed Integrated Academic Classroom Building.
13. Expanded surface parking lot after building removal.
14. Krannert Art Museum expansion to front West Quad.
15. Art and Design expansion to relocate art studios from Oak Street to South campus.
16. Future Law School expansion.
17. Proposed Parking Garage to replace surface parking removed for future infill and West Quad.
18. Potential Ice Arena for student recreation.
19. Surface parking lot replacement for future Ice Arena.

MAJOR PEDESTRIAN CORRIDOR
ACTIVE BUILDING EDGE
BUILD-TO LINE
SIGHT LINE

ARMORY AND WEST SIDE

The west side of campus is a combination of university and non-university owned properties, a mix of academic, institutional, residential, commercial, and office uses interrupted by surface parking lots. It is a part of campus that has grown opportunistically and incrementally, and does not have a cohesive campus organization. It is anchored by the Armory and the Ice Arena. The Ice Arena is in poor condition, and will ultimately be taken down.

The Campus Master Plan proposes the long-term redevelopment of the West Side into a more identifiable campus district, using infill, streetscape, and placemaking to create a focus for this district. The removal of the Ice Arena and the expanse of surface parking lots create sites for future infill, fronting on a re-imagined pedestrian-friendly streetscape and mini-quad at the visual terminus north of the Armory. Future infill along this spine should provide an active ground-level street presence and front entries to help activate the street.

Specific recommendations include:

1. Armory – Continued renovation of classrooms as an educational "Test laboratory" for active learning and technology. Athletics will maintain indoor facilities for Track and Field.
2. Future infill for academic, scholarly, and support functions.
3. Proposed Armory Quad, partial closure of 5th Street. Armory Drive open to transit and vehicles. A traffic feasibility study is recommended to analyze impacts prior to implementation.
4. South 5th Street pedestrian promenade with traffic calming, streetscape, lighting, and landscape.
5. New gateway design at Daniels Street and South 4th Street.
6. Long-term redevelopment of C7 and C10 parking sites, could be part of a P3/mixed-use joint venture.
7. Relocation of Speech and Hearing Clinic to Windsor Road and South 1st Street. Redevelop site as single parking structure to replace parking at C7 and C10.
8. Alternative location for replacement parking for C7 and C10, with proposed liner building fronting East Chalmers Street and 6th Street, and an active ground floor edge on East Chalmers Street.
9. Potential future P3 joint venture development.

ACTIVE BUILDING EDGE

BUILD-TO LINE


N
S. 4th Street
S. 5th Street
S. 6th Street
S. Wright Street
John Street
Daniel Street
Chalmers Street
Armory Avenue
ILLINI UNION
ILLINI UNION BOOK STORE
PSYCHOLOGY BUILDING
ST JOHNS CATHOLIC NEWMAN CENTER
GEORGE HUFF HALL
BUSINESS INSTRUCTIONAL FACILITY
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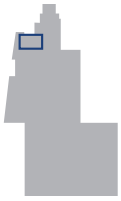


STUDENT LIFE AND HOUSING

The Campus Master Plan recommends the continued redevelopment of Ikenberry Commons and replacement of Hopkins, Scott, Snyder, Weston, Taft, and Van Doren Halls per previous planning studies, and maintains the same expected bed capacity at build-out. The Campus Master Plan proposes a slightly modified layout of future residence halls to better respond to future sight lines, the Military Axis, and the Design Center. The number of building footprints are reduced from five to four, each with a range of 160,000 to 180,000 gross square feet (GSF).

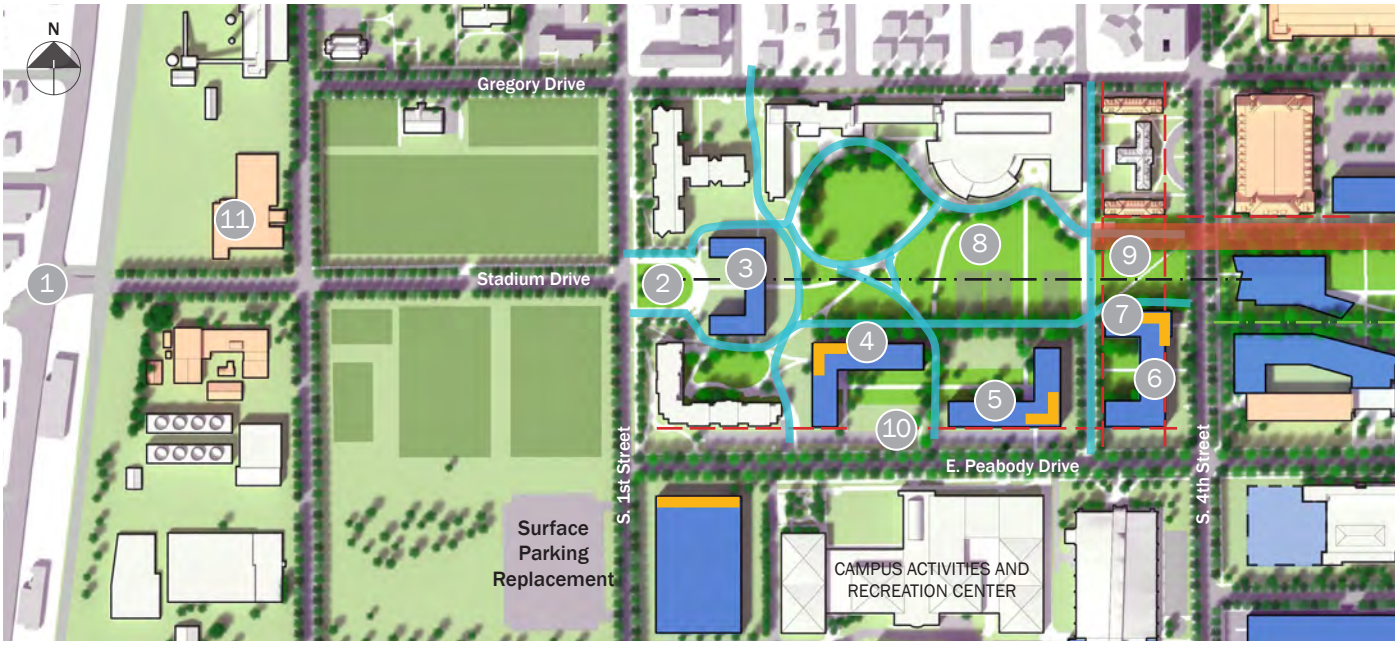
Proposed residence hall footprints are placed to help break up the superblock of Ikenberrry Commons and create a hierarchy of open spaces and courtyards, from the large central gathering space in the center to smaller semi-private courtyards with individual residence halls.

The most significant change from previous planning is a new landscaped gateway and open space on the east end, opening views to the proposed Design Center and major pedestrian corridor running east-west into the Military Axis. This creates the open space connectivity and flow from West Quad to Ikenberry's central commons space.

On the west edge of Ikenberry Commons, the proposed siting of a future residential building helps anchor the view and entry from Stadium Drive. A ground floor portal or opening within the building on the visual axis of Stadium Drive will allow for easy pedestrian and bicyclist movement at this gateway.

Specific recommendations include:

1. Proposed gateway to Ikenberry Commons and campus.
2. Proposed visitor entry and drop-off.
3. Future residence hall as visual terminus from Stadium Drive, with ground floor portal to larger residential quad of Ikenberry Commons.
4. Future residence hall.
5. Future residence hall.
6. Future residence hall, six stories, 180,000 GSF.
7. Vertical building element/landmark as visual terminus to walkway from West Quad.
8. Expansion of central green, with outdoor programming.
9. Proposed Ikenberry East Gateway and pedestrian promenade leading to the Military Axis.
10. Future surface parking addition with sustainable parking infrastructure.
11. Consider relocation of Disability Resources Education Services closer to Central Campus, as possible infill in West Quad neighborhood. Renovation of Rehabilitation Education Center for continued training use.



MAJOR PEDESTRIAN CORRIDOR

ACTIVE BUILDING EDGE

BUILD-TO LINE

SIGHT LINE

PEDESTRIAN WALK/EMERGENCY ACCESS

STUDENT LIFE AND HOUSING

Two new undergraduate residence halls, one proposed near Illinois Street Residence Hall and another proposed adjacent to the Lincoln Avenue Residence Hall, will provide up to 630 additional beds to accommodate existing capture rates at projected enrollment levels. Both locations strengthen existing campus residential neighborhoods and provide ideal locations. Renovations and expansion to Illinois Street Residence Hall and Lincoln Avenue Residence Hall/Allen Hall dining facilities will accommodate the growth in student residents.

Upper division and graduate housing in the Goodwin-Green Apartments will be relocated to the site just north of Daniels Hall. New housing here will feature a proposed quad and greenway along a restored Boneyard Creek.

Specific recommendations include:

1. Proposed upper division and graduate apartments as replacement for Goodwin-Green.
2. Proposed restoration of Boneyard Creek and new greenway.
3. Proposed undergraduate residence hall with Illinois Street Residence Hall, eight stories, approximately 300-325 beds.
4. Housing renovation, dining renovation, and expansion at Illinois Street Residence Hall .
5. Close off Gregory Street to vehicular traffic from Oregon to Illinois Streets. Create an Arts Walk and sculpture garden.
6. Proposed undergraduate residence hall north of Lincoln Avenue Residence Hall, four stories, approximately 300-325 beds.
7. Renovate and expand dining to accommodate Busey Evans and new residence hall.
8. Major new pedestrian spine and bicycle route from Springfield Avenue down to the Illini Grove, connecting to major walks and bicycle paths leading to South Quad.
9. Relocation of existing dance studios as part of Krannert Center for the Performing Arts expansion. Redevelopment of site for potential P3 mixed-use development.


MAJOR PEDESTRIAN CORRIDOR
ACTIVE BUILDING EDGE
BUILD-TO LINE
SIGHT LINE
N
Goodwin Avenue
Green Street
Illinois Street
Oregon Street
Nevada Street
W. Gregory Drive
TO ILLINI GROVE
1
2
3
4
5
6
7
8
9

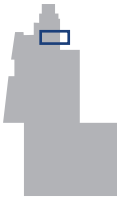
ORCHARD DOWNS REDEVELOPMENT

Orchard Downs and Orchard South provide 765 one-bedroom and two-bedroom apartments primarily for graduate students and their families. Upper division students with families, veterans, faculty, visiting scholars, and staff are also welcome. The residential complex provides some support facilities for families including pre-school and after-school programs, laundry, and the Multicultural Health Center. Situated immediately adjacent to the Arboretum, Orchard Downs provides ample green space with outdoor recreation and playgrounds.

While Orchard Downs provides much needed affordable housing to a wide array of students, the apartment complex has significant deferred maintenance issues. The Campus Master Plan recommends redevelopment of Orchard Downs to maintain it as a mixed income, affordable graduate, married student, and family housing neighborhood. The plan should maintain the same number of units, and incorporate replacement housing for 156 units of Ashton Woods Apartments. Housing will need to be compensated if buildings or land is removed without replacement. Plans should include a variety of housing types and densities, with updated community amenities. The site is an opportunity for a joint P3 to develop the housing. The agricultural land below Orchard South could also be considered for a potential mixed-use and residential neighborhood in the long-term.

Specific recommendations include:

1. Original Orchard Downs housing sites for residential redevelopment.
2. Orchard South housing site for residential redevelopment.
3. Long-term mixed-use and residential development.
4. Maintain major street and utility infrastructure to control development costs, connect existing and new entries to surrounding street grid.
5. New gateway and neighborhood entry to Arboretum.



WEST NEVADA STREET AND CULTURAL CENTERS

West Nevada Street on the east side of campus is an eclectic mix of on-campus housing, greek life, retail, academic, recreational and student life facilities. It is a street characterized by lower density, more human-scaled development, providing an interesting contrast to the larger institutional character of other campus districts. West Nevada Street is also the home of Illinois' Cultural Centers, including the new Bruce D. Nesbitt African American Cultural Center.

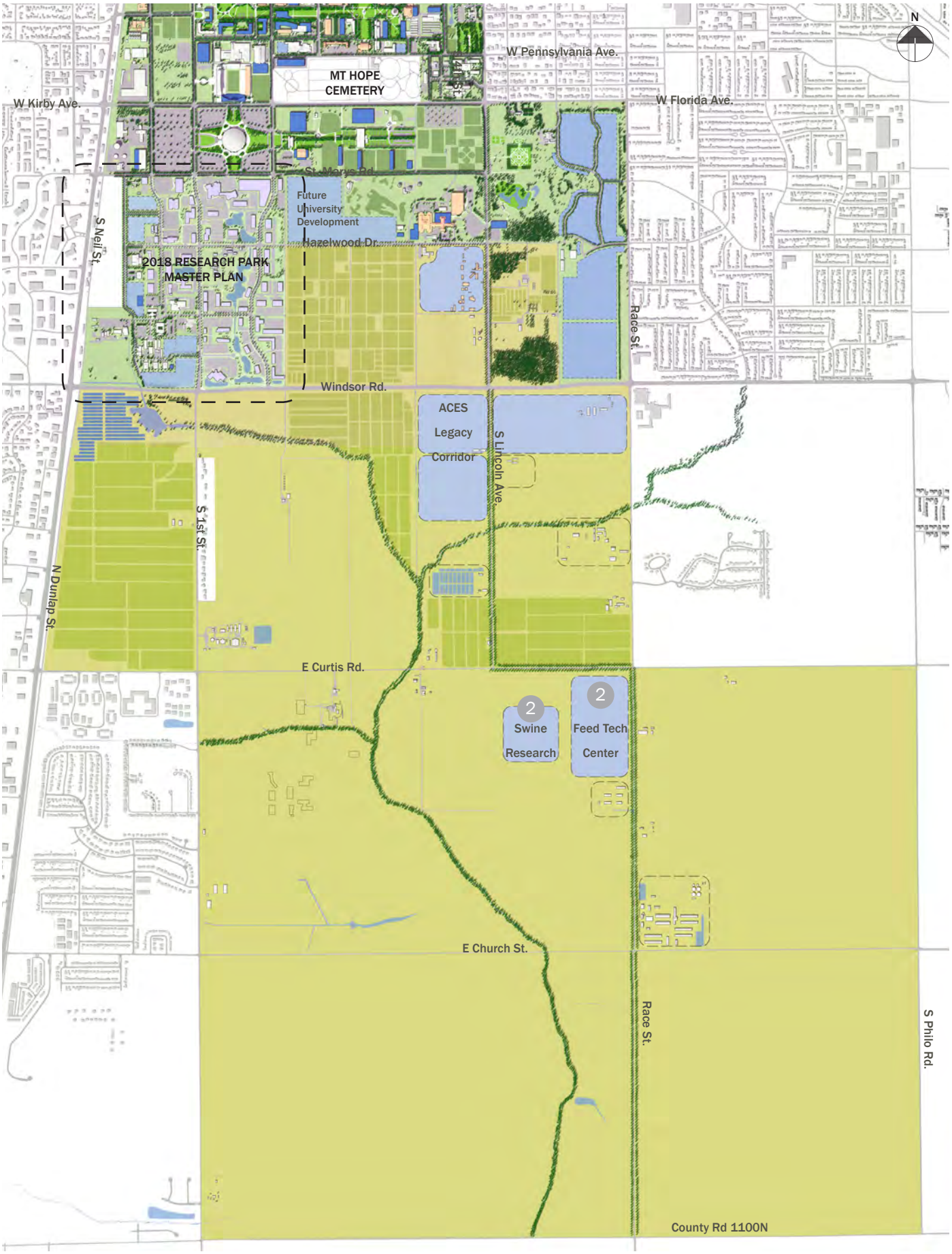
The Cultural Centers play an important role on campus in support of the university's goal to help all students develop awareness and cultural competency through intentional, integrative activities. The Cultural Centers provide the resources and supportive space to gather and share the rich cultures that comprise the diverse student body of the university.

The existing structures occupied by the Cultural Centers are in need of renovation and/or additions and possibly redevelopment in the long-term. They would also benefit from a shared facility to provide more meeting space, group space, and potentially a kitchen for cultural events. The Campus Master Plan proposes short-term renovations, with longer term redevelopment of the Cultural Houses on West Nevada Street to maintain this cultural resource.

Ethnic Studies and Cultural Studies, the academic programs in this area, could be considered for relocation to the West Side neighborhood, as part of the proposed infill development north of the Armory, close to the current International Studies Building.

Specific recommendations include:

1. Bruce D. Nesbitt African American Cultural Center.
2. Existing Cultural Centers long-term redevelopment.
3. Sites for additional Cultural Center facilities.
4. Proposed Diversity and Inclusion Center as shared resource space.
5. Courtyard and outdoor gathering space for Cultural Centers.
6. Future expansion opportunity for Freer Hall.


N
W Pennsylvania Ave.
MT HOPE
CEMETERY
W Kirby Ave.
W Florida Ave.
St. Marys Rd.
Future
University
Development
Hazelwood Dr.
S Neil St.
2018 RESEARCH PARK
MASTER PLAN
Race St.
Windsor Rd.
ACES
Legacy
Corridor
S Lincoln Ave.
S 1st St.
N Dunlap St.
E Curtis Rd.
2
Swine
Research
2
Feed Tech
Center
E Church St.
Race St.
S Philo Rd.
County Rd 1100N

SOUTH CAMPUS

The South Campus at the University of Illinois at Urbana-Champaign encompasses over 5,000 acres. The area contains a broad mix of land uses, including academic, residential, athletic, research, and agricultural facilities, open space, recreation fields, and research plots. South of Windsor Road, the land use is predominantly agricultural, used by the College of Agriculture, Consumer and Environmental Sciences (ACES), the College of Veterinary Medicine, and for productive agricultural land.

The primary objective for the South Campus is to support the academic, research, and land grant mission of the university. The primary land use recommendations are intended to clarify and strengthen districts, improve functions, and allow long term growth.

The area is characterized by different subdistricts: the Research Park; the South Athletics Campus; the College of Vet Med complex; the South Farms and Arboretum as part of ACES; married student/family housing complex of Orchard Downs (described previously); and the President's House located on Florida Avenue.

The southwest portion of campus is a multi-use district that houses various academic, research, administrative, and support functions. The Prairie Research Institute has a number of individual facilities and outbuildings that store various collections for the Illinois State Water Survey and Natural History Survey. The National Petascale Computing Facility, the Illinois Fire Service Institute and the University Primary School (a lab school for the College of Education) are also located within this area of campus. The Campus Master Plan recommendations include improvements to facilities, consolidatation of functions, and expansion needs as shown on the following page.

The Research Park at the University of Illinois Urbana-Champaign (UIRP) is recognized as one of the nation's top research parks and technology incubators. The Research Park is home to more than 115 companies with about 2,000 employees in high-technology careers. The Research Park brings in a range of private sector companies attracted to the University setting for its access to UIUC students, faculty and researchers, and the collaboration with established companies.

The University of Illinois Research Park LLC, a separate organization established by the university to govern the Research Park, leases the land to a private developer, who is responsible for the development of the Park. In early 2018, the Research Park undertook an update to its Master Plan, which is shown as part of the Campus Master Plan for reference. For specific Research Park recommendations, please refer to the separate Research Park at the University of Illinois Urbana Champaign 2018 Master Plan Update report.

- PROPOSED BUILDING
- FUTURE DEVELOPMENT ZONE
- RENOVATION (UNIVERSITY BUILDING)
- RESEARCH PARK BUILDING
- EXISTING UNIVERSITY BUILDING
- EXISTING NON-UNIVERSITY BUILDING
- MEMORIAL OPEN SPACE
- CAMPUS LANDSCAPE
- RECREATION
- AGRICULTURAL LANDSCAPE
- AGRICULTURAL RESEARCH LAND

SOUTHWEST CAMPUS

1. Proposed addition to the NCSA Petascale Computing Facility to expand the Bluewaters computing facility and related support and meeting space.
2. Relocate Feedmill and Swine Research Center to ACES Legacy Corridor on Race Street, south of Curtis Road.
3. Improve and extend Hazelwood Drive to connect to intersection at South 4th Street in the Research Park, Lincoln Avenue in Arboretum, and to Orchard Downs.
4. Relocate Ashton Woods housing units as part of the redevelopment of Orchard Downs property. Reserve existing Ashton Woods site for future university research, mixed-use and community outreach.
5. Reserve for future university academic and research.
6. Prairie Research Institute and university collections facility. Proposed site for consolidated Collections Facility.
7. Illinois Fire Service Institute (IFSI) three potential sites in the South Farms area were evaluated as part of a feasibility study to relocate the IFSI burn site. Discussions are continuing at the time of this report. As part of the project planning for the IFSI burn site, a formal site selection must be conducted with the stakeholders including IFSI, Chancellor and Provost Offices, Capital Planning, University Office of Capital Programs, Real Estate, and ACES prior to project approval. Open communication and interactions with potentially affected communities in discussion of the final site selection are strongly recommended.

- PROPOSED BUILDING
- FUTURE DEVELOPMENT ZONE
- RENOVATION (UNIVERSITY BUILDING)
- RESEARCH PARK BUILDING
- EXISTING UNIVERSITY BUILDING
- EXISTING NON-UNIVERSITY BUILDING
- TO BE REMOVED IN THE FUTURE
- MEMORIAL OPEN SPACE
- CAMPUS LANDSCAPE
- RECREATION
- AGRICULTURAL LANDSCAPE
- AGRICULTURAL RESEARCH LAND
- UIRP 2017 PROJECT AREA BOUNDARY
- UIRP PLANNING AREA BOUNDARY

THE RESEARCH PARK AT THE UNIVERSITY OF ILLINOIS PROJECT AREA BOUNDARY

The “Project Area”: Area shown is the area as it exists at the time this report was written, and is shown in the graphic above, for reference. The “Project Area” is the area within the Research Park designated from time to time by the UIRP, in its sole discretion, for development under the terms of the Development Agreements.

The current Project Area includes all areas within the Research Park that have not been previously leased and developed under the terms of the Agreements.

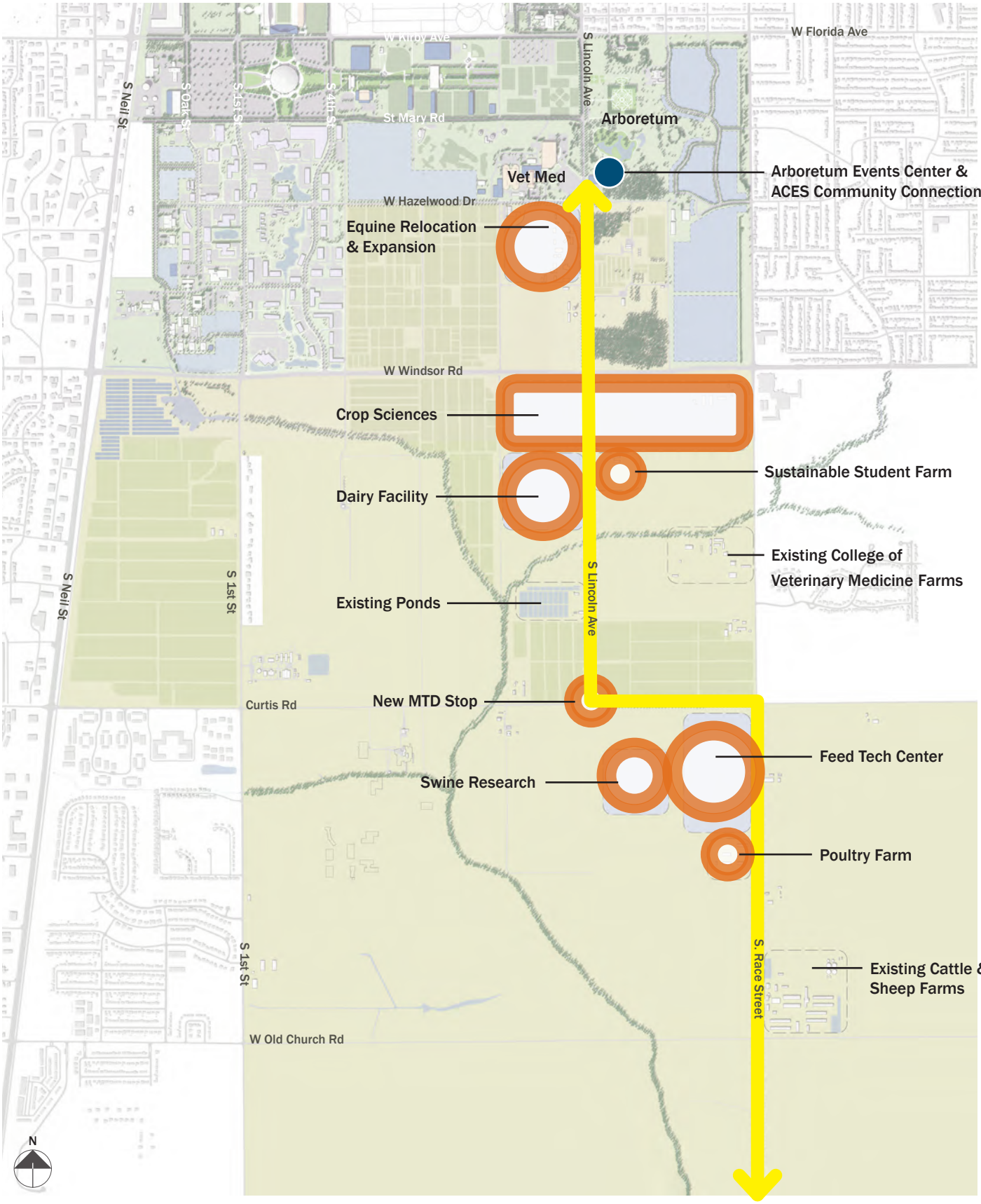
Note: Bullet 2 references the UIUC Campus Master Plan proposed relocation of the Swine Research Center.

THE RESEARCH PARK AT THE UNIVERSITY OF ILLINOIS DEVELOPMENT PLANNING AREA BOUNDARY

The “Research Park Development Planning Area,” which is shown in the above graphic for reference, is the area identified in the 2001 South Campus Master Plan Update, bounded by Neil Street on the west, 4th Street extended on the east, Windsor Road on the south, and St. Mary’s Road on the north.

The Board of Trustees, in its sole discretion, has designated certain areas of the Research Park Development Planning Area to be in the Research Park and may in the future designate other areas of the Research Park Development Planning Area to be in the Research Park.

ACES LEGACY CORRIDOR



ACES LEGACY CORRIDOR AND VETERINARY MEDICINE

The South Farms area is home to Veterinary Medicine and ACES. The College of Veterinary Medicine (Vet Med) plans to renovate its existing instructional facility and expand its clinical services with additions to the Large Animal Clinic and the Small Animal Clinic. These expansions will require a minor modification in entry road and drop off areas for both clinical sides. Vet Med's use of the old Illinois Simulator Laboratory on Hazelwood Drive adds to Vet Med's clinical services. Improvements to Hazelwood Drive, including paving and extending it through to South 4th Street, will help improve the visitor experience and wayfinding for Vet Med.

Energized by a new vision or strategic plan, ACES has a vision of re-branding the South Farms area as the ACES Legacy Corridor, relocating and consolidating crop sciences, dairy facilities, equine facilities, feed mill, and swine research from other parts of campus and aligning them along South Lincoln Avenue. Some of these relocations will allow for other sectors of the university to continue to develop, and provide an opportunity to gain more technologically advanced facilities for these programs.

ACES plans to relocate their Equine Research Center to their current Dairy Farm on S. Lincoln. Crop Sciences and Dairy facilities will be relocated further south on Lincoln Avenue. The Feed Mill and Swine Research facilities will be relocated out of the University Research Park area to South Lincoln Avenue. The Swine Research facility should carefully consider adding buffers, including visual, in the planning phase of the project.

The head house for the ACES Legacy Corridor will be a proposed ACES Community Connection Center, at the Arboretum. This proposed facility would allow ACES to conduct workshops, extension trainings, and conferences, and can be a shared event facility with the Arboretum. To accommodate all of ACES program relocations, Lincoln Avenue will need to be improved from Windsor Road down to Curtis Road.

