UNIVERSITY OF SOUTHERN INDIANA

2018
CAMPUS MASTER PLAN

SMITHGROUPJJR

CONTENTS

01

EXECUTIVE SUMMARY

MASTER PLAN PURPOSE AND INTENT

The 2018 Campus Master Plan for the University of Southern Indiana (USI) represents a unifying vision for the institution which aligns the University's academic mission, strategic plan, and physical development goals into a single document. This plan will help to guide the future direction of the University.

The Campus Master Plan is a collection of powerful ideas. These ideas establish the framework for coordinating physical change on campus within the context of a holistic, long-term vision. This document is designed to serve as a tool to adapt and flexibly respond to unexpected future changes.

The Campus Master Plan focuses on providing realistic, yet visionary solutions to reach USI's future goals by building upon key drivers and guiding principles outlined within this report. It also captures the ambitions expressed by a wide range of university and community stakeholders.

Many of the concepts illustrated in this plan are multi-step initiatives that may require more than one project to achieve. The Campus Master Plan provides parameters to strategically manage and phase opportunities over short, mid, and long-term time horizons.

MASTER PLANNING PROCESS

The Campus Master Plan was completed within a 12-month planning process that was divided into four primary phases: Phase I (Discovery), Phase II (Analysis), Phase III (Planning), and Phase IV (Documentation). The result was a clear methodology, iterative in nature, which successfully identified the future vision for campus.

PHASE I

i.
Goal Setting

This task focused on learning from those who know the campus best: its stakeholders. Outreach sessions were held to make sure every voice was heard. The planning team then distilled ideas into key themes to guide the master plan.

ii.
Strategic Review

Existing data was collected from all facets of the university for strategic review by the planning team. This helped to establish initial opportunities and priorities, as well as identify specific areas for further investigation.

PHASE II

iii.
Analysis

During Analysis, the planning team evaluated both the physical features of campus, as well as spatial elements and organization. Conclusions established baseline parameters for design of the future campus framework.

iv.
Scenario Modeling

This phase involved the testing of ideas. Three alternative scenarios were presented and thoroughly scrutinized against the guiding principles, as well as political, financial, and logistical realities.

INVENTORY
WHAT DO WE HAVE TODAY?

- Enrollment Study
- Facilities Inventory
- Housing Feasibility
- Dining Evaluation
- Space Assessment
- Campus Characteristics
- Community Connections

VISION
WHAT IS THE IDEAL?

- Mission, Vision, Values
- Strategic Plan
- Key Themes
- Guiding Principles

STRATEGY
HOW DO WE GET THERE?

- Qualitative Assessment
- Space Utilization & Needs Study
- Housing Survey
- Site Analysis
- Circulation & Parking
- Safety and Security
- Signage & Wayfinding

DISCOVERY

ANALYSIS

v.
Updating the Plan

The best aspects of the alternative scenarios were refined into a preliminary plan, and ultimately into the final illustrative Campus Master Plan. This task quantified and verified the programmatic elements of the plan.

vi.
Implementation

The master plan also identified a phased development approach over short, medium, and long-term time horizons. Implementation strategies provide the University with a financial planning framework for future development.

vii.
Documentation

The final task involved preparation of the master plan report. This process included recording the master plan goals and objectives highlighting the decision making process, summarizing analysis, documenting the master plan recommendations, and outlining phasing strategies for implementation.

SCENARIOS
WHAT ARE OUR OPPORTUNITIES?

- Framework Plan
- Master Plan Program
- Differentiation Approach
- Alternative Development Concepts

THE PLAN
WHAT IS THE BEST WAY?

- Preliminary Master Plan
- Space/Location Guidelines
- Design Guidelines
- Housing Strategy
- Parking Plan
- Illustrations
- Phasing Plan
- Final Master Plan

MASTER PLAN
WHAT NEVER CHANGES? / WHAT DOES CHANGE?

- Final Master Plan
- Living Document
- On-Going Updates
- Illustrations
- Financial Model

PLANNING

DOCUMENTATION

BUILDING CONSENSUS

CAMPUS + COMMUNITY ENGAGEMENT

The Campus Master Plan is rooted in the University of Southern Indiana's Strategic Plan and institutional vision and mission. As a tool for building consensus, the master planning process included workshops, open forums, focus group meetings, committee meetings, and design charrettes. Input was solicited at every major decision point within the process.

An inclusive and transparent process was achieved by involving individuals from all facets of the University of Southern Indiana campus and community. The process required on-going commitment from USI leadership and committee members, as well as participation from students, faculty, staff, alumni, and Evansville citizenry.

A wide range of dedicated individuals from both the campus and the community provided thoughtful input which helped guide the master planning process. In addition, an interactive master plan website was developed to allow individuals unable to participate in person the ability to provide input as well.

CAMPUS HISTORY

1966

1975

1985

THE CAMPUS BEGINNING:
1960s (FOUNDING)

The University of Southern Indiana (USI) was founded in 1965 by a group of dedicated community leaders in response to a growing need for public higher education in southwestern Indiana. The University began as a regional campus of Indiana State University. By 1967, the Southern Indiana Higher Education, Inc. (SIHE) had raised $1 million to acquire 1,400 acres for the Mid-America University Center. In September of 1969, USI occupied 330 acres, mostly donated by SIHE.

A MID-CENTURY BOOM:
1970s-1990s

It was in the early 1970s that the University began to grow and develop in its current location within Evansville. It was during this two decade time period that the University witnessed its most significant changes. Buildings such as the Liberal Arts, Art Center, and University Center were constructed which began to form the core of campus. The circulation network and parking resources also were constructed and it was on April 16, 1985, that USI became a separate state university.

1995

2005

2015

THE CAMPUS TODAY:
1990s-PRESENT

The campus today reflects the significant growth and development which occurred during the 1990s and early 2000s. Iconic buildings such as Rice Library, the Business and Engineering Center, and University Center East and West now define the core of campus. There are currently four academic colleges which comprise the academic structure of the University: Romain College of Business, College of Liberal Arts, College of Nursing and Health Professions, and Pott College of Science, Engineering, and Education. The University of Southern Indiana now has an alumni network of over 40,500 students with a current enrollment of approximately 11,000 students.

MASTER PLAN DRIVERS

The 2018 Campus Master Plan for the University of Southern Indiana (USI) represents the culmination of an intensive year-long effort guided by USI leadership with broad input from faculty, staff, students and the community. The Campus Master Plan is strongly rooted in USI's Vision and Mission, as well as guided by the 2016 - 2020 Strategic Plan and future enrollment targets.

USI VISION

The University of Southern Indiana's vision is a simple but powerful one:

Shaping the future through learning and innovation.

USI MISSION STATEMENT

USI is an engaged learning community advancing education and knowledge, enhancing civic and cultural awareness, and fostering partnerships through comprehensive outreach programs. We prepare individuals to live wisely in a diverse and global community.

Strategic Plan

The University of Southern Indiana's 2016-2020 Strategic Plan includes three overarching goals:

- *Excellence in Learning for the Entire USI Community* - to recruit and retain outstanding students, we must be intentional in how faculty, staff and the community continue to learn and develop.

- *Access and Opportunity by Design* - intentional design of collaborative and diverse opportunities among students, faculty and staff by generating greater access between our expertise and talents and the organizations with whom we partner.

- *Purposeful and Sustainable Growth* - dynamic growth in student enrollment, in full-time faculty, in programs particularly with a focus on graduate education, in reputation and in geographic reach.
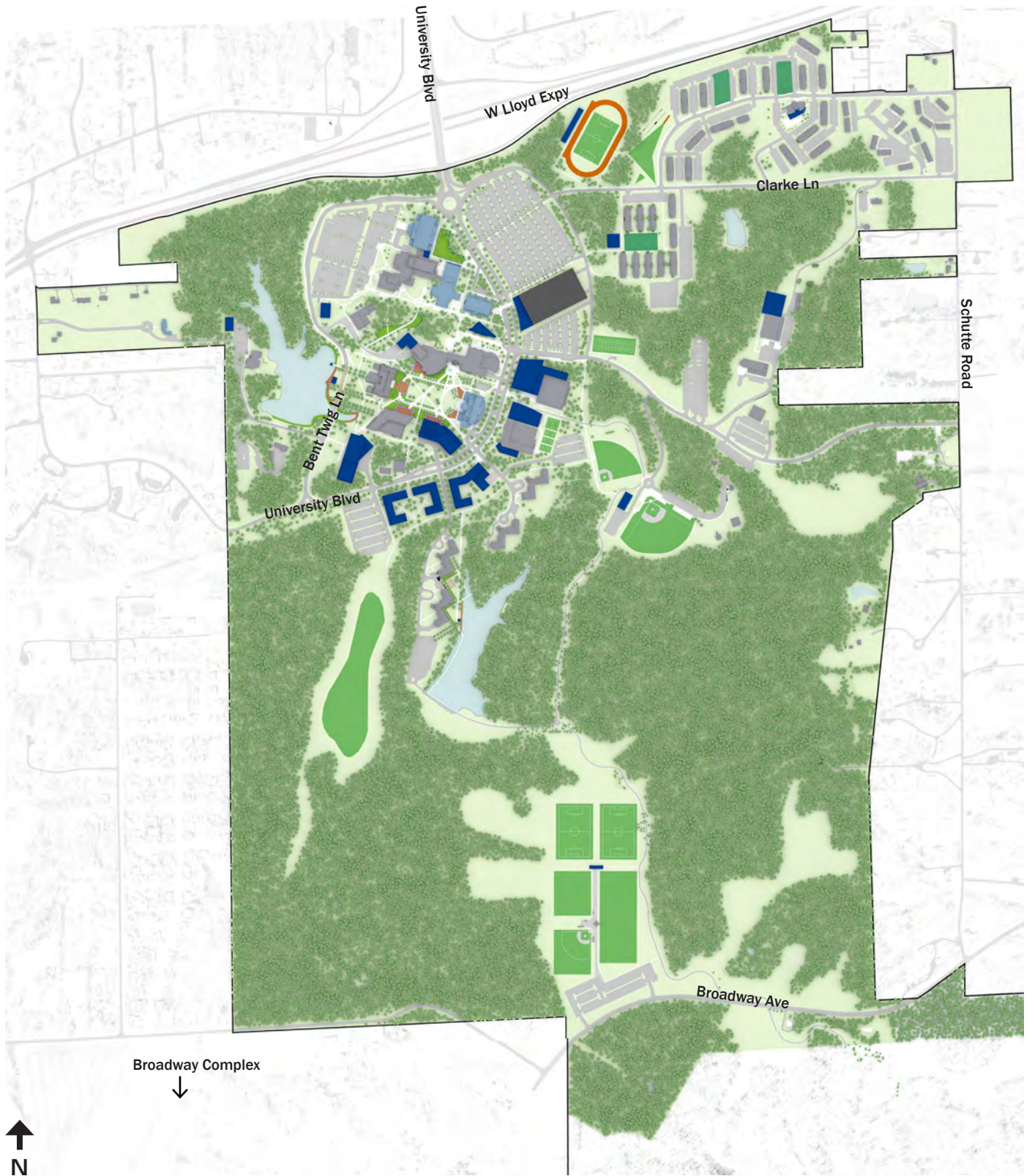
These three goals serve as the primary organizing elements for the Strategic Plan and provide a framework for future strategies and a platform from which the campus master planning process began.

Enrollment Growth

At the outset of the master planning process, USI Leadership outlined a series of enrollment goals. The Campus Master Plan aligns directly with both the goals of the Strategic Plan and future enrollment projections. The Plan has been developed to accommodate a 33% enrollment increase or nearly 14,000 total students, including the College Achievement Program (CAP). More than half of this growth is anticipated to occur in online programs.

Campus-Wide Space Needs

In order to address on-campus enrollment growth, the master planning process included an assessment of existing space utilization and future space needs to better understand specific programmatic growth areas. The findings demonstrated that there is an opportunity for increased classroom use, while at the same time a need for more specialized spaces such as teaching labs, study areas, assembly and exhibit space, and offices. An opportunity exists to reconsider outdated or underutilized academic spaces to address the need for increased collaboration zones and spaces targeted towards student success.

University Blvd

W Lloyd Expy

Clarke Ln

Schutte Road

Bent Twig Ln

University Blvd

Broadway Ave

Broadway Complex
↓

N

EXISTING BUILDING

PROPOSED BUILDING

PROPOSED RENOVATION

OPEN SPACE

ATHLETIC FIELDS

MASTER PLAN
GUIDING PRINCIPLES:

ENRICH THE ACADEMIC EXPERIENCE
The Campus Master Plan promotes strategies to enrich the academic experience thru the development of dynamic learning spaces and by repurposing existing facilities for higher impact.

TRANSFORM STUDENT LIFE
An opportunity exists to increase student housing, dining, recreation and wellness options on campus to transform the student experience and to improve student recruitment and retention efforts.

CELEBRATE CAMPUS SPIRIT
As a means to encourage more on-campus living, the Campus Master Plan explores ways to celebrate campus activities by enhancing recreation opportunities and making athletics more visible.

STRENGTHEN CAMPUS IDENTITY
The University of Southern Indiana is set within a beautiful natural environment. The Campus Master Plan seeks to embrace and strengthen connections to open spaces and natural features on campus.

IMPROVE SUPPORT FACILITIES
In order to elevate the quality of all support facilities and realize possible efficiencies, the Campus Master Plan recommends an investment to improve and upgrade auxiliary facilities across campus.

W Lloyd Expy

Mahrenholz Rd

Clarke Ln

Bluff Ln

Clarke Ln

O'Daniel Ln

Bennett Ln

University Blvd

Ranklin Ln

Bent Twig Ln

Rochelle Ln

University Blvd

ENRICH THE ACADEMIC EXPERIENCE

1. Renovate Health Professions
2. Renovate Wright Admin/Forum Building
3. Orr Student Services Center
4. Rice Library Transformation
5. Nexus Innovation Center

TRANSFORM STUDENT LIFE

6. Housing + Dinning Complex
7. Health + Wellness Center
8. Create a Student Union
9. New Apartment Commons
10. Balance Apartment Mix

CELEBRATE CAMPUS SPIRIT

11. Stadium for Soccer, Track and Field
12. PACI & II Expansions
13. Aquatic Center Expansion
14. Baseball and Softball Center
15. Broadway Complex

STRENGTHEN CAMPUS IDENTITY

16. Create a Signature Quad
17. Enhance the Lake
18. Woodland Walkway
19. University Gateway Plaza
20. Apartment Outdoor Commons

IMPROVE SUPPORT FACILITIES

21. Children's Learning Center
22. Copy Services/Photography
23. Alumni & Foundation
24. Public Safety/Publishing
25. Parking Structure

N

BROADWAY COMPLEX

Map labels:
- University Blvd
- W Lloyd Expy
- Mahrenholz Rd
- Schutte Rd
- Clarke Ln
- O'Daniel Ln
- Bluff Ln
- Bennett Ln
- Ranklin Ln
- Rochelle Ln
- O'Daniel Ln
- Broadway Complex

Numbered markers: 1, 19, 2, 3, 18, 25, 24, 8, 22, 16, 5, 4, 13, 7, 6, 14, 9, 20, 10, 11, 26, 15

SPACE ANALYSIS

02

INTRODUCTION

Paulien & Associates, Inc., a firm that specializes in higher education facilities planning was engaged to conduct a space needs and academic space utilization analysis study for the University of Southern Indiana campus.

The work completed by Paulien for the University of Southern Indiana (USI) included base year (Fall 2016) space needs analysis and a planning target year of 2026 space needs analysis, as well as a space utilization analysis of all on-campus instructional space. The outcome of a space needs analysis are the types and amounts of space needed at the current student enrollment (base year) and the projected student enrollment (target year). An academic space utilization study illustrates the utilization and usage patterns of academic spaces (classrooms and teaching laboratories) as a snapshot in time (Fall 2016).

PROCESS

A quality space needs analysis is based on several components: data elements, input from the campus, on-site observations, and Paulien's knowledge of space guidelines appropriate for the University. The analysis for USI used these metrics to determine the types and amounts of space needed for the current and projected enrollments. This space needs analysis is quantitative and high level. Realization of the detailed, more qualitative aspects of the existing space typically occurs during the physical planning efforts of a campus master plan.

USI provided Paulien with the components used as the main data set: electronic spreadsheet files of the facilities, course, and staffing data from Fall 2016. The facilities inventory included the building, square feet, room use, and department for each room in USI campus facilities. The course data contained the course number, student enrollment, course capacity, start and stop times, start and end dates, and meeting locations. The staffing data was provided by employee type, departmental code, and number of employees. The campus also provided building floorplans and enrollment growth.

Paulien combined the facilities, staffing and course data into one master data file. This information was then verified through field observations made during campus visits, interviews with campus leaders, and continuous, on-going dialogue with the campus facility director. A campus visit was conducted to familiarize the consulting team with the buildings by walking the majority of the facilities on campus. The consultant team conducted several days of interviews with

officials on campus and toured various buildings to document gaps in information or data inconsistencies. As the analysis progressed, "exception reports" generated by Paulien yielded additional Requests for Information (RFI's). For example, classrooms without utilization were scrutinized for correct room use coding.
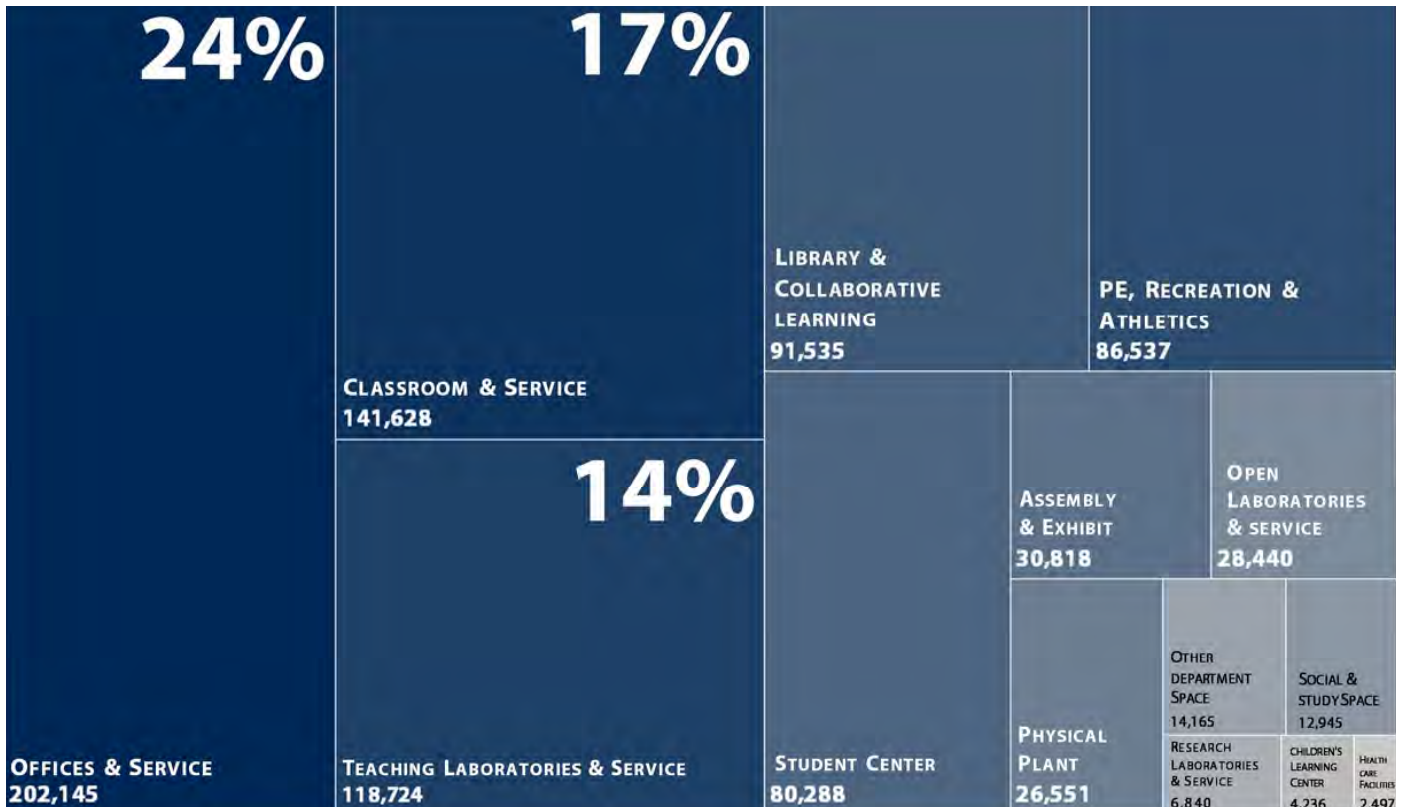
Paulien also reviewed other information in addition to the main data set. For example, the 2016-2020 campus strategic plan was considered.

Using the data sets and empirical evidence derived from observations and interviews on campus, Paulien performed a utilization analysis of existing space, with a focus on classrooms and instructional laboratories. A projection of current and future space needs was then developed in the final phase of work. This chapter summarizes the analyses and key findings.

EXISTING SPACE

The Paulien team compiled the facilities inventory from spreadsheet files with room-by-room lists, meetings with campus constituents, and extensive interaction with facilities staff. The compiled facilities inventory documented room numbers, assignable square feet, space use codes, room designations, and departmental assignments.

The figure *Existing Space* illustrates the current assignment of space on campus by designated use. For the purposes of this study, unassigned space and server rooms were excluded from the analysis, and they were not included in the existing space inventory as provided to Paulien. Residential and Dinning space is addressed in a separate section of the campus master plan.

24%

17%

LIBRARY & COLLABORATIVE LEARNING
91,535

PE, RECREATION & ATHLETICS
86,537

CLASSROOM & SERVICE
141,628

14%

ASSEMBLY & EXHIBIT
30,818

OPEN LABORATORIES & SERVICE
28,440

OTHER DEPARTMENT SPACE
14,165

SOCIAL & STUDY SPACE
12,945

PHYSICAL PLANT
26,551

RESEARCH LABORATORIES & SERVICE
6,840

CHILDREN'S LEARNING CENTER
4,236

HEALTH CARE FACILITIES
2,497

OFFICES & SERVICE
202,145

TEACHING LABORATORIES & SERVICE
118,724

STUDENT CENTER
80,288

Existing Space

PLANNING ASSUMPTIONS

A primary driver of space needs for the USI campus is student enrollment. The campus strategic plan identifies a general goal of enrollment growth for the campus. These goals were further refined in consultation with the deans, vice president for enrollment management and campus leadership. These are summarized in the table *Enrollment by Program*.

It should be noted that these figures do not include the students in the College Achievement Program (CAP), since these are high school juniors and seniors taking college level courses in their own schools. As such, there isn't an impact on USI campus space needs. With CAP factored in the calculations, the ten-year target would likely exceed the strategic goal of 15,000 students.

Another planning assumption was that unassigned space and server rooms were excluded from the study, and they were not included in the existing space inventory as provided to Paulien.