Specific recommendations include:

1. Vet Med small animal clinic expansion.
2. Vet Med large animal clinic expansion.
3. Large animal clinic entry road reconfiguration.
4. Paving and road improvements on Hazelwood Drive, to South 4th Street.
5. Proposed ACES Community Connection Center.
6. Relocation of Equine Research Center to Dairy Farm site.

DIVISION OF INTERCOLLEGIATE ATHLETICS

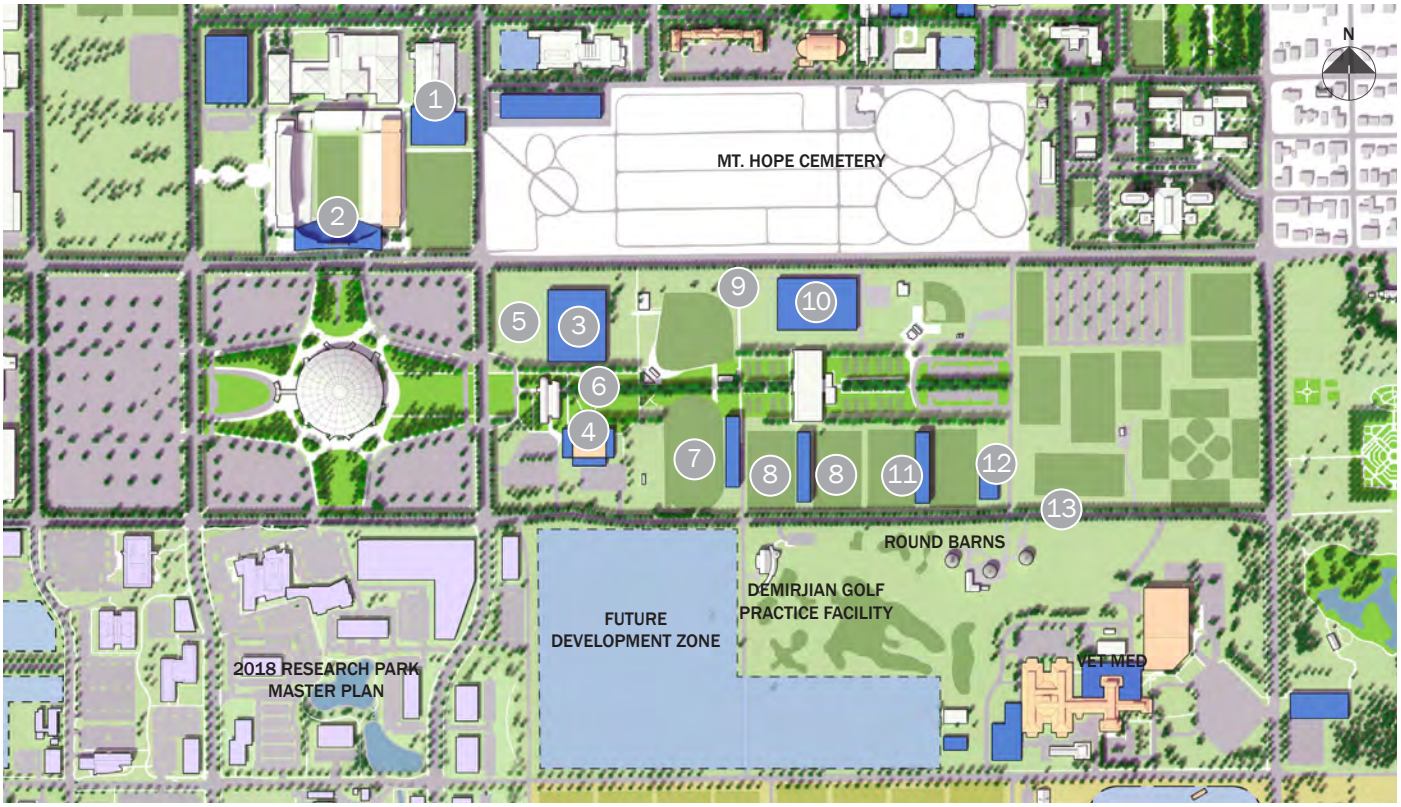
Renovations, additions, reassignment, and new construction are proposed for both training and competition venues in order to recruit and support student athletes. Consolidating and updating facilities onto the land east of the State Farm Center will help the Division of Intercollegiate Athletics (DIA) realize their goal to create a true South Athletics campus.

Specific recommendations include:

1. Proposed North Performance Building as an expansion to Irwin Indoor Football Practice Facility for additional training, weight room, sports medicine, coaches' offices, and meeting rooms.
2. Proposed East Stadium renovation and South Stadium expansion to Memorial Stadium with additional seating, arrival, display, and Hall of Fame membership club (in design at the time of this report).
3. Proposed Performance Center and Olympic Sports Arena for wrestling, gymnastics, volleyball and fencing, training table, and student athlete academic support. The proposed Performance Center will allow the relocation and consolidation of gymnastics out of Kenney Gym, and the relocation and consolidation of volleyball and wrestling out of Huff Hall. DIA would retain weight training and lockers in Huff Hall.
4. Renovation and expansion of Ubben Basketball Facility for men's and women's practice facilities and support space.
5. Proposed walkways and crosswalks from Memorial Stadium to South Athletics campus.
6. Proposed outdoor plaza between the Performance Center, Bielfeldt Athletic Administration Building, and Ubben Hall to create a student gathering space and western focal point to the existing pedestrian promenade to the Atkins Tennis Center.
7. Proposed track stadium renovations and relocation of throws area to infield of track. Expanded seating with proposed concourse below to include locker rooms, concession, restrooms, and support space.
8. New soccer complex with practice and competition soccer fields, stands, and support space.
9. Discontinue Wright Street as a through street, redesign it as a pedestrian walk and service vehicle route.
10. Proposed Indoor Field House with track, plus turf infield for soccer, baseball, and softball practice. The Armory will still be used by the Track Team as their indoor training venue.
11. Proposed playing fields for future sports programs.
12. Proposed Maintenance Facility.
13. Proposed road improvement along St Mary's Road to provide a bicycle connection and improve vehicular traffic flow.

The land south of St. Mary's Road, just west of the Demirjian Golf Practice Facility, is a prime future redevelopment opportunity for university athletics programs, recreation, or other functions. The area is currently used by Crop Sciences and other departments of ACES. Additional outbuildings along South Wright Street in this area are currently used by academic units and facilities for storage.

As part of the master plan for the ACES Legacy Corridor, Crop Sciences facilities will be relocated to the South Farms in the future. Remaining storage functions will need to be consolidated and relocated over time to free up future development of this parcel. Winter bicycle storage will be displaced and can be relocated in the long term to an area in the southwest of campus.



SYSTEM DIAGRAMS

PROPOSED BUILDING USE

The diagram shown on the following page outlines recommended building uses for the proposed facilities within the Campus Master Plan. The intent of this proposal is to reinforce existing uses with similar uses to help to strengthen neighborhoods, as well as to incorporate new uses into certain areas in strategic ways to supplement existing services or facilities that may currently be lacking. The Campus Master Plan is designed to be flexible, so it is understood that initiatives may change over time or multiple uses may be located within a single building.

ACADEMICS AND RESEARCH

Proposed academic and research facilities, and future development zones are shown in blue on the adjacent map. They are primarily positioned within the core of campus, along key pedestrian circulation corridors and fronting primary quad spaces. This is designed to allow for the greatest access to these types of buildings for all students, faculty, and staff.

STUDENT LIFE

Student life facilities are shown in orange and are clustered around the core of campus to allow for the expansion of existing facilities and services, as well as to ensure that new facilities are centrally located for students.

HOUSING AND DINING

All proposed housing and dining facilities, shown in yellow, are to be located adjacent to existing residential complexes. For example, the Campus Master Plan recommends expansion of Ikenberry, ISR, Daniels Hall, and Lincoln Avenue Residence Hall in order to allow for shared common resources such as dining halls.

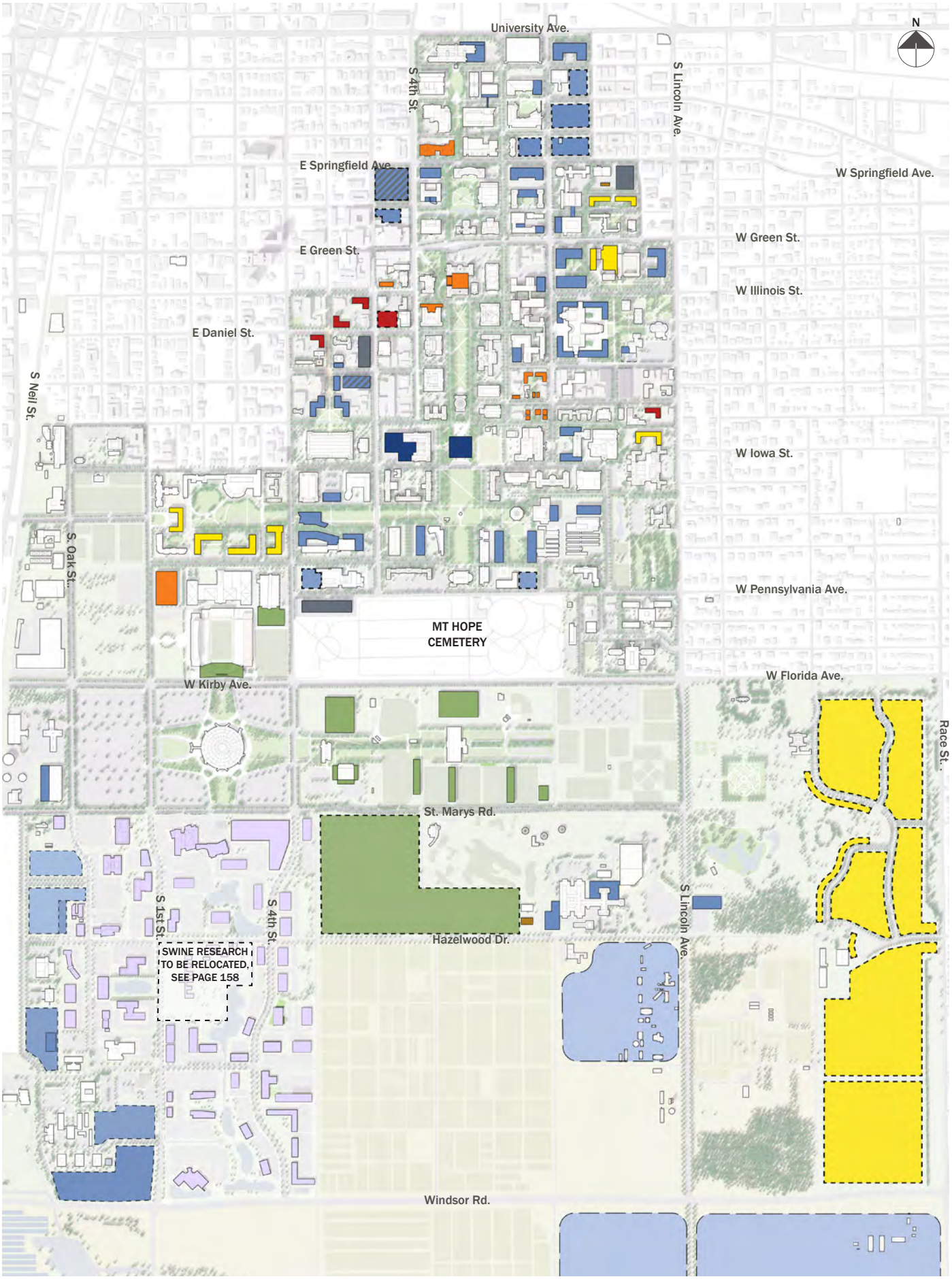
ATHLETICS

Future athletic uses, shown in green, are all to be located south of Pennsylvania Avenue within the Athletics campus. This will help to reinforce this area as a primary community sports destination and allow for DIA to better utilize proposed facilities.

PARKING

The Campus Master Plan identifies multiple zones near the perimeter of campus for possible future parking structures. The location of future parking, shown in gray, will be dependent upon future building projects and demand analysis. Where possible, parking structures should be designed as mixed-use with an activated first floor along primary roadways to help engage with the street.

- ACADEMICS AND RESEARCH
- STUDENT LIFE
- HOUSING AND DINING
- LIBRARY
- ATHLETICS
- RESEARCH PARK (PER 2018 RESEARCH PARK MASTER PLAN)
- MIXED-USE
- PARKING
- SUPPORT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S Lincoln Ave.
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W Springfield Ave.
W Green St.
E Green St.
W Illinois St.
E Daniel St.
S Neil St.
W Iowa St.
S. Oak St.
W Pennsylvania Ave.
MT HOPE
CEMETERY
W Kirby Ave.
W Florida Ave.
Race St.
St. Marys Rd.
S 1st St.
S 4th St.
Hazelwood Dr.
S Lincoln Ave.
SWINE RESEARCH
TO BE RELOCATED,
SEE PAGE 158
Windsor Rd.

CIRCULATION AND TRANSPORTATION

ROADWAY NETWORK

During the master planning process, a series of roadway interventions were identified to allow for improved vehicular circulation, as well as to help to reinforce key gateways into the Urbana Campus. The diagram shown to the right highlights the proposals for roadway improvements, expansions, and closures.

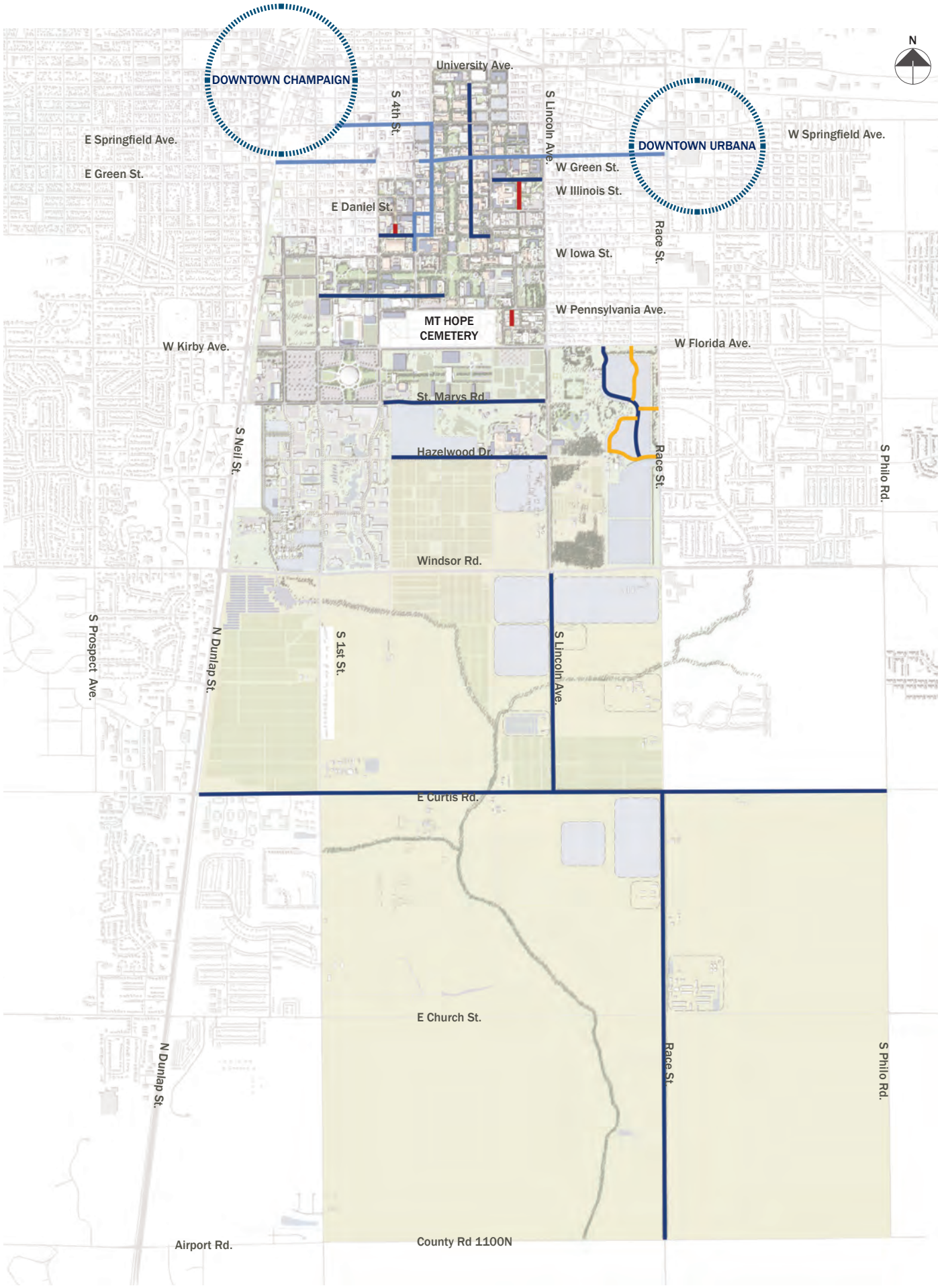
South Mathews Avenue and East Peabody Drive are proposed for reinvention by incorporating an autonomous shuttle system which is described in more detail later in this chapter. West Illinois Street is also proposed for reinvention in order to better support pedestrian circulation and connectivity. Vehicles will still be allowed on this street, but they will be the invited guest rather than the primary occupant. East Armory Avenue is also proposed to take on a new character with redevelopment of the West Campus area. The street will remain open to bicycle, bus, and personal vehicle traffic.

Another proposed roadway improvement is along St. Mary's Road to allow for increased traffic flow. Roadways within Orchard Downs are also proposed for removal. One independent project being led by the Champaign Urbana Urbanized Area Transportation Study (CUUATS) is also reflected on this diagram. The university has met with representatives from CUUATS and is in support of the improvements proposed as part of the effort.

The most significant roadway proposal within the Campus Master Plan is for the extension and improvement of South Lincoln Avenue and Race Street within the South Farms area. This will allow for the full realization of the vision for the ACES Legacy Corridor. The roadway is to be re-designed as a complete street to provide access for pedestrians, cyclists, and vehicles. It will serve as a new entry to campus.

PROPOSED ROADWAY NETWORK

- ROAD CLOSURE
- ROAD IMPROVEMENT
- MCORE PROJECT ROAD IMPROVEMENT
- NEW ROAD


DOWNTOWN CHAMPAIGN
DOWNTOWN URBANA
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University Ave.
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W Pennsylvania Ave.
MT HOPE CEMETERY
W Kirby Ave.
W Florida Ave.
St. Marys Rd.
Hazelwood Dr.
S Neil St.
S Philo Rd.
Windsor Rd.
S Prospect Ave.
N Dunlap St.
S 1st St.
E Curtis Rd.
E Church St.
Airport Rd.
County Rd 1100N

BUS AND SHUTTLE NETWORK

The Champaign-Urbana Mass Transit District (MTD) currently provides excellent service to the Urbana Campus. Students, faculty, and staff are able to ride all routes for free using their iCard. Additionally, iStop locations recently added in the core of campus allow visitors to board campus routes without an iCard.

There are three areas which were identified during the master planning process that would benefit from expanded bus routes. The first area is the Research Park. While MTD does service this portion of campus, it is only with limited routes. Campus and community constituents spoke of a desire to see service improved to the Research Park in order to better integrate it into the fabric of campus and allow improved connectivity for visitors to the I-Hotel and NCSA Petascale Computing Facility.

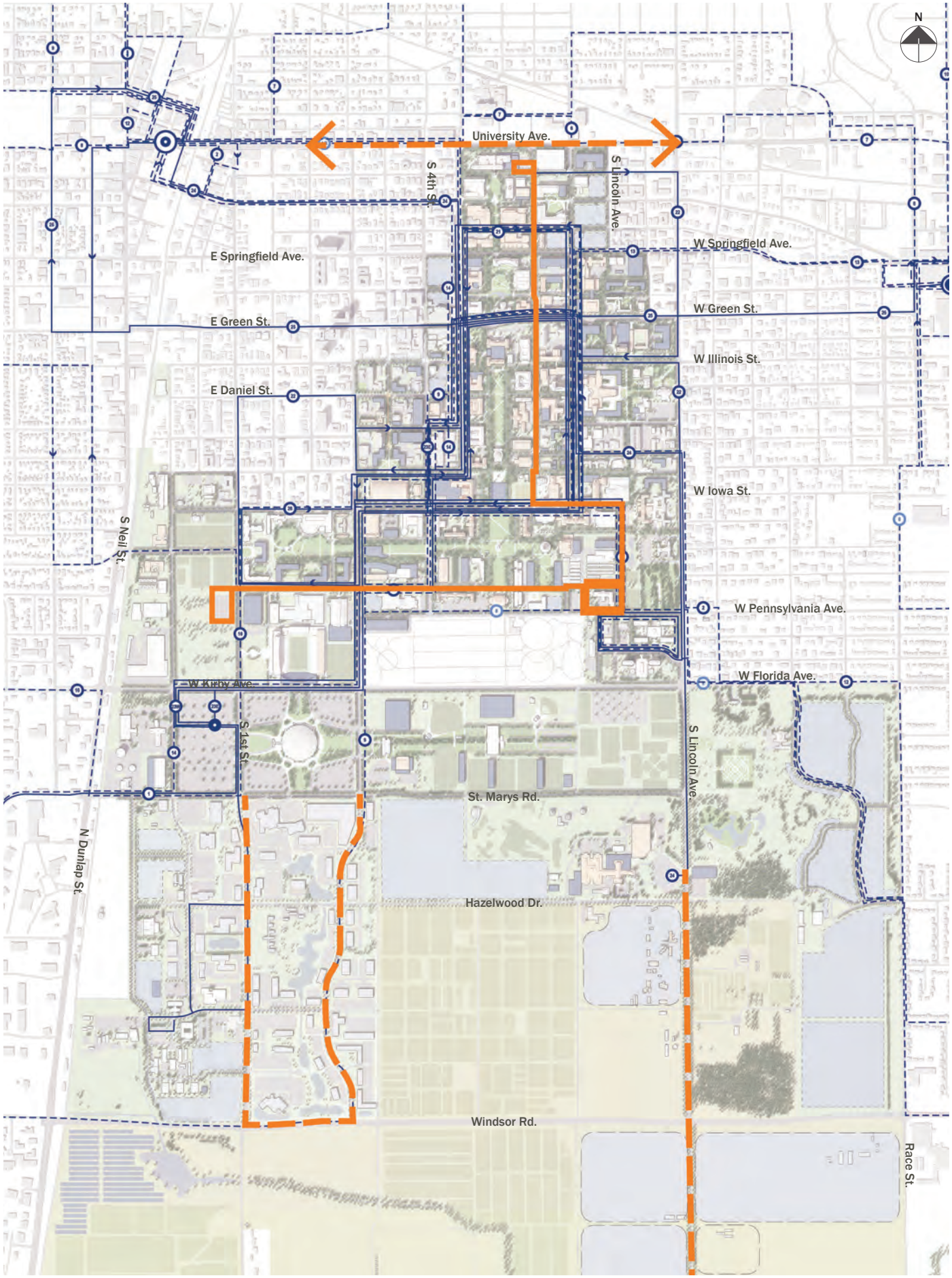
The second area aligns with the proposed roadway extension of South Lincoln Avenue described on the previous page. A new bus route, which would extend to Windsor Road, would be ideal to help reinforce this roadway as a primary gateway corridor on campus and to provide better access to students involved in the agricultural research efforts within this area.

A final proposal is shown along University Avenue, at the northernmost portion of campus. Significant private student housing development in this area in recent years has generated the need for improved bus transit to campus. Several bus routes already frequent this area but are not as well connected to the core of campus. For any route improvements, a feasibility study will be needed to determined the effectiveness of proposed changes.

PROPOSED TRANSIT NETWORK

- EXISTING BUS ROUTE (CAMPUS)
- EXISTING BUS ROUTE (COMMUNITY)
- PROPOSED AUTONOMOUS SHUTTLE (CAMPUS)
- PROPOSED BUS ROUTE (CAMPUS)

Data Source: Champaign-Urbana Mass Transit District bus route and schedule maps.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W Iowa St.
S Neil St.
W Pennsylvania Ave.
W Florida Ave.
W Kirby Ave.
S 1st St.
St. Marys Rd.
S Lincoln Ave.
N Dunlap St.
Hazelwood Dr.
Windsor Rd.
Race St.

AUTONOMOUS SHUTTLE SYSTEM

One exciting concept to emerge from the planning process was the idea to incorporate autonomous shuttles along key north-south and east-west routes on the Urbana campus to help improve connectivity. Several universities across the country are beginning to experiment with autonomous, self-driving shuttles to ease parking congestion and safely move faculty, staff, and students across campus. Given the university's history of innovation, the Urbana campus is a prime candidate to join in this experimentation.

The Campus Master Plan recommends two proposed shuttle routes to help reduce the time it takes to move from north to south and east to west. The first shuttle is proposed along the South Mathews Avenue corridor, starting on the north side of campus near the Beckman Institute for Advanced Science and Technology and extending south all the way to West Pennsylvania Avenue. The second autonomous shuttle route is then proposed to move in an east to west direction, beginning in the same location on Pennsylvania Avenue as the end point for the northerly shuttle. This would allow a seamless transition for users. The shuttle would extend westward along East Peabody Drive to the Ikenberry Commons residential complex.

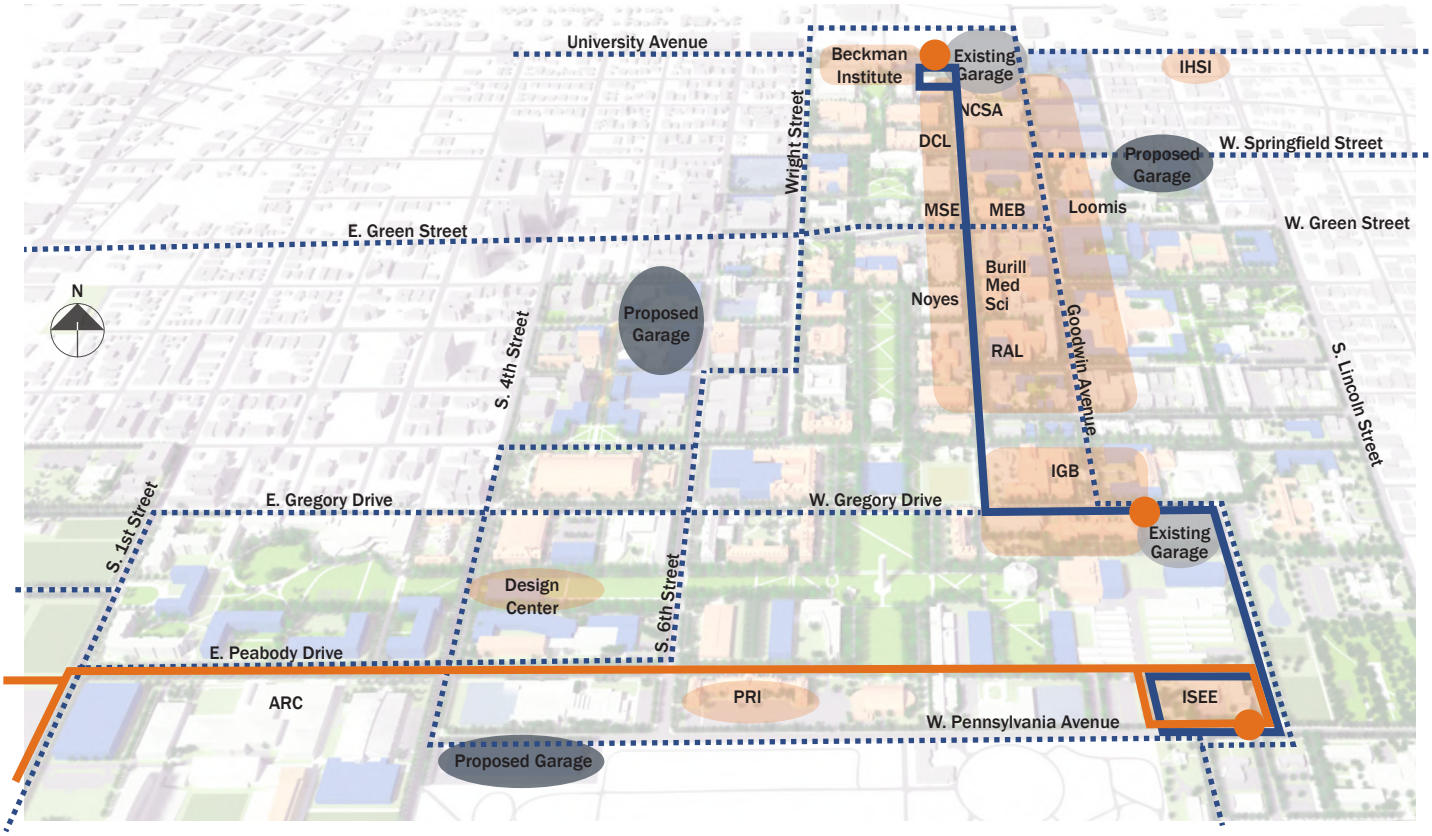
East Peabody Drive is owned by the university and would serve as an excellent area to test the system before implementing the full autonomous shuttle network. However, operational details have not yet been resolved and further study will be required.