PROGRAM	Fall '16	10 Year Growth Figures			GROWTH TOTALS
		On-Line	On-Campus	Total	
Engineering					800
UG	399		200	200	
Grad	65				
Subtotal	*464*				
New BS programs (Civil, Elec, Bio Med, Mech):			400	400	
Biology					
Biology	307		200	200	
Nursing					2,420
New/Expanded programs:					
BSN On-line		2,000		2,000	
OT PhD			120	120	
PT			150	150	
Informatics			100	100	
MPH		50		50	
Business					1,037
UG	1,463		337	337	
Grad	213	600		600	
Subtotal	*1,676*				
Computer Sci		100		100	
Liberal Arts					200
Professional Studies			150	150	
Addiction Counseling			50	50	
New Agriculture Program				200	200
Possible Enrollment Growth		**2,750**	**1,707**	**4,657**	**4,657**
Fall 2016 Enrollment					9,024
Retention increases					292
10 year Target					**13,973**

Enrollment by Program

DEFINITIONS

Classroom and teaching laboratory utilization outcomes were studied to show the level of use. The factors illustrated in the utilization study included the following metrics:
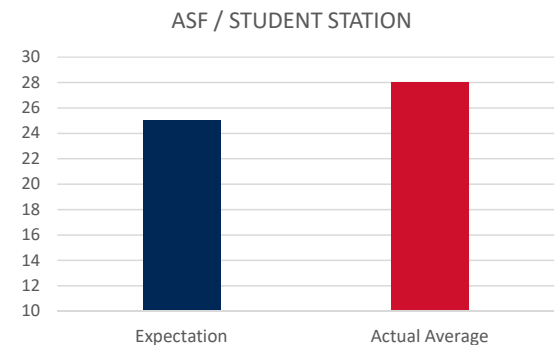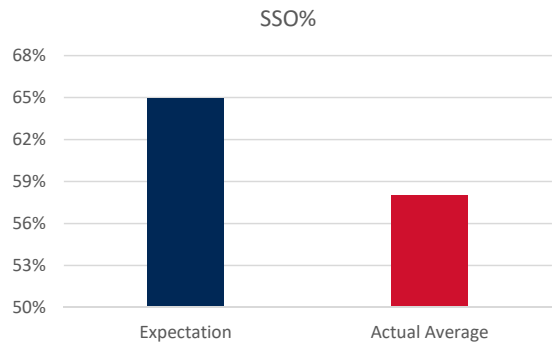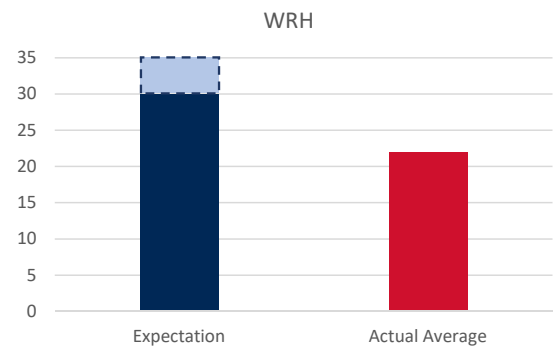
Weekly Room Hours (WRH)
The average hours of scheduled instruction per week indicate overall use, patterns of use, and capacity for enrollment growth.

Student Station Occupancy (SSO)
Occupancy or seat fill is a measure of the percentage of student stations filled when the rooms are scheduled. This also in an indicator of use and capacity.

Assignable Square Feet per Student Station (ASF/Student Station)
This is a measure of space per student station and is an indicator of the type of pedagogy which is possible in the room. A room suited for traditional lecture would have a lower ASF/Student Station than a room suited for active learning and group interaction.


Classroom Utilization Metrics

KEY FINDINGS

CLASSROOM UTILIZATION

- Classroom utilization is below what Paulien would typically recommend, based upon a national perspective. Recommended targets are **30-35 Weekly Room Hours (WRH) at 65% Student Station Occupancy (SSO),** and the University of Southern Indiana campus achieved **22 WRH at 58% SSO,** based upon information provided. This low utilization provides some opportunities for re-purposing classrooms, as noted in the section on space needs.

CLASSROOM WEEKLY ROOM HOURS

72%
of classroom are
used less than
30 hours per week

Classroom Weekly Room Hours
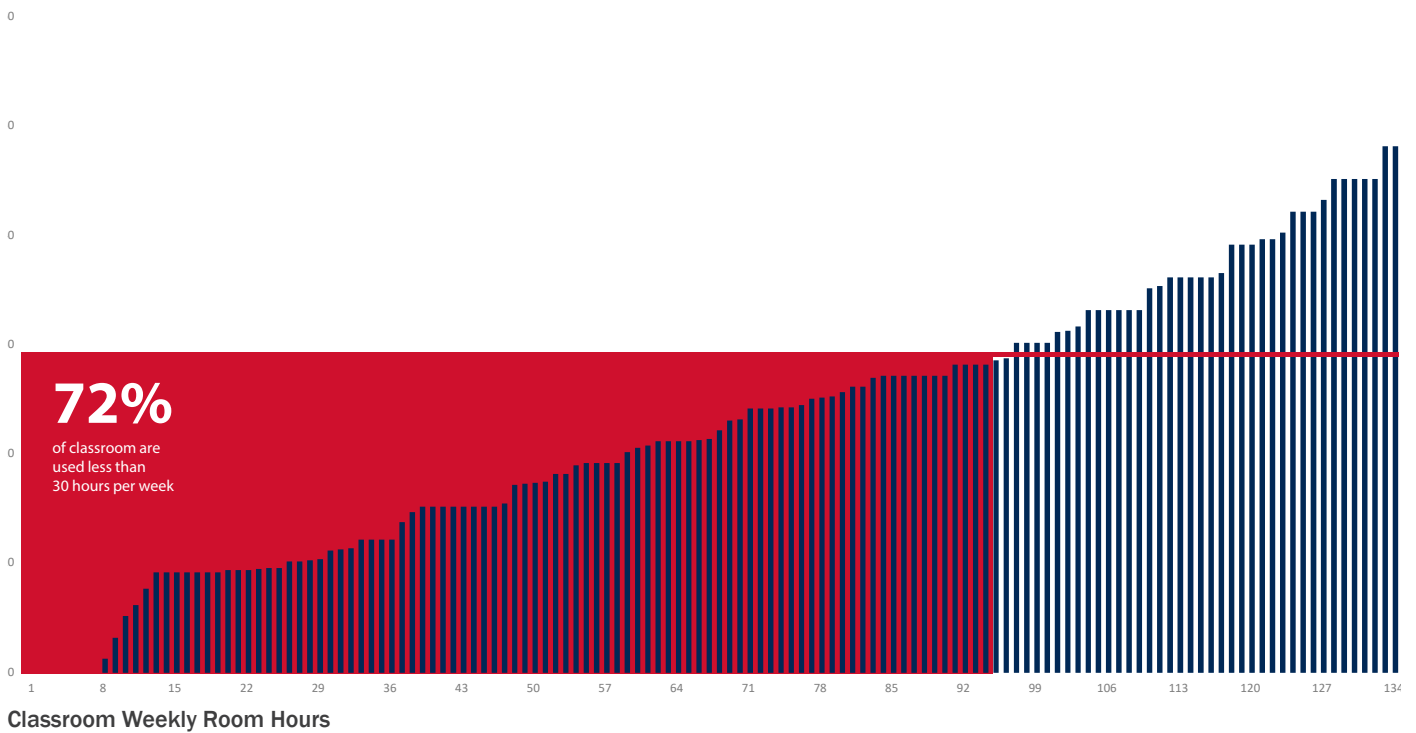
- Of 134 classrooms, 119 or almost 89% of the inventory are 60 seats or less. In fact, 60% of the rooms have less than 36 seats, and consistent with the campus-wide, average section size enrollment of 23 students.

- Classrooms with more than 75 seats averaged only 16 WRH and 48% occupancy. To support enrollment growth, these rooms can accommodate more courses and larger section sizes. There is only one classroom with more than 250 seats and it is very under-utilized with scheduled use of only 15 WRH and an average seat occupancy of 23%. This space could potentially be a candidate for taking off line.

- Consistent with the low student to faculty ratio, classrooms in the 46-50 and 51-60 seat capacity ranges were scheduled the most often at 34 and 32 weekly room hours respectively. However, less than half of the seats in the latter category were filled when the room was scheduled, indicating that smaller section sizes could not be scheduled in the rooms available.

- The most heavily used class start times are from 9:00 am to 1:30 pm on MW and from 9am to 2:30 pm on TR. During these blocks, classroom use peaks at 10am on Tuesdays with 107 of 137 classrooms in use. However, the overall count of empty classrooms ranges between thirty and seventy during even the most heavily used times. Use between 8am-9am and on Fridays afternoons is much lower.
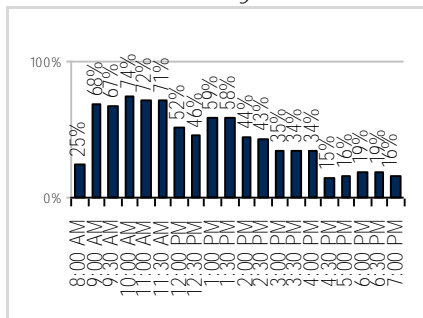
Classroom Utilization by Capacity Summary

Classroom Capacity Grouping	No. of Rooms	No. of Seats	Average Room Size	Average ASF per Station	Average Section Size	Weekly Seat Hours	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
20 and Under	19	306	475	29	8	6.8	9	64%
21 - 25	11	256	941	41	16	11.1	15	75%
26 - 30	21	594	793	28	19	15.4	22	69%
31 - 35	30	989	888	27	19	16.2	27	60%
36 - 40	11	438	931	23	22	15.1	28	53%
41 - 45	10	432	1,029	24	25	13.4	23	58%
46 - 50	6	292	1,131	23	26	17.5	34	52%
51 - 60	11	650	1,189	20	25	14.0	32	44%
61 - 75	4	294	1,510	21	34	11.4	25	46%
76 - 100	4	384	1,865	20	35	6.4	15	45%
101 - 150	3	385	2,037	16	44	7.5	17	42%
151 - 250	3	526	2,809	16	109	12.6	18	67%
251 and Over	1	450	4,521	10	104	3.5	15	23%
Total No. of Rooms = 134	AVERAGE		**1,012**	**26**	**23**	**12.3**	**22**	**58%**

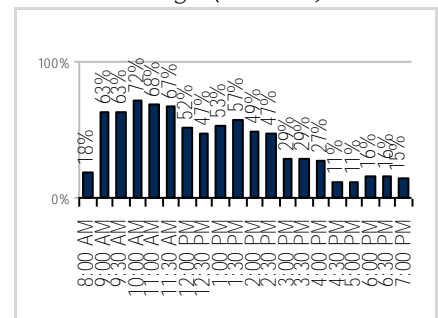**Classroom Use by Day and Hour Graphs**

- A strong culture of scheduling classes 9:00 am – 3:00 pm was observed. For example, of the classes meeting on Mondays, Wednesdays or Friday, 610 of 744 classes had start times from 9:00 am to 3:00 pm. The most popular hour was 9:00 am, but on MWF, approximately 20 courses were scheduled outside of the typical 50 minute block. Utilization can be improved by promoting the MWF schedule blocks and reassigning the conflicting 75 or 110 minute coursework to TR or afternoons. A significant decline was seen in scheduling after 2:30 pm. A robust Monday-Friday class schedule will have positive impacts on the quality of student life, especially as the campus evolves toward being more residential. A five day class schedule will make the campus feel more vibrant and provide students with more opportunities for engagement, which has been shown to be a critical component of student success.

Classroom by Day and Hour Heat Map

Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Average	
	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use
8:00 AM	33	25%	25	19%	27	20%	16	12%	20	15%	24	18%
9:00 AM	91	68%	87	65%	90	67%	79	59%	78	58%	85	63%
9:30 AM	90	67%	85	63%	90	67%	78	58%	77	57%	84	63%
10:00 AM	99	74%	104	78%	99	74%	94	70%	86	64%	96	72%
11:00 AM	96	72%	93	69%	97	72%	85	63%	84	63%	91	68%
11:30 AM	95	71%	90	67%	96	72%	82	61%	84	63%	89	67%
12:00 PM	70	52%	82	61%	69	51%	73	54%	55	41%	70	52%
12:30 PM	61	46%	74	55%	62	46%	69	51%	52	39%	64	47%
1:00 PM	79	59%	73	54%	79	59%	65	49%	61	46%	71	53%
1:30 PM	78	58%	87	65%	78	58%	80	60%	61	46%	77	57%
2:00 PM	59	44%	86	64%	60	45%	79	59%	45	34%	66	49%
2:30 PM	57	43%	82	61%	56	42%	75	56%	43	32%	63	47%
3:00 PM	47	35%	49	37%	46	34%	49	37%	3	2%	39	29%
3:30 PM	45	34%	49	37%	46	34%	49	37%	3	2%	38	29%
4:00 PM	45	34%	45	34%	43	32%	44	33%	2	1%	36	27%
4:30 PM	20	15%	19	14%	18	13%	17	13%	2	1%	15	11%
5:00 PM	21	16%	21	16%	20	15%	14	10%	1	1%	15	11%
6:00 PM	26	19%	28	21%	29	22%	24	18%	0	0%	21	16%
6:30 PM	25	19%	28	21%	28	21%	24	18%	0	0%	21	16%
7:00 PM	21	16%	27	20%	27	20%	24	18%	0	0%	20	15%
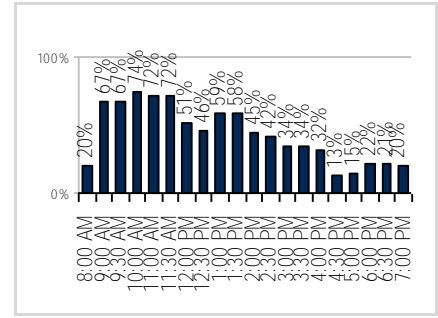
Total classrooms = 134

- The majority of classrooms are concentrated in six buildings. The highest classroom use as measured by weekly room hour was observed in the Business and Engineering Center, the Liberal Arts Building and the Science Center/Wright Administration buildings. However, the 17 classrooms in Rice Library are significantly under-performing with an average of only 13 WRH.

Classroom Utilization by Building Summary

Building Name and ID		No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Weekly Seat Hours	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
Art Center	AC	1	782	37	0	0.0	0	0%
Business and Engineering Center	BE	19	1,194	35	24	18.4	26	69%
Education Building	ED	17	1,051	30	23	13.1	22	62%
Forum Wing	FA	3	2,809	16	109	12.6	18	67%
Health Professions	HP	25	1,113	24	24	8.4	19	57%
Liberal Arts Building	LA	27	907	26	19	16.0	28	54%
Orr Center	OC	17	717	20	13	11.5	22	42%
Rice Library	RL	17	809	21	21	6.9	13	62%
Science Center/Wright Administration	SC	8	950	29	22	17.8	28	65%
Total No. of Rooms = 134	AVERAGE		**1,012**	**26**	**23**	**12.3**	**22**	**58%**

TEACHING LABORATORY UTILIZATION

Teaching Laboratory utilization is lower than what Paulien would typically recommend based upon a national perspective. Recommended targets are conservatively **20-22 WRH** at **75- 80% SSO** with 16 weekly seat hours. The campus averaged **15 WRH at 73% SSO.**

- The average space per station at 60 ASF is in line with the needs of many modern science laboratory space types, although it is on the high side of the expected range for the entire campus.

- Many of the laboratories in the Science Center were found to be highly specialized and little used.

Spaces dedicated to zoology or plant science, for example, were used less than 10 hours per week. Since enrollment increases in engineering, biology and nursing will place pressure on science-related teaching labs, these under-utilized dedicated labs should be evaluated to see if they can be renovated to be more flexible and available for other uses.

- Growth in engineering and biology will drive a demand for more teaching laboratories in these fields; this is discussed further in the space needs section.

Teaching Laboratory Utilization by Building Summary

Building Name and ID		No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Weekly Seat Hours	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
Applied Engineering Center	AE	3	3,834	175	11	6.8	11	67%
Art Center	AC	14	1,280	69	11	12.1	16	73%
Art Studio	AS	2	1,902	76	15	4.7	9	55%
Business and Engineering Center	BE	13	1,003	56	13	9.0	11	72%
Ceramics Complex	CC	1	1,725	86	14	12.5	17	72%
Education Building	ED	1	2,247	23	53	25.1	45	56%
Health Professions	HP	6	879	34	18	16.1	23	71%
Liberal Arts Building	LA	1	1,136	36	19	3.8	7	53%
Orr Center	OC	4	836	24	25	17.4	25	70%
Science Center/Wright Administration	SC	28	1,076	48	16	11.4	14	79%
Theatre Support Center	TS	2	1,758	146	0	0.0	0	0%
Total No. of Rooms = 75		AVERAGE	**1,248**	**60**	**15**	**12.2**	**15**	**73%**

OFFICE

- The average single, private office size on campus is approximately 140 ASF, which is within normal ranges. Campus wide, USI averages approximately 152 ASF/FTE, which includes office circulation, support space and conference rooms. This is below some state guidelines and may indicate a shortage of meeting space. However, many spaces in Wright Administration have interior zones of open landscape office furniture.

- In the traditional office approach, private offices include dedicated meeting or visitor space and storage. Alternatively, an activity based workplace (ABW) approach aggregates meeting and storage needs into shared conference rooms, huddle rooms, and informal gathering space with amenities such as soft furniture and appliances. Consequently, reductions in total space per employee can be realized in the progression from a fully enclosed private office to a more open and shared work space. Furthermore, collaboration is greatly enhanced by providing more shared spaces for interaction. This approach should be considered for both faculty and administrative offices. Some recent renovations, such as those proposed for Enrollment Management are moving in this direction. As faculty and staff are hired for growth, this office planning model could offer space and cost savings.

- The campus does not have published space standards for offices. Newer buildings, such as the Business and Engineering Center have average office size of approximately 138 ASF, although the national trend is for smaller faculty offices and shared open offices for administrative support. Development of planning standards for these and other space types is recommended before undertaking the planning of a new academic building.
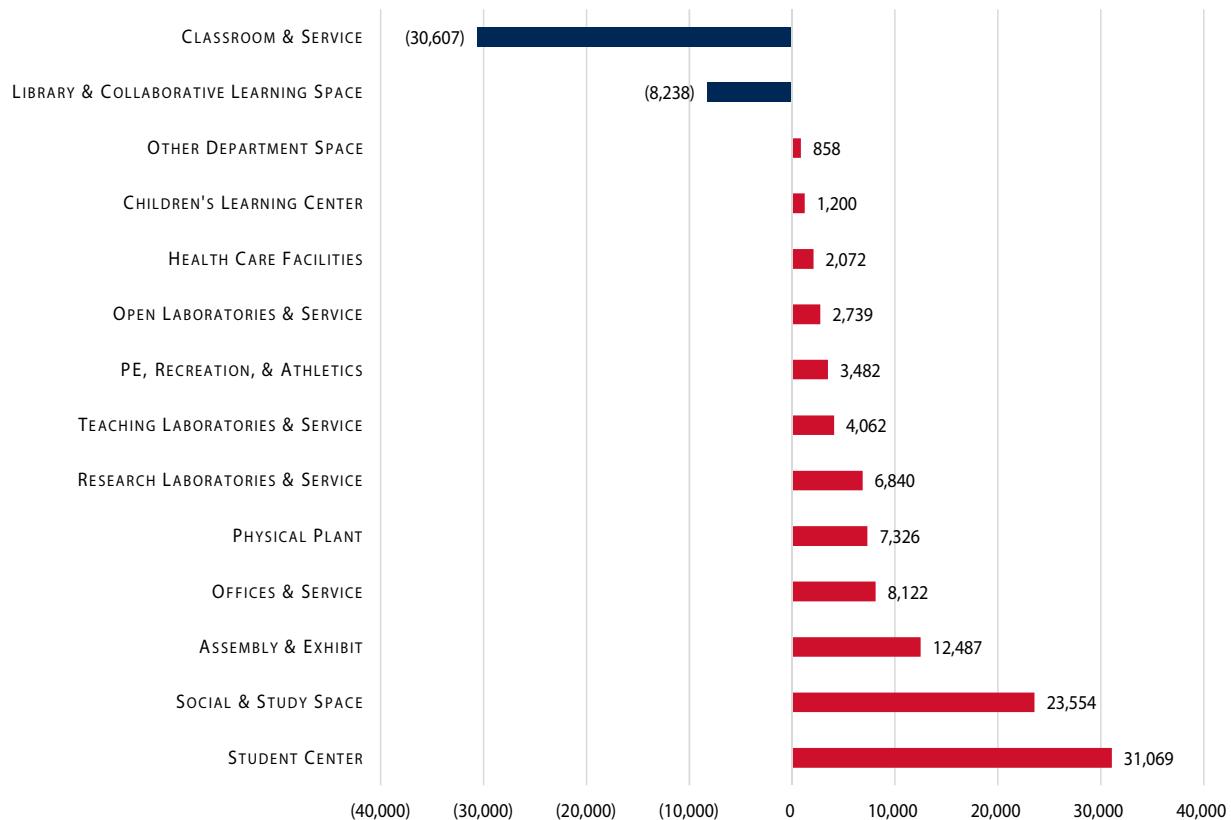
SPACE NEEDS ANALYSIS

- The analysis projected space needs at a ten-year planning target, based upon the forecasted enrollment growth. Despite this growth, there is a surplus of classroom space anticipated for the target year as a result of the low utilization described in a previous section of the report. There is also a surplus of space identified for the Library. However, this presents multiple opportunities:

    - Under-performing classrooms and other space in the Rice Library could be re-purposed to support relocation of academic skills, TRIO,

undecided advising, and career services to create a Learning Resource Center that enhances student services. This would also release space for re-use in the Education Building.