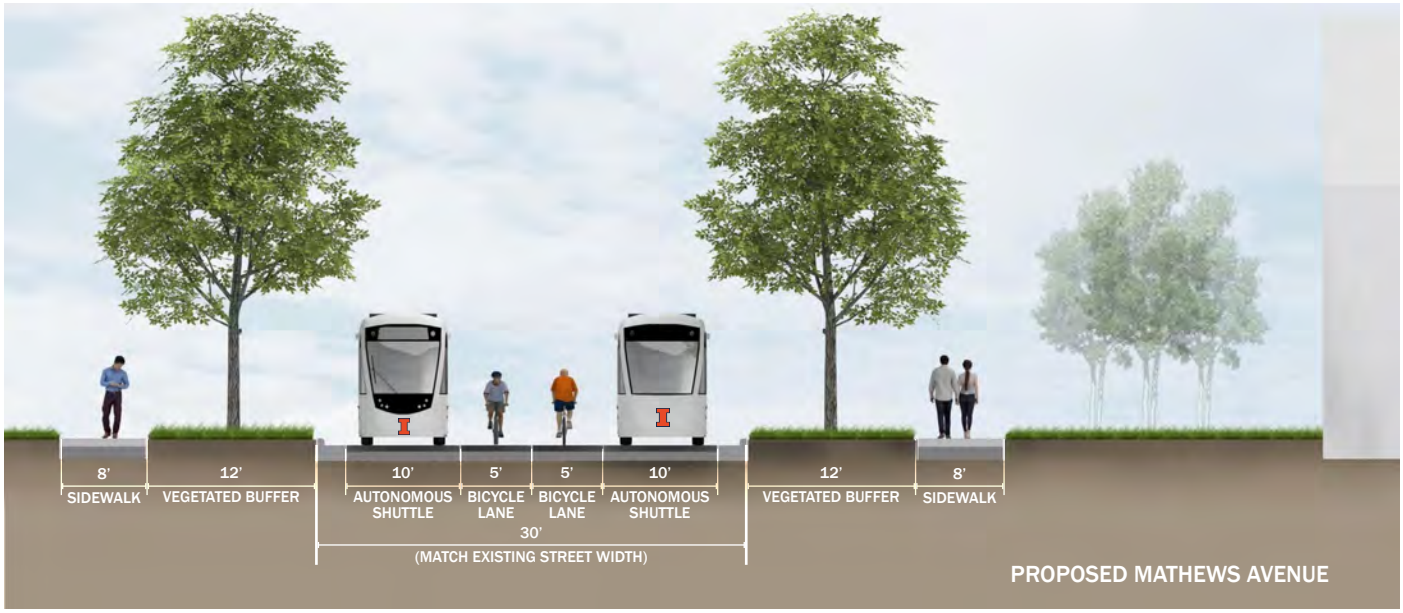
PROPOSED AUTONOMOUS SHUTTLE NETWORK

PROPOSED NORTH-SOUTH SHUTTLE ROUTE

PROPOSED EAST-WEST SHUTTLE ROUTE

EXISTING MTD BUS SYSTEM ROUTE


University Avenue
Beckman Institute
Existing Garage
IHSI
NCSA
DCL
Wright Street
Proposed Garage
W. Springfield Street
MSE
MEB
Loomis
W. Green Street
E. Green Street
N
Burill Med Sci
Noyes
Proposed Garage
S. 4th Street
RAL
Goodwin Avenue
S. Lincoln Street
IGB
E. Gregory Drive
W. Gregory Drive
S. 1st Street
Existing Garage
Design Center
S. 6th Street
E. Peabody Drive
ARC
PRI
ISEE
W. Pennsylvania Avenue
Proposed Garage


8'
SIDEWALK
12'
VEGETATED BUFFER
10'
AUTONOMOUS SHUTTLE
5'
BICYCLE LANE
5'
BICYCLE LANE
10'
AUTONOMOUS SHUTTLE
30'
(MATCH EXISTING STREET WIDTH)
12'
VEGETATED BUFFER
8'
SIDEWALK
PROPOSED MATHEWS AVENUE

PARKING

The Campus Master Plan focuses on the replacement of parking displaced by future development, rather than significant expansion of parking resources. Increased utilization of existing parking structures and lots, tied to transit and the proposed autonomous shuttle system are a part of the overall parking strategy for the university.

The master planning team coordinated with the parking consultants during the course of the master planning process to ensure future parking adequacy is maintained. The Parking Master Plan, conducted by Walker Parking Consultants, modeled a similar enrollment growth rate over the next ten years as the Campus Master Plan to determine any future parking capacity issues. They note that, while overall campus parking capacity is projected to remain adequate, "campus preference and desire for institutional efficiency highlight the benefits of maintaining balance between proximate and remote parking." This underscores the need to maintain an adequate supply of parking closer to the Main campus.

The Parking Master Plan identified three areas of campus that would be most in need of future structured parking in the long-term:

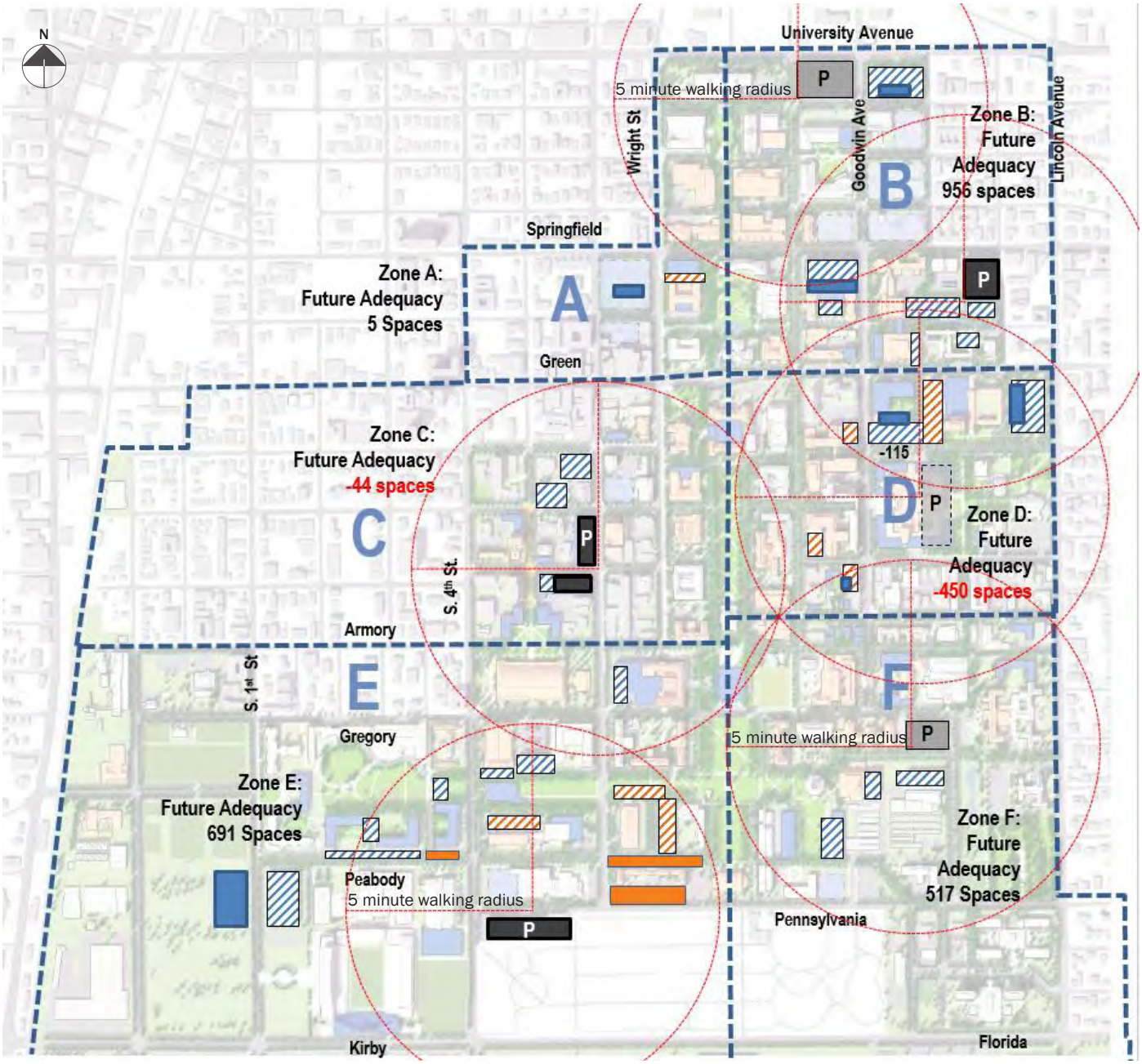
- West of the core of campus off of South 6th Street,
- On the east side of campus within a block or two of West Green Street and South Lincoln Avenue, and
- Near South 4th Street and East Pennsylvania Avenue, on the south side of campus.

The Campus Master Plan has proposed up to three future parking structures in those same areas of campus in Zones B, C, and E, to accommodate future development as demand requires. The proposed locations, taken together with existing parking structures, will provide adequate coverage across all of Main campus, within a 5-minute walking distance from each location. The map to the right shows proposed parking changes recommended by the Campus Master Plan, and the walking distance from existing proposed structured parking sites.

Each zone will have sufficient capacity except for Zone D, showing a potential future deficit. However, Walker Parking Consultants acknowledges in its report that the boundaries of each zone are somewhat arbitrary. The proposed parking structure in Zone B on West Springfield Avenue and South Gregory Street is just a block north of Zone D, and has capacity to take on parking demand from adjacent zones.

Zone A does not currently include structured parking. An expansion to Lot A3 West should cover future demand for this zone. That block is designated as a long-term, future redevelopment site. Should the university decide to build on that property, parking should be included in the program for the site.

As with proposed campus development, the parking strategy is not a mandate to build. It is meant as a guide when and if demand justifies investment in additional parking resources. Development of future parking will also require careful consideration of the funding and financing required to replace parking and provide for its maintenance. It is recommended that the Parking Department be included in any discussions related to planned programming efforts associated with either (a) existing parking facilities or (b) facilities which will include new parking resources as part of the overall program.



The graphic above is intended as a diagram and parking areas are not shown to scale.

- P — EXISTING GARAGE (RETAINED)
- DISPLACED PARKING 0-10 YEARS
- PROPOSED PARKING 0-10 YEARS (SURFACE LOT)
- DISPLACED PARKING LONG-TERM
- PROPOSED PARKING LONG-TERM (SURFACE LOT)
- P — PROPOSED PARKING LONG-TERM (GARAGE)

In its projections, the Parking Master Plan did not assume any displacement of current parking lots due to future construction over the next ten years. The Campus Master Plan; however, does identify key campus development sites that include building on some of the current surface parking lots, creating the need for relocation of existing parking.

The overall goal of the Campus Master Plan regarding parking is to maintain the same amount of parking as is currently on campus, particularly near Main campus. The Campus Master Plan identifies up to three future parking structures, and additional surface parking lots to account for and replace potential displacement of existing parking for future development. Greater utilization of existing parking structures, the long-term replacement of C7 and C10 parking structures, and up to three future parking structures are proposed to provide enough capacity in the long-term.

The map to the right shows potential parking impacts by zone and by lot, identified in either a 0-10 year horizon, or in the longer term. The map also identifies proposed parking additions and expansions by zone and by lot/structure. The tables below provide a comparative breakdown for existing and proposed parking capacity, demonstrating a slight net gain in proposed parking with the Campus Master Plan.

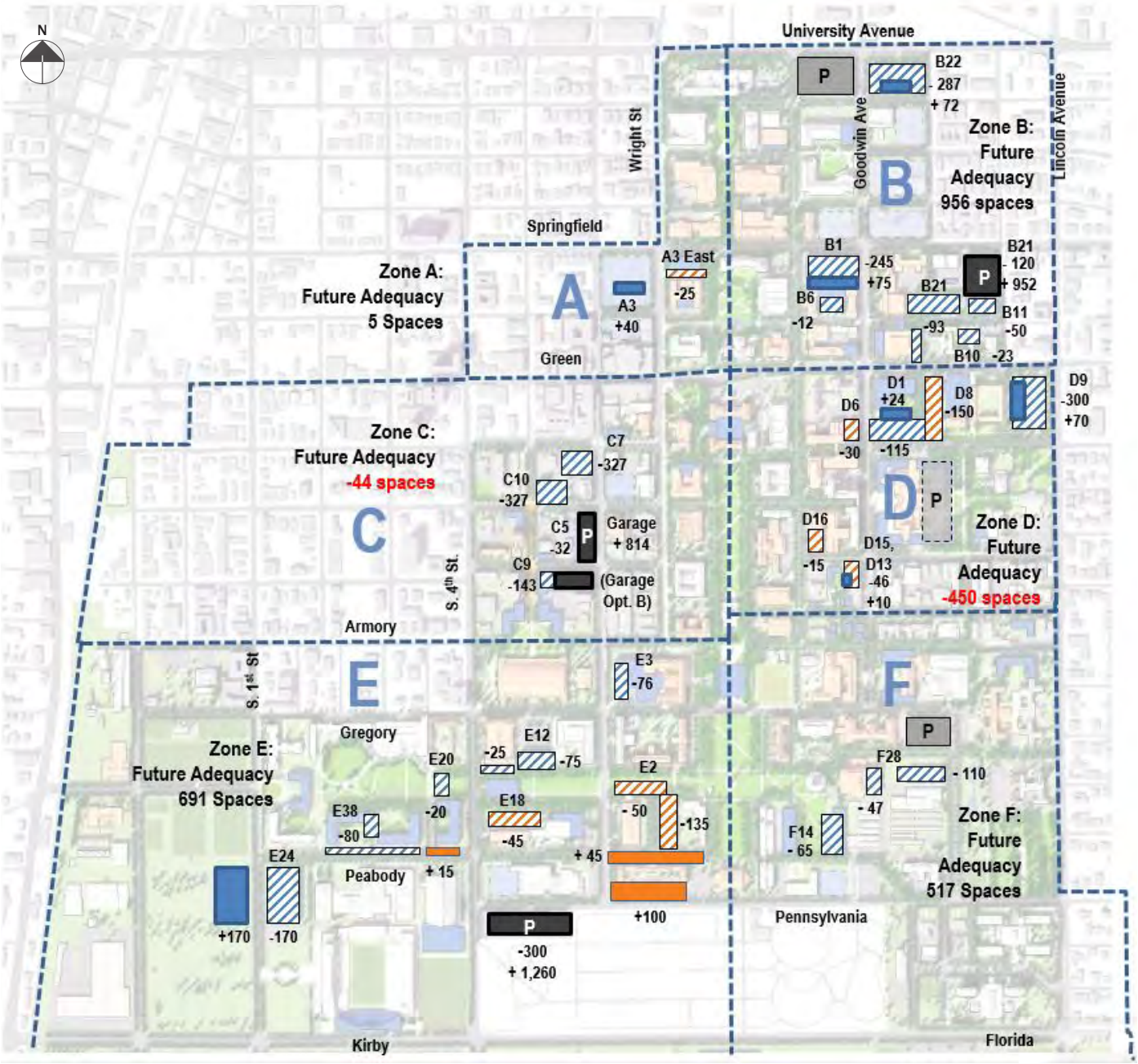
EXISTING AND FUTURE ADEQUACY PER WALKER PARKING MASTER PLAN

ZONE	2015 INVENTORY	EFFECTIVE SUPPLY	2015 PEAK OCCUPANCY	2015 ADEQUACY	FUTURE SUPPLY	FUTURE OCCUPANCY	FUTURE ADEQUACY
ZONE A	420	407	374	33	407	417	-10
ZONE B	2,633	2,516	1,613	903	2,486	1,799	687
ZONE C	1,138	1,092	1,023	69	1,092	1,141	-49
ZONE D	1,717	1,653	1,381	272	1,647	1,541	106
ZONE E	5,957	5,725	5,032	693	5,681	5,614	67
ZONE F	3,737	3,589	2,544	1,045	3,577	2,838	739
TOTAL	**15,602**	**14,982**	**11,967**	**3,015**	**14,890**	**13,350**	**1,540**

FUTURE PARKING ADEQUACY PER CAMPUS MASTER PLAN = NET GAIN OF 139 SPACES

ZONE	PROPOSED DISPLACED PARKING	PROPOSED NEW PARKING	PROPOSED NRE GAIN/LOSS		ADJUSTED FUTURE SUPPLY	FUTURE OCCUPANCY	ADJUSTED FUTURE ADEQUACY
ZONE A	25	40	15		422	417	5
ZONE B	830	1,099	269		2,755	1,799	956
ZONE C	829	834	5		1,097	1,141	-44
ZONE D	656	104	-552		1,091	1,541	-450
ZONE E	966	1,590	624		6,305	5,614	691
ZONE F	222	0	-222		3,355	2,838	517
TOTAL	**3,528**	**3,667**	**189**	**NET GAIN**	**15,029**	**18,850**	**1,679**

Walking radii represent approximately 5 minutes.



Space counts are based on total displaced.

- P — EXISTING GARAGE (RETAINED)
- DISPLACED PARKING 0-10 YEARS
- PROPOSED PARKING 0-10 YEARS (SURFACE LOT)
- DISPLACED PARKING LONG-TERM
- PROPOSED PARKING LONG-TERM (SURFACE LOT)
- P — PROPOSED PARKING LONG-TERM (GARAGE)

PARKING REPLACEMENT, ZONE C

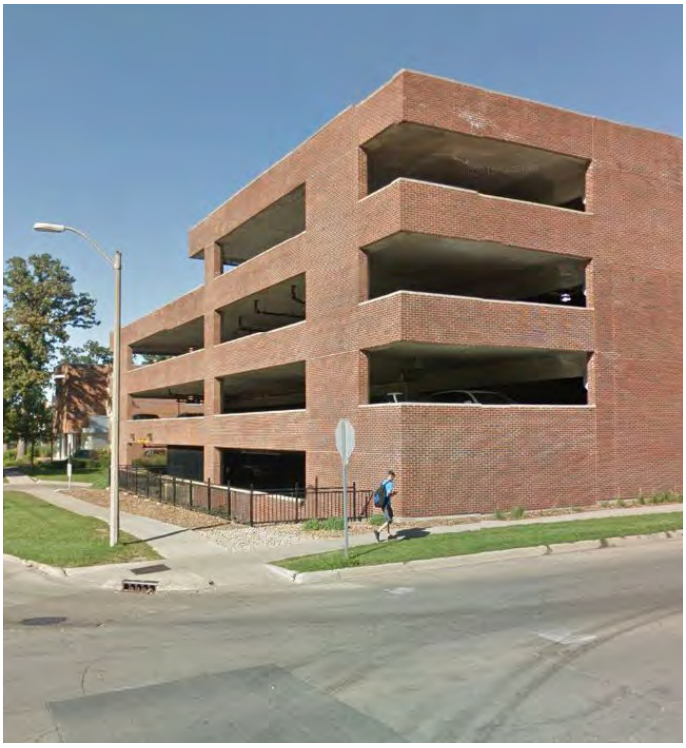
Further evaluation by Walker Parking Consultants of parking structures C7 and C10 have shown that the two garages can be repaired and maintained for the next 10 to 15 years. The Campus Master Plan has assumed they will remain in place for the same timeframe, but has also illustrated two options for their ultimate replacement. The Parking Master Plan and Campus Master Plan were completed at different times. Therefore, the Parking Master Plan did not anticipate where future buildings may be proposed on campus.

The first option and preferred scenario of the Campus Master Plan, is to build a new parking structure on the parcel vacated once Applied Health Sciences relocates out of their current Speech and Hearing Clinic on East Daniel and South 6th Streets. This half-block parcel is in an ideal location close to Central campus, the Illinois Bookstore, and the Illini Union. If developed at seven levels (one level down, six levels above grade), the size of the structure could replace the 657 spaces in C7 and C10, and have additional capacity to replace other surface parking displaced in Zone C. The disadvantage of this option is the impact on phasing if the Speech and Hearing Clinic remains longer than C7 and C10 remain viable.

A second option, supported by the Parking Master Plan, is to construct a garage of similar size on the current surface lot C9. This has the advantage of more flexibility in timing. However, the site is also identified as a future infill site for the university, and a key corner of the West Side Neighborhood redevelopment. If a garage does get built on the C9 lot, it should be designed to have a ground floor presence on both South 5th Street and Chalmers Street, including a liner building fronting South 5th Street, to maintain a more human-scale and pedestrian friendly presence in the district.

In either scenario, the former sites of the C7 and C10 parking structures will be available for future redevelopment. The sites could be candidates for a possible mixed-use, P3 development that could include office, academic, residential, and/or research uses, with possible ground floor retail. The program mix will be decided on a project basis, depending on university need and development agreement.

Detailed traffic impact studies will be needed prior to design and implementation of future parking garages in order to protect pedestrian safety, as prioritized within the goals for this Campus Master Plan and as agreed upon with the local transportation collaboration (via the CUUATS).



ALTERNATE SITE FOR GARAGE, INTENDED AS INFILL SITE

1. Proposed location for future C7 and C10 parking garage replacement.
2. Future academic/research infill, or alternate site location for proposed C7 and C10 parking garage replacement.
3. Mixed-use infill (potential P3) proposed for future redevelopment of C7 and C10 parking garage sites, once replacement garage is constructed.
4. Proposed infill (potential P3).
5. Potential P3 redevelopment as joint venture.
6. Proposed academic/research infill.
7. Proposed West Quad

BICYCLE NETWORK

Bicycle use continues to be a popular mode of travel on campus, but gaps and disconnects in the existing infrastructure limit future growth. The proposed bicycle network is a robust system which unites the core campus, as well as connects it to Champaign, Urbana, Orchard Downs, the Research Park, Vet Med, and the South Farms. The Campus Master Plan recommends continued implementation of the proposed bicycle network as adopted in the 2014 Campus Bike Plan, with additional recommendations noted here.

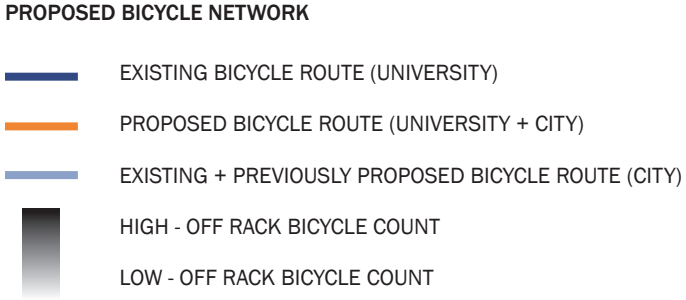
In order to strengthen the overall bicycle network, three primary areas of bicycle lane improvements are proposed along Lincoln Avenue, University Avenue, and the campus interior east-west corridors. The analysis completed during the master planning process revealed that there is a high amount of vehicle-to-bicycle crashes along Lincoln Avenue; the proposed path, shown in diagram to the right, addresses this safety problem while also creating a stronger connection south to Vet Med, the Arboretum, and the ACES Legacy Corridor.

New private housing along University Avenue has generated a demand for a new bicycle path along this roadway to help better connect students to campus. Since University Avenue has the highest volume of traffic of any street adjacent to the Urbana campus, permanent bicycle infrastructure is critical for the safety of cyclists.

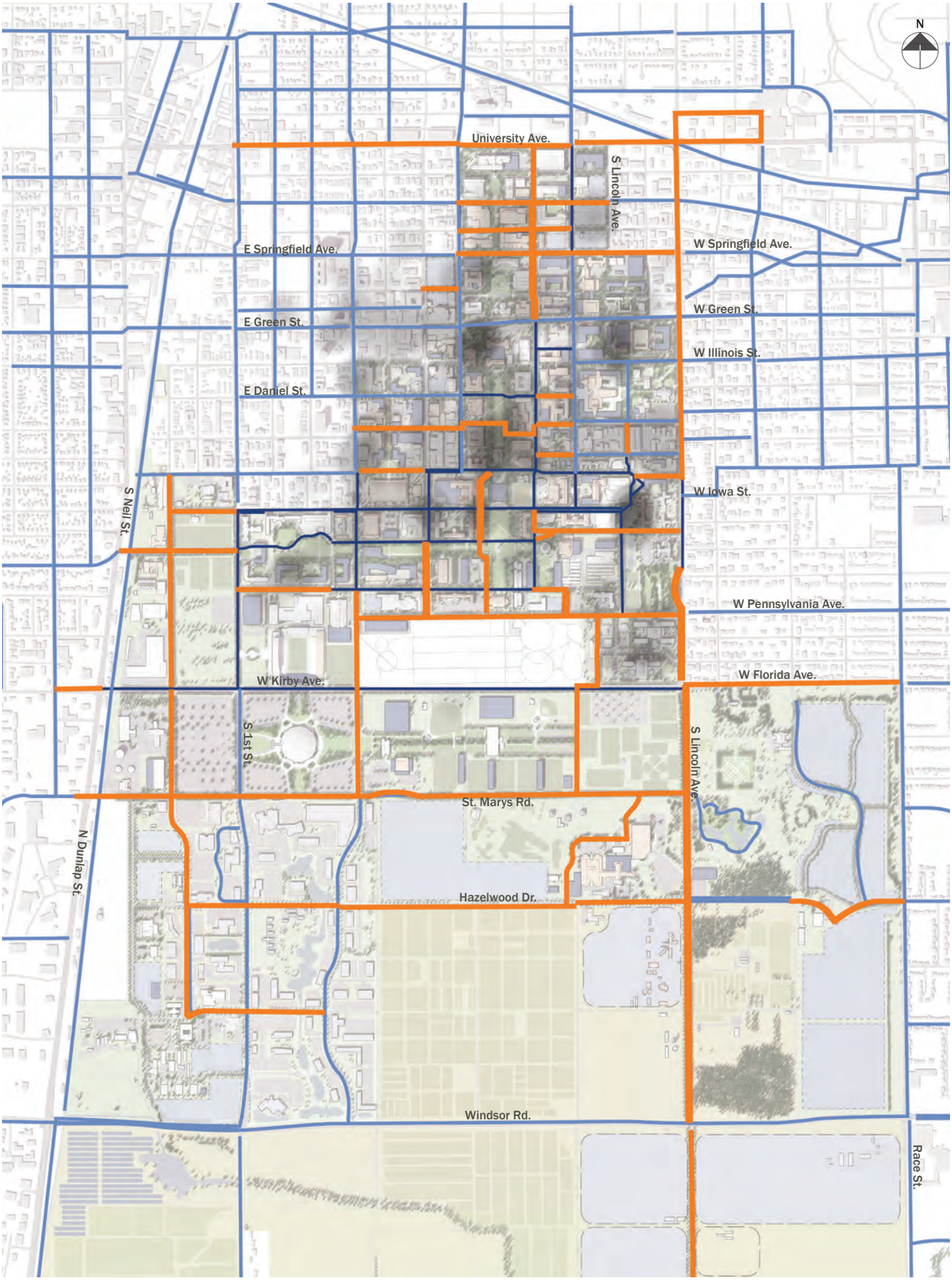
Improvement of the roadway section and addition of a bicycle route and pedestrian walks on St. Mary's Road from Neil to Oak Street will improve the gateway into campus off of Neil, enhance pedestrian and bicycle safety, and connect the newly developed commercial zone along Neil Street to the Research Park and Athletics campus.

In addition, a number of east-west streets in the core of campus lack consistent bicycle infrastructure. The diagram highlights a series of proposed paths to further unite the campus and better connect it to the cities of Champaign and Urbana, as well as the Village of Savoy.

Additional bicycle parking is needed in the core of campus, especially around the Illini Union and Foellinger Auditorium.



Data Sources: 2014 University of Illinois Campus Bicycle Plan; 2016 Urbana Bicycle Master Plan from the City of Urbana; 2008 Champaign Bicycle Master Plan from the City of Champaign; Sustainable Choices 2040: Long Range Transportation Study, 2015, Champaign Urbana Urbanized Area Transportation Study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University Ave.
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W Green St.
W Illinois St.
E Daniel St.
S Neil St.
W Iowa St.
W Pennsylvania Ave.
W Florida Ave.
W Kirby Ave.
S 1st St.
St. Marys Rd.
N Dunlap St.
Hazelwood Dr.
Windsor Rd.
Race St.

PEDESTRIAN AND OPEN SPACE NETWORK

The Urbana campus is characterized by a very successful linear north-south existing open space framework which defines the primary pedestrian corridors uniting campus. However, the open space network begins to break down as one moves towards the southern portions of campus and also from east to west. In order to strengthen the pedestrian and open space network, the Campus Master Plan recommends establishing a series of new quad spaces and pedestrian walks in strategic locations throughout campus.

In addition, primary east-west pedestrian circulation corridors, including the Boneyard Creek Greenway, have been identified which can be enhanced through lighting, landscaping, pavement improvements, and wayfinding to emphasize their role as important linkages within the overall pedestrian circulation system. This will not only help to improve pedestrian connectivity across campus, but will also help to create a greater sense of aesthetic and visual unity within the overall campus environment.

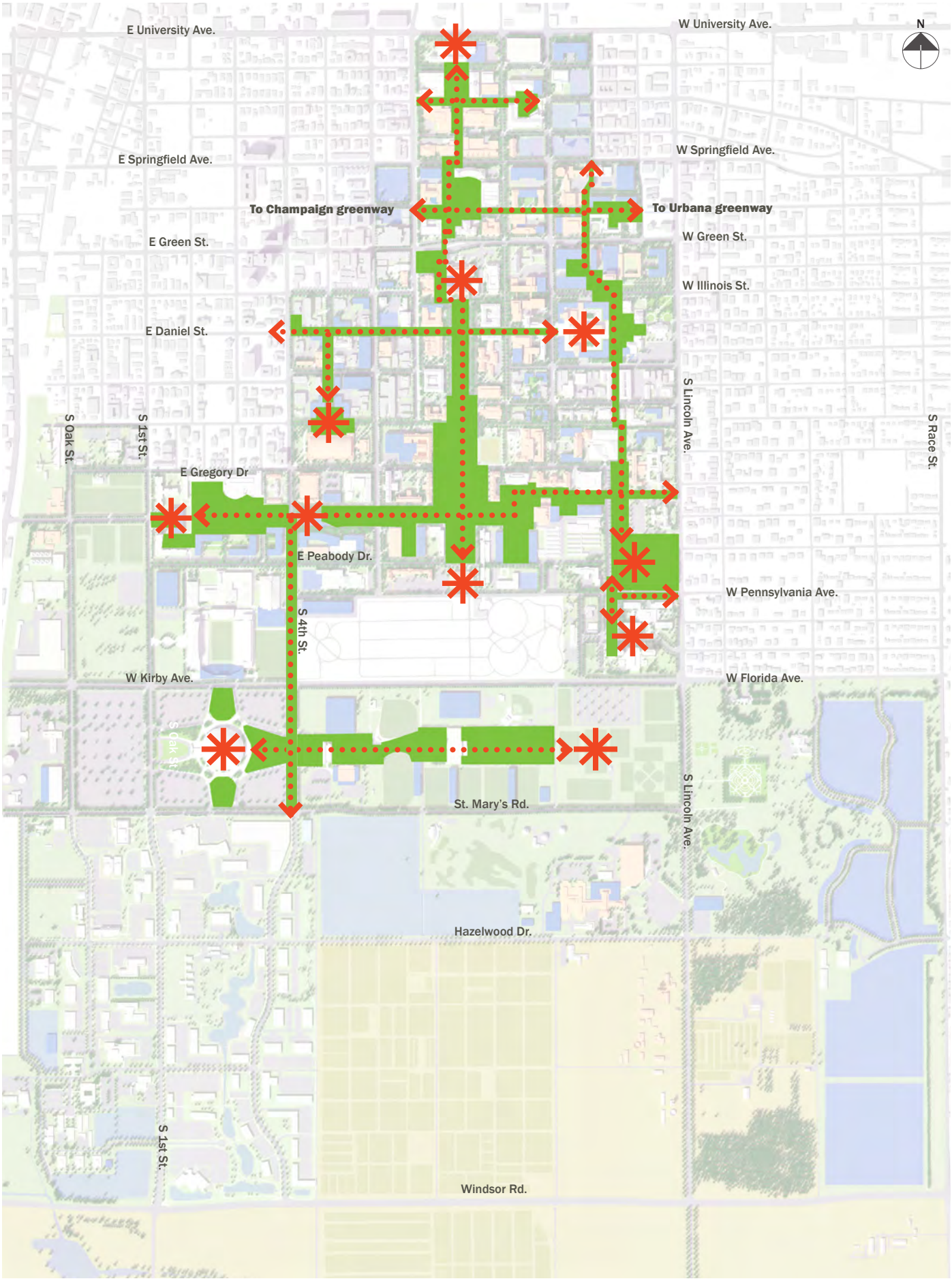
VIEW OF A PRIMARY PEDESTRIAN CORRIDOR ON CAMPUS

PROPOSED PEDESTRIAN AND OPEN SPACE NETWORK

PROPOSED PEDESTRIAN CIRCULATION CORRIDOR

PROPOSED OPEN SPACE NETWORK

KEY DESTINATION NODE


E University Ave.
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E Springfield Ave.
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To Champaign greenway
To Urbana greenway
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W Illinois St.
E Daniel St.
S Lincoln Ave.
S Race St.
S Oak St.
S 1st St.
E Gregory Dr
E Peabody Dr.
W Pennsylvania Ave.
S 4th St.
W Kirby Ave.
W Florida Ave.
St. Mary's Rd.
Hazelwood Dr.
Windsor Rd.

CAMPUS TYPOLOGIES

Campus typologies represent the performance of the landscape and its interplay between various building types and programs. Even though variability in the built environment exists, the campus can be successfully knit together through various campus typologies, connecting disparate building uses while providing unity and definition to create a more cohesive campus experience.

SACRED LANDSCAPES SA

Sacred Landscapes are pedestrian oriented spaces consisting of open formal lawn areas, trans-versed by pedestrian walkways and punctuated with iconic sweeping vistas. Framed by historic campus architecture, these landscapes represent the heart of the university and provide for a range of uses from passive recreation to large scale programmed campus events. The Main Quad is the best example of this landscape typology. It is formally defined by pedestrian walks, taxus border hedges, an ornamental understory, and open lawns and large canopy trees. Future integration or development adjacent to or in this typology must maintain an understated landscape utilizing a simplified pallete aligning with existing materials and predominantly open lawn space.

CAMPUS QUADS CQ

Campus Quads are composed of a series of formal and informal pedestrian oriented open lawn spaces. Framed with buildings and consisting of walkways and large canopy trees, Campus Quads recognize the formality seen in the Sacred Landscapes but provide more casual spaces with respect to the surrounding contemporary anchors. They allow for passive recreational uses in addition to a wide range of programmed events.

Campus Quads should emphasize a simplified materials palette of mown lawn, cast-in-place concrete walks, and minor embellishments at key entry points and gateways. Canopy trees shall be maintained as the organizing structure with the ground plane reflecting the need for open space, characterized by common paving materials identified in the campus design standards. Landscape zones should employ a simplified palette and incorporate native plant material in broad sweeps and masses.

SA SACRED LANDSCAPES

CQ CAMPUS QUADS

UC URBAN CAMPUS

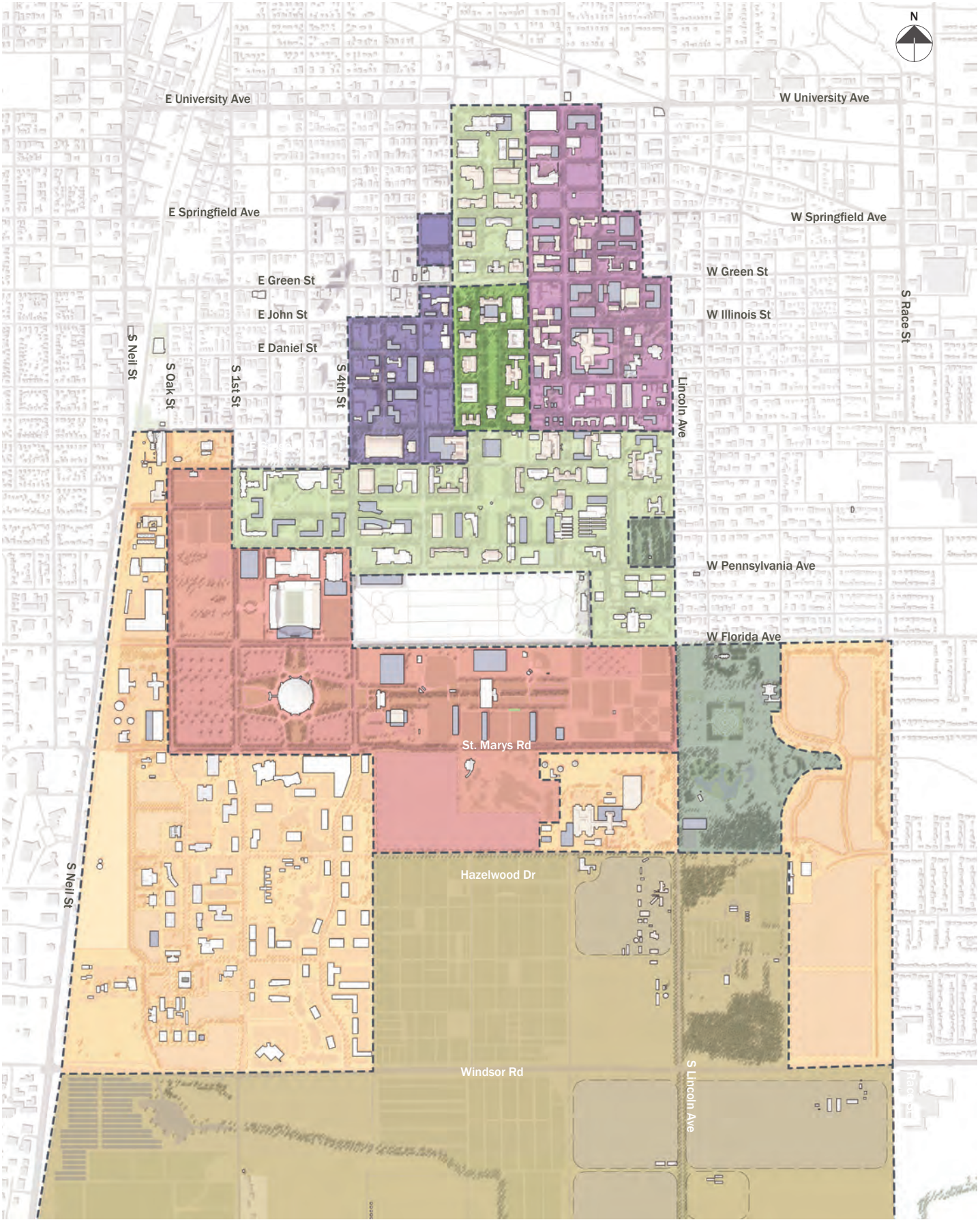
UT URBAN TOWN/GOWN

AL ACTIVE LANDSCAPES

PL PASSIVE LANDSCAPES

LL LEARNING AND RESEARCH LANDSCAPES

CL CONTEMPLATIVE LANDSCAPES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S Oak St
S 1st St
S 4th St
Lincoln Ave
W Pennsylvania Ave
W Florida Ave
St. Marys Rd
Hazelwood Dr
S Neil St
Windsor Rd
S Lincoln Ave

URBAN CAMPUS UC

The Urban Campus consists primarily of university focused uses set within the campus framework but laid out in a series of disconnected superblocks. The Urban Campus is the transitional zone between the small scale residential neighborhoods to the east and the Sacred Landscapes and Campus Quads to the west, the backbone of the university. The areas are predominantly defined by the urban grid versus traditional open campus green space. Pedestrian circulation is presently maintained on the perimeter of these areas rather than integrally woven into the fabric. This typology is generally less dense, the material palette is inconsistent, and urban assets are limited due to disjointed circulation patterns. A strengthened material palette would help to reinforce connectivity and unify existing disjointed uses. Enhancements to aid unifying this space would be the use of planting pits vs. tree grates, allowing for broader landscape interventions that can be leveraged as storm water and water quality Best Management Practices (BMP).

URBAN TOWN/GOWN UT

Urban Town/Gown forms the northwestern edge of campus and represents a primarily vehicular oriented typology derived from a typical city grid with a mixture of business, retail, cultural, and residential uses. Though the current streetscapes lack organized definition, it can be improved by reinforcing visual connectivity, unifying existing disjointed uses, and by articulating signage and wayfinding elements, lighting, appropriate site furnishings, and a cohesive palette of materials. Materials consistent with the existing vernacular present along Green Street, just to the north, would help to reinforce this urban context.

The density of the Urban Town/Gown typology reinforces the need to establish street trees within tree grates that invites and encourages pedestrian mobility. A unified paving palette with enriched material accents should be employed in this typology to allow for a cohesion of typologies but identification as a unique district.

ACTIVE LANDSCAPES AL

Comprised of indoor and outdoor recreational facilities and set within large auto-oriented blocks, Active Landscapes prioritize vehicular circulation and their associated parking accommodations, in contrast to the more pedestrian oriented typologies to the north. The campus character may be emphasized on both a vehicular and pedestrian level by enhancing key gateways, implementing roadway design standards, utilizing an enhanced palette of materials, as well as through consistent lighting, banner treatments, and planting techniques. In addition, accommodations should be made for pedestrians through an improved sidewalk network and clearly identified crosswalks. Special attention should be paid for pedestrian circulation at key locations such as mid-block crossings and iconic entry points to stadiums.

With the broad area that this typology covers, adherence to material standards is critical for uniformity across the entirety of the area. Accommodations for pedestrian engagement should not be overlooked, especially at key locations where placemaking or gathering should occur. At these locations incorporating campus standards for site furnishings elements such as bicycle racks, benches, lighting and signage will further enhance and activate the areas.

PASSIVE LANDSCAPES PL

Situated between the Active Landscape to the north and the more rural Learning and Research Landscape to the south, Passive Landscapes are made up of various campus uses, situated in a suburban context. As a primarily vehicular oriented typology, these uses are linked by their roadway networks and associated parking arrangements, with a secondary focus on pedestrian level circulation. Significant building setbacks result in a high amount of open space from building face to roadway. Maintaining connectivity between the Passive Landscape and the more urban campus core to the north can be achieved through roadway design standards, lighting strategies, signage, wayfinding, and planting techniques.

Maintaining a material standard in this typology should relate to the core campus, however, material selections must be scaled down as a unit size. Interventions with the site should include landscape masses that are scaled appropriately to the architectural structure and land form with a simplified prairie style landscape. Promotion of stormwater infiltration through engineered or natural systems should be prioritized in this area.

LEARNING AND RESEARCH LANDSCAPES LL

Learning and Research Landscapes are primarily experienced via vehicular means and set within a distinct rural, agricultural context. The immense scale of these spaces is typically experienced by passing through at a fast pace rather than on foot at a close range. Roadway character varies from a suburban quality to rural in nature as the surrounding, vast open landscapes comprise 360 degree sprawling views of the surrounding agricultural landscape.

In order to further define the Learning and Research Landscapes, a unique rural palette of materials can be established that will successfully relate back to the campus core. Elements include fencing, signage, sidewalk treatments and roadway plantings to unify this outlying typology to the larger campus character. Elements include fencing, signage, sidewalk treatments, and roadway plantings to unify this outlying typology to the larger campus character.

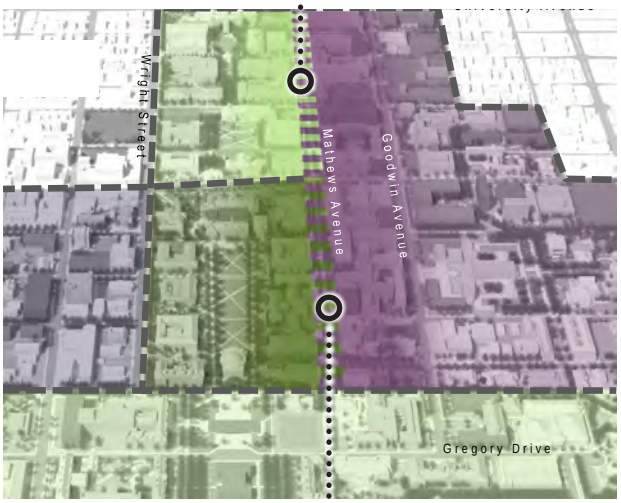
CONTEMPLATIVE LANDSCAPES CL

Comprised of both designed and naturalized spaces, Contemplative Landscapes provide opportunities for passive recreation and respite within a park like setting. From ornately designed gardens to the more informal Illini Grove, these landscapes allow for connection with nature. The streetscapes surrounding these destinations should be welcoming and accessible to both pedestrians and vehicles. Clearly communicating the uses within these landscapes and their associated entry points may be improved with consistent signage and wayfinding elements. Likewise, a strengthened palette of materials and lighting strategies would reinforce the campus character on the periphery and throughout these unique landscapes. Despite the unique aspect of these areas, materials and landscape pallete should still remain focused. Building and site materials should relate to the standards and landscape plantings should be broad movements with minimal variety to the palette.

TRANSITIONAL ZONES

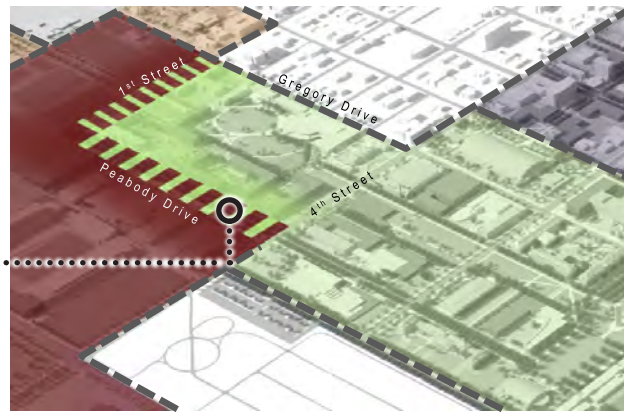
URBAN CAMPUS TO CAMPUS QUADS UC CQ

The transitional zone between the Campus Quads and the Urban Campus is currently defined by Mathews Avenue. By utilizing a palette of streetscape materials and reinforcing pedestrian connections to the Campus Quad, this area would be strengthened. Additionally, extending the open spaces of the Campus Quad eastward would be creating a common thread. Within the Urban typologies the importance of utilizing building setbacks that align with those of the adjacent quad typologies is critical to creating the sense of place that is responsive to the context of the pedestrian and the overall campus landscape. The materials drawn upon in this transition zone across the typologies should be derived from the current palette within the Campus Quads typology.



URBAN CAMPUS TO SACRED LANDSCAPES UC SA

Unity between Sacred Landscapes and Urban Campus can be realized with an alternate roadway configuration focusing primarily on public transit, bicycle, and pedestrian circulation. Material uniformity is critical with in this zone to maintain a campus branded identity. Existing buildings within the Sacred Landscape typology shall be the reference points through this transition zone to identify key development components such as setbacks, build to lines and material palettes. The ground plane across this transition zone shall adhere to the campus standards and identity of the Urban Campus typology.



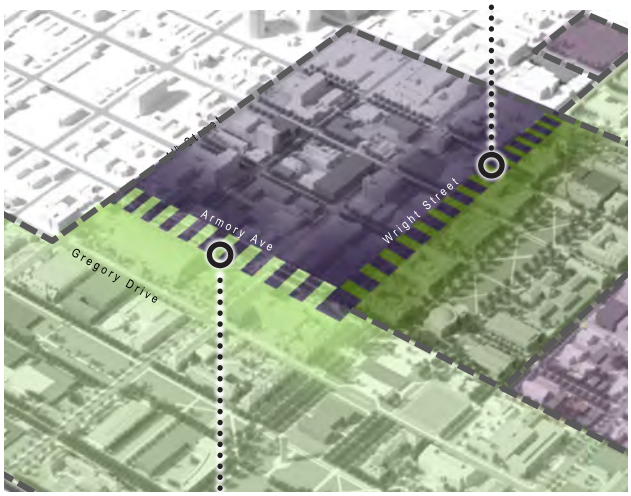
CAMPUS QUAD TO ACTIVE LANDSCAPES CQ AL

A dramatic shift occurs in the transitional zone between these two typologies. This is largely due to a change in scale. Access between these typologies should be strengthened with improved gateways, streetscape elements, safe crosswalks, and by interweaving Campus Quad elements on the periphery to create unity. Broad landscape massings should be used along the transition zone of Active Landscape typologies to enhance either opportunistic or existing gateways. Site furnishing and site lighting are critical elements among these zones that must maintain conformance with the campus standards in order to encourage and enhance a pedestrian/human scape engagement.

TRANSITIONAL ZONES

URBAN TOWN/GOWN TO SACRED LANDSCAPES UT SA

The materiality that exists within the transition between these landscapes should be reflective of the Sacred Landscape typology, yet complementary to the Urban Town/Gown. The corridor should be softened by extending open spaces between the two. Given the mix of uses, a P3 vision becomes essential to knitting these typologies together. Architecture in the Urban Town/Gown typology is a critical component to the overall composition of this transition area, adherence to build to lines and responsive to existing materials and massing located within the Sacred Landscapes typology will foster a cohesive community. Site landscape solutions in this zone shall be derived from the Urban/Town Gown typology.



URBAN TOWN/GOWN TO CAMPUS QUADS UT CQ

A similar relationship exists in the transition between the Urban Town/Gown and Campus Quad; however, the architectural qualities are more relaxed and less formal. By strengthening the P3 and carrying material elements of the Campus Quad through to soften the corridor edge, the transition will knit these two typologies together successfully. Currently this area of campus is in a bit of transition, mixed parcels, with little to no organization.

Organizing and enhancing open space along this transition zone is crucial to developing a core identity to this area of campus with the landscape opening up the view sheds that foster a relatable scale among the broader context of campus. The landscaped zones in this area shall consist of larger open lawns and mass native landscapes that remain loose and informal. To ensure consistency and recognition as a place on campus, adherence to the campus design and material standards shall be maintained here

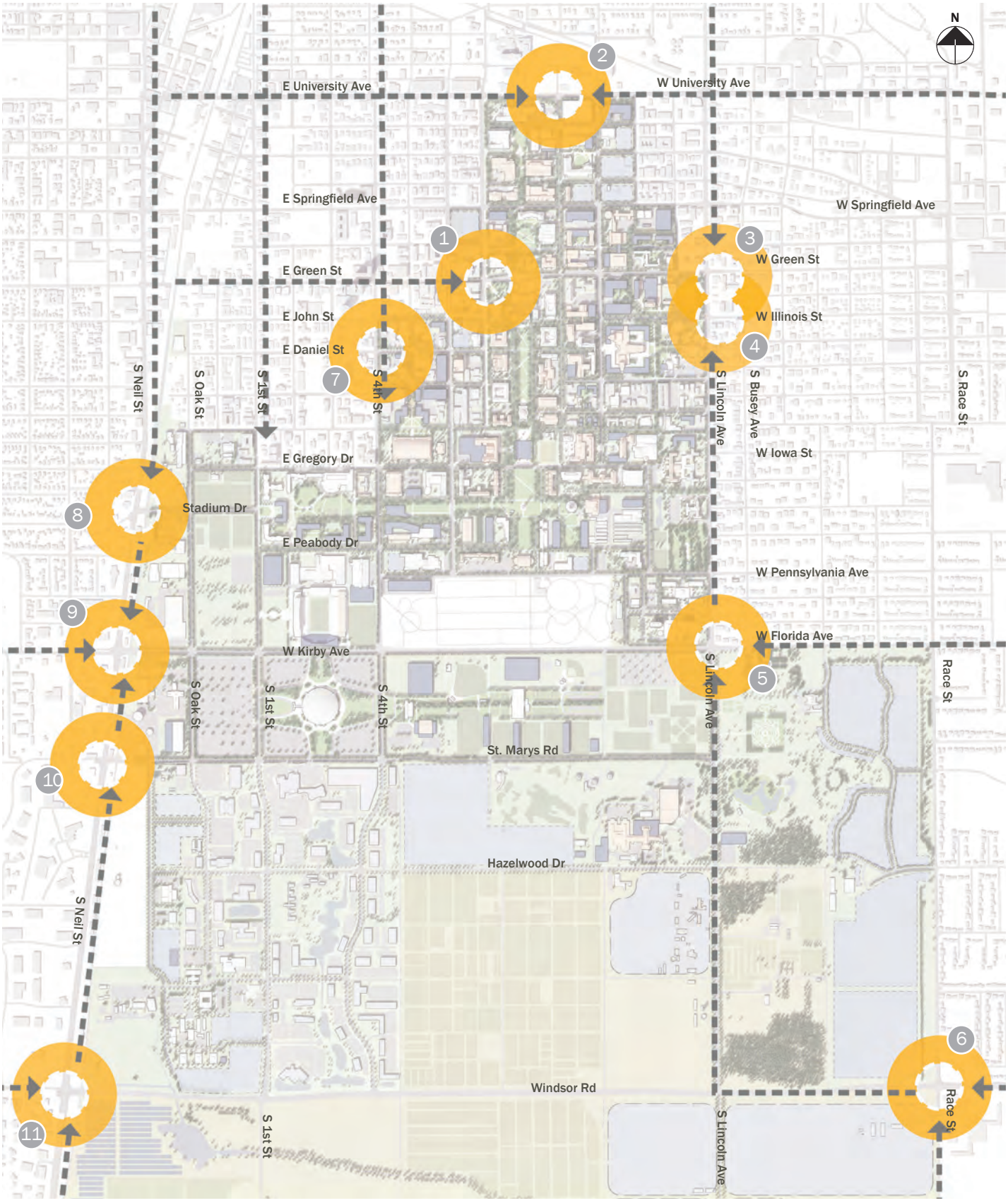
CAMPUS GATEWAYS

ARRIVAL EXPERIENCE

The primary gateways shown represent opportunities to strengthen and enrich the arrival experience into the Urbana campus. Currently, the gateways lack university branding, pedestrian and bicycle accessibility, and an essential sense of placemaking and campus arrival.

At all gateways, a wayfinding and signage family should be implemented to introduce and direct both vehicles and pedestrians through the campus. Focus should be placed on improving the pedestrian scale of these thresholds by utilizing a consistent campus palette of materials, lighting strategies, and planting techniques that would serve to evoke a stronger sense of place and the Urbana campus character.

1. GREEN STREET AND WRIGHT STREET
2. UNIVERSITY AVENUE AND MATHEWS AVENUE
3. GREEN STREET AND LINCOLN AVENUE
4. ILLINOIS STREET AND LINCOLN AVENUE
5. FLORIDA AVENUE AND LINCOLN AVENUE
6. RACE STREET AND WINDSOR ROAD
7. 4TH STREET AND DANIEL STREET
8. STADIUM DRIVE AND NEIL STREET
9. KIRBY AVENUE AND NEIL STREET
9. ST MARY'S ROAD AND NEIL STREET


N
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W University Ave
E Springfield Ave
W Springfield Ave
E Green St
W Green St
E John St
W Illinois St
E Daniel St
S Neil St
S Oak St
S 1st St
S 4th St
S Lincoln Ave
S Busey Ave
S Race St
E Gregory Dr
W Iowa St
Stadium Dr
E Peabody Dr
W Pennsylvania Ave
W Florida Ave
W Kirby Ave
St. Marys Rd
Hazelwood Dr
Windsor Rd
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IMPLEMENTATION STRATEGIES

iCAP STRATEGIES AND METRICS

The Campus Master Plan seeks to balance future campus growth and renewal in support of the iCAP goal of Net Zero Growth. However, No Net New Square Feet does not mean no new square feet. The university must maintain and continually improve its facilities and campus infrastructure to aggressively support its academic, research and land grant mission; to attract top students, faculty and researchers from around the globe; and to serve the Urbana-Champaign community, the State of Illinois, the country, and the world.