- If the English department can be moved out of the Orr Center, upper level classrooms could be taken off-line to add a testing center and expansion of disability services; to support increased on-line coursework, the distance

Space Needs Analysis - Surpluses & Deficits

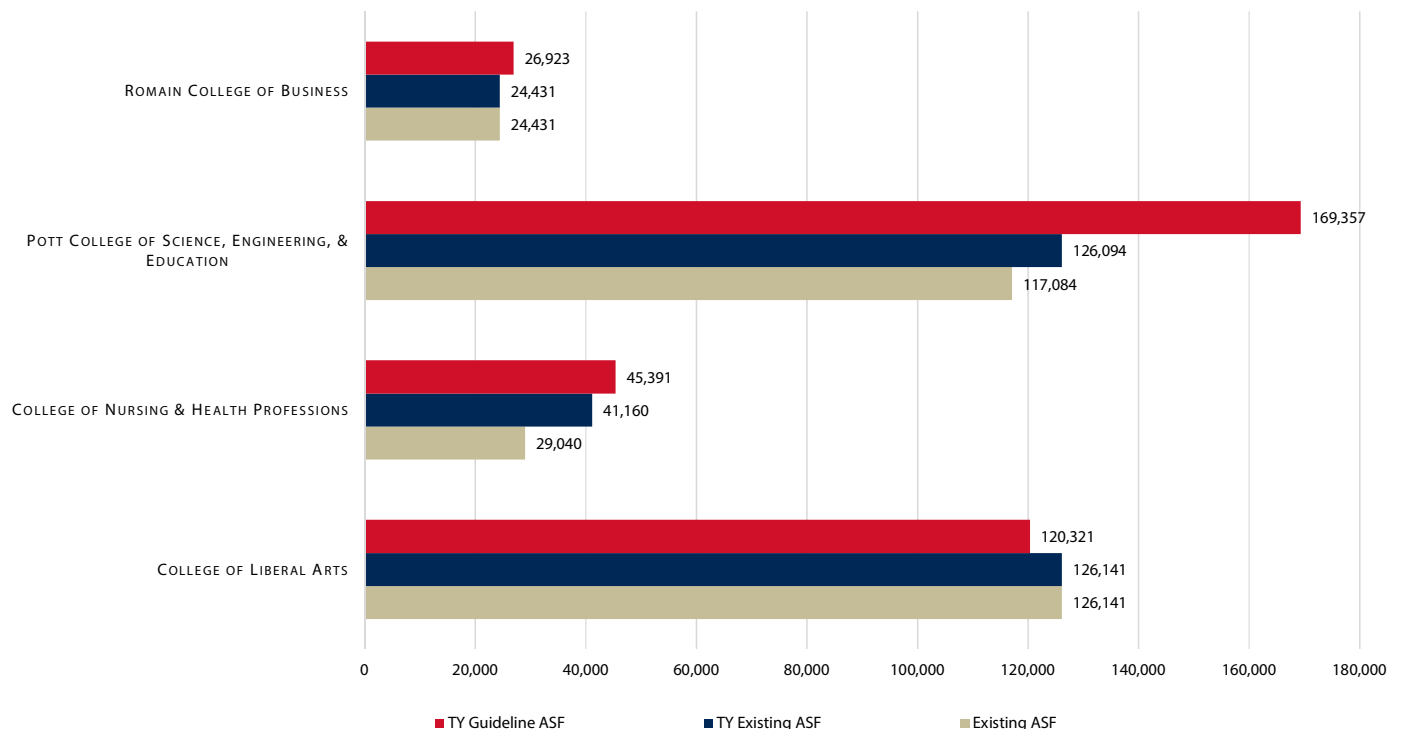| Category	Value
Classroom & Service	(30,607)
Library & Collaborative Learning Space	(8,238)
Other Department Space	858
Children's Learning Center	1,200
Health Care Facilities	2,072
Open Laboratories & Service	2,739
PE, Recreation, & Athletics	3,482
Teaching Laboratories & Service	4,062
Research Laboratories & Service	6,840
Physical Plant	7,326
Offices & Service	8,122
Assembly & Exhibit	12,487
Social & Study Space	23,554
Student Center	31,069

education facility could be moved from the Wright building into Orr center and space converted for faculty distance classroom training. Graduate studies could also be expanded and Honors either expanded or moved to Rice Library.

- Math and sociology classes held in Health Professions (HP) should be rescheduled for another building and that classroom space repurposed for HP, which needs renovated classroom space for more appropriate nursing section sizes in sync with cohort size.

- The Health Clinic could be moved out of HP to provide any decompression space for the college as needed.

- The significant on-campus enrollment growth in Engineering and Biology will drive a need for more teaching laboratories. The need for Biology and Chemistry Labs could potentially be reduced through conversion of existing dedicated teaching laboratories to more flexible, multi-purpose science labs. (The Utilization by Room Detail reports in the appendix identify specific rooms with low utilization which could be targeted).

- Research has shown that student participation in activities and engagement in communities of learners can help support student success. Since

Future Space Needs by College

College	TY Guideline ASF	TY Existing ASF	Existing ASF
Romain College of Business	26,923	24,431	24,431
Pott College of Science, Engineering, & Education	169,357	126,094	117,084
College of Nursing & Health Professions	45,391	41,160	29,040
College of Liberal Arts	120,321	126,141	126,141

improving retention and student success are key strategic goals, additional social and study space is merited. This could be distributed throughout colleges and/or residential facilities. Excess classrooms could be re-purposed to provide these sorts of social and study spaces.

- Based on comparison with other institutions and on-campus interviews, a larger student center with student focused activity space for more vibrant campus life is warranted. There was also a need expressed for meeting space, and this is reflected in a need for more assembly space in the figure Space Needs Analysis - Surpluses & Deficits. The music programs could also benefit from more of this assembly/exhibit space.

- The College with the largest need in the Target Year was the Pott College of Sciences, Engineering and Education due to forecasted growth in engineering and biology with additional research activity anticipated for new faculty. It should be noted that many of the faculty are on overload, but this model assumes that instructional load will eventually be accommodated by new hire who will require office space.

- There is modest space need anticipated for the College of Nursing and Health Professions, although this could potentially be addressed by relocation of the Student Health Clinic and rescheduling some math and sociology coursework to another building. However, this is very dependent upon the instructor model for the new on-line BSRN program.

- The Romain College of Business has a modest need for space if previous enrollment levels are returned and slightly surpassed. (This does not account for a very large innovation or incubator space, however, which would likely need to be off-site).

- A slight surplus is indicated for Liberal Arts due to under-utilized teaching laboratories primarily in the arts, although these spaces may be needed regardless of enrollment size.

- Paulien analyzed benchmarking data from APPA and database sources. The data benchmarked public master's degree-granting institutions with enrollments between 7,700 and 11,800 FTE. Both sources indicated University of Southern Indiana has significantly higher ASF/FTE than the peers in the benchmark datasets for classrooms at both the current and target year enrollments. USI also had higher ASF/FTE for laboratories, offices and study/collaborative space at the base year but deficits in the target year. This reinforces the findings of the space needs analysis.

GENERAL

- Classrooms are an important campus resource and centralized scheduling will not only generate better utilization data but also facilitate optimization of their use.

- Space is a valuable resource which is costly to construct, maintain, and operate. A transparent and data driven space management system can be a valuable tool for strategic asset management. This requires an investment in proper data maintenance, as well as development of policies and procedures that will govern the equitable allocation of space resources. A space inventory was developed for this planning effort and every effort should be made to maintain and update this data on a regular basis.

03

HOUSING & DINING

In January 2017, the University of Southern Indiana ("USI" or "University") engaged SmithGroupJJR for Campus Master Planning services. Brailsford & Dunlavey, Inc. was engaged ("B&D") to specifically focus on the student housing and residential dining master planning components for the University's main campus in Evansville, Indiana.

EXISTING CONDITIONS

USI has two distinct residential communities on its main campus. On the east side, along the Lloyd Expressway, there are four apartment complexes (O'Daniel South, O'Daniel North, McDonald West, and McDonald East) with just over 1,900 apartment beds. On the campus's south end there are the four residence halls (Governors, Newman, O'Bannon, and Ruston) with nearly 800 suite-style beds. USI's total on-campus bed count is just over 2,700. The fall 2016 overall occupancy was 94%. Figure 1 indicates that USI predominately houses first-time freshmen and sophomores.

CURRENT CHALLENGES

1. USI is unable to fully accommodate its on-campus freshman population in the current residence halls. Therefore, 46% of freshmen live in four-person, two-bedroom apartment units.

2. The residence halls' suite-style configuration offers large living units, but has limited common spaces on the floor and building levels.

3. The apartment complexes are dated and students perceive the neighborhood as being isolated from the campus core. In addition, there are limited dining and programming space options.

Figure 1: Housing Capture Rates by Class (fall 2016)

Enrollment Classification	Target Market Undergrad Population*	Fall 2016 Capture Rate	Fall 2016 Occupancy
First-Time Freshman	1,659	69%	1,148
Sophomore**	1,856	39%	720
Junior	1,363	25%	336
Senior / Other	1,632	16%	253
TOTAL	6,510	38%	2,457

Note: Full-time, degree seeking, main campus undergraduates
**Note: Includes returning freshmen*

WORK PLAN

- In order to develop a student housing master planning strategy B&D conducted the following qualitative and quantitative analyses:

- Stakeholder interviews to understand the global university perspective and strategic vision with regards to housing;

- Discussions with 45 students during focus group and intercept interviews to gain qualitative student body input and understand their perceptions and opinions regarding on-campus housing and USI student life;

- Peer benchmarking to understand USI's competitive context with regards to housing and dining;

- An off-campus rental housing analysis to better understand the offerings available to students in Evansville, IN;

- An on-line student survey to analyze preferences and price sensitivities. In April of 2017, the survey was sent to all USI students. B&D collected a total of 1,350 surveys, which yielded credible data with a low margin of error (+ / - 2.67%);

- A demand-based programming ("DBP") analysis to quantify the demand for student housing. B&D used predictive modeling to translate student demand projections into spatial recommendations to inform the Master Plan projects; and

- B&D developed a comprehensive housing system financial model including capital and operating expenses and revenues and to test various implementation options models and associated financial feasibility.

KEY FINDINGS

1. There is unmet demand for community-style (pods) housing and a surplus of four-person, two-bedroom apartments. There is a desire for more privacy in the suite-style units as seen in the slight surplus of four-person full suites, and a deficit of two-person full suites (Figure 2).

2. USI's affordable cost of attendance and room rates support opportunities for investment; however, the local off-campus rents are competitive.

   • USI's total cost of attendance is below the peer average. The out-of-state cost of attendance (including tuition, fee, room, and board) at USI is 20% below the peer average and the in-state total cost is 4% below.

   • USI's housing program contributes to institutional affordability. Suite-style and apartment doubles are priced 30% and 16% below their peers, respectively, and make up the majority of USI's on-campus housing (Figure 3).

• The four-person, two-bedroom apartments are competitively priced compared to the local off-campus market (Figure 4). However, having your own bedroom on campus is more expensive than off campus. In addition, according to the survey, 75% of student renters have a private, single bedroom.

• Only Eagle Village is within walking distance to campus.

• Based on the off-campus market analysis, rental properties were on average 5.7 miles away from campus (Figure 5).

• Student survey respondents reported high satisfaction with their off-campus living conditions (97% satisfactory or better). However, looking at both on- and off-campus students, proximity to campus was reported as the most important housing decision factor. The scattered nature of the off-campus market contributes to the second most important housing decision factor, which was the "ability to drive and park on campus."

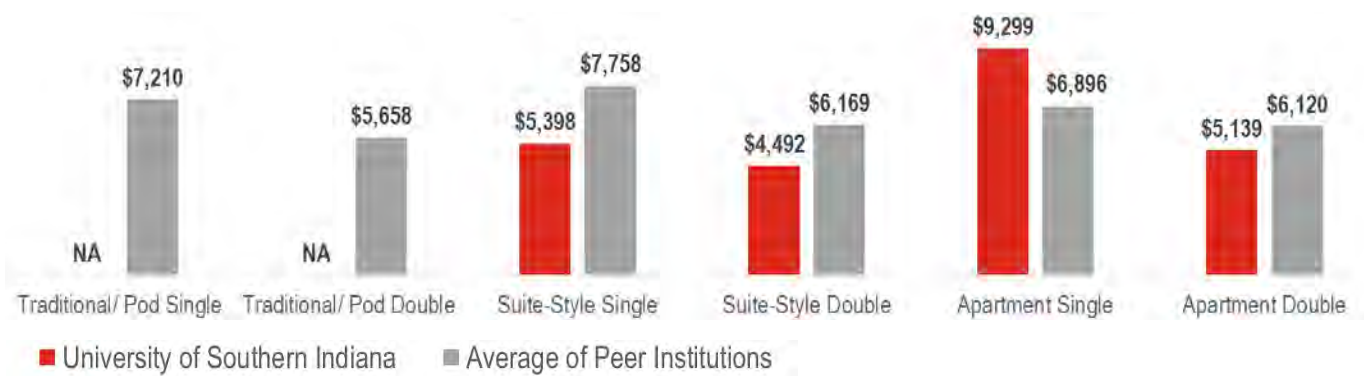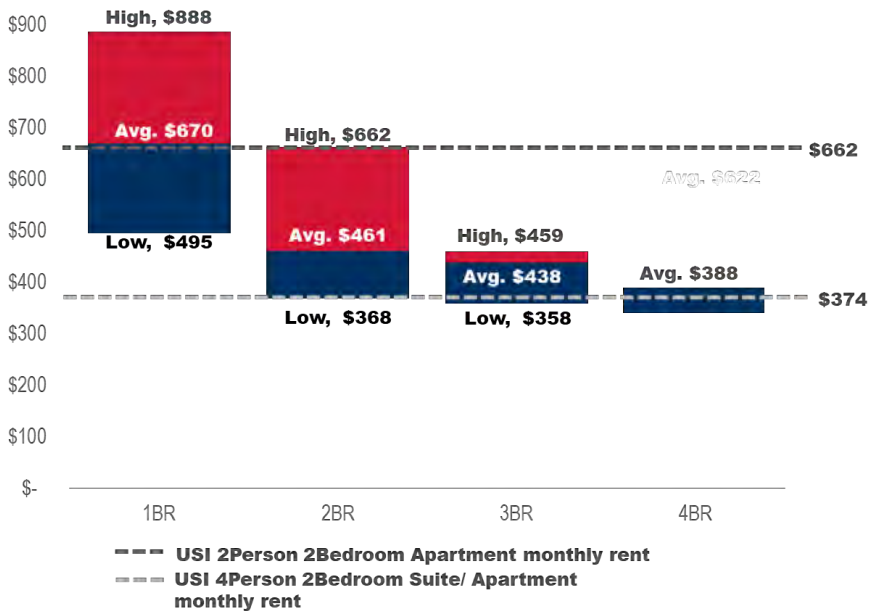**Figure 2: Housing Demand by Unit Type**

Note: Total includes RA, AC, and one-bedroom unit beds
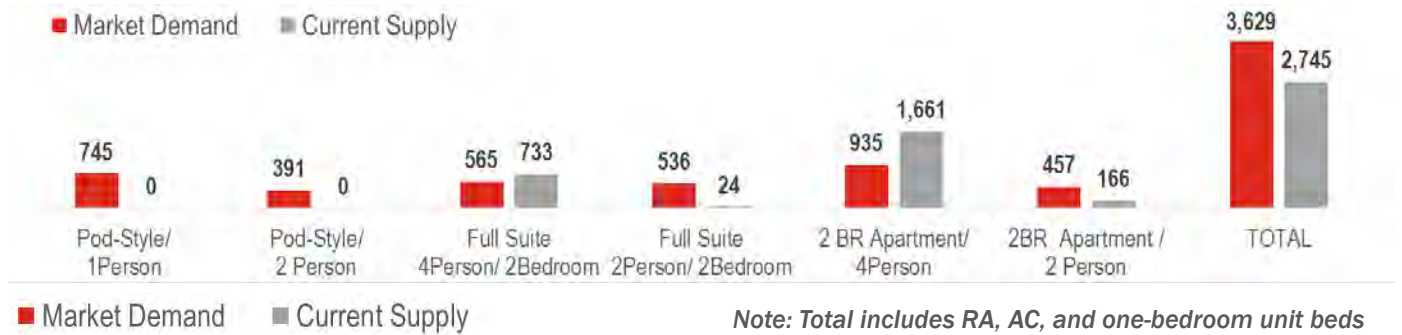
Figure 3: 2017-2018 Academic Year Housing Rates Peer Comparison

Sources: Institutional Data
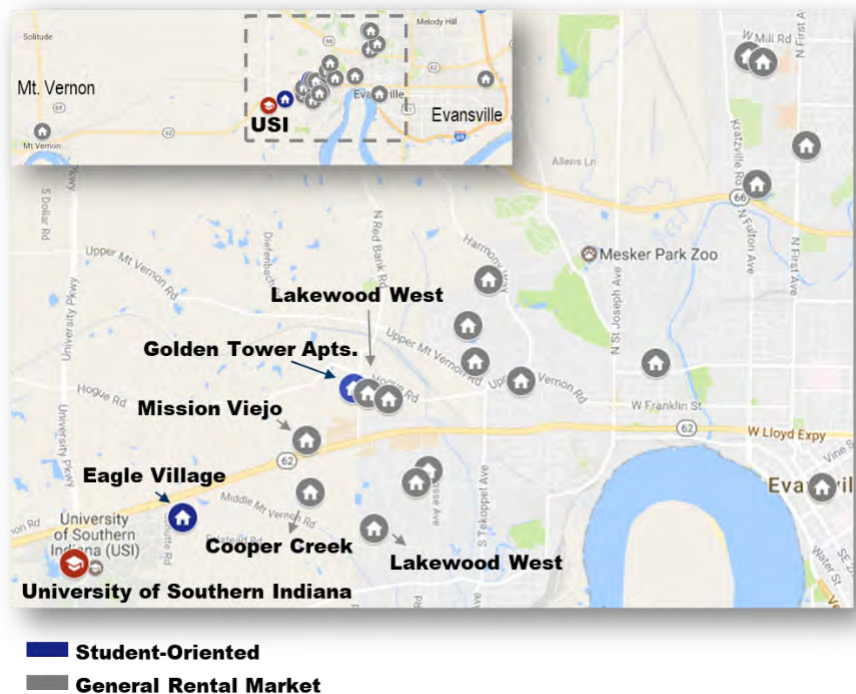*Note: USI apartment rates are an average of one and two bedroom units*

Figure 4: Off-Campus Monthly Rent Per BEd (Single Bedrooms)*

*Note: Off-campus rents include a monthly $100 utility surcharge (except four bedrooms)

*Note: USI two-bedroom apartment rate is the annualized monthly rent

Legend for Figure 4:
- - - USI 2Person 2Bedroom Apartment monthly rent
--- USI 4Person 2Bedroom Suite/ Apartment monthly rent

Figure 5: Off-Campus Housing Map

Student-Oriented
General Rental Market

3. USI students report a high level of satisfaction with Dining Services. Students with meal plans value a variety of service (Figure 6).

Figure 6: Dining Satisfaction Survey Results

How would you rate access and the convenience to you of USI's dining facility locations?

How would you describe the quality of campus dining at USI?

RECOMMENDATIONS

In order to align USI's housing and dining with strategic objectives and market demand there is an opportunity to transform the residential experience with "pod- community" style housing. A phased approach is recommended to deliver two 400-bed projects and a new dining facility. The first residence hall is included in Campus Master Plan Phase 1 and the second hall will tentatively be developed during Phase 2 per the Master Plan schedule below.

To address the surplus of four-person, two-bedroom apartment beds and the deficit of two-person, two-bedroom apartment beds a de-densification strategy is recommended. De-densification would convert double occupancy bedrooms, resulting in 150 single occupancy bedrooms.

To enhance the on-campus apartment experience with added community and green space, address the perceived disconnect from campus, and make land available for the new track and field facility, four residential buildings, the Residence Life Services, and the Fair Residence Life Center will be demolished during Phase 2 per the Master Plan. As a result, a renovation and expansion to the Residential Life Community Center building, and additional green space will be created as part of phase 1 in the apartment community. In addition, the second new residence hall (Phase 2) project will include replacement space for the Residence Life Services and the Fair Residence Life Center.

After Phase 2 is completed USI will have a total of 3,342 beds for a total net gain of 597 beds. This reduces the demand gap from 884 beds to 287 beds. Phase three requires an evaluation of housing financial and occupancy performance.

DINING PLAN

In Phase 1, additional dining is recommended to accommodate the addition of 400 non-apartment beds. As part of the first new residence hall, 150-200 seats of a limited service/limited-menu venue for all-day service (including late night) is recommended at approximately 3,750-4,500 square feet.

The new dining hall would be accessible to meal-plan students and serve as a campus-wide dining outlet. The dining venue would be an additional community gathering place being adjacent to or part of a student lounge and programming space. This new dining hall should be designed with an expansion opportunity to accommodate the eventual second new residence hall planned for Phase 2.

The dining program recommended for the size and scale of the apartment community is aligned with USI's existing offerings:

- A limited-scale and inventory convenience mart (approximately 1,500 net square feet) with staple food items for apartment kitchens, breakfast menu of fresh-prepared items, snacks, brewed coffee, and cold beverages. Recommended to be accommodated as a renovation project of the current c-store.

- 'Fast casual' or 'student pub' concept (approximately 2,600-2,975 net square feet) with a potential sports/USI Athletics theme providing afternoon/evening service. Indoor seating (100-125 seats) with space for programming events and additional outdoor seating adjacent on a deck or patio. This would be a replacement and slight expansion of the current fast casual concept in McDonald West.

It is recommended that the two dining venues remain in the Residence Life Community Center to capitalize on operational efficiencies and the central location within the apartment neighborhood. In Phase 1 the Plan calls for a renovation and new construction addition to the existing Residence Life Community Center. The expanded facility would to accommodate a larger C-Store, remove Archie's Pizzeria, and include the 'fast casual' concept. The renovation and expansion would add 1,775 net square feet to the existing facility.

STUDENT LIFE PHASING PLAN

PHASE 1 (2017-2018 to 2023-2024): 0-6 years

Fall 2019: Continue apartment renovations (three buildings per summer)

Fall 2021: First new residence hall + dining opens

Fall 2022 : Residence Life Community Center expansion and renovation at McDonald West

PHASE 2 (2024-2025 to 2029-2030): 6-12 years

Fall 2024: Second new residence hall opens + Residence Life Services and the Fair Residence Life Center replacement

Fall 2026: O'Daniel North four person to two person conversion + demolition of Fair Residence Life Center, Gates, and Schricker apartment buildings for athletics

Fall 2027: O'Daniel South four person to two person conversion + demolition of Residence Life Service Center to develop community green space

Fall 2028: McDonald West four person to two person conversion

Figure 7: Student Life Phasing Timeline

04
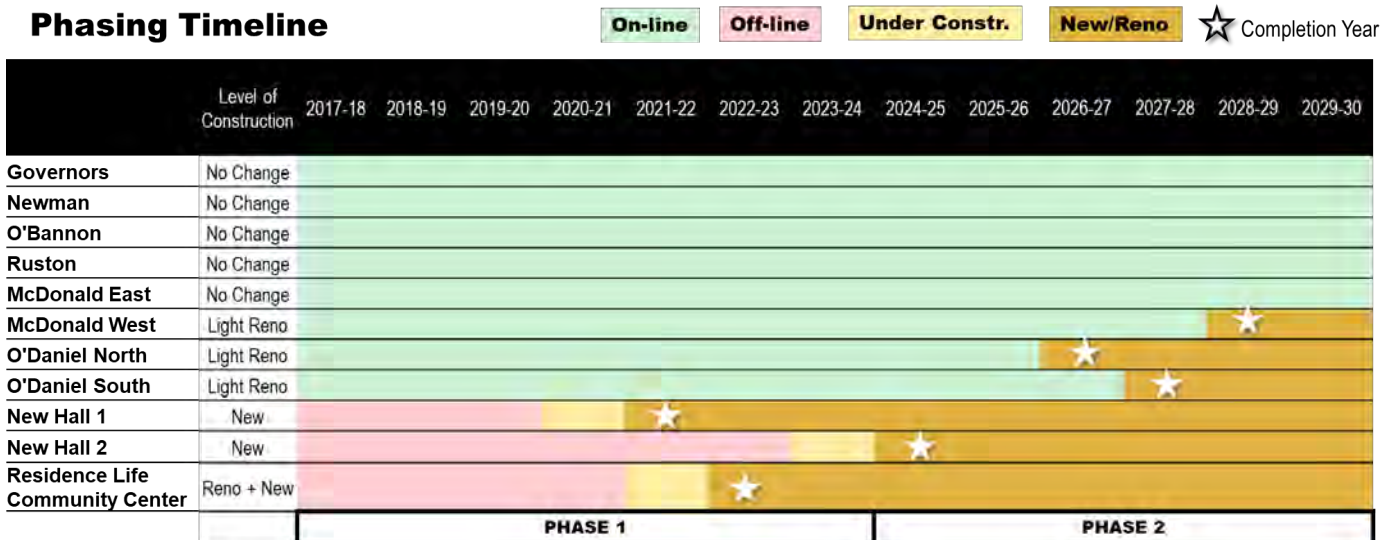
CAMPUS SYSTEMS

As part of the University of Southern Indiana (USI) Campus Master Plan, campus systems were reviewed for possible enhancements to improve both functionality and the overall campus experience. In each case, a campus system was evaluated first in its existing state to understand both its strengths and its weaknesses. Following this process, the planning team then explored improvement opportunities within the context of both short and long-term futures.