This is the first campus master plan to incorporate iCAP goals into the planning process. Balancing campus growth and renewal with a policy of no net new square footage has required a different approach to planning. Four overarching strategies will help achieve Net Zero Growth:

REDUCE

Reduce the supply of existing space by removing obsolete structures and reserving their square footage as part of a space 'bank' used to offset future construction.

Reduce the demand for additional space through sharing resources and greater utilization of existing classroom, class laboratories, research laboratories, and office space.

RE-USE

Re-use existing facilities through renovation, right-sizing, and enhanced technology to improve the quality of existing space, increase utilization, and create more flexibility to adapt to new pedagogies and technologies.

RECYCLE

Some facilities may need to be re-purposed to a less energy or space-intensive use to create a better functional fit.

RENEW

No net new square footage of space does not mean no new square footage. The university will continue to need new construction, to replace space lost to removal, and to provide new, state-of-the-art facilities for learning and discovery.

SPECIFIC STRATEGIES

An evaluation of usable space on campus as a ratio to the student population has shown that the university has the second highest assignable square foot (ASF) ratio per student compared to its peers. If we assume the campus continued "Business as Usual," this could result in close to 2 million GSF of additional campus development to accommodate projected enrollment growth in the next ten years. If, however, the university added its anticipated enrollment, but did not increase its total square footage, the ASF per student ratio would be reduced, yet still be above the average ASF/student compared to peers.

Balancing growth with no net new square footage will require new models for growth that emphasize quality over quantity, sharing resources, renovating space, and right-sizing space to fit new models of learning, research, and collaboration. 60% of total campus space is used for academic, research, office, and support space. Increased utilization in these space categories, and converting space to more appropriate uses will gain efficiencies to offset demand for additional new construction.

Over one-third of all campus square footage goes to supporting student life and auxiliary functions, such as housing, dining, recreation, athletics, and student services. These are population-dependent programs, and their space needs will grow as enrollment grows. While it will be difficult to achieve a total net zero growth in Auxiliary programs, creative re-use of existing space, mixing uses such as academic and office space with student residential programs and dining, can have a positive net effect on student life facilities with less square feet.

Specific Net Zero Strategies include:

Reduce Demand - No Net New Square Feet for Classrooms, and Class Laboratories

- Share Space - put more classrooms and class laboratories into centralized scheduling
- Increase classroom and class laboratory utilization
- Retrofit and recombine existing classrooms into more appropriately sized, technology-enabled learning spaces
- Invest in modernizing teaching space, IT and support systems

No Net New Square Feet for Office and Support Space

- Consolidate, renovate, convert and/or replace existing office space on and off campus
- Look at new models of work environments
- Consolidate storage and increase efficiency

Improve Research Laboratory/Office Utilization and Efficiency

- Increase laboratory utilization by 6% (reduce NASF/PI from 2,100 to 1,980 NASF)
- Improve, renovate, and/or replace existing underutilized laboratory space
- Share core laboratory and laboratory resources campus-wide

Renovate and Reinvest, or Re-purpose Space

- Re-purpose older space into less energy intensive uses, e.g. converting the Transportation and Ceramics Buildings from research space into office and collaboration space, with more flexible research laboratories as infill between the two existing buildings
- Consider creative conversion of existing space into student-centered facilities, such as the re-use of Kenney Gym for recreational, food and student gathering space

Replace or Remove Outdated Facilities

- Demolition and remove surplus and obsolete facilities in poor condition - bank the square footage in the space bank

Construct New, Energy Efficient and Flexible Facilities

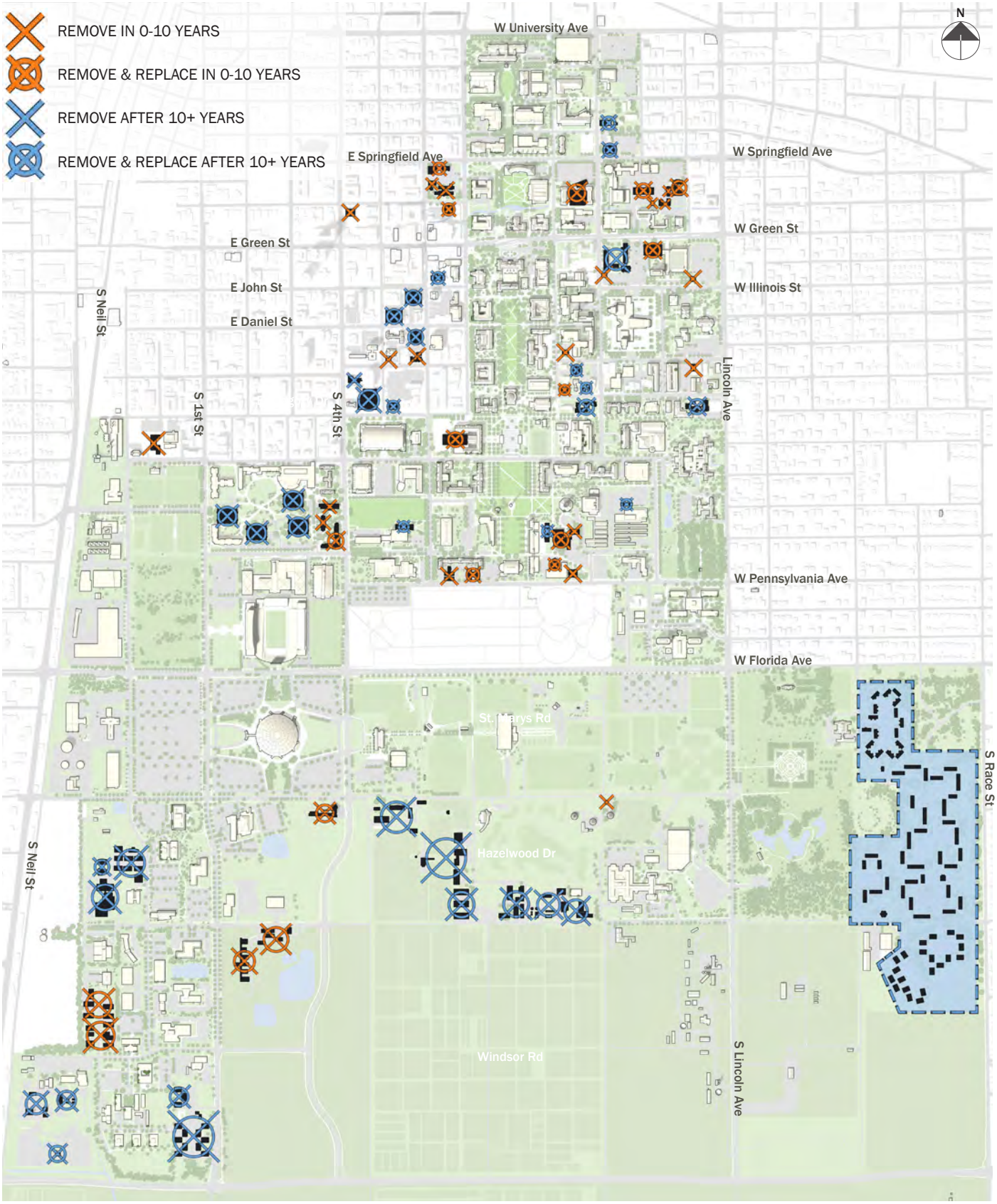
- Replace inefficient footprints with more flexible, space efficient, and energy efficient facilities
- Look for opportunities to create more synergistic programs and funding sources to reduce redundancy in facilities

iCAP METRICS

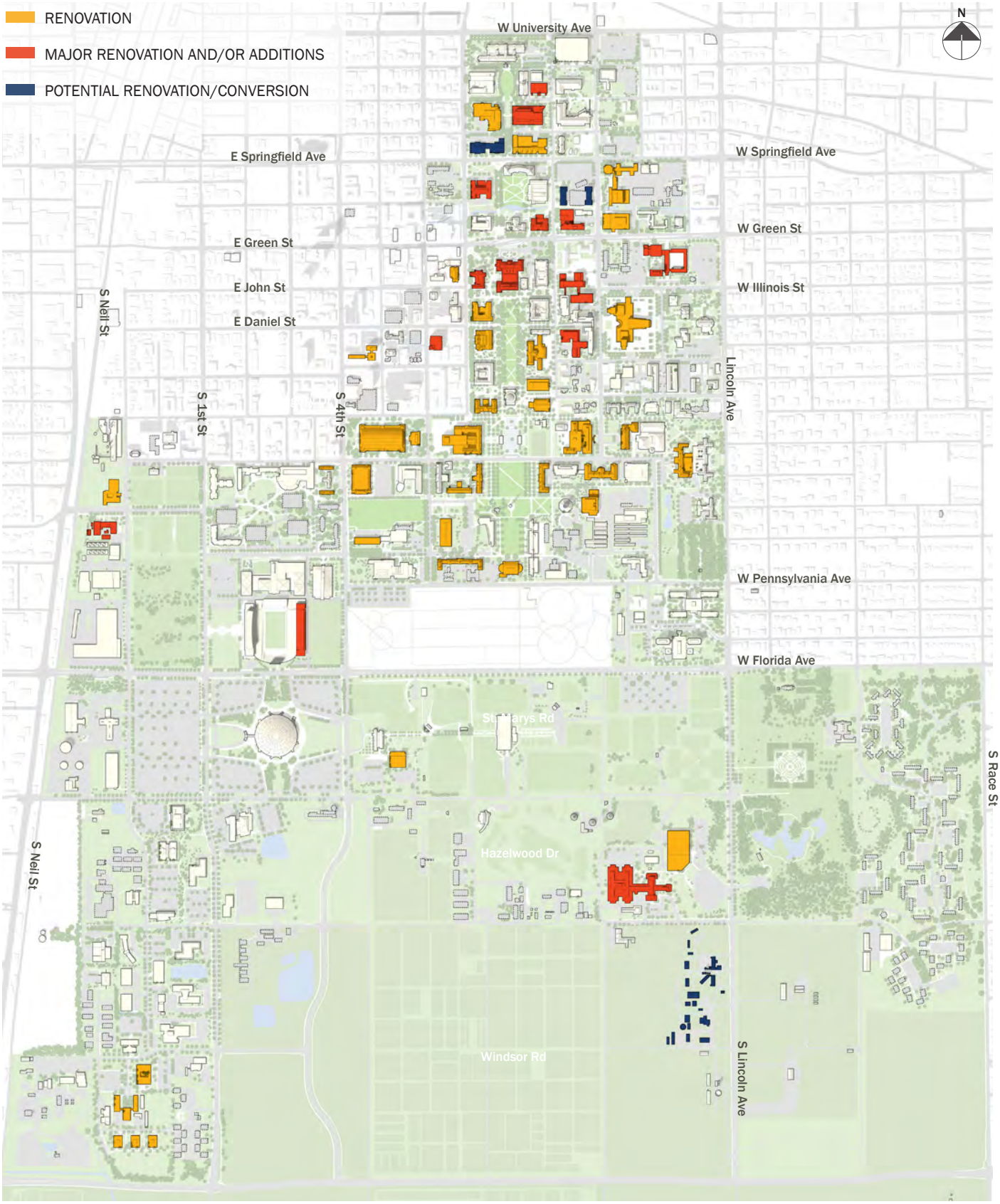
To test the model for Net Zero Growth, the Campus Master Plan has identified preliminary targets for demolition, demolition with replacement, and new construction over the next ten years. This is a preliminary target, and may change as new priorities emerge and funding sources shift. Preliminary estimates are:

Demolition	- 270,000 GSF
Demolition and Replacement	- 400,000 GSF
New Construction and Additions	+ 1,574,000 GSF
Net New Square Footage	+ 904,000 GSF
Apply Space Bank Reserve	- 626,000 GSF
Net New Square Feet, Ten Years (approximately 1.25% above cap)	+ 278,000 GSF

BUILDING REMOVAL/REPLACEMENT



RENOVATION/ADAPTIVE RE-USE



ACADEMIC SPACE STRATEGIES

The classroom inventory represents a valuable campus asset and space resource. It is mission critical space and essential for achieving educational and enrollment objectives. However, optimization of this asset is often complicated by issues of scheduling preferences, ownership, and control. Centralized scheduling for all classrooms on campus is recommended to improve utilization of existing space.

In line with best practices at other universities, and in recognition of the need to provide convenient access to faculty in their home departments, it is recommended that departments have first choice of the classrooms during certain periods, then release to the other departments and colleges if not scheduled. The Provost/Chancellor's Office may share the costs of utilities, deferred maintenance, and renovation/upgrade for better utilization of these classrooms. In addition, extending course offerings throughout more of the day and week will also improve utilization and help mitigate the need for additional facilities.

Over two-thirds of all classrooms are contained in one-third of the academic buildings on the Urbana campus, including the English Building, Foreign Languages Building, Gregory Hall, Altgeld Hall, the Armory, David Kinley Hall, and Davenport Hall. Many of these buildings are older buildings that are in poor facility condition, have educational adequacy issues, and are below the target guideline for utilization. Because of the volume of students that experience these facilities, renovation and modernization of these buildings will be critical to improve academic quality.

The Campus Master Plan identifies several existing academic buildings for renovation over the next ten or more years. In both renovation of existing classrooms and in new construction, flexibility to adapt to new learning pedagogies will be essential over the next decade.

For universities similar to the University of Illinois at Urbana-Champaign, ASF per station guidelines vary, but are usually between from 15 ASF to 30 ASF. The standard guideline is 22-25 ASF per station. As of fall 2015, the Urbana campus had an average of 17 ASF/station, indicative of a very traditional, lecture-based format. As the university renovates classrooms, or builds new spaces to incorporate more active learning spaces on campus, the master planning team recommends a guideline of 22 ASF/student for classrooms.

OFFICE GUIDELINES

For office guidelines, there is a great variety in office sizes and square feet per occupant, based on the range of building types and ages found on campuses. There is no "One Size Fits All" in office guidelines. New guidelines typically range from 100 to 120 square feet per occupant; however, this will vary depending on the type of office user. In addition, renovating offices in older buildings to more modern, efficient guidelines can be difficult to achieve, given building configuration, column placement, etc. Guidelines for office square footage will need to be verified at the programming stage for future projects, in balance with the iCAP goal of No Net New Square Footage and increased utilization of existing space.

ACTIVE LEARNING STRATEGIES

A 2014 study in the Proceedings of the National Academy of Sciences has concluded that active learning models positively impacts learning retention (Active Learning Increases Student Performance in Science, Engineering, and Mathematics, Freeman, et al. 2014). According to the author, “The impact of these data should put to rest any debate about whether active learning is more effective than lecturing.” Active learning pedagogies rely on flexible layouts, movable furniture, writable surfaces, and technology everywhere, resulting in greater square feet per station.

Opportunities to improve existing classrooms through renovation and strategies for new academic spaces include the following strategies:

- Combine small classrooms to make larger ones.
- Convert medium sized classrooms to more active learning environments with larger, more flexible furniture and achieve a higher, more appropriate ASF per student station ratio.
- Add configurable furniture, convert blank walls to white boards, and add technology, power, and large monitors for team and group learning.
- Knock down walls and add windows to access more daylight in classrooms. Add more transparency to corridor walls, use demountable wall systems and glass to open up spaces and bring light in.
- Repurpose underutilized classrooms for other programmatic needs, such as informal, collaborative learning spaces, student entrepreneur space, academic advising, offices or needs related to program growth.

RESEARCH SPACE STRATEGIES

Over 20 facilities were evaluated based on the quality of their research space. The following facilities are recommended for minor renovation, major renovation, possible conversion to another use, and/or demolition and replacement:

MINOR RENOVATION

- Altgeld Hall
- Children's Research Center
- Digital Computer Laboratory
- Loomis Laboratory
- Madigan Laboratory
- Micro and Nanotechnology Laboratory
- Seitz Materials Research Laboratory
- Superconductivity Center
- Water Survey Research Center #3

MAJOR RENOVATION/ADDITIONS

- Burrill Hall
- Civil Engineering Hydrosystems Laboratory
- Materials Science and Engineering Building
- Mechanical Engineering Building
- Morrill Hall
- NCSA East Wing Expansion
- Nathan Newmark Civil Engineering Laboratory
- Nuclear Physics Laboratory
- Psychology Building
- Roger Adams Laboratory

POTENTIAL CONVERSION

- Ceramics Building
- Dairy Facilities (Conversion to Equine Use)
- Transportation Building

DEMOLITION AND/OR REPLACEMENT:

- Aeronautics Laboratory
- Burnsides Research Laboratory
- Biomedical Animal Swine Research Replacement
- Feedmill Replacement
- Natural Resources Studies Annex
- Natural History Survey Greenhouse
- Shelford Vivarium

Additional observations and recommendations on research laboratory renovations include:

- Most existing research laboratories are custom planned around specific technologies. Future renovations need to be more modular, with opening planning where feasible.
- Laboratory partition systems in existing facilities evaluated are primarily block walls, making renovation more costly. Block should be used for corridor walls, with interior laboratory partitions dry wall for increased flexibility.
- Most fume hood systems are 100% exhausted. Hoods should be converted to Variable Air Volume (VAV) exhaust with motion sensors to improve energy efficiency.
- The current Faculty Condition Index (FCI) system is not consistently maintained by all colleges. It is a useful analytical tool, and if regularly updated, can be used as a strategic facilities planning tool versus just for deferred maintenance.

THE FUTURE OF RESEARCH

Future development will require the research culture to transition from a predominantly college-based allocation of space to more collaborative utilization. Science will be increasingly more interdisciplinary requiring increased modularity and flexibility. Big data and computational analysis in biology and chemistry will require a greater percentage of dry laboratory space. Core laboratory demands for imaging and specialized instrumentation will increase and need to increase shared utilization.

Facilities will need more collaborative space for group work and interaction, including maker space for graduate student investigations. HVAC systems should be designed as demand controlled ventilation systems with zoned energy sensors. Buildings will need to be sustainable, moving towards net zero energy and water usage.

Laboratory planning should accommodate open modular planning to provide greater flexibility with zoned laboratory support areas for specialized equipment for shared utilization. Laboratory casework and furniture systems should be movable, with accessible utility services. Office space should provide for an agile work environment for a range of private work to group collaboration and interaction . Augmenting innovation will require engaging technology for computer simulation and virtual reality environments.

ENERGY AND INFRASTRUCTURE

ENERGY AND INFRASTRUCTURE STRATEGIES

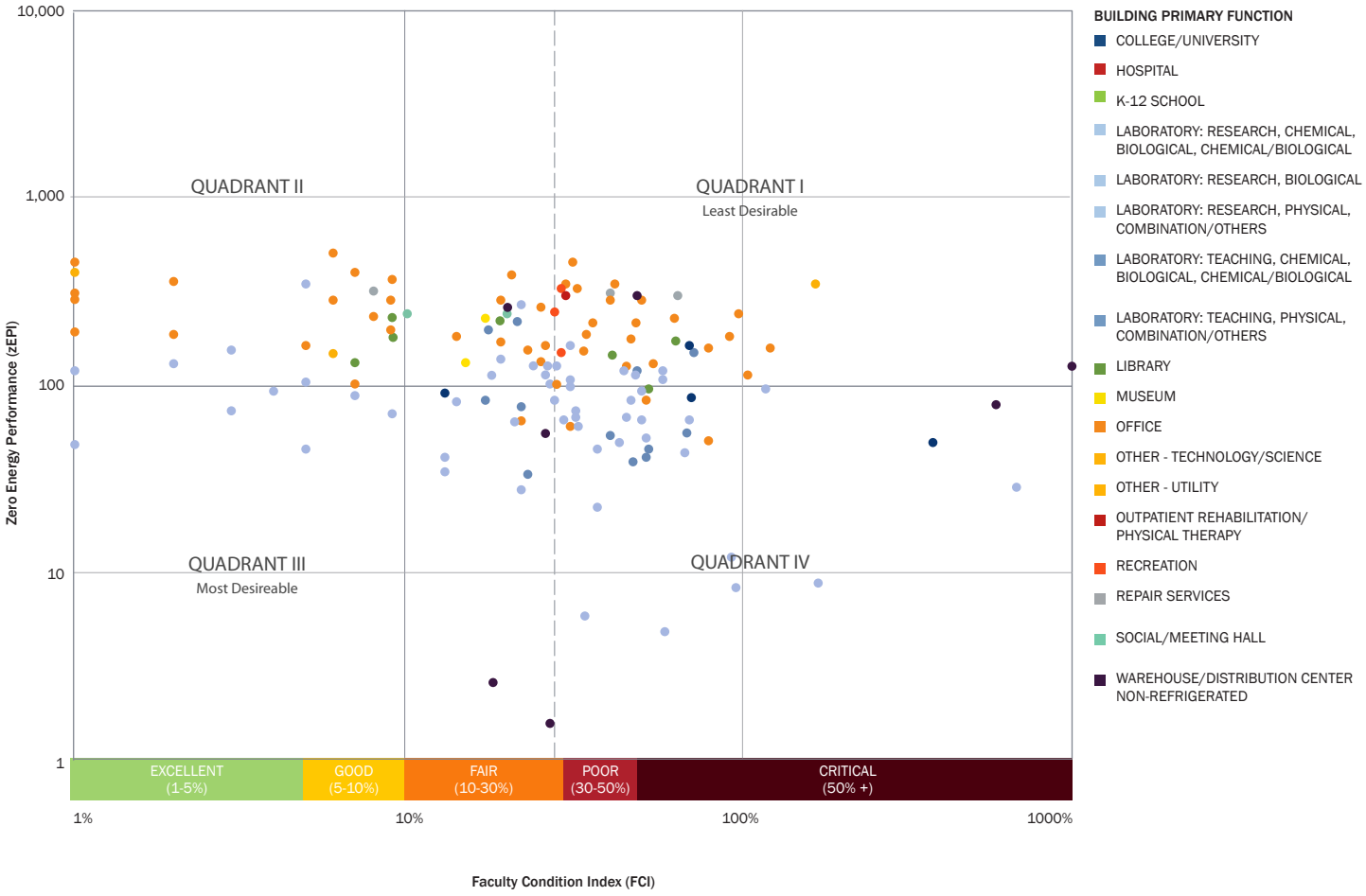
To better understand the correlation between energy performance and building condition, the team created a condition-energy matrix that maps a building's zEPI score against its FCI.

The matrix can be segmented into 4 quadrants as seen on the right of this page. Quadrant I, in the upper right-hand corner, represents the least desirable dataset, as it represents buildings in fair, poor or critical condition with an energy use intensity greater than that of the national median for comparable property types. Not only do the majority of campus buildings fall into this category, the majority of academic/administrative and athletics facilities are in this quadrant.

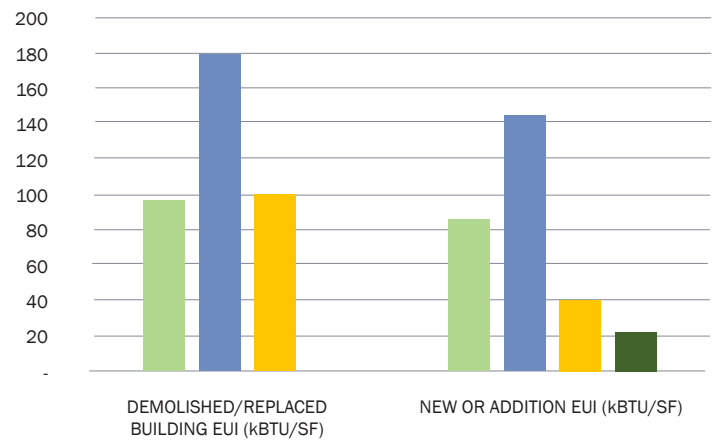
Buildings located in Quadrant III, in the lower left-hand corner, are most desirable – they are in good to excellent condition and have a site EUI less than the national median. Research laboratories are the predominant building type in this quadrant.

Buildings in Quadrants II and IV should be targeted for on-going routine maintenance to sustain or improve performance over the long term. Administrative buildings represent the majority of buildings in Quadrant II (good to excellent condition, poor performance), while academic buildings and laboratories are the predominant building types in Quadrant IV (fair, poor or critical condition but with relatively good performance).

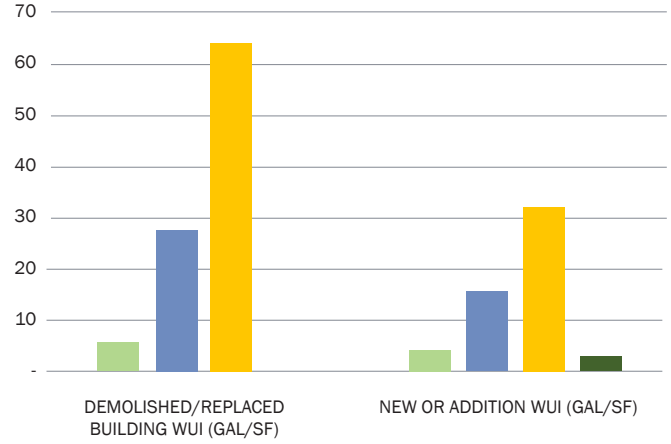
CONDITION-ENERGY MATRIX



DEMO VS. NEW ENERGY PERFORMANCE (kBTU/SF)



DEMO VS. NEW WATER PERFORMANCE (GAL/SF)

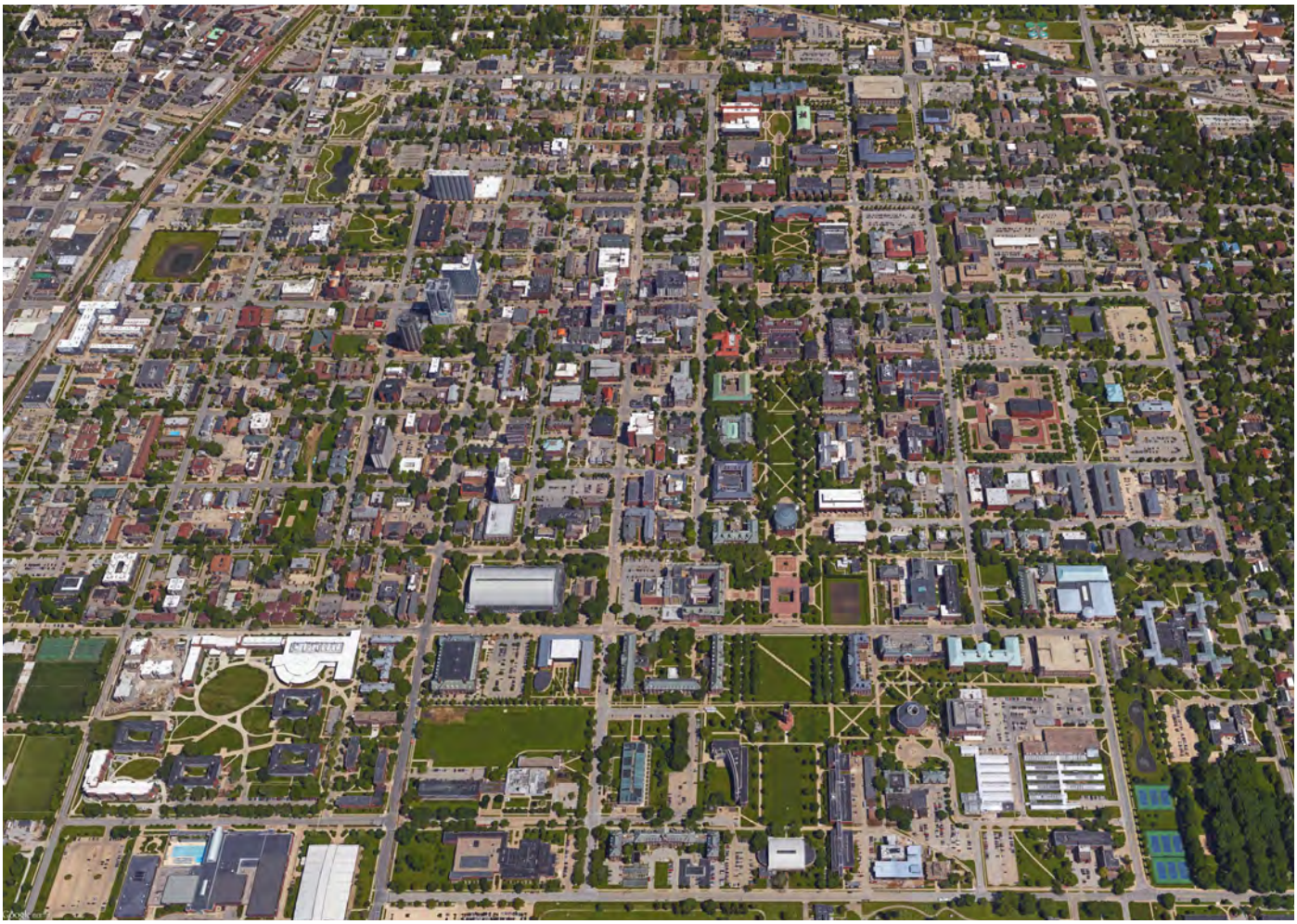


06
DESIGN GUIDELINES

INTRODUCTION

The University of Illinois at Urbana-Champaign Design Guidelines is a companion set of performance criteria to the Campus Master Plan. Whereas the role of the Campus Master Plan is to provide a framework for open space, circulation, use relationships, and building placement, the role of the Design Guidelines is to ensure that specific designs implemented within the Campus Master Plan framework will be of consistent high quality. These guidelines are not intended to be so constraining as to stifle analysis and judgment or to predicate design solutions; however, they should not be interpreted so loosely as to permit entirely different initiatives and/or conceptual directions, from time honored campus strategies.