The recommendations outlined in the following chapter strive to transform the USI campus, and ultimately the student experience in a positive way. An overall campus systems approach was utilized to address potential improvements to the University's existing campus organization, facility condition, circulation network, wayfinding, open space fabric, and parking.

Strategic goals were established early in the master planning process with consensus from the USI campus and community. The goals and recommendations highlighted on the following pages for campus-wide systems provide a planning framework that is both visionary and realistic. The result is an actionable plan for implementation which aligns the Guiding Principles to the physical vision for campus to improve the overall image and enrich the physical environment for learning.

Labels on map: University Blvd · W Lloyd Expy · Clarke Ln · Schutte Rd · University Blvd · N

EXISTING CAMPUS

The University of Southern Indiana (USI) was founded in 1965 and has grown into a thriving institution of higher education on a beautiful 1,400 acre campus. As a result of this multi-decade growth and these expansive land holdings, the University faces the on-going challenge of maintaining aging facilities and infrastructure.

The USI campus is situated approximately six miles west of Downtown Evansville in an area rich with natural features - woodlands, wetlands, lakes, and rolling topography. The majority of existing buildings are clustered within the northern half of campus, adjacent to the Lloyd Expressway.

Significant swaths of dense woodlands separate the core of campus from the Broadway Complex of athletic, intramural and recreation fields. The Burdette Trail, for pedestrians and cyclists, serves as a wonderful campus-community amenity connecting these two areas of campus together.

In order to better comprehend the unique identity of USI, the master planning team evaluated campus systems holistically to gain an understanding of both their relationship to one another and their specific role within the overall campus environment. The findings and recommendations are presented on the following pages.

University Blvd

W Lloyd Expy

Clarke Ln

Schutte Rd

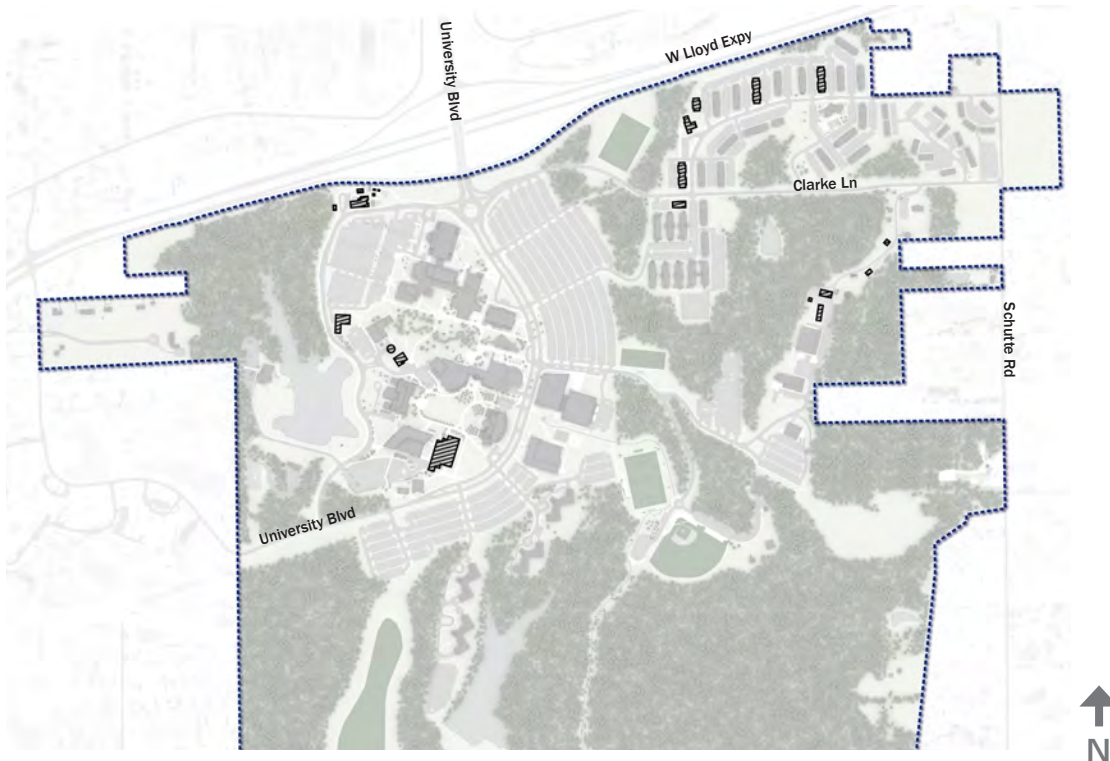University Blvd

N
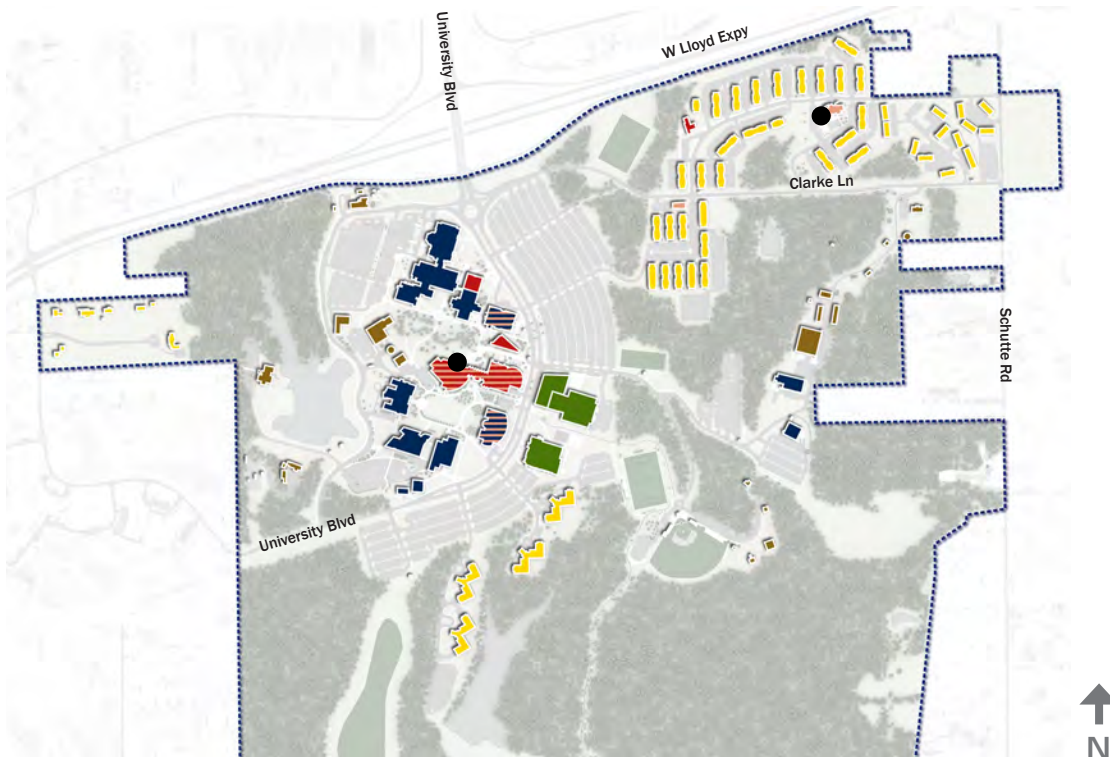
CAMPUS ORGANIZATION

EXISTING CONDITION

The USI Campus is bisected by University Boulevard which serves as the primary entry into campus from the Lloyd Expressway. The land west of University Boulevard contains the majority of academic facilities and student support services. Key buildings within this area of campus are Rice Library, University Center, and the Orr Center. Indoor athletic and recreation facilities, as well as all student residences are positioned on the east side of the Boulevard. Additional outdoor athletic venues are primarily located further east and south along Broadway Avenue.

RECOMMENDATIONS

The Campus Master Plan recommends that the future organization of campus remain similar to its current layout. The proposed changes focus instead on reinforcing existing uses with new and expanded facilities. Proposed enhancements include new housing and additional dining options within the existing campus residential neighborhoods. An opportunity also exists to reconsider the grouping of athletic facilties to optimize collaboration between programs. In addition, it is recommended that new academic buildings remain within the core.
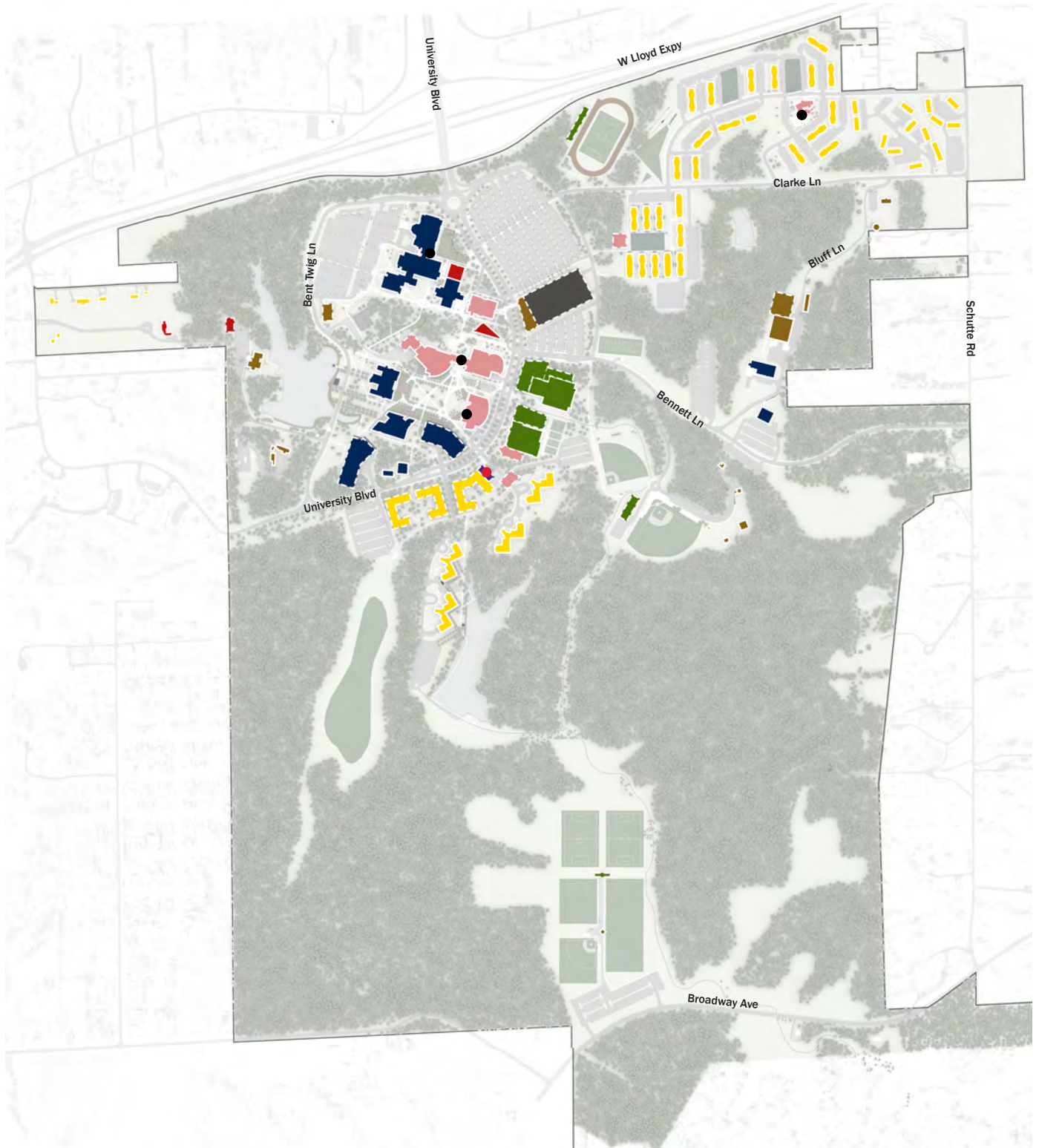
ADMINISTRATIVE

ATHLETIC/RECREATION

PARKING STRUCTURE

SUPPORT

ACADEMIC

EXISTING DINING

STUDENT SERVICE

RESIDENTIAL

PROPOSED DINING

University Blvd

W Lloyd Expy

Clarke Ln

Schutte Rd

University Blvd

N

BUILDINGS:
REMOVALS, REPLACEMENT & RENOVATIONS

EXISTING CONDITION

As a result of in-depth discussions with campus and community constituents, a handful of existing structures have been identified for removal. Some of these facilties are small and no longer function well for current campus activities. In other cases, a higher and better use for the existing land was identified during the planning process. One key example is the Art Center. There was much deliberation as to the future of this facility. Ultimately, due to its limited expansion opportunities and low-rise configuration, it was identified as an ideal candidate for removal.

RECOMMENDATIONS

The buildings shown in dark blue on the adjacent diagram represent proposed facilities designed to enhance academic, student life, athletic and recreation offerings on campus. New facilities are positioned closely adjacent to other compatible uses. A new inter-disciplinary facility is proposed in the location of the existing Art Center. In general, proposed buildings are positioned in close proximity to University Boulevard as a means to help unify the east and west sides of campus and to also encourage a more walkable campus environment.
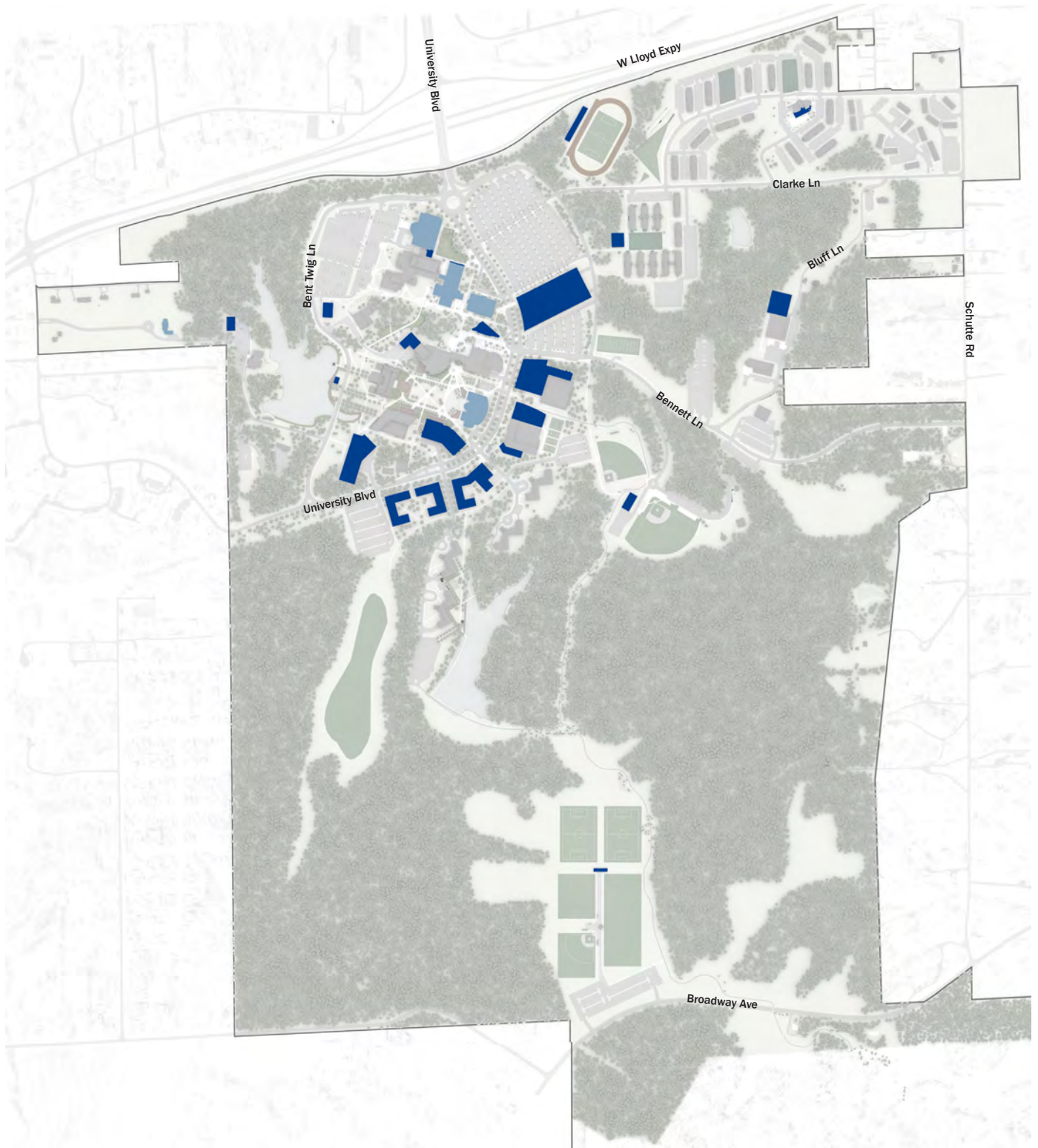
PROPOSED BUILDING REMOVAL

PROPOSED BUIDLING RENOVATION

PROPOSED NEW BUILDING

CAMPUS BOUNDARY

N

# VEHICULAR CIRCULATION

EXISTING CONDITION

A primary goal of the Campus Master Plan is to establish a robust network of pedestrian and vehicular circulation options for all campus users. USI is currently challenged by a single entry and exit point to campus. A key focus of the master planning effort was to explore ways to improve campus access, while also ensuring safety for pedestrians. University Boulevard serves as the primary vehicular circulation spine for campus. Bent Twig Lane and Clarke Lane also support considerable vehicular traffic as individuals circulate around campus to access parking areas and student housing.

RECOMMENDATIONS

The Campus Master Plan recommends additional study into the possibility of creating a connection from Bennett Lane to Schutte Road. This could serve as a secondary access point to campus and help to alleviate the congestion experienced near the intersection of University Boulevard and the Lloyd Expressway. An additional recommendation focuses on reducing vehicular traffic on University Boulevard by creating a secondary road on the eastern side of Lots A, B, and C to service these parking areas. This would help to create safer pedestrian connectivity across campus.
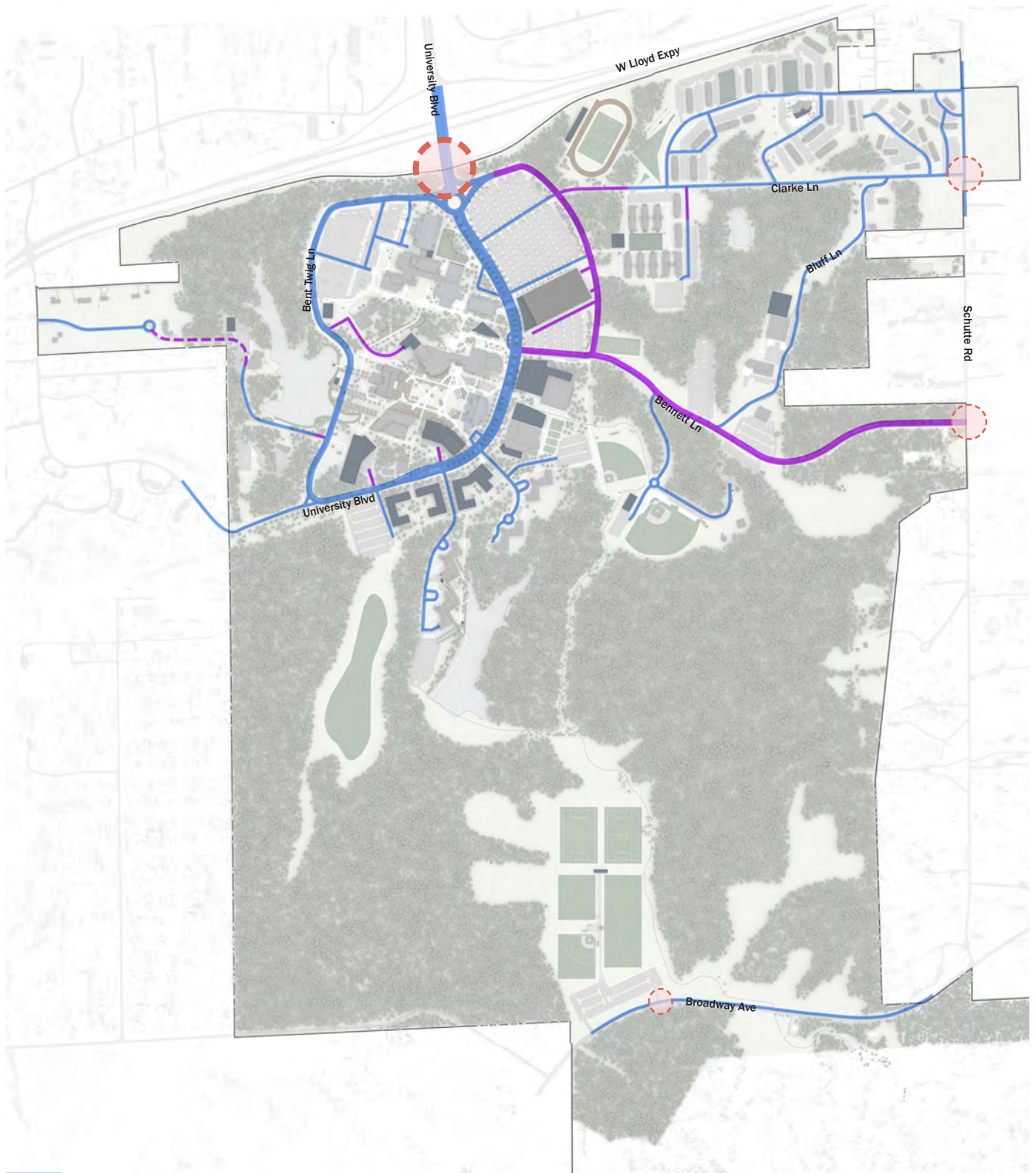
EXISTING VEHICULAR CIRCULATION