The intent of the Design Guidelines is to achieve a balance between the guidelines set forth and the judgments that must be exercised at each phase of plan development so the campus is built as an integrated whole and over an extended period of time. Since the Urbana campus already has a number of development standards ranging from



Aerial of the University of Illinois at Urbana-Champaign Campus

DESIGN GUIDELINES PURPOSE

To provide Professional Services Consultants with planning and design direction for campus facilities (all buildings, sites, and built/natural elements within the physical campus environment). The guidelines seek to enhance campus unity and provide a campus aesthetic that appropriately reflects the prestige and enduring qualities of the university.

broadly stated campus design traditions to specific design details in the University of Illinois at Urbana-Champaign Facilities Standards (U of I Facilities Standards, located at http://fs.illinois.edu/resources/facilities-standards), these standards are intended to supplement, rather than supersede, the Design Guidelines.

On every project, the university is committed to further enhancing the campus environment through:

Design Excellence - All new university facilities must project an aesthetic identity and uniqueness appropriate to its function while also integrating into the overall Campus Master Plan framework.

Universal Design – All new university facilities must create an equal access campus environment with a well integrated design that fosters pedestrian travel, the predominant mode in and around campus. Prior to codification in the Americans with Disabilities Act, the university was one of the leaders offering accessible design environments and intends to continue to lead in this effort.

Sustainability – All new university facilities must be designed to promote the most environmentally and financially responsible construction, maintenance, and use. Therefore, all buildings, major additions, and site developments will meet a minimum Leadership in Energy and Environmental Design (LEED) Silver rating regardless of whether the University decides to pursue certification. The goal on each project, however, must always be to reach for the highest ratings possible.

Technical Innovation – As appropriate, all new university facilities must, through carefully and aesthetically considered design, incorporate technologies that might promote the Design Guidelines (e.g. using “green” roofs or photovoltaics in lieu of a predominantly “pitched” roof). However, care should be taken not to negatively impact the building exterior with embedded technologies at risk of becoming obsolete. Though the interior may be renovated multiple times over the life of a building, the exterior should be designed with an aesthetic, performance and quality of materials that are appropriate for its intended life.

During projects’ planning and design phases, the greatest impact on the above commitments should be achieved with the most cost effective approach. Thus, the guidelines provide essential visionary direction as construction codes, standards, strategies, and technologies evolve.

ADMINISTRATION GUIDELINES

Five different types of university groups, with varying responsibilities and involvement, will oversee facility project designs in consideration of the Design Guidelines:

MANAGE, REVIEW, AND APPROVE

Facilities and Services (F&S) – This campus unit is responsible for managing capital facility project planning, design, construction, and maintenance. F&S Planning Division and the Architectural Review Committee (ARC) will review and consider any deviations from the Design Guidelines on projects.

University Office of Capital Programs and Real Estate Services (UOCP & RES) – The University of Illinois System administration unit supports the University of Illinois' mission by facilitating and overseeing the development of and adherence to policies, procedures, and systems pertaining to the built environment for all universities in the System. UOCP&RES is responsible for all University of Illinois master planning and its related sub-master planning, acquiring property to meet the needs of the master plans, design guidelines, and review of capital facility project designs and site selections that require Board of Trustees approval.

Architectural Review Committee (ARC) – This committee is to function in the roles of the Campus Architect and Campus Landscape Architect. It is expected that this committee will be consulted and involved at any time when the physical fabric of the campus is considered for alteration. The ARC is responsible for reviewing architectural designs and installations of new buildings and/or additions and alterations to existing structures, interpret the Design Guidelines, select and/or approve materials, and provide feedback to design consultants to ensure that the proposed work is compatible with U of I Facilities Standards and intent of the Design Guidelines in support of the University's Mission and Strategic Plan.

Chancellor's Design Advisory Committee (CDAC) – This committee functions as a cultural voice of the campus, and works in an advisory role to the Director of Capital Programs at F&S. CDAC is charged with the following: Establishing the appropriate general guidance for the orderly development and presentation of the campus; Providing input to proponents/designers of proposed projects contributing to development of campus; and, Providing reaction to specific design/development solutions proposed by contracted professionals and in-house staff. In addition, CDAC will be asked to provide comments relative to design concepts, historical sites, art in public spaces, and on the continued development of our Campus Master Plan.

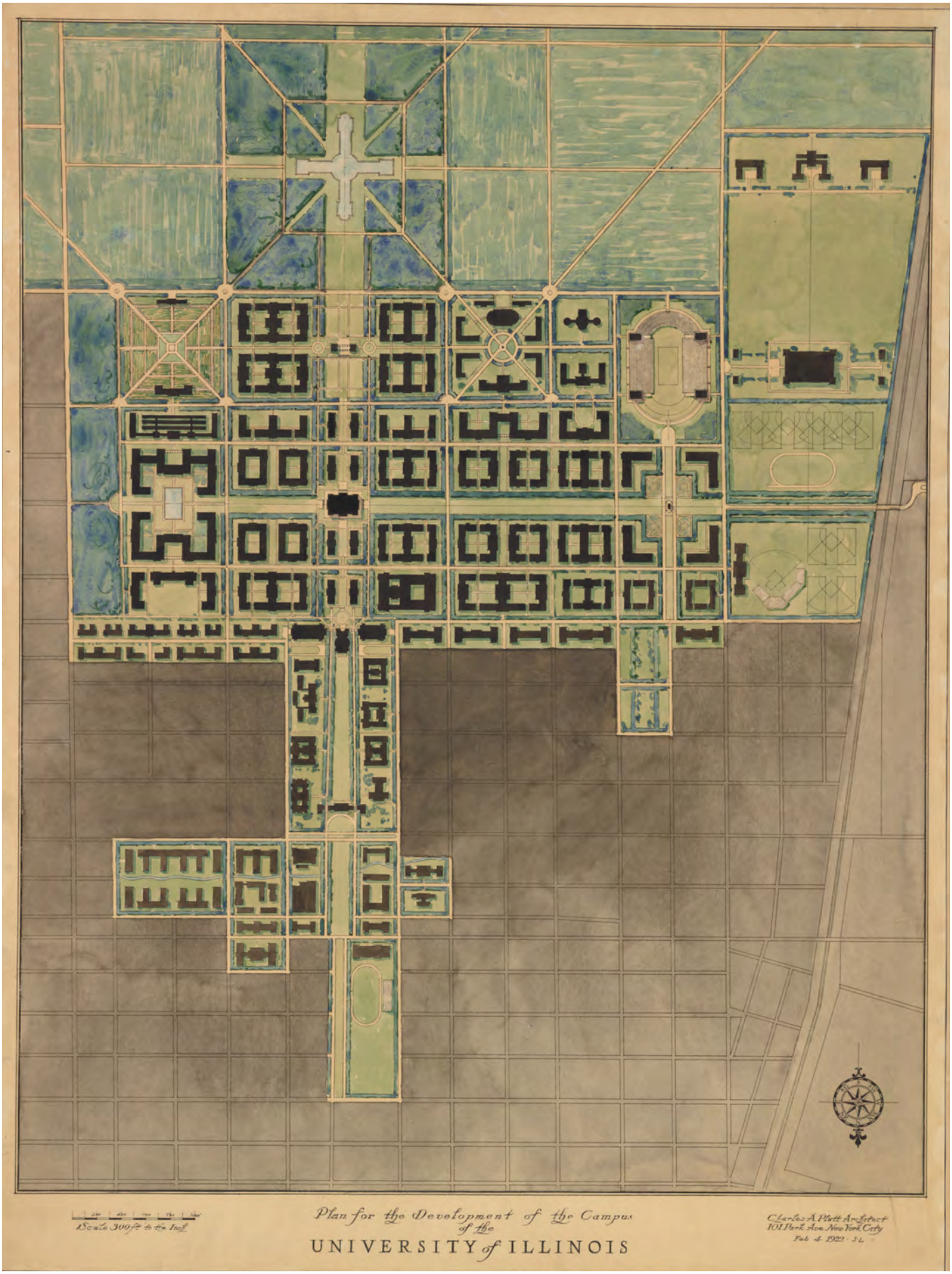
Board of Trustees of the University of Illinois (BOT) – BOT approves all University of Illinois master planning and its related sub-master planning and the design of any new facility, major addition, remodel, site development or site selection significant enough to visually impact the character of campus. Meetings occur, on average, every two months and UOCP&RES coordinates design presentations requiring BOT approval.

Note:

The design of any project with a visual impact on the character of campus must be coordinated with the Director of Capital Programs at F&S. As deemed appropriate, any project or its unique design element/ quality will be reviewed by ARC and CDAC.

The Director of Capital Programs at F&S and/or ARC will review any design elements not covered by or are deviations from the U of I Facilities Standards and/ or Design Guidelines before the project can proceed with the new design.

Historic View of Campus from the north looking to the south (1962)



Plan for the Development of the Campus - 1922

BUILDING DESIGN GUIDELINES

UNITY BETWEEN OLD AND NEW

The basic goal of any new building must be to contribute to the overall visual unity in deference to its individual expression. Central to the idea of achieving a unified design for the University of Illinois at Urbana Champaign is the need to develop clear ties between new (or expanded) and existing facilities.

These ties should be both visual and functional. Visual ties involve building form, which can be defined in fundamental aspects of size, shape, color, texture, directionality, and location. Facilities possessing similar aspects of form will be perceived as a unified group. The more aspects that are similar, the greater sense of unity there will be.

No one aspect of form is responsible for visual unity; rather, a combination of factors unique to each situation will result in a compatible composition. For example, the Commerce Courtyard (south of the Main Library) is a group of four buildings – three of which are nearly identical in all aspects of form (David Kinley Hall, Wohler's Hall, and the Architecture Building) and a fourth (Irwin Academic Services Center) that is much smaller in size.

The Irwin Academic Services Center compensates for its small size because it shares sufficient similarity of color, texture, shape, alignment, and proximity with the three dominant buildings.

The Main Quad is another example where the aspects of shared building size, location, and alignment around the quad space exert a unifying influence in spite of considerable differences in color, texture, and building shape. The Foreign Languages Building, however, has a strongly divergent shape (narrow base, broad top) and texture (overall grain of detail, window, and solid area). While the crisp modern form contrasts with its neighbors on the Main Quad, the height, volume and massing of the building contributes to the definition of the exterior, "negative space." In addition, the unifying influence of landscape (spatial hierarchy, plants, paths, and topography) contributes significantly to the success of the Main Quad.

These examples illustrate that while the aspects of building form are interactive, some play a more important role than others in coalescing a collective and unified campus. Accordingly, primary attention should be given to building location, size, and directionality (alignment and proportion). All campus facilities (buildings, sites, and built/natural elements within the physical campus environment) play an important role in this campus-wide connection between old and new.

BUILDING DESIGN GUIDELINES

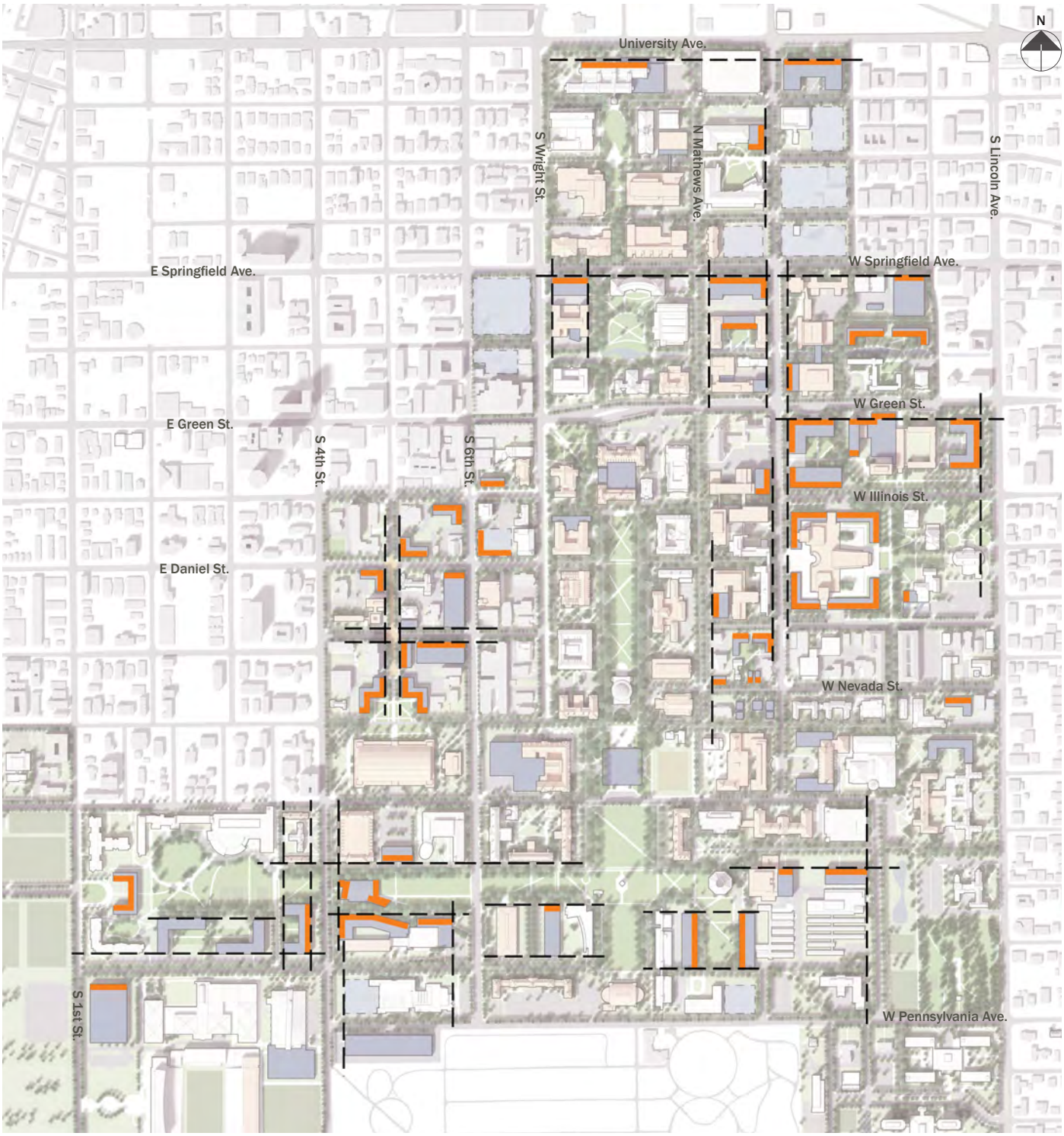
Successful principles used in the achievement of unity in existing, traditional campus facilities can provide guidance for the development of new (or expanded) buildings. Some of these observations and principles are listed below.

- Overall building proportions tend to be horizontal.
- Roofs are used as unifying elements. They often include chimneys (Mumford Hall), vents (Noyes Laboratory), or towers (English Building) to enliven the profile and character of the roof.
- Buildings are generally organized into three clearly defined parts: the base, middle, and top.
- Walls are generally regular planes and read as solid walls rather than curtain walls.
- Walls are frequently subdivided into interesting and carefully composed patterns created by the rhythmic repetition of doors, windows, cornices, dormers, changes in material, and subtle layering.
- Compositional emphasis is often assigned to the main and secondary entrances.
- Windows are “punched” and usually have white or light colored frames. Windows are often grouped together to form larger visual units that relate well to the overall scale of large façades. Façade materials are typically brick with stone accents.

BUILDING SETBACK AND BUILD-TO LINES

Building locations should conform to average or prevailing setback or Build-to lines implied in the Campus Master Plan (illustrated in the example on the facing page) intended to complement and develop unity among existing buildings via common directionality and location. Setbacks and Build-to lines should, as much as practical, align with adjacent structures within the zone or district, or respond to the definition of existing or planned open space; this includes preserving or creating view corridors and other civic responsibilities within the context of the project site. Where no context exists, implied setbacks should be influenced by Campus Master Plan zones or districts that look to current, future, or abandoned transportation corridors or open space development. Keeping buildings (except the Beckman Institute for Advanced Science and Technology or the Main Library) off street axes will also limit the size of buildings to a one block area. Aligning buildings also helps to clearly define open spaces. The location of new (or expanded) buildings is to be reviewed and approved by the Director of F&S Planning and the ARC.

The diagram to the right defines Active Edges for future buildings. An Active Edge designates those facades that should be considered the primary facade of the building, with major building edges, and transparency at the ground floor, to help activate adjacent public space and walks.



Setbacks and build-to lines maintain relationships between buildings and surrounding context

BUILD-TO LINE

ACTIVE EDGE

BUILDING SIZE

Recognizing that some diversity enriches the visual environment and humanizes the scale of the surroundings, building size should be controlled to maintain a common scale relationship between existing and proposed (or expanded) buildings. Building height should, typically, be three to five stories (or 40- to 60-feet) with the level of details appropriate to the scale of human experience.

Only special architectural elements in key landmark locations should exceed this limit. Examples of such elements are the Beckman Institute for Advanced Science and Technology entrance tower and the Illini Union cupola along the north-south axis of the Main campus. Building height will be reviewed at time of design.

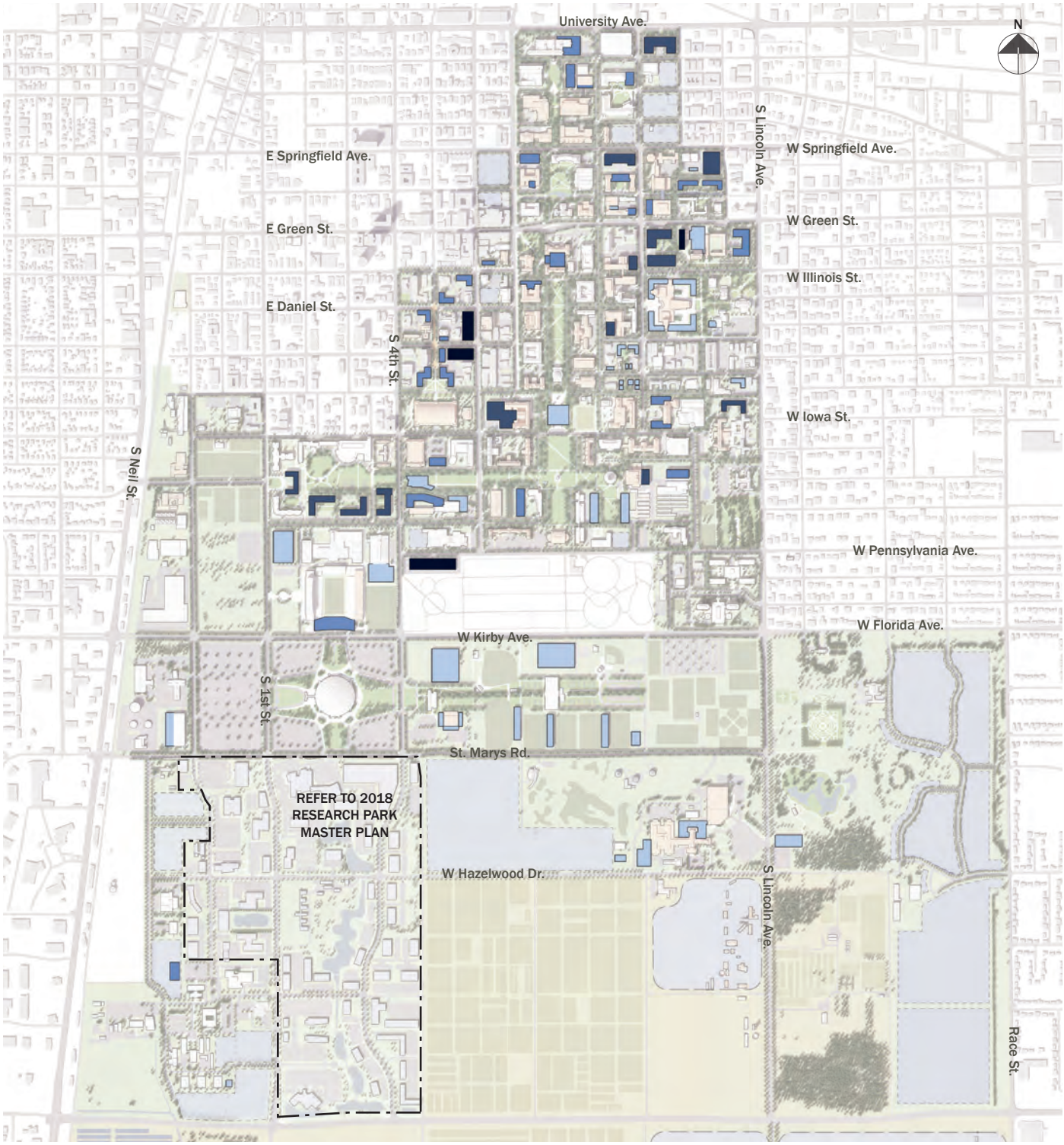
In certain cases, parking structures may exceed height standards in order to address a campus-wide desire to reduce surface parking lots and move towards structured parking. The topic will be evaluated at the time of design and implementation.

Foellinger Auditorium - view towards the building from the Main Quad

Noyes Laboratory - view from the Main Quad with emphasis on hierarchy of entrance and rhythmic composition of openings

College of Engineering overlooking Bardeen Quad showing overall composition into defined parts of base, middle, and top

Illini Union - View from the Main Quad looking north



BUILDING HEIGHTS

- 1 - 2 STORIES
- 3 - 4 STORIES
- 5 - 6 STORIES
- 7 - 8 STORIES

ARCHITECTURAL DISTRICTS

CC Campus Core District
Includes architectural Vocabulary of late 19th to early 20th century. District includes traditional academic facilities. This District will be the most contextually guarded and restrictive in terms of applying the Design Guidelines.

CEE Campus Edge District East
Shares context/compatibility with campus core; contextual with contemporary architectural vocabulary; the district includes architectural vocabulary of mid to late 20th century. Abuts low density single family neighborhood to the East and Carle Hospital medical campus at Northeast. District includes diverse occupancies: museums, entertainment, residential, research and academic. This area will have a diversity in design solutions in applying the Guidelines. The Campus Edge District East is expected to infill with university development in the future. The university will continue to work with local municipalities to maintain community planning and development standards as this area transitions.

CEW Campus Edge District West
Shares context/ compatibility with campus core, contextual with more modern architectural vocabulary; the district includes architectural vocabulary of mid-century to contemporary design. Abuts mixed density low/high rise residential, commercial neighborhood between Wright St and the RR right of way. Context will assist in applying the Guidelines to development. The Campus Edge District West is expected to continue to be a transitional area with an integration of university development with private high density residential (low to high-rise), approved university housing and commercial occupancies. The university will continue to work with local municipalities to maintain community planning and development standards as this area transitions.

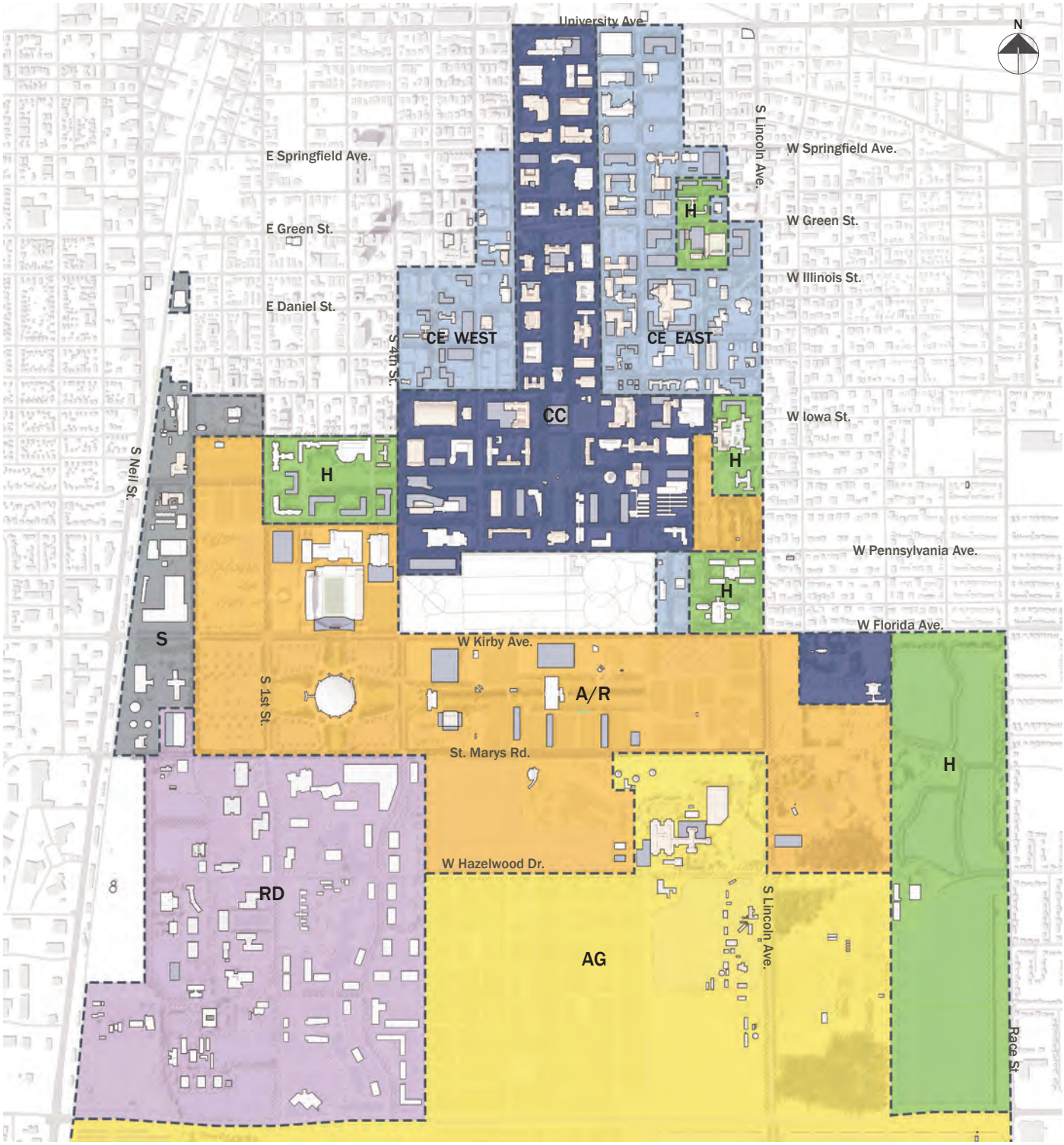
H Housing District
Each of the residence halls have their own design vocabularies and material palettes, though they all share some of the same site elements; the districts include architectural vocabulary of early 20th century to contemporary design. Future development shall be responsive to the context of each diverse district and neighborhood providing a variety of neighborhood identities.