PROPOSED VEHICULAR CIRCULATION

PROPOSED GATEWAY
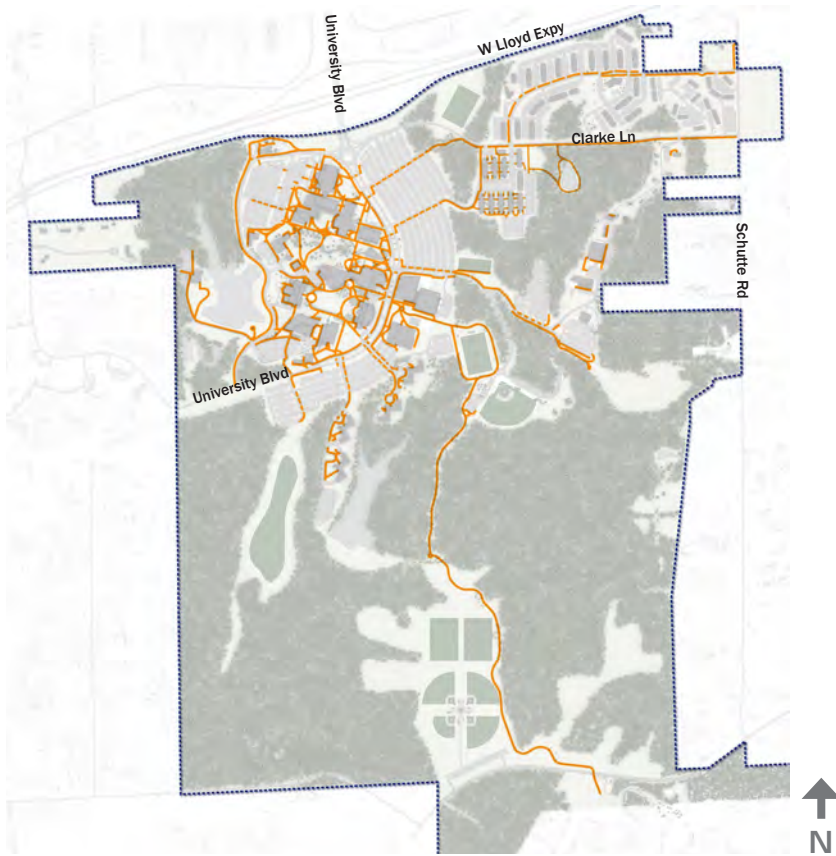
PEDESTRIAN CIRCULATION
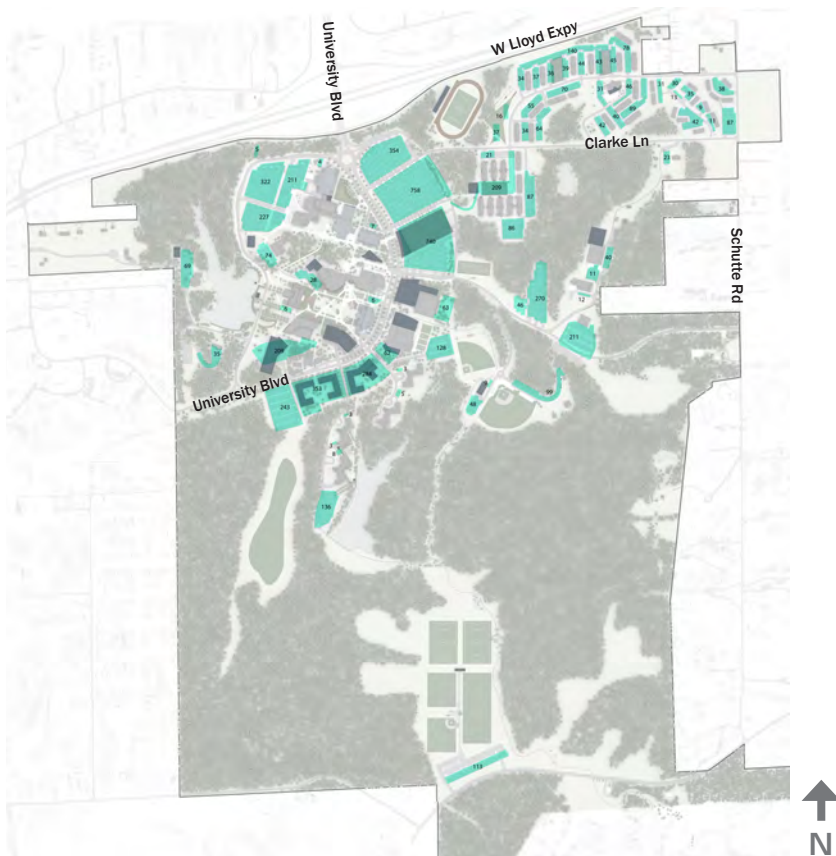
EXISTING CONDITION

Given the significant land area of the USI campus and limited parking resources, the pedestrian network is critical to connecting people to distributed campus facilities. In general, the existing pedestrian network of walkways works very well. However, as part of the master planning effort, a detailed study of the entire network was completed to better understand existing gaps and circuitous connections. Two key areas of possible improvement are connections from the core of campus to the apartments and also development of a more effective pathway system within the core of campus between University Center and Business and Engineering.

RECOMMENDATIONS

The Campus Master Plan evaluated the pedestrian circulation system as it relates to building entries and loading docks. The diagram to the right showcases a refined network of pedestrian circulation to both eliminate poorly utilized paths and also to propose the creation of new paths to better direct pedestrian flow, such as within the campus core. One big idea to emerge from the planning process, was the idea to establish a new "front door" to Rice Library along University Drive to allow improved connectivity for students, particularly those living within the existing residence halls. It would also provide a more welcoming impression to visitors.
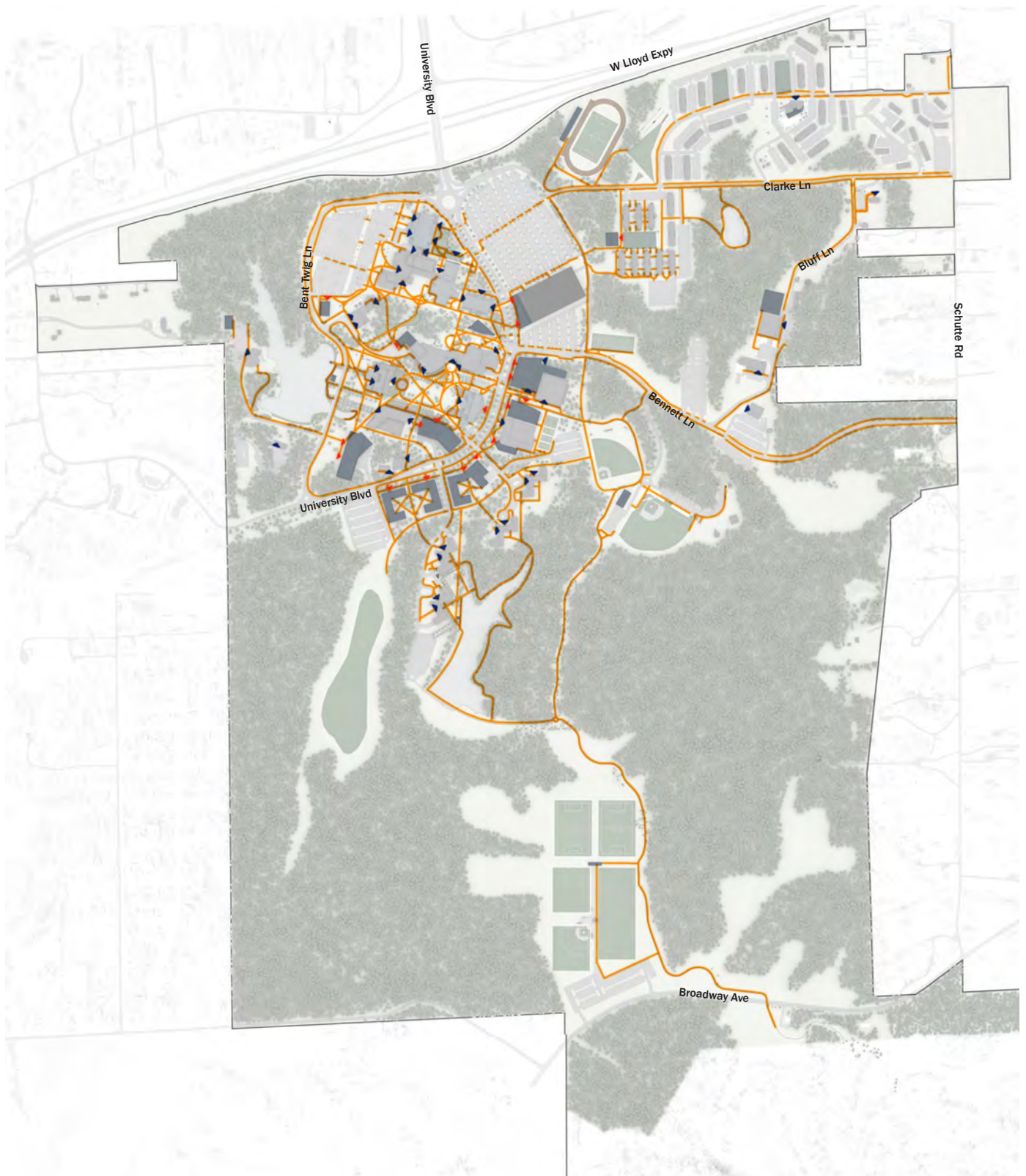
PEDESTRIAN CIRCULATION

PRIMARY PEDESTRIAN ENTRY LOCATION

SECONDARY PEDESTRIAN ENTRY LOCATION

University Blvd

W Lloyd Expy

Clarke Ln

Schutte Rd

University Blvd

N

PARKING

EXISTING CONDITION

Parking remains an incredibly valuable resource on the USI Campus. As part of the planning process, every parking space was identified and counted. The majority of USI's parking resources are located within large surface parking lots along the eastern side of University Boulevard. Visual and anecdotal evaluations demonstrated a very high utilization rate for the majority of these lots throughout all daytime hours. Additional parking resources are positioned around campus, adjacent to buildings in smaller surface lots. USI currently does not have any structured parking.

RECOMMENDATIONS

A key goal of the USI Campus Master Plan is to locate future development close to existing facilties in order to encourage a walkable campus environment. To do so, several key surface parking lots must come offline to allow for new buildings. To offset this parking loss, a parking structure is proposed in place of Lot C, in the area of highest parking utilization on campus. Due to existing topography, it could be built into the hillside to allow for more cost effective construction. Parking recommendations also include expansion of the surface parking lot serving the Broadway Complex.
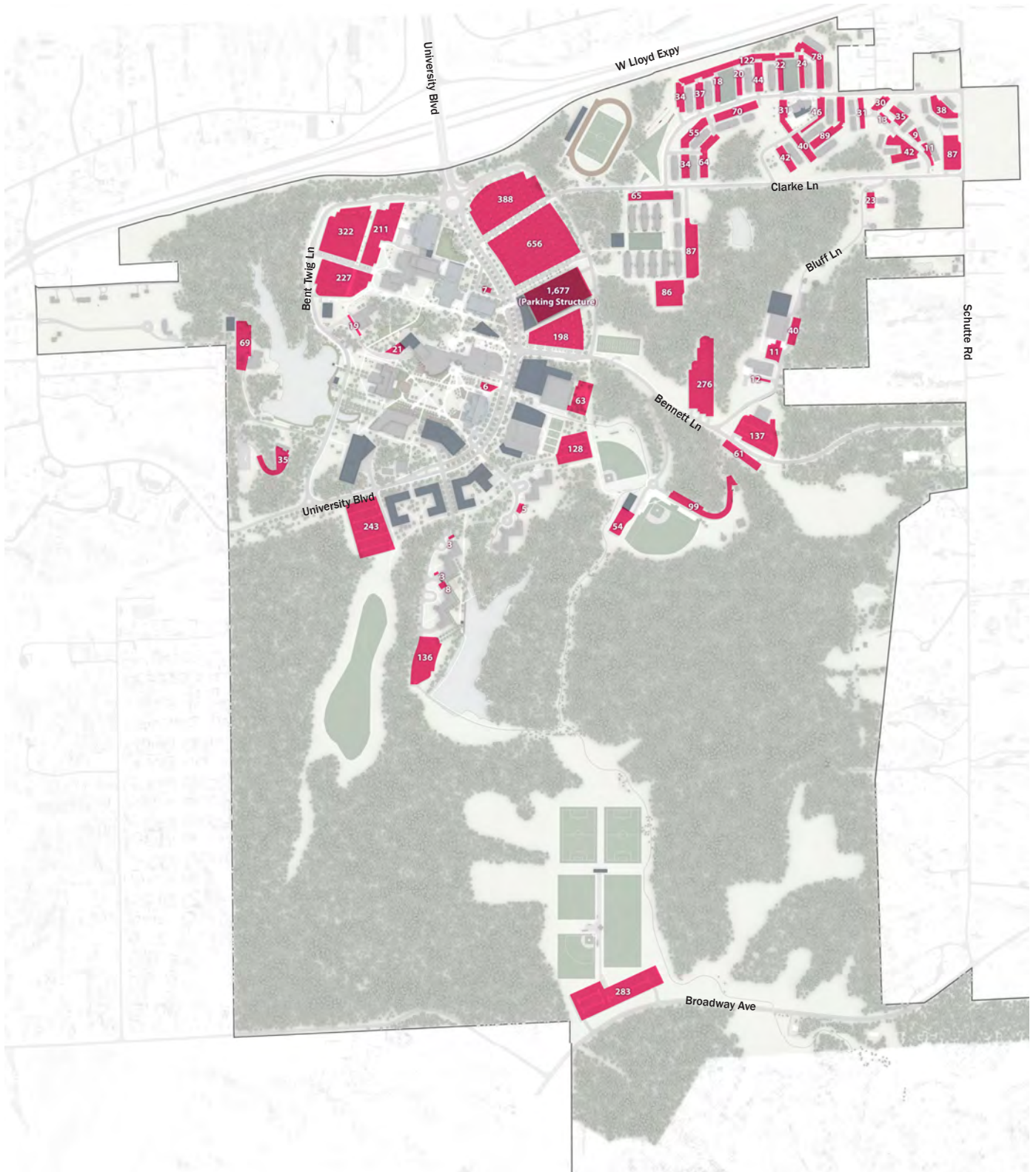
EXISTING SURFACE PARKING   PROPOSED SURFACE PARKING   PROPOSED PARKING STRUCTURE

SIGNAGE & WAYFINDING

EXISTING CONDITIONS

1. As visitors approach the USI Campus, DOT signage clearly provides exit information to access campus.

2. Campus is visible from West Lloyd Expressway/62 but campus boundaries are not clearly identified.

3. DOT signage continues to support visitors onto University Boulevard to access the Main Entrance. Once on University Boulevard, landmark features and university branded signage welcomes visitors.

4. Visitors accessing campus via Schutte Road are provided a much less welcoming experience with only a temporary real estate sign to identify access to the campus.

5. Though visitors can park anywhere on campus, there is nothing in the environment relaying this information. The addition of temporary parking signs further complicates visitor parking.

6. Building identification signs are poorly located and lack proper contrast making it difficult for visitors to find their destination, particularly along University Boulevard.

7. There is lack of connectivity between University Boulevard an other parts of campus, particularly, housing, Applied Engineering Center/Theatre Support Center, Bent Twig Outdoor Education Center, baseball and soccer fields, and Broadway Recreational Center.

8. Unfortunately, there were no pedestrian kiosks located on the campus. A kiosk located outside of Admissions (Orr Center) would be helpful for first-time visitors to orient themselves to the campus.
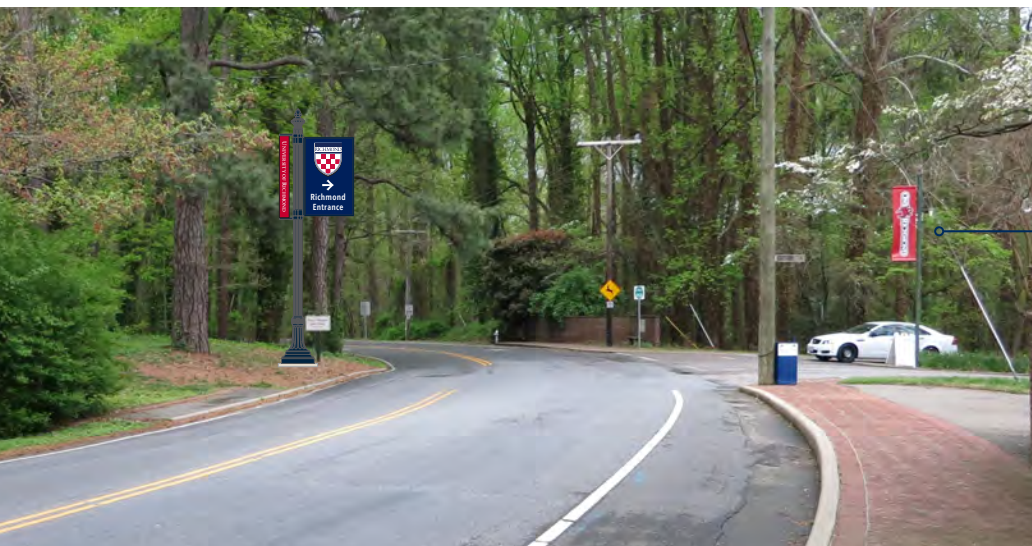
01

BETTER IDENTIFY CAMPUS BOUNDARIES AND ENTRANCES

Though the campus is visible from all directions for traffic on Lloyd Expressway/62, it is unidentifiable due to the lack of signage and branding.

02

CREATE AND IMPLEMENT A CONSISTENT AND COMPLETE VEHICULAR WAYFINDING SIGNAGE PROGRAM

The existing wayfinding system does not reflect the current image of the university. Signs are inconsistent, often illegible. The metallic finish on the sign faces acts as a reflective white surface when the sun is shining directly on the sign faces.

03

BETTER IDENTIFY BUILDING NAMES AND ENTRANCES

Currently, public buildings and entrances are mostly unidentifiable to vehicular and most pedestrian traffic.

04

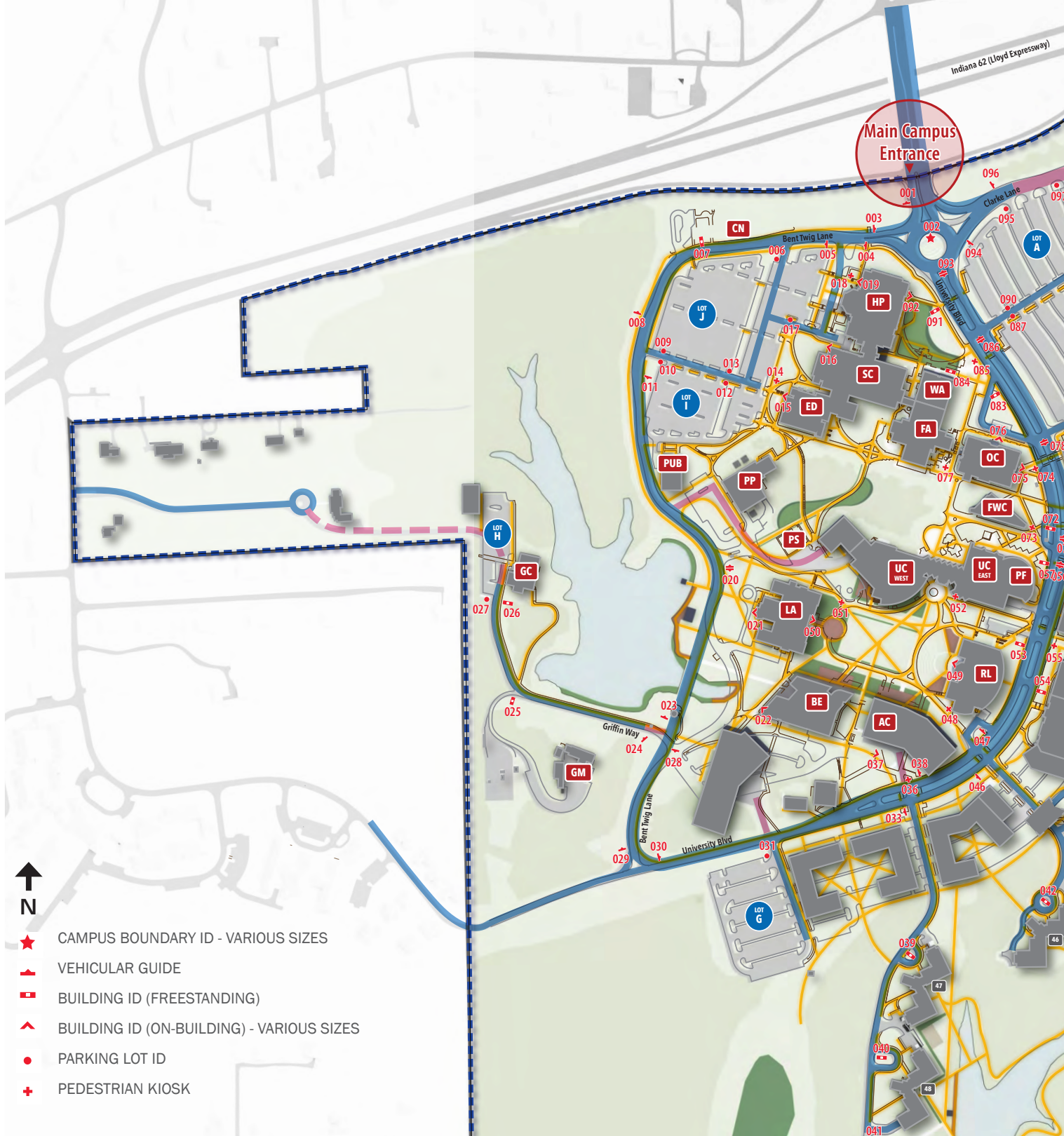### PROVIDE BETTER PARKING INFORMATION FOR VISITORS

Despite the generous public parking policy at USI that allows visitors to park for free in most campus lots, this policy is not obvious to first-time visitors.

05

INTRODUCE A PEDESTRIAN WAYFINDING SYSTEM

Because of the open parking policy on campus, it is incredibly important to support the pedestrian journey from the parking lots to the destination and back. To do so, we suggest adding map kiosks and pedestrian guide signs throughout campus.
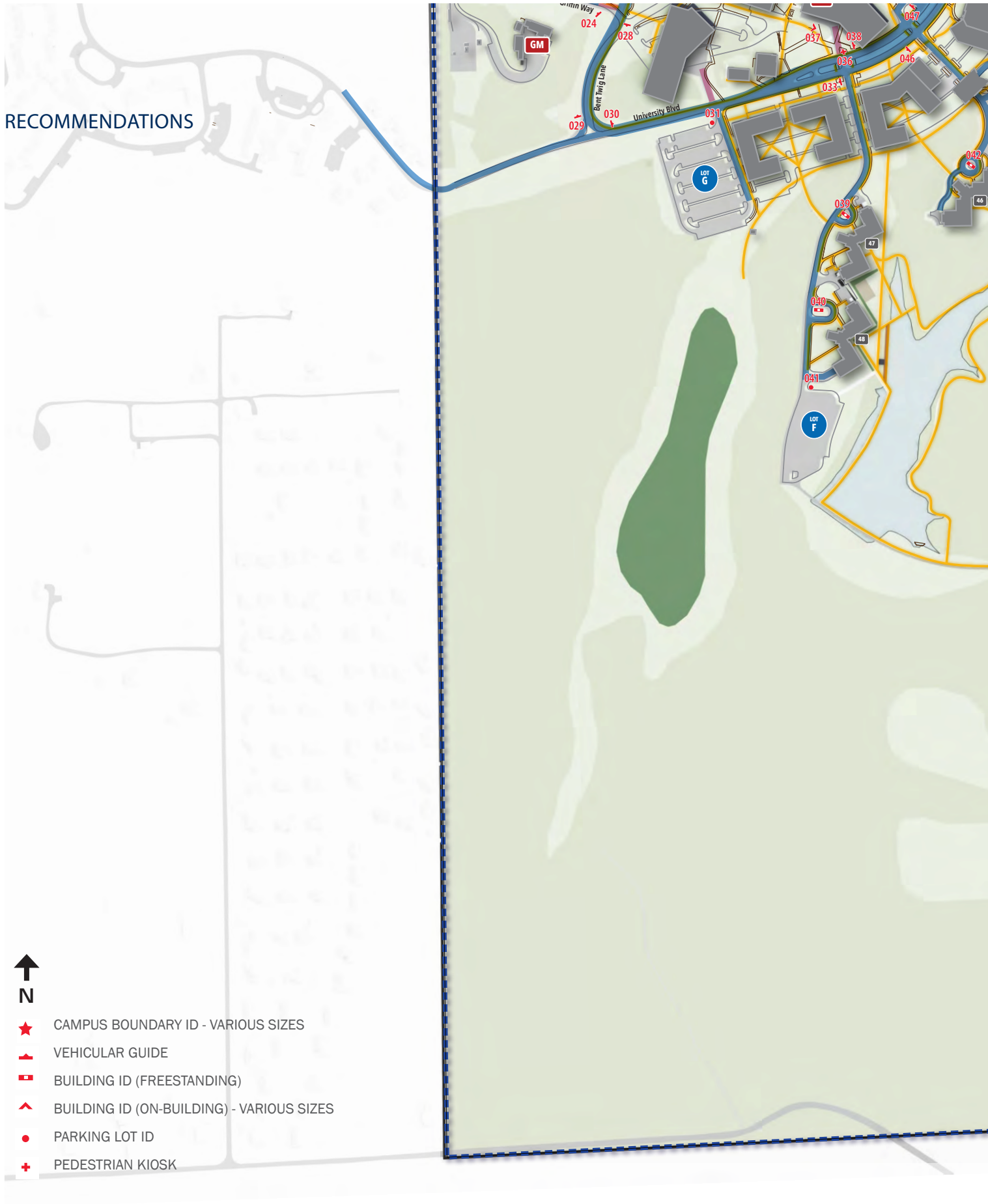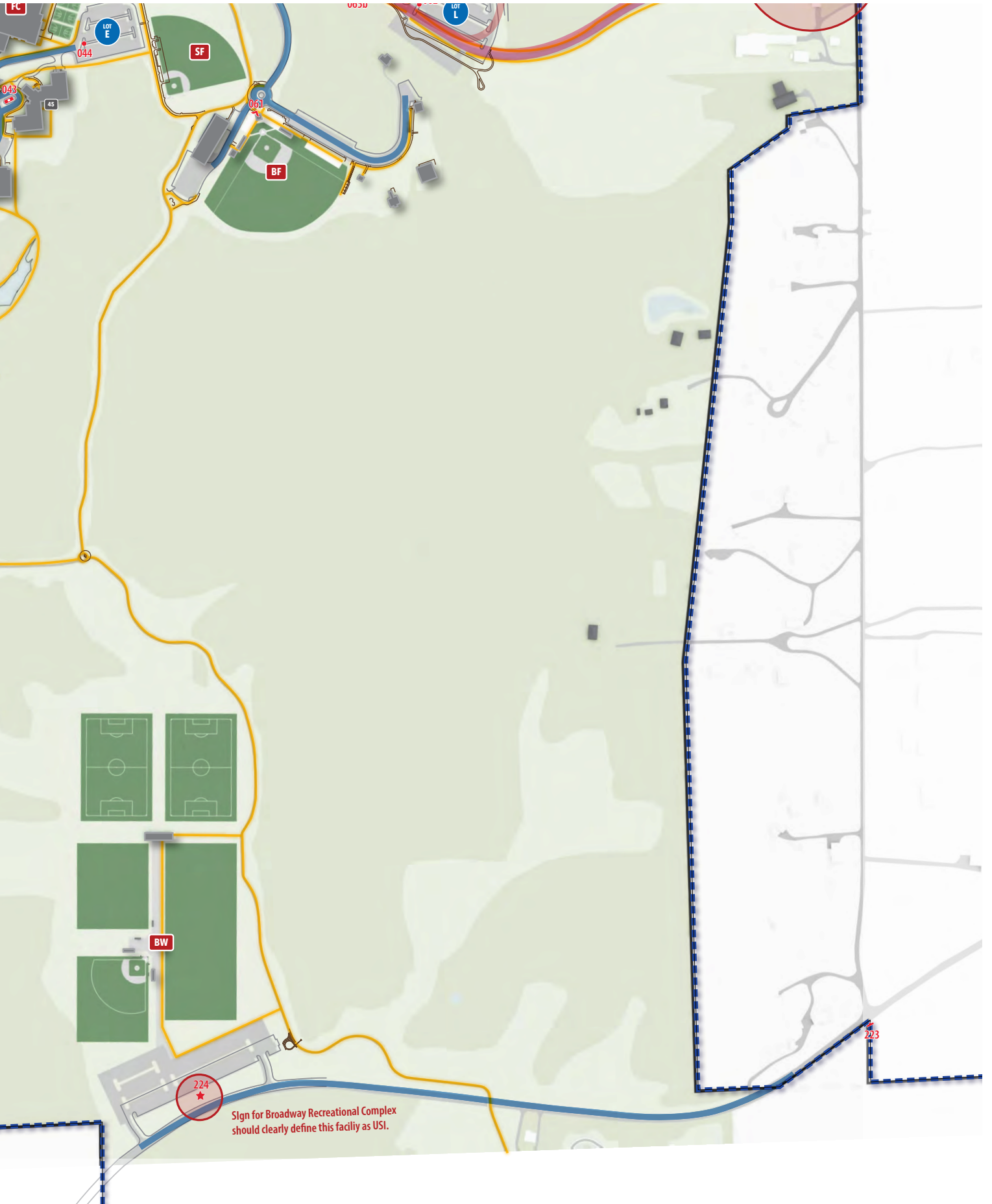
Indiana 62 (Lloyd Expressway)

Main Campus Entrance

Clarke Lane

Bent Twig Lane

University Blvd

Griffin Way

Bent Twig Lane

University Blvd

CN
HP
SC
WA
FA
ED
OC
PUB
PP
FWC
PS
UC WEST
UC EAST
PF
LA
BE
AC
RL
GC
GM

LOT A
LOT J
LOT I
LOT H
LOT G

N

★ CAMPUS BOUNDARY ID - VARIOUS SIZES

▲ VEHICULAR GUIDE

▫ BUILDING ID (FREESTANDING)

∧ BUILDING ID (ON-BUILDING) - VARIOUS SIZES

● PARKING LOT ID

✚ PEDESTRIAN KIOSK

HRL

RCC

RRC

FO

SS

AE

TS

TN

PA

FC

SF

BF

LOT B

LOT C

LOT D

LOT E

LOT K

LOT L

Clarke Lane

Bennett Lane

Mahrenholz Road

Clarke Lane Entrance

Future Entrance

Bennett Lane Entrance

Future Parking Garage

RECOMMENDATIONS

N

- ★ CAMPUS BOUNDARY ID - VARIOUS SIZES
- ▲ VEHICULAR GUIDE
- ▭ BUILDING ID (FREESTANDING)
- ︿ BUILDING ID (ON-BUILDING) - VARIOUS SIZES
- ● PARKING LOT ID
- ✚ PEDESTRIAN KIOSK

LOT
E

044

SF

45

043

061

BF

065D

LOT
L

Sign for Broadway Recreational Complex
should clearly define this faciliy as USI.

224

BW

223

05

CAMPUS DISTRICT RECOMMENDATIONS

The intent of the Campus Master Plan is to present a vision for the University of Southern Indiana (USI) that reinforces its goals and strategic objectives as it positions itself for the future. The Campus District Recommendations translate the Guiding Principles into an actionable planning framework to aid USI's future decision making process. It is intended to serve as a road map for the institution.

The illustrative Campus Master Plan represents an ideal future vision for the USI campus. The plan translates the guiding principles, key analysis objectives, and campus systems recommendations, developed during the master planning process, into a composite graphic. The recommendations embody ideas related to campus enhancement, preservation, and transformation opportunities that will strengthen the overall campus experience.

Both short-term and long-term opportunities for the continued growth and development of the University are represented within this plan. 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 and innovations.
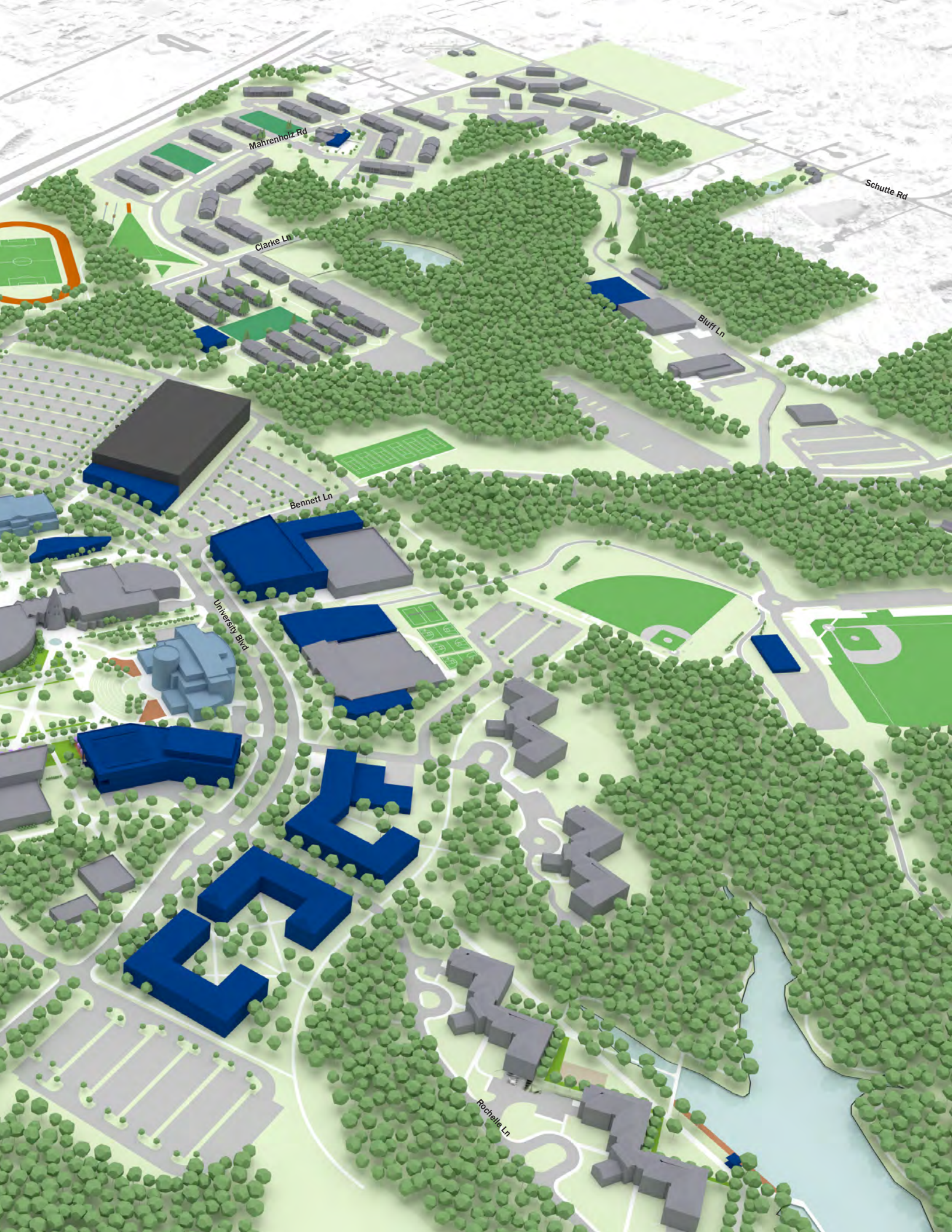
CAMPUS MASTER PLAN

The Recommendations for the Campus Master Plan are organized around five Key Planning Themes for the purposes of clearly outlining the proposed initiatives within the plan.

Key Planning Themes:

- Enrich the Academic Experience
- Transform Student Life
- Celebrate Campus Spirit
- Strengthen Campus Identity
- Improve Support Facilities
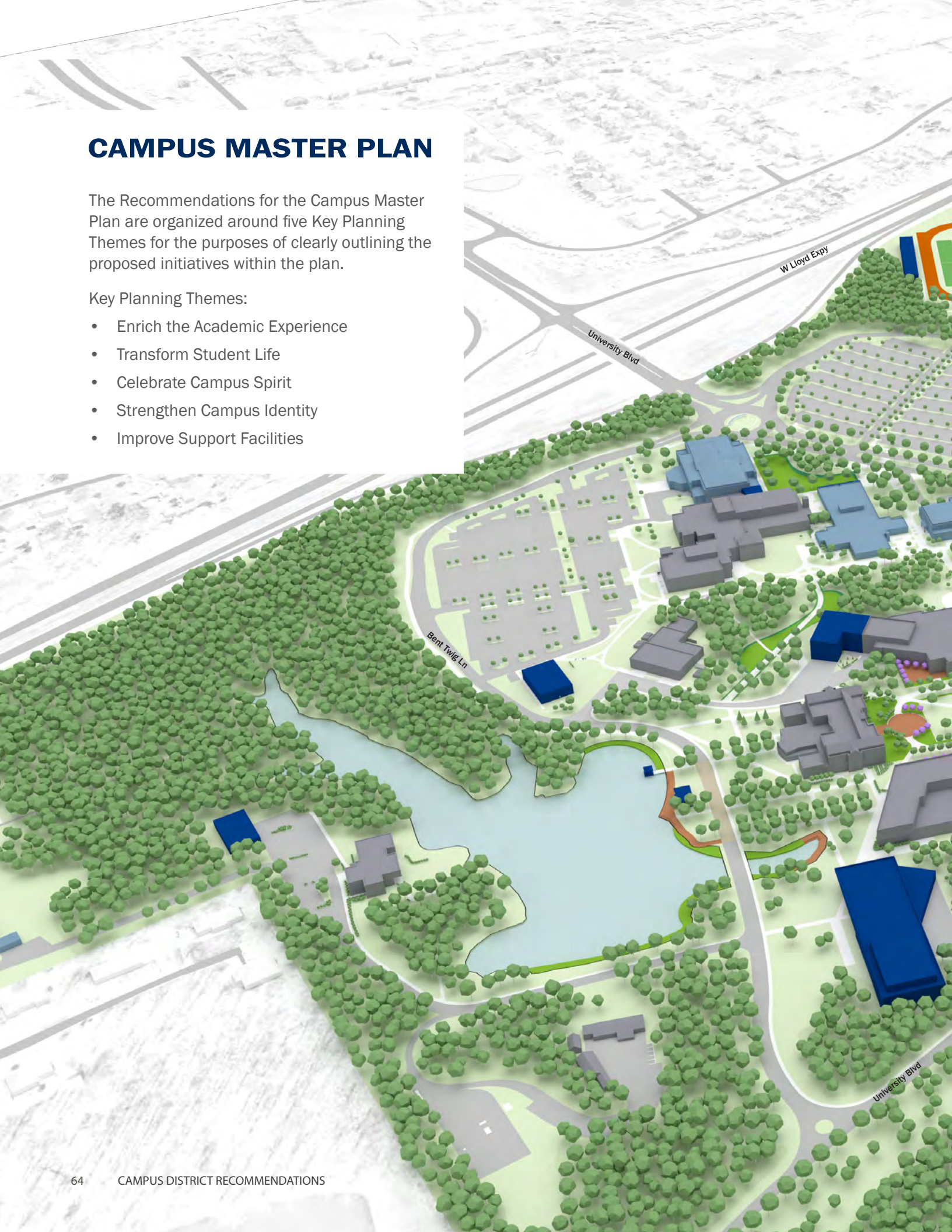
Mahrenholz Rd

Clarke Ln

Schutte Rd

Bluff Ln

Bennett Ln

University Blvd

Rochelle Ln

KEY PLANNING THEMES

The Campus Master Plan promotes strategies to enrich the academic experience thru the development of dynamic learning spaces and by repurposing existing facilities for higher impact.

Overarching Planning Strategies:

• Better utilize existing classrooms.

• Repurpose underutilized space for greater impact.

• Ensure technology is equitable across campus.

• Create uniform building condition.

• Transform Rice Library.

Enrich the Academic Experience

ENRICH THE ACADEMIC EXPERIENCE

01

RENOVATE HEALTH PROFESSIONS

A full-scale renovation of the Health Professions Center is recommended in order to elevate the overall quality of the classroom and laboratory spaces within the building. Expanded food offerings and collaboration space are also recommended in "The Link".

02

RENOVATE WRIGHT ADMIN/ FORUM BUILDING

A new facade on the north side of the Wright Administration Building would provide a more dynamic image and gateway into campus. In addition, modernized classroom spaces within the Forum will greatly improve the student experience within this facility.

03

ORR STUDENT SERVICES CENTER

The Campus Master Plan envisions the future of the Orr Center as being fully dedicated to its mission as a student services hub. This can be accomplished thru a series of strategic relocations to better position student facing resources in visible and easily accessible locations within this building.

04

RICE LIBRARY TRANSFORMATION

An opportunity exists to transform Rice Library into a 21st century learning commons with a focus on student success. By consolidating stacks on higher floors, more space can be dedicated to student collaboration. In addition, underutilized classroom spaces in the basement can be reconsidered for higher impact uses.

05

NEXUS INNOVATION CENTER

One of the most exciting ideas to emerge during the planning process was creation of the Nexus Innovation Center, an interdisciplinary facility. This is an emerging concept across the country and represents a powerful opportunity for USI.

PROPOSED

- ● EXISTING BUILDING
- ● PROPOSED BUILDING
- ● PROPOSED RENOVATION
- ● OPEN SPACE
- ● ATHLETIC FIELDS

ENRICH THE ACADEMIC EXPERIENCE:
CREATE THE NEXUS INNOVATION CENTER
PROPOSED

University Boulevard

Engineering

Design

Nexus

Business

Reflection Lake

NEXUS INNOVATION CENTER

The Nexus Innovation Center would serve as a new state-of-the-art facility designed to facilitate inter-disciplinary learning specifically focused on the intersections of engineering-business-art-and design. It further expands upon the integration initially promoted almost a decade ago at USI with development of the Business and Engineering Center.

The complex would occupy space on both the east and west sides of the existing Business and Engineering Center. The complex is envisioned as a multi-building facility with connections across all three buildings. It has been sited to take full advantage of its position adjacent to Reflection Lake and the Main Quad.

KEY PLANNING THEMES

An opportunity exists to increase student housing, dining, recreation and wellness options on campus to transform the student experience and to improve student recruitment and retention efforts.

Overarching Planning Strategies:

- Balance the mix of apartments and suites.

- Increase the number of residential units.

- Expand dining options on-campus.

- Enhance available student amenities.

- Recast the University Center.

Transform Student Life

TRANSFORM STUDENT LIFE

01
HOUSING + DINING COMPLEX
Three new residence halls are proposed adjacent to the existing residence halls to form a stronger neighborhood of student housing on campus. A new dining center is also proposed to be included on the first floor of the first new residence hall to be constructed.

02
HEALTH + WELLNESS CENTER
A southern expansion to the existing Recreation Center is proposed to allow for the co-location of health and wellness resources, currently distributed across campus, into one single centralized space.

03
CREATE A STUDENT UNION
The Campus Master Plan recommends University Center be transformed into a more student-focused facility that functions in a way that is representative of a student union on campus.

Presently, many offices and conference spaces dominate the top floors and limit it from being used as a dynamic hub for student activities and events on campus.

04
NEW APARTMENT COMMONS
The planning process revealed the need for increased amenities within the existing apartments. An opportunity exists to expand existing offerings in the Residence Life Community Center and also to construct a new "Commons". Increased food offerings and collaboration space are needed.

05
BALANCE APARTMENT MIX
As part of the master planning process, a detailed Housing Study was completed to better understand future student housing needs on campus. The feedback revealed a surplus of four-person, two-bedroom apartments and students' desire for a more diversified mix of unit types.

PROPOSED

EXISTING BUILDING

PROPOSED BUILDING

PROPOSED RENOVATION

OPEN SPACE

ATHLETIC FIELDS

KEY PLANNING THEMES

As a means to encourage more on-campus living, the Campus Master Plan explores ways to celebrate campus activities by enhancing recreation opportunities and making athletics more visible.

Overarching Planning Strategies:

- Encourage more on-campus living.

- Activate campus.

- Make athletics more visible with higher impact.

- Preserve and enhance recreation opportunities.

Celebrate Campus Spirit

CELEBRATE CAMPUS SPIRIT

01

STADIUM FOR SOCCER, TRACK AND FIELD EVENTS

There is currently no track and field facility on the USI campus. The Master Plan proposes a new stadium in the northern portion of campus along the Lloyd Expy. The facility is sized to allow for competition soccer on turf in the infield and a 400-meter track around the perimeter. Field events are to be located near the stadium.

02

PAC I + II EXPANSIONS

The Physical Activities Center is currently undergoing a significant expansion to allow for a new basketball and volleyball arena, as well as additional sports labs. An additional expansion is proposed for the future to add more seating and space for faculty and staff.

03

AQUATIC CENTER EXPANSION

As part of the Physical Activities Center expansion, the existing pool is proposed to be removed

and a new aquatic facility to be constructed as part of Phase II.