A/R Campus Athletic / Recreational District
The district includes dedicated landscapes, open space and architectural vocabulary that is historic to contemporary. Future development shall be responsive to the context of each distinctive facility and its identity. Due to its unique programming of buildings and spaces, this area has the potential to depart from and challenge some of the prescribed guidelines.

AG Agricultural District
The district includes dedicated landscapes, open space and architectural vocabulary that is historic to contemporary. This area includes the Veterinary Medical Campus. Due to the agrarian and pastoral context, this area may be the least restrictive in application of the Guidelines due to varied programming of facilities.

RD Research District
Shares context/ compatibility with campus edge districts, contextual with contemporary architectural vocabulary; the district includes the Research Park as Well as properties and sites retained and reserved by the University for future development. Guidelines for development may be a blend of UI and Research Park guidelines.

S Service District
Shares context/compatibility with campus edge districts; contextual with contemporary architectural vocabulary and materials palette.



Specific information on how the Design Guidelines are applied to each of the Architectural Districts can be found in the Facilities and Services' Facility Standards. (located at http://www.fs.illinois.edu/resources/facilities-standards)

ARCHITECTURAL DISTRICTS

- CAMPUS CORE
- CAMPUS EDGE
- ATHLETICS/RECREATION
- HOUSING
- AGRICULTURAL
- RESEARCH
- SERVICE

BUILDING DESIGN GUIDELINES

Campbell Hall for Public Telecommunication - building design with steeper slopes and with projecting parapets

View of Mumford Hall and Animal Sciences Laboratory - example of new roofs relating to existing buildings and composition of stacks and vents at the Mumford Hall

BUILDING DESIGN PRINCIPLES

In order for new facilities to blend into the campus surroundings as seamlessly as possible, building design for developing (both expanding and infilling) areas of campus must complement building design on more established areas of the campus. It is the intent of these guidelines to ensure an architectural expression compatible with the main body of the Urbana campus without unduly restricting the creativity of designers. The guidelines have been crafted to avoid imposing unrealistic constraints that could result in excessive costs of construction.

Massing – In order to preserve the build-out capacity of campus, buildings must be no less than three stories above grade. Higher buildings are permitted, but the height must demonstrate sensitivity to adjacent and nearby buildings.

Roofs – Roofing design should be contextually sensitive to surrounding existing buildings, A pitched roof is encouraged with a pitch of no less than 6 in 12. Some elements (exterior stairwells and mechanical spaces) may have flat roofs. Pitched parapets that give a flat roof the appearance of a 6 in 12 or steeper roof are acceptable, as was built in Campbell Hall for Public Telecommunication. Roof projections for the purposes of mechanical, ventilation and/or plumbing requirements must be minimized, and treated as elements contributing to the architecture of the building. An optimal growing environment will dictate the pitch of "green" roof areas. The pitch of a roof will also be affected by the presence of solar photovoltaics. In either case, when features are introduced onto a roof structure, proper safety measures must be incorporated for the safe access and maintenance of these areas. Flat roof areas used for placement of mechanical equipment shall be enclosed by a roof-like appearing parapet similar to Grainger Engineering Library Information Center's.

Acceptable materials are pre-finished metal standing seam, slate, copper, zinc, commercial quality fiberglass/asphalt shingle, or concrete/clay tile. Stacks and vents must be "ganged or manifolded" into architectural projections as was done with the Chemical and Life Sciences Building. In some cases a screen wall of other materials may be accepted by the Director of Capital Programs and the ARC. However, in all cases, full visual screening of mechanical areas should be accomplished by materials that complement the architectural materials and design of the building.

Exterior Walls – All exterior walls must be 100% brick masonry units; however, non-modular or "oversized" units are acceptable by exception only and must be approved by the Director of Capital Programs and the ARC. Brick walls found on campus have a great variety of color and texture. The Illinois 'red brick blend' varies from building to building. Therefore, care must be taken when selecting new brick blends to ensure facades will be harmonious with the surrounding context. In repair and renovation projects, careful blending of brick colors and textures are a necessity, often resulting in the need to reclaim existing bricks whenever necessary. Stone or cast stone trim is desirable, but not mandatory. Prefabricated curtain walls are acceptable only in exceptional situations. The proposed brick blend and the proposed color of pre-finished metal products is subject to the approval of the Director of Capital Programs and the ARC.

Windows – All windows must be pre-finished metal frame with double-pane or insulating glass, except for the requirements of historic preservation considerations. Window frame color can vary to complement the color of the roofs and walls. Reflective glass is not acceptable; "low-e" energy-efficient glass is encouraged but not mandatory. Windows should be incorporated as "punched" windows similar to those in the central portion of the campus (e.g. Illini Union). Windows need not always be square or rectangular; although, traditional shapes must be dominate. Accent windows of other shapes may be incorporated into the design (e.g. Grainger Engineering Library Information Center and Huff Hall). Profiles of window frames, muntins, and sashes shall closely match the original wood profiles.

Grainger Engineering Library Information Center - building design includes accent windows, protective projections and recessed openings

Ikenberry Dining Center - profile of window frames, muntins, and sash shall relate to original windows

Henry Administration Building - example projection

Temple Hoyne Buell Hall - exterior view of interior multi-story open atrium

ACES Library, Information and Alumni Center - example of a focus building

Projections and Ornamentation – Canopies and accents at major doorways (e.g. west side of Henry Administration Building and the Illini Union Bookstore), protective projections (e.g. south entry of Grainger Engineering Library Information Center), or recessed doorways (e.g. north entry of Grainger Engineering Library Information Center) must be designed to protect occupants and visitors from the weather. Air-lock foyers must be used at major entrances. Canopies and projections must be of material and design compatible with the building. The main entrance to the building should be easily identifiable, and part of a larger "entrance element." This element should be in scale with the building plane.

Façade Proportion - Directional aspects of campus buildings include building alignment, as well as façade proportion and expression. All new (or expanded) buildings should align with the street grid, be essentially horizontal in proportion, and exhibit a horizontal façade expression. Most campus buildings conform to this rule but Turner Hall, Coordinated Science Laboratory (CSL), and the Psychology Building are conspicuous exceptions. Turner Hall is horizontal in overall proportion, but the vertical striping of the façade makes it appear more vertical in expression while the Psychology Building and CSL are vertical in both proportion and expression.

Building Shape, Color, and Texture - Secondary aspects of form (such as shape, color, and texture) should also be compatible with traditional campus design standards. General building shape should be rectangular or square; although, "focus" buildings (e.g. ACES Library, Information and Alumni Center or State Farm Center) can successfully depart from this convention.

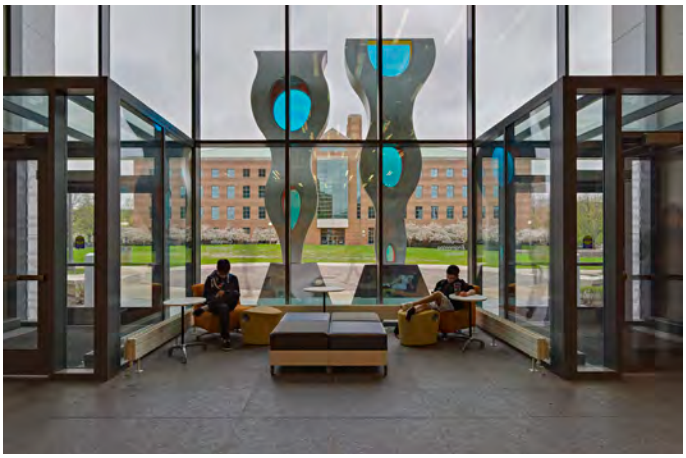
Many traditional campus buildings from the early 20th century are in the neo-Georgian style. The details of this style (strong base, stone cornices, brick exteriors, pitched roofs, dormers, chimneys, entrance columns, and regularly spaced, double-sash windows with mullions) create an overall building texture and color pattern that is generally

restrained, but lively in character. The walls are regular and continuous (not sculpted) and the degree of transparency is relatively high; therefore, walls do not appear blank and impassive. These guidelines do not suggest that the neo-Georgian style be readopted, but recommends that new buildings be designed to complement the style that have become ingrained in the university architectural vernacular: regularity, transparency, color pattern, and lively character.

For example, many recent campus buildings are not neo-Georgian (e.g. Micro and Nanotechnology Laboratory, Thomas M. Siebel Center for Computer Science, and the College of Business Instructional Facility), yet are compatible with the style because they share basic textural, color, and shape characteristics. The Huff Hall addition is a good example of compatibility between old and new architecture.

Transparency - A number of campus buildings possess a transparency that helps increase awareness and feelings of engagement with the overall collegiate setting. The large bay windows on the south side of the Illini Union, the open atrium of Temple Hoyne Buell Hall and the glazed stair towers of the Agriculture Engineering Sciences Building are good examples of how the greater campus can be experienced from within the buildings. Solid walls, particularly at ground level, tend to emphasize boundaries and separation that undermines the notion of the campus as a public place. New buildings on campus should be designed as public buildings with a level of transparency (as appropriate) that encourages a visual fusion of indoor and outdoor spaces. Exterior building walls should be considered both as a means of containing and defining interior space, as well as an element centrally involved in the broader goal of defining and connecting the campus environment as a whole.

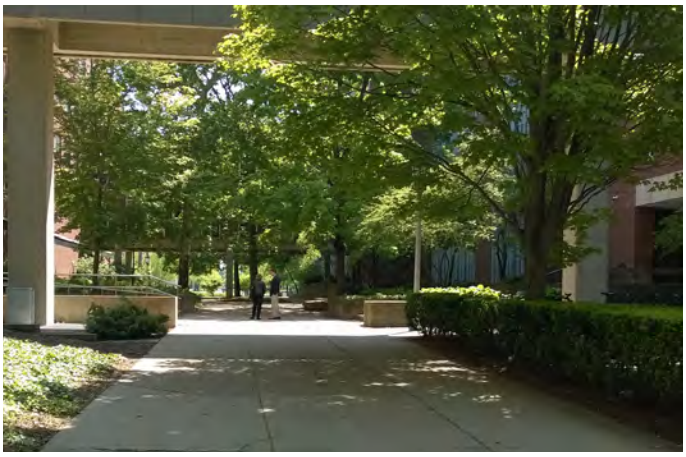
College of Business Instructional Facility - example of massing and proportion of newer building design relate to the existing campus context



Electrical and Computer Engineering Building - transparency between interior and exterior spaces further defines the campus community

Psychology Building - example of conspicuous elevation in terms of facade's overall vertical proportions

Chemical and Life Science Laboratory Bridge - view of the pedestrian experience under the bridge



Bridge connections between the School of Molecular and Cellular Biology/ Burrill Hall

North Campus Parking Deck - view of retail corridor towards the Beckman Institute for Advanced Science and Technology

Parking Structure (West Gregory Drive) - materiality and configuration of parking structures designed to relate to the surrounding context

SPECIFIC BUILDING TYPES

- Bridges and Tunnels should be employed only to improve functional links between facilities because they often diminish the sense of liveliness and security at the ground level. Therefore, bridges between buildings must be designed to maintain the same sense of connection that a ground-level open axis provides. In addition, bridges can be learning and social places for students, if the width of a bridge is appropriately provided to incorporate furniture and technology, in addition to circulation. The bridge at the Chemical and Life Science Building is a good example because it acts as an important gateway between the exterior elements on either side of it without creating dead space underneath. Views through it are carefully framed to maintain a sense of open passage that preserves the importance of its axial terminus, prominent vantage points, and landmarks.

- Parking Garages are a unique building type that require contextual design intervention to mitigate the typically austere appearance. Large blank walls and continuous strip windows should be avoided in favor of fenestration patterns more closely resembling inhabited buildings. Devices such as louvers or screens can be employed to make the façade surface more regular. Where possible, the first floor level of parking garages should be designed for human occupancy uses (such as retail, office, or service functions that will maintain activity at the ground level).

SUSTAINABILITY

With the university's creation and implementation of the 2015 Illinois Climate Action Plan (iCAP) and 2016 signing of the Second Nature Resilience Commitment, the University of Illinois at Urbana-Champaign has made a commitment to being a model of sustainability. These two documents (refer to http://sustainability.illinois.edu/campus-sustainability/icap/ for documents) provide guidelines and a narrative for sustainable future planning, including the aggressive goal of carbon neutrality by the year 2050. Building design, energy infrastructure and usage, and site elements all contribute to this policy's implementation. As a part of iCAP, a policy for Zero Net Growth was also implemented in 2015. The intent is for all new buildings and additions to be balanced with the 2015 baseline square footage of campus buildings. These considerations will have a direct impact on all projects undertaken on campus and additional discussion should take place to further assess the university in meeting iCAP goals.

ENERGY CONSERVATION AND BUILDING STANDARDS

As part of the sustainability initiatives outlined in iCAP, several strategies were identified that would contribute to conservation efforts, such as improve energy efficiency, improve indoor building environments, conserve water-use throughout campus, and implement an initiative to develop a campus-wide energy conservation master plan. iCAP outlines strategies that can be incorporated into the design of both new buildings and existing buildings. Examples of strategies include but are not limited to the following:

Existing elevation with window air-conditioner units

Newmark Civil Engineering Laboratory green roof

External example of photovoltaic panels on roof of a parking structure

Transparent facade of the College of Business Instructional Facility

- Integrating geothermal with a hot water distribution system.
- Providing air-source heat pumps to allow more energy efficient cooling and heating of existing buildings in lieu of individual room air-conditioner units.
- Renovating existing buildings to improve the exterior envelope's overall performance and thermal value resulting in reduced energy loss.
- Installing energy efficient windows.
- Expanding solar photovoltaics, solar thermal, and on-site campus solar energy production.
- Installing water-use reduction fixtures and gray water capture and reuse where possible.
- Increasing the tree canopy for the campus in order to reduce heat island effects and improve carbon sequestration in campus soils, as well as increase overall enjoyment for pedestrians.
- Add green infrastructure in order to retain water on site and improve infiltration and groundwater recharge.

In addition, new buildings can be oriented to incorporate daylighting and minimize reliance on artificial lighting. Incorporating elements that allow users to have control over their indoor environment will enhance the comfort of indoor spaces responding to the user's needs. These individual efforts would improve energy conservation efforts contributing to a more sustainable campus community.

SITE DESIGN GUIDELINES

While streets and buildings define the basic open space framework of campus, its character and the way it is perceived are largely determined by the treatment of the campus landscape. The Campus Master Plan categorizes landscape types as Civic Spaces (e.g. Main Quad and the Oval Allée), Courtyards (e.g. Beckman Courtyard and Commerce Courtyard), various dedicated use areas (e.g. Morrow Plots, Illini Grove, Campus Recreation and Athletic Fields, and parking lots), and quite a few spaces in-front-of and in-between buildings (e.g. "Alma Mater" Plaza and Chi Omega Plaza) – all of which differ in function and appearance.

Just as each new campus building must establish clear and enduring ties to existing and planned facilities, new site developments must connect with current and proposed campus surroundings. To visually reinforce the connectedness and permanence of the landscape throughout campus, common site design qualities (defined in terms of color, form, shape, size, and texture) should be arranged to achieve the desired visual continuity and spatial definition. Site design qualities are found and managed in the elements that comprise campus landscape/open spaces. Plantings and pavements offer the biggest visual impact, but other elements (e.g. gateways, lighting, sculpture, fountains, signage, site furnishings, topography, and walls) also play an important role in how the campus is ultimately perceived.

View of Main Quad looking south

View of the Morrow Plots in early spring

Chi Omega Plaza - View along the informal pathway looking south-eastward toward the Main Quad and Lincoln Hall.

Alma Mater Gateway Plaza

CAMPUS LANDSCAPE VISION

The university envisions a campus landscape that achieves the following objectives:

- Create and maintain a sense of place that is inspiring, fosters appreciation for the Illinois natural and cultural heritage, and protects campus historic landscapes.
- Provide an environment that is safe, accessible, encourages healthy activities, and which is supportive of education outside the traditional classroom.
- Foster a dignified campus setting that is appropriate to an institution of higher education.
- Utilize resources responsibly through the appropriate use of materials, practices, and technologies to achieve an ecologically-friendly and sustainable campus landscape.
- Design a clean, simple, and understated landscape that is an elegant public space and reasonable to maintain. Visual complexity should be focused at the main building entrances, with secondary and tertiary facades simplified greatly, even to a simple lawn panel or decorative stone maintenance edge
- Establish a comprehensively-designed campus landscape where the need for later “fixes” (e.g. post-and-chain barriers used to block undesired pedestrian pathways) are avoided.

McFarland Carillon at the South Quad along the Military Axis

Main Quad an important campus civic space

View of Main Quad

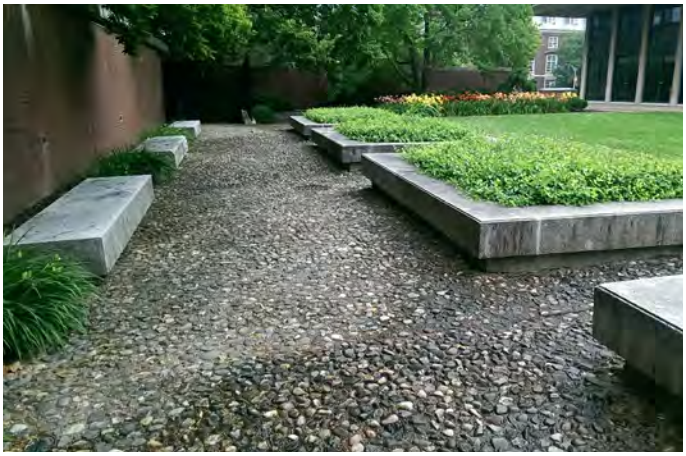
- With increasing public requests for native plantings and the influence of sustainable landscapes, these areas should be detailed using native and naturalized plantings with a strong orderly design ethic. When located around buildings, these planting beds should not be randomly mixed together, but should be carefully thought out to provide plant massings appropriate in scale and diversity to our large educational buildings. Mixed group plantings should be used sparingly and sited appropriately into more courtyard spaces, as opposed to civic or public spaces.
- Plantings that lend themselves to a positive visual aesthetic, in addition to providing food for pollinators should be also be prioritized.

Historically, courtyards and the areas in-between buildings have been developed with informal designs and accents contrasting the formality of the larger, adjacent civic spaces. This hierarchy helps to reinforce the campus' urban structure by offering a sense of orientation, delineating transitions into vehicular-free zones, and encouraging the variety of spaces that appear and function in diverse ways to meet different programmatic needs. As the design characteristics of developing civic spaces evolve, issues of formality and other site design qualities should be in keeping with the framework of the Campus Master Plan and with the nearby contextual character in order to maintain a campus-wide continuity.

Courtyard adjacent to the College of Business Instructional Facility

Entrance at the Student Dining and Residential Programming Building

Courtyard adjacent to Wassaja Hall

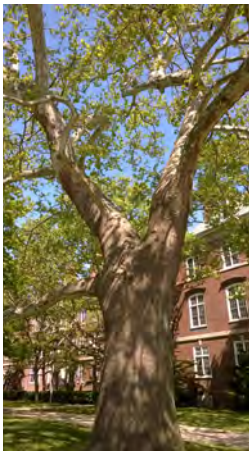


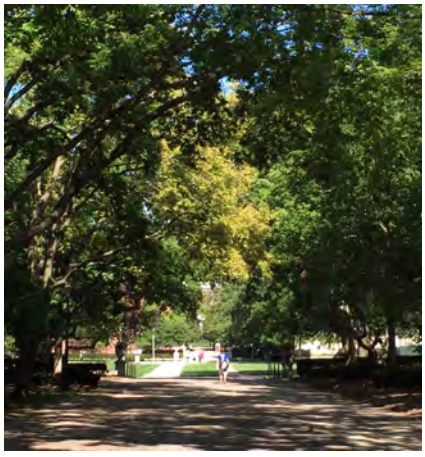
Courtyard adjacent to the Education Building

PLANTINGS

The following general principles will be used to guide campus planting design:

- For all campus areas, tree, shrub, and hedge plantings should be appropriate to the scale of the space. A broad stroke use of plants in large rows and masses is generally preferred to fussy, intricate plantings in order to maintain a proper scale relationship with large university buildings. Intimate scale plantings are only appropriate in smaller courtyard spaces and in proximity to smaller campus buildings.
- For all campus areas, plantings should reinforce the basic campus structure (defined by streets and buildings) and positively shape open spaces.
- In general, plantings in civic spaces and front yard landscapes should be simple and restrained, limiting the diversity of species within given groups or rows of trees, though not limiting diversity to where the design intent would be greatly impacted by a regional insect or disease event. This principle should also apply to the streetscapes and the framework open spaces associated with South campus developments (areas south of Kirby/Florida Avenues).
- Throughout campus, plant selections should favor plants that are native to Illinois. Native plants should be used except in situations where they are programmatically, functionally, and horticulturally inappropriate. Plants should be selected to match the existing soil and exposure conditions; however, soils and drainage patterns may be restored or modified to support native plantings and plant associations as supported by the project budget. With a changing climate bringing warmer weather, naturalized and adaptive plants should be explored to maintain a high quality landscape aesthetic over the next generations.
- The U of I Facilities Standards maintains and updates a list of approved plants that may be used on campus.
- Historic landscape areas of the campus shall be protected to retain their design integrity. Renewal of these areas may, however, include the replacement of historic plant species with carefully selected native species that fulfill the original design intent. Historic areas include, for example, the Main Quad and the front yard areas of the campus core. The historic landscape design elements consisting of a lawn panel, shade



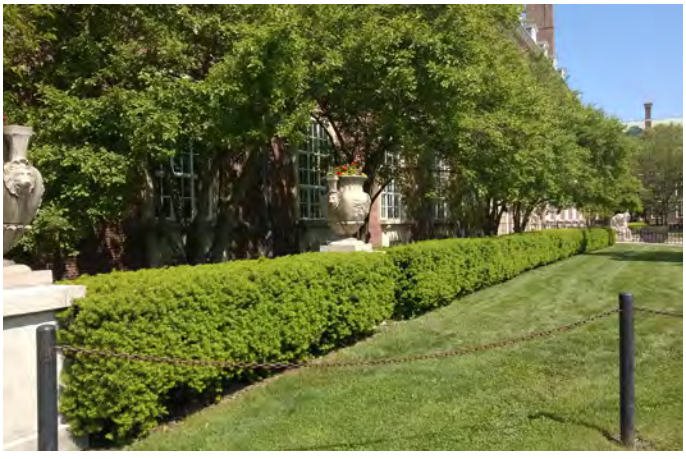


Preserve and protect mature trees throughout campus

Plant palette consisting of shade trees, ornamental trees, and groundcovers

trees, evergreen hedge, and ornamental trees should be preserved and maintained in the historic core. In areas of newer development, the historic landscape aesthetic should be encouraged. However, the evergreen hedges should not be used in mass. If a hedge is deemed appropriate, use of native grasses should be explored, with evergreen hedges to be used as deemed appropriate to the contextual landscape design and intended use (i.e. pedestrian control, vehicular screening, etc).

- Plantings for courtyards, residential quads, and other interstitial areas should be organized to increase the variety of campus landscape experiences and plants should be selected to increase the diversity of species employed on campus. Plants that support the local and migratory species should be incorporated to assist the local wildlife ecology. These areas should serve as a complement to the simpler, restrained design of the campus streets and civic spaces. As noted by Ferruccio Vitale (consulting landscape architect who established the space-defining landscape characteristics for the campus environs in his 1929 landscape framework report that continues to influence the university's development patterns and the role of plants in its landscape), these spaces should contrast with the great quads and malls of the civic landscape. Their scale can be more intimate and personal, their design can be tailored to the specific functions of buildings, and the character their spaces can vary from area to area.
- For the rural South campus areas, plantings should be consistent with the character of the existing agricultural and natural landscape. For example, shelterbelt plantings next to the Research Park and other South campus research centers are appropriate.



Landscape of lawn, shade trees, evergreen hedge in historic campus civic spaces

Surrounding campus areas should incorporate a diversity of native species and support informal spaces adjacent to campus buildings

PAVEMENTS

Patterns of circulation for the campus are built around the idea of using existing street corridors for vehicle, bicycle, and pedestrian pathways. In addition to roadways, the other types of off-street pavements described in this section include service and emergency access drives, vehicular and bicycle parking, pedestrian and bicycle pathways, and malls and plazas. The individual design and layout of pavements should emphasize pedestrian movement as the primary means of movement on campus. Therefore, locations with conflict between bicycles, pedestrians, and/or vehicles should be well lit and regulated by signage and/or other means that grants the right-of-way to pedestrians.

Service and maintenance access roads, as well as emergency service access, should be located in accordance with campus standards and should be curbed except in the rural South campus areas. All service drives should suit the specific service requirements of the facility it serves as well as be designed to conform to the U of I Facilities Standards with allowances for service vehicles and emergency access. Where service drives must also function as pedestrian pathways, they should be kept free of parking, provide adequate space for pedestrian refuge, and visually appear as pedestrian space (e.g. Chemical and Life Science Laboratory). When roads and streets are removed and replaced by boardwalks that also serve as limited vehicular use, the geometries shall include adequate access for vehicle turn around or back up.

Along public streets, the street edge between curb and buildings should be designed to reflect the intensity of pedestrian use (e.g. Wright Street Transit Plaza). Areas of high pedestrian use should be paved and areas of lower usage should include a planted parkway. Where underground utilities do not conflict, trees should be placed behind the curb in a continuous planting bed with pedestrian walkways behind the tree line to remove pedestrian activity from the immediate street edge. Wherever possible, bicycle lanes should be incorporated into the street and out of the pedestrian zone. For bicycle lanes that cut through campus, lanes should be designed with a separation from pedestrian traffic to minimize potential conflicts.

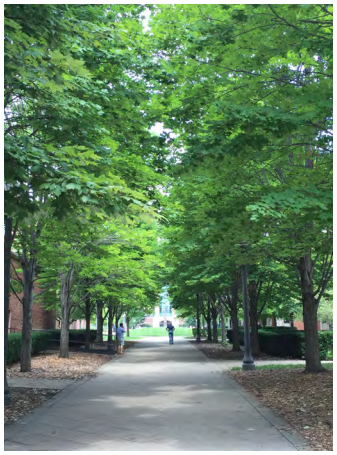
Where heavy pedestrian crossing activity or on-street parking precludes the use of a planted parkway street edge, pathway pavement may extend to the street curb. If continuous pavement abuts the street curb, tree plantings should be established in large cutouts with a minimum 100 square feet sized cutout to help ensure survivability (similar to Ikenberry Commons). When possible, additional soil volume should be provided through the use of engineered soil cells for the long-term health and longevity of the tree. Permeable pavements may also be employed to assist in water and air uptake for tree roots.

Pedestrian and bicycle pathways should be poured-in-place concrete. Where bicycle paths are not multi-use paths, they should have painted, traffic control striping that differentiates them from pedestrian pathways. All pedestrian paths should be a minimum 6-foot width and meet public accessibility needs. Any pathways or plazas over 6-foot wide should be designed to accommodate vehicular traffic for service and snow removal (e.g. the larger walks in the Main Quad). Bicycle pathways should support two-way travel with a minimum 8-foot width, however 10-foot width is preferred. Multi-use paths should be a minimum 10-foot width and a minimum pavement thickness of 8 inches to meet required vehicle loads.

The use of proven hardscape design techniques and advancements in pavement material technology that promotes better storm water infiltration and groundwater recharge throughout campus shall be encouraged alongside the use of green infrastructure. Appropriate space should be provided adjacent to all buildings for landscape and future maintenance access.