04

BASEBALL + SOFTBALL COMPLEX

USI boasts championship winning baseball and softball teams, however their current facilities are not reflective of this ranking. The Campus Master Plan proposes co-locating baseball and softball into a single athletic complex in order to optimize shared facilities. Baseball would remain in its current location while a new softball field would be proposed in place of the existing competition soccer field. Soccer would then be relocated to a new stadium venue to the north.

05

BROADWAY COMPLEX

Enhanced facilities are proposed at the Broadway Complex to better support athletic, intramural, and recreational activities on campus. The following page illustrates specific proposed enhancements within this area of campus.
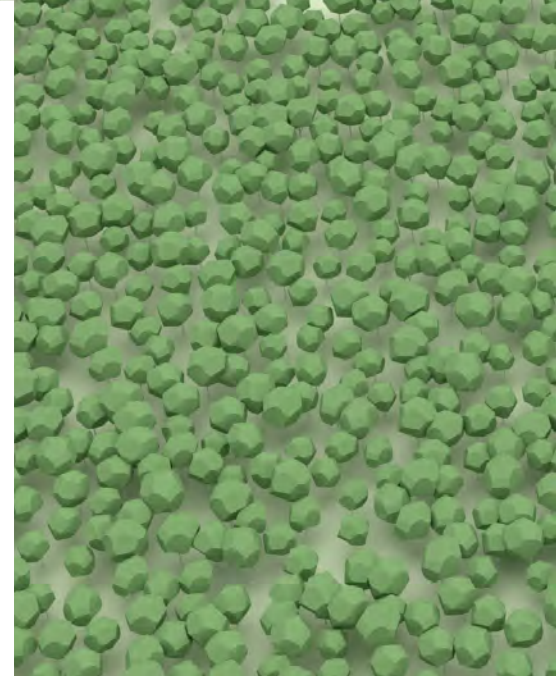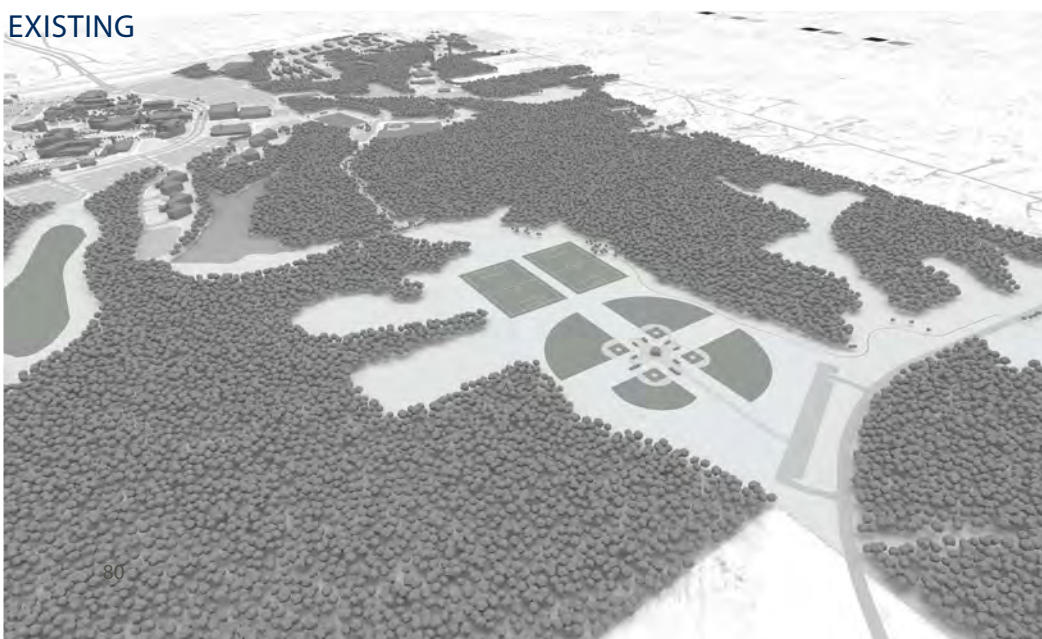
PROPOSED

- ● EXISTING BUILDING
- ● PROPOSED BUILDING
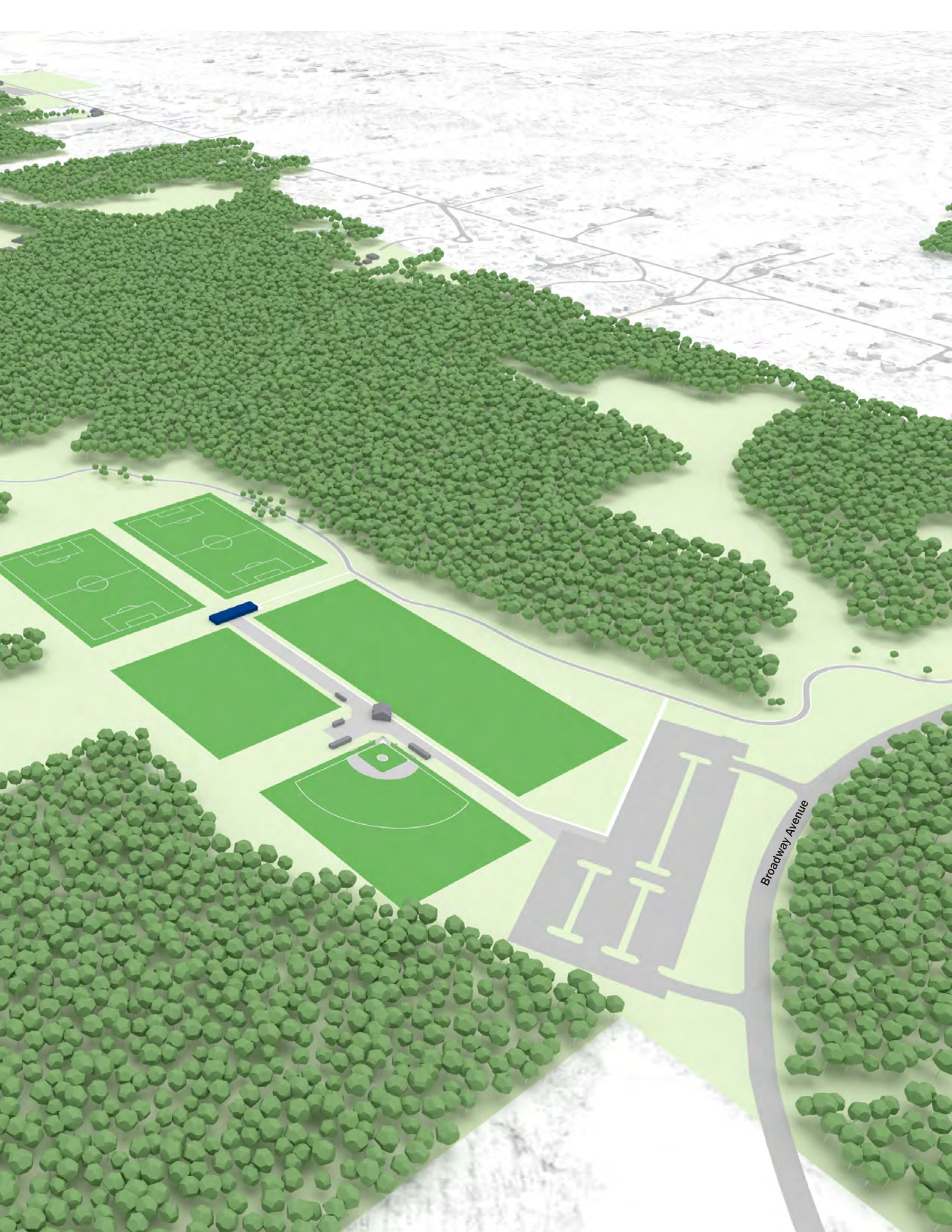- ● PROPOSED RENOVATION
- ● OPEN SPACE
- ● ATHLETIC FIELDS

CELEBRATE CAMPUS SPIRIT:
IMPROVE THE BROADWAY COMPLEX
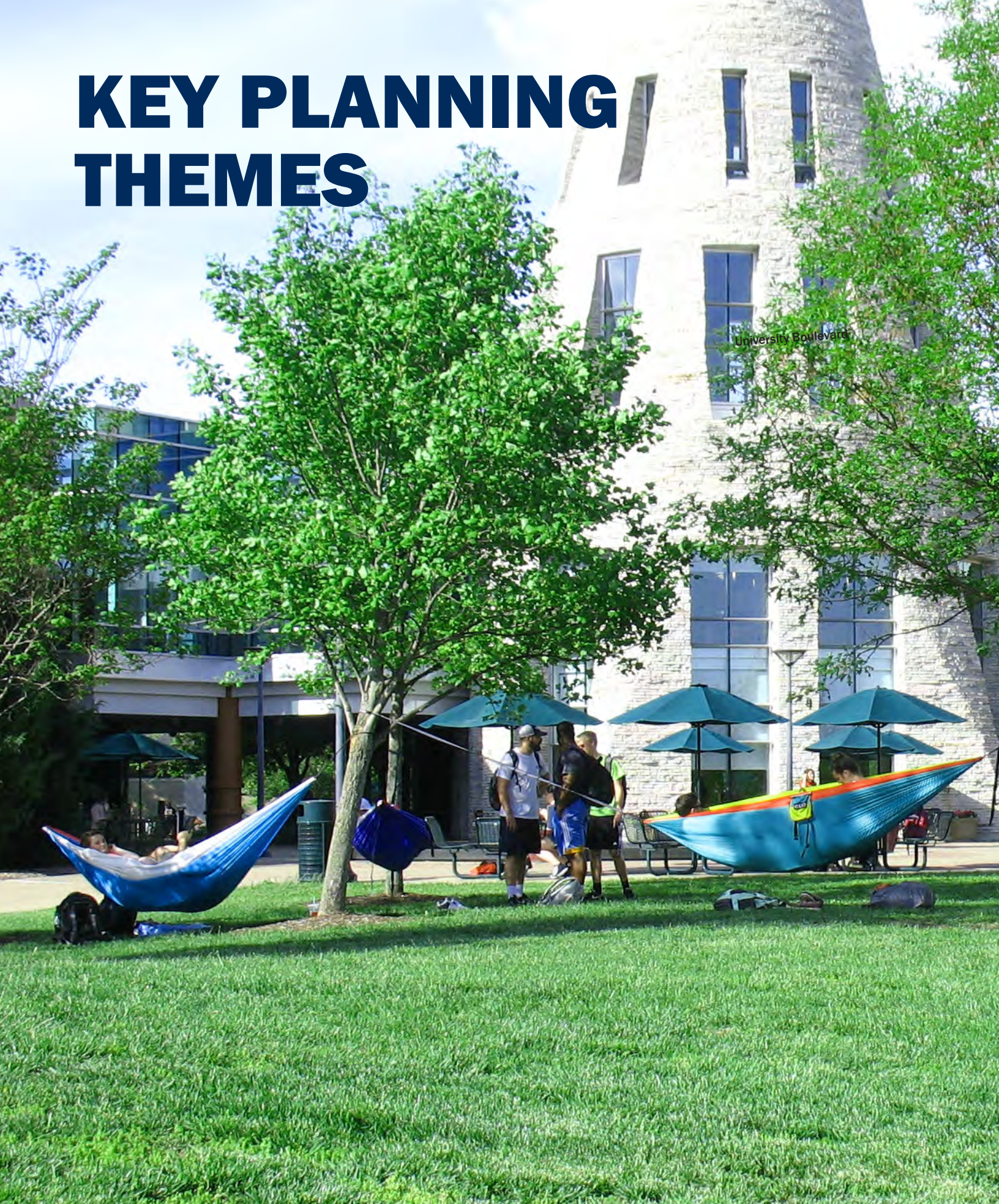PROPOSED

EXISTING

Broadway Avenue

KEY PLANNING THEMES

University Boulevard

The University of Southern Indiana is set within a beautiful natural environment. The Campus Master Plan seeks to embrace and strengthen connections to open spaces and natural features on campus.

Overarching Planning Strategies:

- Improve campus wayfinding and signage.

- Develop a consistent palette of open spaces.

- Enhance campus-wide connectivity.

- Embrace natural features (lakes, trees, topography).

Stregthen Campus Identity

STRENGTHEN CAMPUS IDENTITY

01
CREATE A SIGNATURE QUAD
The USI campus core is currently organized around a central open space with Rice Library anchoring the eastern end and the Liberal Arts Center on the western side. An opportunity exists to transform this space into a more dynamic landscape that can become a signature space for campus.

02
ENHANCE THE LAKES
USI is fortunate to have two existing lakes on campus, one directly west of the Liberal Arts Center and one east of the existing residence halls. However neither lake is treated as an amenity on campus. The Master Plan proposes a series of landscape enhancements to allow individuals on campus greater access and enjoyment of each lake.

03
WOODLAND WALKWAY
The area separating the Health Professions Center from the campus core is currently considered a psycological barrier and unpleasant connection. Thru the re-design of this space and addition of new landscape amenities, it has the potential to become a visually pleasing pedestrian corridor.

04
UNIVERSITY GATEWAY PLAZA
An opportunity exists to ehance the area directly north of the Orr Center and Wright Administration with landscaping and sculpture to provide a more visually pleasing gateway to campus.

05
APARTMENT OUTDOOR COMMONS
The Housing Study revealed that students within the apartments are yearning for more outdoor hang-out and recreation space. The Master Plan proposes the creation of additional unprogrammed green space for informal student use by selectively removing two existing apartement buildings.
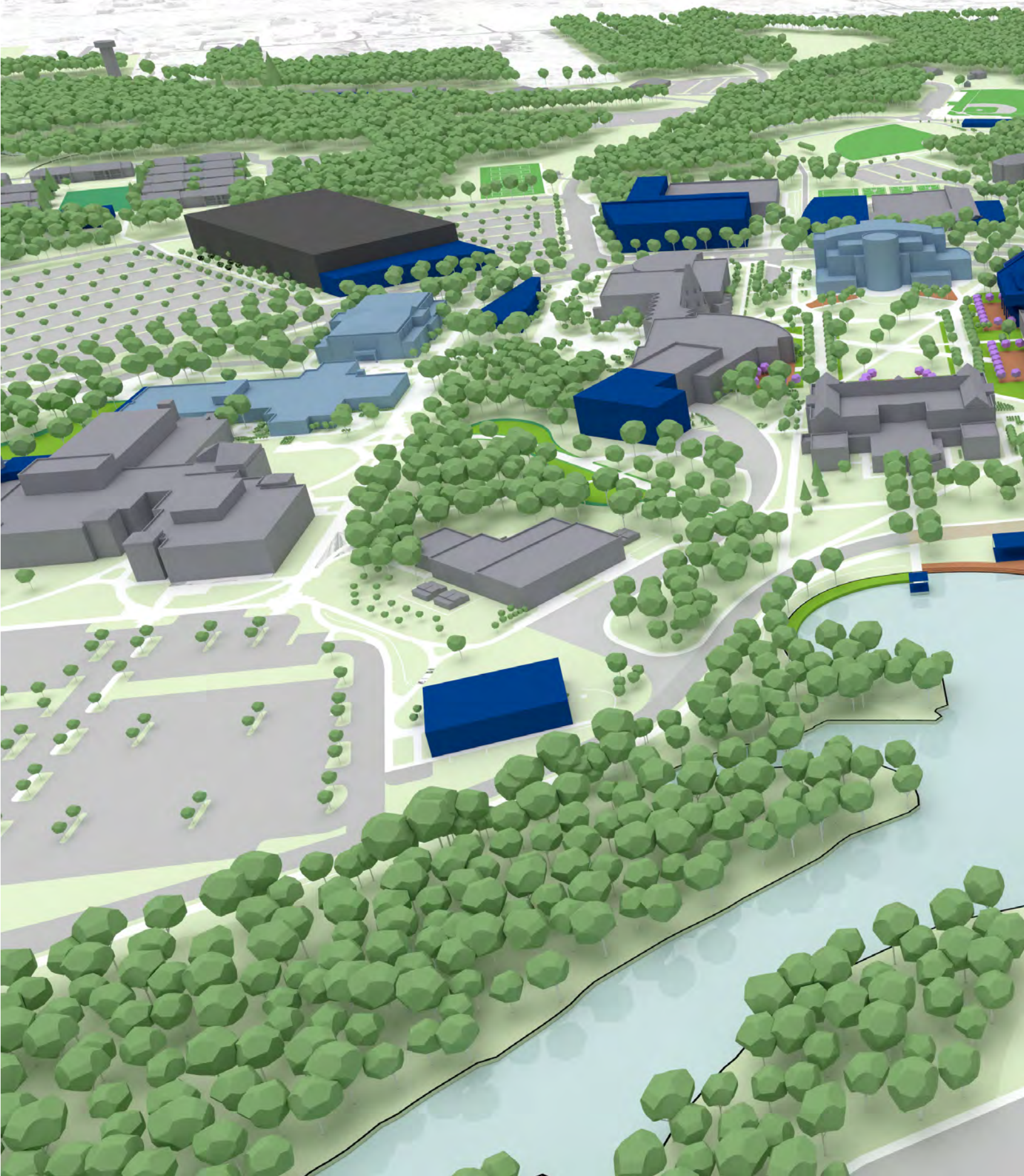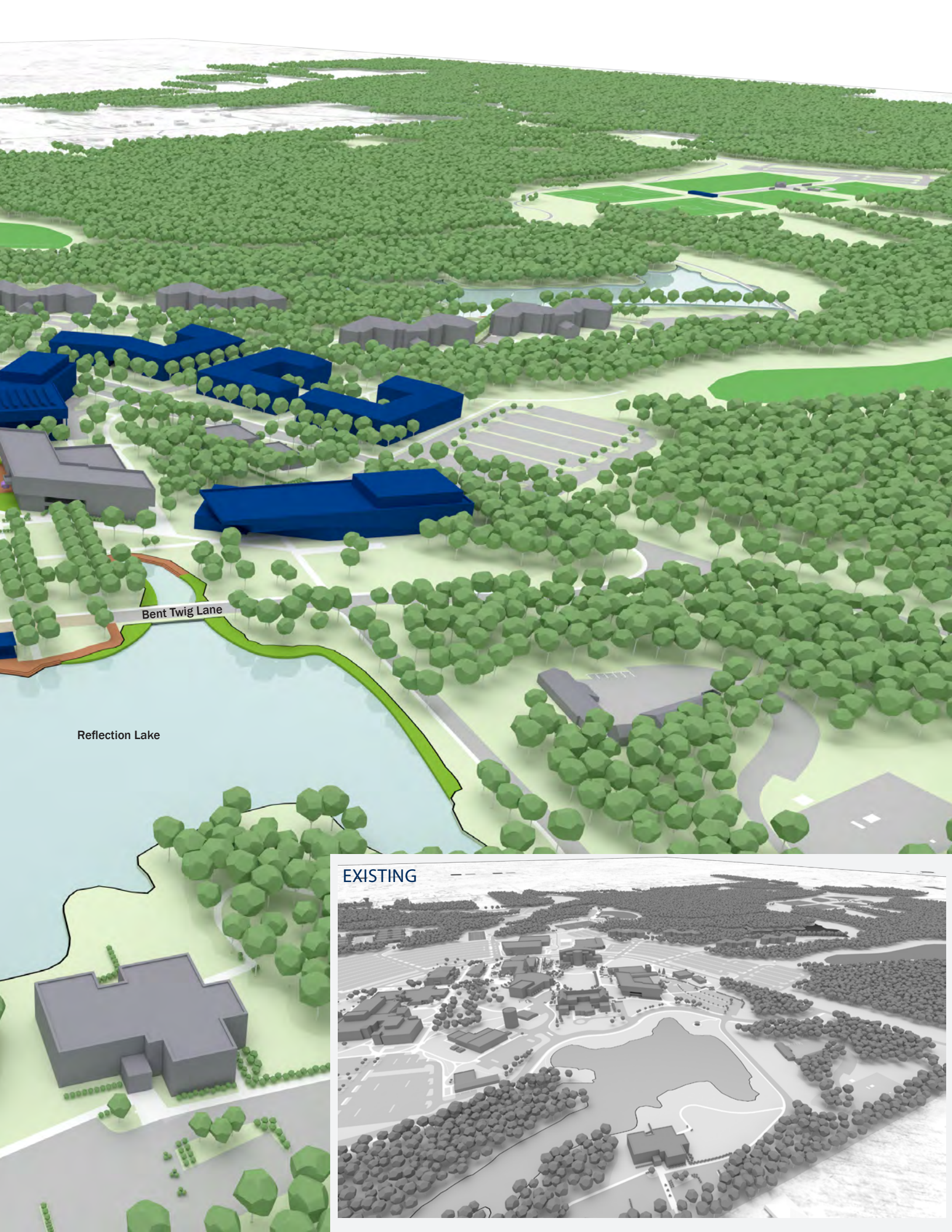
PROPOSED

EXISTING BUILDING

PROPOSED RENOVATION

ATHLETIC FIELDS

PROPOSED BUILDING

OPEN SPACE

Reflection Lake

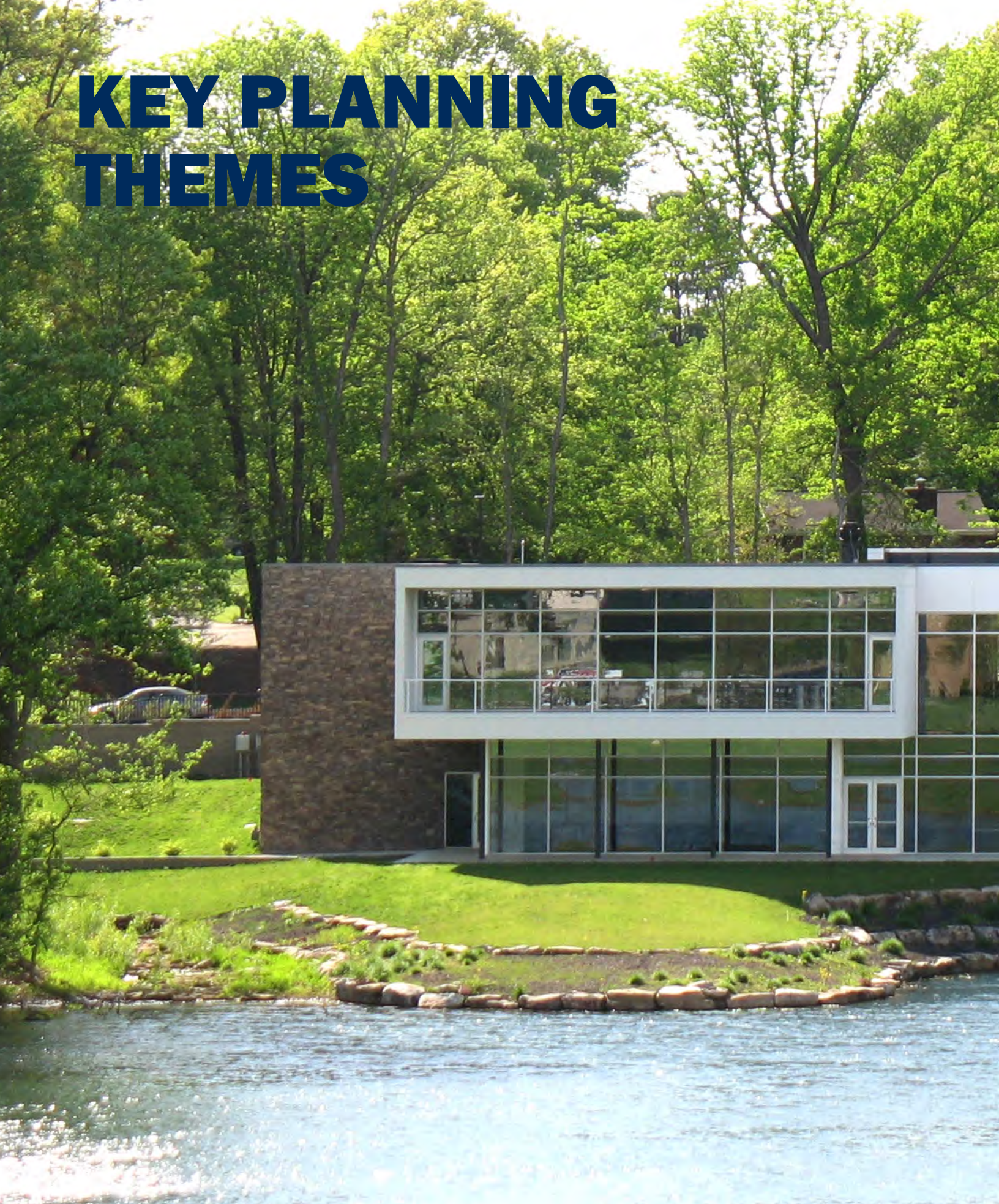Bent Twig Lane

KEY PLANNING THEMES

In order to elevate the quality of all support facilities and realize possible efficiencies, the Campus Master Plan recommends an investment to improve and upgrade auxiliary facilities across campus.