Bicycle pathway with dedicated signage to accommodate two-way travel

Thomas M. Siebel Center for Computer Science - view of the integrated universal access design at the southwest entrance



Campus walks

Tree planting within Ikenberry Commons

GATEWAYS

Gateways communicate an arrival and entry to the campus defining the visitor's experience. The primary purpose of gateways, whether pedestrian or vehicular, should be the symbolic passage to and the clear definition of the campus realm (e.g. gateway at the Beckman Institute for Advanced Science and Technology). Secondarily, gateways may also be made operational, where appropriate, to regulate access. The overall scale and function of the gateway structures should be designed to relate to the visitor's arrival experience. The design and materiality should express the importance of the university as an enduring, public institution (e.g. Wright Street gateway). Brick, stone, and metal (steel, wrought iron, and/or bronze) are all suitable materials that are consistent with the campus aesthetic. Incorporating landscape, lighting, and signage further designates these significant entry points and campus edge creating a sense of hierarchy for the university.

Campus gateway combined with signage

Eastward view through the campus gateway at Wright Street

View of campus gateway from Springfield Avenue looking towards the Beckman Institute for Advanced Science and Technology

View of campus gateway with gates to regulate access

LIGHTING

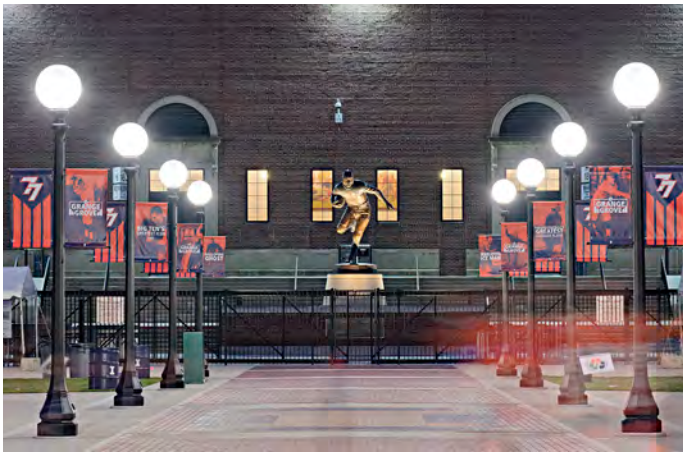
Campus lighting must conform to the specifications in the U of I Facilities Standards, and should be organized in simple patterns that reinforce the basic structure of streets, open spaces, and pathways (bicycle and pedestrian). Where lights follow streets or pathways, they should be placed in straight rows on one or both sides but preferably not in a staggered, alternating pattern. Pathways will ordinarily only require lighting from one side, so a single row will suffice. Roadway lighting may require lighting on both sides, in which case lights should be placed opposite one another. Alternating light placement does not result in the simple and readable pattern that a single row or paired double row does, especially where the road is relatively short.

Poles and fixtures for lighting pathways and open spaces should be uniform and in conformance with the U of I Facilities Standards. New poles and fixtures should be selected for compatibility with existing pedestrian lighting on campus and are subject to approval by the Director of F&S Planning and the ARC. Pathway light sources should be LED with a uniform illumination level of ½ foot-candles and dark sky compliant, projecting downward only. Lighting for service areas and surface parking lots should use dark sky compliant LED fixtures on 30- to 35-foot poles that are coordinated with tree canopies and walls/screens. These poles and fixtures should be a simple inconspicuous design that conforms with the U of I Facilities Standards. An LED lighting level of ½ foot-candle should be maintained in surface parking lots and service areas.

Exterior lighting of buildings should be confined to entrance points and special features such as the Illini Union cupola. Entrance lighting may use exposed or concealed source fixtures. Entrance lighting may use exposed or concealed source LED fixtures.

Historic fixture

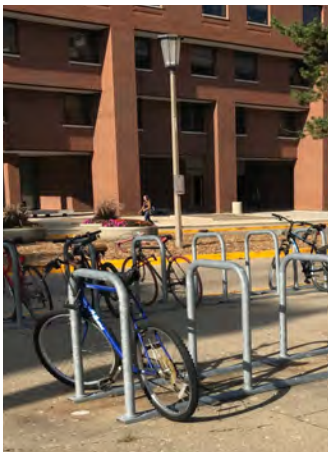
New campus standard fixture to replace historic lantern style fixture



View of globe fixtures with integrated signage banners

View of new campus standard fixture (to be used in lieu of the globe fixture)

Typical concrete bench detail



Standard bicycle racks

Waste receptacle

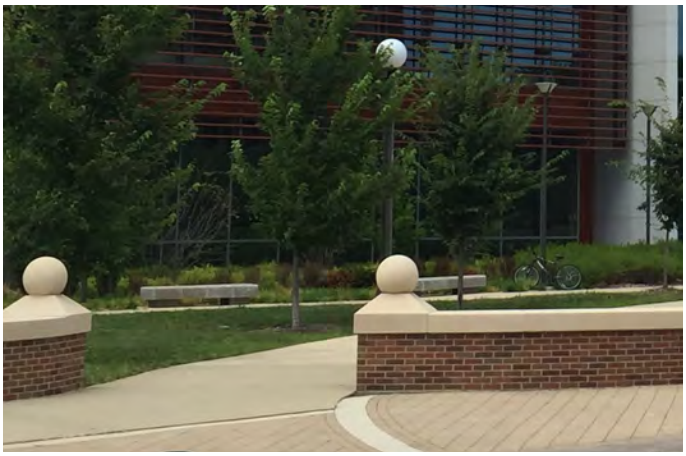
Specialized site benches at building entry

View of site tables, chairs, and umbrellas in a courtyard

FURNISHINGS

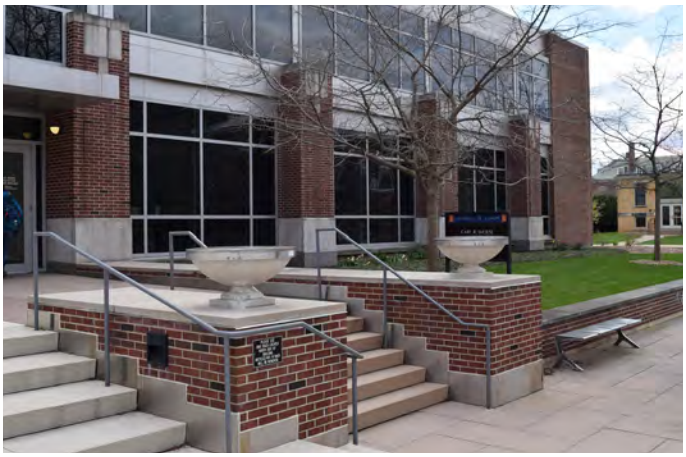
The U of I Facilities Standards has guidelines and specifications for vandalism-resistant site furnishings including bicycle racks, bollards, planters, trash receptacles, and benches to be used in the more public areas of campus civic spaces such as the Main Quad, front yards, and parking lots/facilities. However, courtyard spaces provide opportunities for more specialized site furnishing design to enhance a project's programmatic needs. Movable furniture should be reserved only for areas with monitored access.

Retaining walls along the campus walk west of Foellinger Auditorium



Brick site walls capped with cast stone/stone define campus space

Memorial Stadium - combination of site walls and fencing at special locations



Carl R. Woese Institute for Genomic Biology - retaining walls at entrance relate to building materiality and design

WALLS AND FENCES

Walls provide a clear definition of the campus realm. Walls function much like and are often built in concert with campus gateways. Walls also provide screening, seating, plant containers, and retaining for abrupt grade changes (e.g. walls west of Foellinger Auditorium).

The scale of walls and the materials used to construct them (generally brick, stone, and wrought iron) should not only reflect their practical usage and immediate building context but also illustrate the university's importance and enduring qualities as a public institution.

Fencing is generally only utilized for athletics/recreation fields, storage, or operations facilities (e.g. Campus Recreation Fields along Stadium Drive) in the North and Central campuses; however, it is used more extensively in the larger scale research, storage, and training facilities (e.g. new ACES Field Research Station fencing) of the South campus. The U of I Facilities Standards have specifications for campus standard fences for these various campus applications.

Screening of service area with combination of site walls and planting to minimize visibility

Grainger Engineering Library Information Center Service Area

Ikenberry Commons service area screening example

Hedge screening and alternate grass screening of parking areas

SCREENING

Service areas, including generators, utility equipment, and loading docks, should not be located along main streets or major campus walks, where they can be visible to pedestrians. Screening for these site and building components should employ site walls or appropriately designed opaque fencing. Preferred materials for site walls include masonry (brick or stone). Enclosures for mechanical equipment such as generators, transformers, and dumpsters should also incorporate opaque metal gates or doors to allow for access and screen uses from view while simultaneously securing access to service areas. These enclosures should be designed with materials to fit harmoniously into the site with their adjacent buildings and surrounding campus facilities. Heavy duty hinges and hardware should be used to accommodate frequent use of gates. Evergreen trees and hedges can also be used as secondary means to screen service areas from view. All screening for surface vehicle and bicycle parking lots must be designed so that views in and out of the space are not obscured to the point of making them unsafe.

SIGNAGE

A comprehensive unified signage approach will further define university's campus identity for visitors, students, and staff. Various categories should be incorporated to ensure a consistent design and hierarchy effectively allowing visitors to easily navigate the campus. The design can be periodically updated to maintain consistency with the university's overall branding and campus identity. At minimum the following signage types would be included:

- Regional signage directing to and from campus
- Gateway signage
- Campus area or "neighborhood" identification signage
- Parking lot identification and regulatory signage
- Campus map directory signage
- Visitor destination signage
- Street name signage
- Light Pole Banners
- Electric signage (where applicable)
- Wayfinding signage adjacent to sidewalks
- Free-standing building name signs
- Dedication plaques
- Historic signage

All campus facilities shall have a campus standard building sign, as specified in the U of I Facilities Standards and the Exterior Signage Guidelines, displaying the name of the facility and its street address only. Additional naming for departments or colleges should be avoided and will only be approved in exceptional cases. These signs are manufactured and installed by F&S, but must be planned for in any project design. Other fixed, site signage on campus (retail advertisements, informational/directional "wayfinding," and traffic safety/control) shall, to the extent feasible, match or coordinate with the campus facility signage and/or the street and traffic signage provided by the municipalities of the university district. All signage, either temporary or permanent, to be reviewed and approved by the Director of F&S Planning and the ARC. Additionally, any signage with the potential to detract from the campus setting, such as an electronic marquee, will be reviewed by the CDAC.

Campus standard building signage and historic plaque

Campus parking and street signage

Campus Gateway Signage

Campus Wayfinding Signage standard

SCULPTURE AND FOUNTAINS

Art is a special element in the landscape and, as such, should create delight as well as accentuate the quality of campus' built environment. Works of art are a secondary level of landmarks that must be in harmony with the larger order of building landmarks. Appropriate scale and character of sculpture and fountains is critical to success in any location. Generally, sculpture and fountains should be large enough to fit within the surrounding space, but should not be so monumentality massive to overpower the setting. In addition, these elements should be understood as objects to endure with a classical, timeless quality rather than a style associated with short-lived trends.

Sculpture/fountain design should always be integral to its immediate setting. The design of a given art display setting should be expanded to include more than the selection and placement of the work. Lighting, pavements, plantings, site furniture, topography, and walls should all be arranged to integrate the campus landscape and the art work. The environment should be arranged so if the sculpture/fountain were removed, one would feel that it was missing (e.g. "Diana" at the Illini Union).

Water may be combined with sculptural elements or may be used sculpturally itself (e.g. "Janet Weston Fountain" at David Kinley Hall). How a piece will visually appear in times when water is not present must also be considered. For instance, large reflecting pools are generally not recommended because they are lifeless and conspicuous when not in use.

Diana Sculpture/Fountain at Illini Union

Janet Weston Fountain at David Kinley Hall

Mananaan at the south quad of the Grainger Engineering Library Information Center

Upwells near the Beckman Institute for Advanced Science and Technology and Electrical and Computer Engineering Building

TOPOGRAPHY

The dominant landform characteristic of the overall campus is flat, but gentle slopes can be found near drainage corridors and basins around campus. Given the horizontal uniformity of campus, abrupt vertical elevation changes are dramatic campus landscape effects that should be understood as man-made works rather than an out-of-context “naturalized” elements. For example, since mounds would not normally be found in the local geography, earth berms are generally avoided except where integrated as sculpture or part of a sculptural work. An example is the mounded area along Peabody Drive in front of the Art and Design Building. Vertical design elements in the landscape must maintain accessibility as an integral component of design rather-than a conspicuous afterthought to meet code such as the southwest entrance of the Thomas M. Siebel Center for Computer Science.

Where noticeable grade change is present, site design should take advantage of this feature, as functionally appropriate, to enhance the quality of the facility and the overall campus landscape. For instance, an existing low area on site might be an opportunity to develop a rain garden that will increase the biodiversity of a given area and provide a natural groundwater recharge basin reducing the amount of storm water pipes required.

Thomas M. Siebel Center for Computer Science - integrated site design addresses grade issues maintaining accessibility for visitors at the southwest entrance

View of Oval Allee

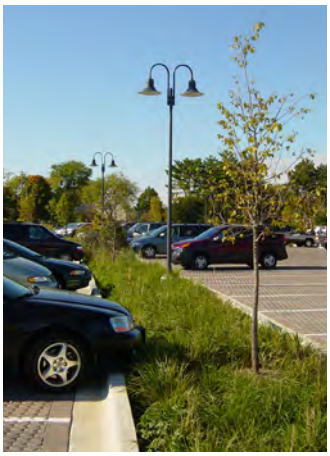
Carl W. Woese Institute for Genomic Biology - roof terrace and courtyard

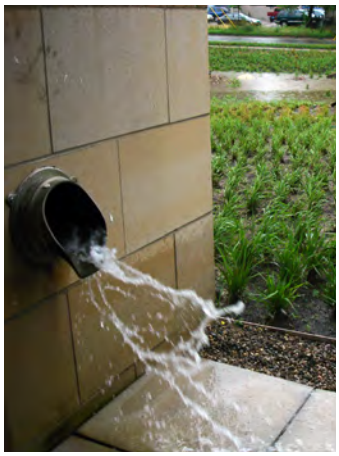
Krannert Center for the Performing Arts

UTILITIES

As the campus consists of a vast web of interlaced utilities, these connections should always be designed to be easily maintained, yet be visually subordinate to all other campus elements. Elements that need to be mounted on the exterior, such as Wi-Fi units, should be properly and carefully located and designed as not to be visually intrusive. They should also be incorporated into mountings that are removable or that serve dual purposes, as technology rapidly changes and we do not want to introduce long-term elements into the campus landscape that may only serve short-term needs. Similarly, telecommunications equipment is preferred to be added to street poles and street lights. When equipment needs to be mounted to the building, it should be carefully designed and screened such that it does not appear obvious.

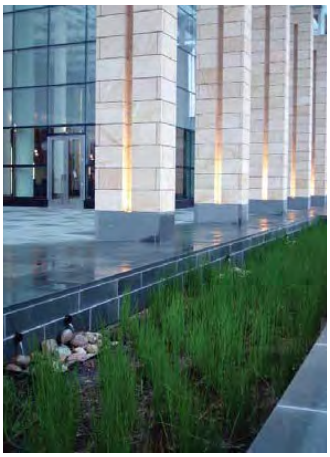
Newmark Civil Engineering Laboratory green roof





External example of a bioswale with permeable pavers and overflow drain

External example of a raingarden with native plantings



External example of Infiltration planters both along the street and located adjacent to a building entry

SUSTAINABILITY

The iCAP sustainability initiatives also focus on strategies to create a more sustainable and high performing site environment. Various Best Management Practices could be implemented allowing for greater infiltration, improving stormwater quality, and resulting in reduced stormwater runoff throughout the campus. Strategies include, but are not limited to the following:

- Bioswales
- Constructed wetlands
- Stormwater infiltration planters
- Raingardens
- Greenroofs
- Cisterns
- Reuse of graywater for irrigation where permitted by code
- Incorporating native or adaptive planting to minimize irrigation and maintenance requirements
- Permeable pavement including permeable pavers, pervious concrete, and porous asphalt where possible given site conditions
- Reuse of graywater for building plumbing fixtures, where permitted by code
- Promote an active transportation network to help reduce vehicle emissions

These combined strategies will create a high performing campus and landscape. Strategies can also be incorporated as an educational feature throughout campus.

Combination of meadow native planting and low-mow grasses

Solar Farm

CONCLUSION

While individual project decisions may seem minor at the time they are made, a series of uncoordinated changes will result in an ad-hoc campus aesthetic. The university prepared and enforces these guidelines to help ensure the coordination of design elements critical to its visual identity and future legacy.

The Hallene Gateway

ANNOTATED SOURCE LIST

The University of Illinois at Urbana-Champaign Campus Master Plan Update references many sources that contribute to its final form. Following is a list of sources, arranged in chronological order, that provide historic documentation as to the rationale that influenced development the campus master plan to its current state. Many of the sources are on file at the University of Illinois Library or can be downloaded at http://www.uofpp.uillinois.edu/UIUCplan.htm.

Tilton, Leon Deming and Thomas Edward O'Donnell. *The Illinois Campus Plan.* Urbana-Champaign, IL: The University of Illinois Press, 1930.

- Book documenting the campus history growth and development of the University of Illinois from 1867 until 1930.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign North Campus Master Plan.* Watertown, MA: The Board of Trustees of the University of Illinois, April 1986.

- Master plan report created to guide the growth and development of the North Campus into the twenty-first century. The report focused on the North Campus area from University Avenue to Green street and from 6th street to Lincoln avenue at the Urbana-Champaign Campus.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign South Campus Master Plan.* Watertown, MA: The Board of Trustees of the University of Illinois, September 1986.

- Master plan report created to guide the growth and development of the South Campus into the twenty-first century. The report focused on the South Campus area from Nevada street to St. Mary's road and from Neil street to Lincoln avenue. The South Campus area is now considered part of the Central Campus Planning area.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign Central Campus Master Plan.* Watertown, MA: The Board of Trustees of the University of Illinois, October 1989.

- Master plan report created to guide the growth and development of the Central Campus planning area into the twenty-first century. The report focused on the Central Campus planning area from Green street to Gregory drive and from 4th street to Lincoln avenue at the Urbana-Champaign Campus.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign Arboretum Master Plan.* Watertown, MA: The Board of Trustees of the University of Illinois, July 1990.

- Master plan created to guide the development of the Arboretum planning area. The report focused on the area from Florida avenue to Windsor road and from Lincoln avenue to Race street at the Urbana-Champaign Campus.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign South Farms Master Plan.* Watertown, MA: The Board of Trustees of the University of Illinois, September 1990.

- Master plan report created to guide the growth and development of the South Farms planning area into the twenty-first Century. The master plan report focused on the area from Kirby/Florida avenues to Church Street/Deers Road and from Neil street to Philo road.

Campus Safety Task Force. *Campus Safety Task Force Report. (Produced by the University Office for Capital Programs)* Urbana-Champaign, IL: The Board of Trustees of the University of Illinois, 1995.

- Report focusing on 3 primary areas of a comprehensive approach to increase safety and preventative measures on the University of Illinois at Urbana-Champaign Campus: safety education, enforcement, and facilities planning.

University Office for Capital Programs. *University of Illinois at Urbana-Champaign Core Campus Master Plan Update.* Champaign, IL: The Board of Trustees of the University of Illinois, October 1996.

- An accumulation of information concerning landscape historical background, master plan landscape design guidelines, campus tree inventory data, the landscape planning and design process, and summaries of major landscape and site initiatives (circa 1994) in the Core Academic Campus planning area. The master plan focused on the area from University avenue to St. Mary's road and from Neil street to Lincoln avenue at the Urbana-Champaign Campus.

University of Illinois at Urbana-Champaign Office for Project Planning and Facilities Management. *Historic Preservation: University of Illinois at Urbana-Champaign.* Urbana-Champaign, IL: The Board of Trustees of the University of Illinois, 1998.

- A historic preservation report focused on the history and historic resources of the University of Illinois at Urbana-Champaign Campus.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign South Campus Master Plan.* Watertown, MA: The Board of Trustees of the University of Illinois, June 1999.

- Master plan report on the formerly named South Farms planning area. The master plan report was created to guide the future growth and development of the formerly named South Farms planning area. The report focused on the area from Kirby/Florida avenue to Airport road and from Neil street to Philo road.

Bucher, Willis & Ratliff Corporation. *University of Illinois Campus Area Transportation Study Final Report*. St. Louis, MO: Champaign-Urbana Urbanized Area Transportation Study (CATS), June 1999.

- Report on the collective efforts of the Champaign-Urbana Urbanized Area Transportation Study, the Cities of Urbana and Champaign, the University of Illinois, the Illinois Department of Transportation, and the Champaign-Urbana Mass Transit District that discusses how travel should be accommodated in the University District among vehicles, pedestrians, bicycles, and transit as well as priorities for future funding.

SmithGroup JJR. *University of Illinois at Urbana-Champaign North Campus Planning Feasibility Study.* Chicago, IL: The Board of Trustees of the University of Illinois, September 2000.

- Feasibility study to determine the viability and development options for Research Park facilities in the North Campus area and adjacent to the City or Urbana properties. The report focuses on the area from University avenue to Springfield ave and from Wright street to Lincoln avenue.

Carl Walker, Inc. *University of Illinois at Urbana-Champaign Campus Parking Master Plan Final Report.* Glendale Heights, IL: The Board of Trustees of the University of Illinois, May 2001.

- Report on the existing parking demand, parking development priorities, and recommended revenue streams for automobile parking facilities in the Academic Core of campus.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign Arboretum Master Plan Update.* Watertown, MA: The Board of Trustees of the University of Illinois, June 2001.

- Master plan update report created to guide the development of the Arboretum at the Urbana-Champaign Campus. The report focused on the area from Florida avenue to Windsor road and from Lincoln avenue to Race street.

Sasaki Associates, Inc. *Land Use Plan for the South Campus Area Assigned to the Department of Natural Resources and Environmental Sciences.* Watertown, MA: The Board of Trustees of the University of Illinois, June 2001.

- Report to describe the NRES land and facilities program defining the specific land allocations and building organization within the acreage identified for NRES in the South Campus Master Plan (June 1999).

SmithGroupJJR. *University of Illinois at Urbana-Champaign South Campus Master Plan Update.* Chicago, IL: The Board of Trustees of the University of Illinois, July 2001.

- Master plan update report to address emerging Research Park issues in the planning area from St. Mary's road to Windsor road and from Neil street to Lincoln avenue. The Master Plan was an update to the 1999 South Campus Master Plan.

SmithGroupJJR. *University of Illinois Division of Intercollegiate Athletics Heritage Plan.* Chicago, IL: The Board of Trustees of the University of Illinois, 2002.

- Comprehensive plan focused on future growth areas for the Division of Intercollegiate Athletics.

Ellerbee Becket, Inc. University of Illinois at Urbana-Champaign Assembly Hall Feasibility Study. Kansas City, MO: The Board of Trustees of the University of Illinois, May 2002.

- Report to assess the feasibility of modernizing the Assembly Hall.

Ellerbee Becket, Inc. *University of Illinois at Urbana-Champaign New Arena / Assembly Hall Renovation Study.* Kansas City, MO: The Board of Trustees of the University of Illinois, July 2004.

- Report to study the feasibility of a new basketball specific facility and necessary requirements to modernize the Assembly Hall to enable it to remain a competitive multi-purpose arena facility (without University of Illinois at Urbana-Champaign Basketball) for the foreseeable future. The report was based on the 2002 Assembly Hall Feasibility Study.

Jones Lang LaSalle IP, Inc. *Retail Assessment of the University of Illinois at Urbana-Champaign.* Chicago, IL: The Board of Trustees of the University of Illinois, May 2004.

- Master Plan Update (2007) report to assess the Urbana-Champaign retail market in general, existing University of Illinois at Urbana-Champaign retail locations, and five retail locations under consideration.

Brailsford & Dunlavey. *University of Illinois Orchard Downs Redevelopment Plan.* Washington, DC: The Board of Trustees of the University of Illinois, September 2004.

- Report to examine strategies for improving the family and graduate housing neighborhood at Orchard Downs.

Cannon Design. *University of Illinois at Urbana-Champaign Research Park Master Plan: A Vision for Growth*. Chicago, IL: Fox/Atkins Development, LLC., Champaign, IL, 2004, updated by Fox/Atkins Development, LLC, February 2005.

- Master plan update report produced by the University of Illinois at Urbana-Champaign Research Park Master Developer with input from multiple stakeholders to communicate future plans for development of the University of Illinois at Urbana-Champaign Research Park area. The report focused on the area from St. Mary's road to Windsor avenue and from Neil street to 4th street.

Mackey Mitchell Associates. *University of Illinois Champaign Residence Halls Redevelopment Master Plan*. St. Louis, MO: The Board of Trustees of the University of Illinois, February 2005.

- Report to study the various approaches to redeveloping the Champaign Residence Halls (new construction, renovation, or a combination of new/renovation), phasing, and the best long-term site plan solution for the University.

Booth Hansen. *University of Illinois Champaign Residence Halls Redevelopment Master Plan Update.* Chicago, IL: The Board of Trustees of the University of Illinois, May 2006.

- Based on the Mackey Mitchell Associates study in February 2005, Student Dining/Residential Programs Building and First Wing of the New Residence Hall was the first project to evolve from the Champaign Residence Hall Redevelopment. During the planning of this project, the Booth Hansen team developed a revised master plan scheme for the site, which is shown in the 2007 Master Plan Update.

Martin/Alexiou/Bryson, PLLC. *University of Illinois at Urbana-Champaign Intermodal Study.* Raleigh, NC: The Board of Trustees of the University of Illinois, July 2006.

- Transportation study to: review existing studies and plans; review and assess existing conditions; project and assess future conditions; perform peer review and comparative studies; develop goals, objectives, and criteria; develop alternative plans; identify incentives to use alternative modes; develop final plan; and develop priorities and phasing recommendations.

University of Illinois. *Vision for Orchard Downs.* Urbana-Champaign, IL: The Board of Trustees of the University of Illinois, October 2006.

- Informational brochure distributed to community stakeholders to convey the intended expectations of the project.

University of Illinois Facilities & Services, Engineering and Transportation Services, Transportation Demand Management. *Campus Bicycle Network Master Plan for the University of Illinois at Urbana-Champaign.* Urbana-Champaign, IL. The Board of Trustees of the University of Illinois, May 2014.

- Master plan report to: assess state of campus bicycle network, provide recommendations for improving connectivity, and determine strategies for implementation.

Champaign Urbana Urbanized Area Transportation Study (CUUATS). *Sustainable Choices 2040: Long Range Transportation Plan.* Urbana, IL; Champaign, IL: Champaign County Regional Planning Commission (CCRPC), December 2014.

- Report to: assess the pedestrian, bicycle, bus, pedestrian, automobile, rail, and air transit in the Champaign-Urbana Urbanized area; create a 25-year vision for the transportation network of Urbana-Champaign; provide recommendations to create a safe, health-promoting, efficient, and economical transportation system for the Urbana Champaign urbanized area.

Champaign Urbana Urbanized Area Transportation Study (CUUATS). *Urbana Bicycle Master Plan.* Urbana, IL. City of Urbana, December 2016.

- Master Plan report to: compare the City of Urbana's bicycle network to peers, establish design guidelines, assess existing conditions, provide recommendations for improving bicycle transportation in the City of Urbana.

Champaign-Urbana Mass Transit District. *Bus Route Maps.* Urbana, IL. Champaign-Urbana Mass Transit District, July 2017.

- Transit maps identifying the campus and city bus routes and schedules.

Catalyst Consulting, LSA Associates. *City of Champaign Transportation Master Plan.* City of Champaign, January 2008.

- Master plan report to: assess the current transportation network, create a vision for the the future of the City of Champaign's multi-modal transportation network, determine required capital investment, prioritize improvements.

Clark Dietz Engineers. *Multimodal Corridor Enhancement Project: Plans for Proposed Street Improvements Volumes 1 - 4.* State of Illinois Department of Transportation, April 2016.

- Construction douments with drawings of proposed road improvements as part of the Multimodal Corridor Enhancement Project (MCORE) project.

SMITHGROUP