Overarching Planning Strategies:

- Elevate the quality of all support facilities.

- Identify improved opportunities for collaboration.

- Position student focused services in centralized locations.

- Realize operational efficiencies where possible.

Improve Support Facilities

IMPROVE SUPPORT FACILITIES

01
CHILDREN'S LEARNING CENTER
The Master Plan recommends the construction of a new Children's Learning Center. The proposed location will still allow easy access for parent drop-off while also improving connectivity to the core.

02
COPY SERVICES/PHOTOGRAPHY
With construction of a new Children's Learning Center in place of the existing Publishing Services Center, a new home is needed for these offices. Student facing resources such as Copy Services and Photography are recommended for placement in the University Center.

03
ALUMNI + FOUNDATION
The USI Foundation is currently located on the far eastern corner of campus. A new proposed building near the existing President's Home would allow for greater synergy between these related facilities.

04
PUBLIC SAFETY + PUBLISHING
A new mixed-use building fronting the proposed parking structure would be an ideal placement for the re-location of both Public Safety and the Publishing Center

05
PARKING STRUCTURE
In order to accommodate future development on campus, a new parking structure is needed to offset the displacement of existing surface parking lots. It is sited to provide improved connectivity between the apartments and the academic core of campus.

06
CONSOLIDATED STORAGE
An opportunity exists to consolidate existing storage from across campus into a single multi-purpose facility adjacent to the existing campus warehouse. This would allow for operational efficiences and improved effectiveness.

PROPOSED

- ● EXISTING BUILDING
- ● PROPOSED BUILDING
- ● PROPOSED RENOVATION
- ● OPEN SPACE
- ● ATHLETIC FIELDS

06

LANDSCAPE AND OPEN SPACE DESIGN GUIDELINES

Landscape and Open Space Design Guidelines are established to ensure that those who work on USI's campus landscape understand their role as stewards of the USI brand: an expectation of consistent high quality design grounded in a woodland context. This is a unique opportunity for USI to re-focus attention on the campus landscape, and develop key projects that help re-frame landscape as a driver of campus place rather than as part of individual building projects. Working in concert with other design review processes, the Landscape and Open Space Design Guidelines are intended to be flexible, yet establish a baseline for the level of performance expected of designers for each landscape and open space type.

The following Landscape and Open Space Design Guidelines are divided into three sections:

Landscape Action Projects The first section focuses on specific landscape design projects, referred to as Action Projects, that were identified to help improve campus identity in the immediate future.

Landscape Typology Guidelines The second section breaks down the overall campus into eight specific landscape typologies defined by a combination of site function, character, materials, furnishings, and planting.

Landscape Maintenance Guidelines The last section defines the level of maintenance required for general landscape zones based on location and function.

A Woodland Walk with
Playful Groves

A Signature Quadrangle with
Intimate Edges

3

2A

1

Active Lakeside Settings
with Long Views

2B
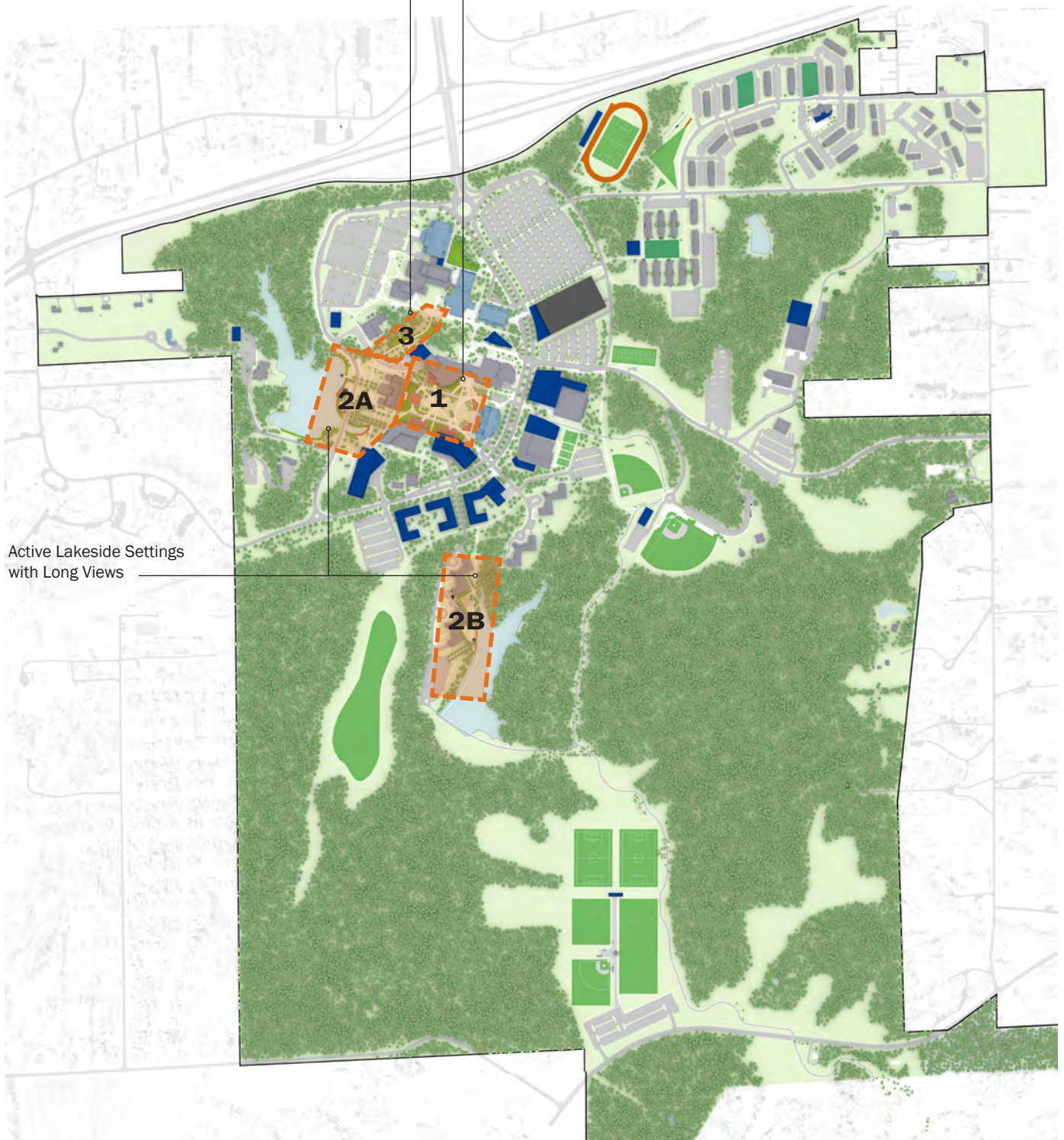
LANDSCAPE ACTION PROJECTS

Action Projects are identified as specific landscape design projects to help improve USI's overall campus identity in the immediate future. These Action Projects address deficiencies by offering recommendations for enhancing existing water bodies, retrofitting quadrangles and social spaces, and adjusting cross-campus pedestrian circulation patterns. The Action Projects, as part of the overall comprehensive planning effort, support the goal of embracing USI's unique sense-of-place defined by:

- A Rugged Natural Woodland Context

- Long-views of Campus Lakes

- Traditional Campus Core Open Space

- Eclectic Architecture

The following three Action Projects are grounded in ideas generated during campus site visits and a design charrette with USI staff during the summer of 2017. The projects were identified based on meeting the following criteria:

- Realistic and can be accomplished in the near future

- Scope of work targets current landscape issues

- Address common goals of creating a consistent campus image, enhancing natural systems, improving cross-campus circulation

Double Rows of Canopy Trees and
Groundcovers to Define Quadrangle
Edge and Reduce Scale of Quad

Smaller Flowing Tree Bosques on
East and West Ends of Quadrangle

Additional Paths that Respond to
Existing Pedestrian Circulation Routes

University Center
West

Liberal Arts
Center

David Rice Library

Business and
Engineering Center

Quadrangle Concept Plan

Flowering Trees and Simple
Shrub and Groundcovers at
Building Edges

Entry Plazas with Moveable
Seating and Tables

01 A SIGNATURE QUADRANGLE WITH INTIMATE EDGES

At the heart of USI's campus is an existing green space loosely defined by the University Center, Rice Library, Liberal Arts Center, Business and Engineering Center, and Technology Center. Today's quadrangle is impressive but lacks a well defined edge of consistent canopy trees that transition from the building edges to the central lawn. This action project will reduce the scale of the central green by better defining the edges so it feels more like a signature quadrangle enclosed by trees and architecture.

DESIGN PRINCIPLES

01 Simplify building edge transitions with low-maintenance groundcovers and occasional shrub masses.

02 Provide new pedestrian paths that accommodate existing circulation patterns while highlighting focal points, such as building entries and the existing fountain.

03 Provide double rows of canopy trees along paths on the north and south edges of the quadrangle.

04 Reduce the scale of east and west plazas by adding flowering tree groves.

05 Integrate outdoor seating and tables in small plaza areas near building entries that can function as outdoor learning spaces.

Existing Quadrangle

Smaller Secondary Paths
Accommodate Existing Pedestrian

Large Canopy Trees Define the
Quad Edge

University of Illinois Urbana-Champaign, Urbana-Champaign, IL

Well Defined Seating Areas at
Building Edges

Miami University, Oxford, OH

Simple Shrub and Groundcovers at
Adjacent Building Edges

University of Virginia, Charlottesville, VA

Washington University, St. Louis, MO

Trees with Annual
Spring Blooms

Primary View Corridors
From Building Entries or
Significant Walks

Terraced Lakefront Edge
with Outdoor Seating and
Pavilion for Small Events
and Classes

Road Still Remains, but Surface
Material is Changed to Highlight
Significance of Lakeside Open Space

Double row of Canopy Trees Frame
Views to Lake and help Reduce
Scale of Lakeside Lawn Area

Reflection Lake

Bent Twig Lane

Reflection Lake Concept Plan

Aquatic and Emergent
Vegetation to Stabilize Shoreline
and Improve Water Quality

Pulled Bent Twig Lane Westward to
Create Better Physical Connection
Between Buildings and Lakeside
Open Space

02 ACTIVE LAKESIDE SETTINGS WITH LONG VIEWS

There are two existing lakes on USI's campus that have the potential to better engage with the adjacent open space and buildings. Reflection Lake is the larger of the two lakes, and is located directly east of the Liberal Arts Center. The second lake is located directly east of Ruston and O'Bannon Halls. This action project will create better visual and physical connections to both lakes, while also creating lakeside spaces that enhance USI's campus image.


Existing Reflection Lake

DESIGN PRINCIPLES

01 Create tree-lined walks that frame long-views of Reflection Lake and help reduce the scale of the lakeside lawn areas.

02 Stabilize shoreline with a mix of stone terracing and aquatic/emergent vegetation that improves water quality.

03 Provide a lakeside gathering space with a pavilion, moveable seating, and tables that can accommodate small events and classes.

04 Change the surface material of Bent Twig Lane to a specialty paving that highlights the significance of the new lakeside open space.

05 Integrate the regional Burdette Park Trail with the new Bent Twig Lane configuration.

06 Soften building and open space transition at Ruston and O'Bannon Hall with ground covers and small groupings of ornamental trees adjacent to buildings.

07 At Ruston and O'Bannon Hall provide a community overlook and boardwalk that ties into the regional Burdette Park Trail.

Edge Planting to
Create Smaller
Courtyard Feel

Informal Student
Recreation Space

Boardwalk and Overlook
Creates New Interaction
Between Residents and Lake

O'Bannon
Hall
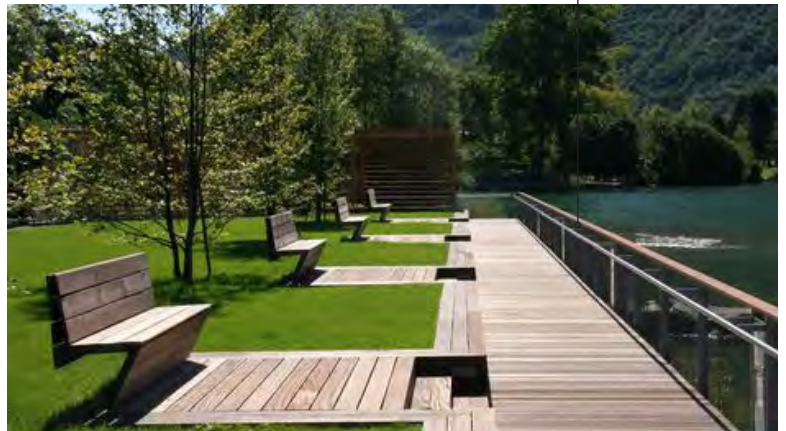
Ruston
Hall

Ruston and O'Bannon Hall
Lake Concept Plan

Existing Lake Near Ruston Hall

Liberty Park,
Clarksville, TN

Boardwalk Ties into
Existing Regional
Trail System

Lakefront Overlook
with Outdoor Seating
and Pavilion for Small
Student Events

Aquatic and Shoreline
Planting Reduces
Erosion and Improves
Water Quality

Boardwalk Ties into Existing
Regional Trail System

Terraced Shoreline Edge
Reduces Erosion and
Functions as Seating

Tree-lined Walks
Create Long Framed
View Corridors

Indiana University-South Bend, South Bend, IN

University of Wisconsin-Madison Student
Union Terrace, Madison, WI

Small Pavilion Functions
as Stage and Outdoor
Classroom

Woodland Hill Walk Framed
by Allee of Trees and Shade
tolerant Groundcover with
Specialty Lighting

Hammock Groves and
Outdoor Classroom Areas

Education
Center

Forum
Wing

Physical
Plant Service
Center

Reflection
Lake

University Center
West

Liberal Arts
Center

Woodland Hill Walk and Grove Concept Plan

Primary View Corridor
Towards Reflection Lake

03 A WOODLAND WALK WITH PLAYFUL GROVES

Located north of University Center West is a rolling woodland with a mix of large and small canopy trees. Today's woodland has a few paths that eventually link to the Physical Plant and Service Building. With the removal of the Public Safety building, this Action Project will provide an improved woodland walk experience that connects the northern core campus to Reflection Lake and the Liberal Arts Center.

DESIGN PRINCIPLES

01 Create a tree-lined walk that frames long-views of Reflection Lake while providing better connectivity to adjacent open spaces.

02 Integrate two lawn groves along the path that are defined by low groundcovers and small groupings of multi-stemmed trees.

03 Integrate hammocks and seating elements that help define a playful woodland character.

Existing Woodland Hill

Philadelphia Navy Yard, Philadelphia, PA

Playful Hammocks and
Use of Color Help Visually
Activate Space

University of Illinois Arboretum, Urbana-Champaign, IL

Smaller Groupings of
Trees Help Define Extent
of Grove

Philadelphia Navy Yard, Philadelphia, PA

LANDSCAPE AND OPEN SPACE GUIDELINES

The following section breaks down the overall campus landscape into eight landscape typologies defined by a combination of site function, character, materials, furnishings, and planting. Although the landscape has been broken down and defined by type, each should be viewed as playing a critical role in creating one consistent and comprehensive landscape that defines the overall campus experience and identity.

Landscape Typologies:

1. Shared Residential Greens

2. Plazas and Entry Courtyards

3. Athletics and Recreation

4. Transition Landscapes

5. Pedestrian Malls

6. Streetscapes

7. Parking Lots and Service Docks

8. Naturalized Landscapes

01 SHARED RESIDENTIAL GREENS

Shared residential greens are open spaces typically enclosed by residential buildings and structures on two, three or four sides. The scale of these greens can vary greatly, with some large enough to throw a frisbee, while others just large enough to accommodate a small plaza and edge planting. The layout is typically composed of a central lawn space framed by seating, trees, and edge plantings. Most shared residential greens will incorporate paths that provide connections between the surrounding structures and buildings. These areas are meant to be a space that supports social gatherings, passive recreation, and academic learning initiatives.

PAVING AND MATERIALS

Paths and small plaza areas should be constructed of durable materials that can be a combination of concrete, pavers, or compacted stone. The material palette should consider and relate to existing buildings, structures, and context whenever possible.

FURNISHINGS

Shared greens typically include site furnishing such as fixed benches, moveable seating and tables, trash receptacles, and lighting. The selection of these elements should complement and be consistent with USI's overall campus identity while also being durable and easily maintained by staff. Pedestrian scale lights should create a comfortable and safe evening environment.

PLANTING

Plant material can vary, but typically includes a few canopy trees that provide shaded seating areas. Building edges should consist of small ornamental trees and shrub groupings with low-maintenance groundcovers. Whenever possible bioswales and other stormwater plantings should be used to help slow, filter, and infiltrate stormwater runoff on-site as means to help protect the adjacent woodlands from erosion and improve water quality in the lakes.

Flowering Trees and Shrubs at Edge of

Lawn Panels for Passive Recreation

Moveable Tables and Seating along Edge of Green

Yale University, New Haven, CT

Miami University, Oxford, OH

District Detroit, Detroit, MI

Artificial Turf in Small, High Use Areas

02 **PLAZAS AND ENTRY COURTYARDS**

Plazas and entry courtyards are highly active, multi-use spaces that accommodate a variety of circulation and uses, and are usually found near the intersections of primary circulation routes or near the entrances to primary buildings. Plazas and entry courtyards range in size from small to large and their size is dependent on their intended use and context. They should allow for a variety of pedestrian movements through the space and support small gatherings outdoor learning initiatives, events, and outdoor art. Views from these spaces should connect with other adjacent open spaces and interior building spaces.

PAVING AND MATERIALS

Plazas and entry courtyards are primarily hardscape elements constructed of concrete and/or pavers in patterns consistent with USI's campus image. The material palette should consider and relate to existing buildings, structures, and context whenever possible. Compacted or crushed aggregate should be avoided near building entries since the aggregate is often tracked into the buildings and can damage floors.

FURNISHINGS

A variety of seating types, including movable tables and chairs, should be placed throughout the plaza and encourage people watching,

studying and gathering. Public art, water features and shade structures/canopies should complement USI's campus image. Plazas and entry courtyards should always have lighting, trash and recycling receptacles. Additional furnishings or amenities may include tables, bicycle racks, and planters.

PLANTING

Trees should consist of varieties that are high branching, durable, low maintenance, and do not bear fruits, nuts or provide a distinguishable odor. The trees and adjacent shrub plantings should create a sense of intimacy and consider springtime blooms and fall color.

Existing Plaza

Existing Entry Courtyard
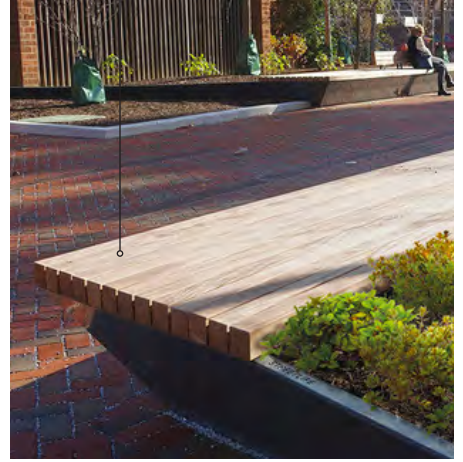
Trees in Pavers Provide
Natural Overhead Canopy

Trees in Pavers Should Have
a Subsurface Silva System to
Support Healthy Root Growth

Raised Planters Function
as Edge Seating

Paley Park, NYC, New York

Science Center, Philadelphia, PA

District Detroit, Detroit MI

Specialty Lighting Extends
Use into Evening

03 ATHLETICS AND RECREATION

Athletics and recreation landscapes consist of large active turf fields, sport courts and their adjacent buffers with supporting trails, seating, and viewing areas. Athletic and recreation areas support various types of active recreation activities on surfaces consisting of lawn, concrete or sand. Areas surrounding these active areas support viewing, seating, and pedestrian circulation, while also functioning as a transition to adjacent buildings and natural areas.

PAVING AND TURF MATERIALS

Sport courts and paths should consist of durable concrete surfaces that easily accept athletic paint that can withstand intense use. Sport fields should consider using high-end turf and soil mixes, or artificial turf to help reduce long-term maintenance and irrigation.

FURNISHINGS

Seating should consist of fixed benches that are located outside active playing zones. Shade structures should be considered in viewing areas that are in large open recreation fields. Other items such as trash and recycling receptacles, bicycle parking, and smaller non-traditional fitness stations should be located near the regional trail corridor.

PLANTING AND STORMWATER

In areas outside active playing zones, planting should consist of no-mow grasses or low-maintenance native grasses that transition to adjacent woodlands and natural spaces. Trees should be planted near viewing areas and near paths to provide areas of shade. Stormwater detention areas and bioswale plantings should be used when space is available to manage runoff from turf and sport courts.

Existing Recreation Fields and Regional Burdette Park Bicycle Path

Vegetated Swales Capture Stormwater from Fields and Courts and Slowly Release it into Natural Areas

Artificial Turf Reduces Annual Maintenance and Eliminates Need for Irrigation

University of Wisconsin-Madison, Madison, WI

Tallgrass Buffer Between Natural and Recreation Areas Reduces Need for Mowing and Irrigation

University of Pennsylvania, Philadelphia, PA

Navy Yards, Philadelphia, PA

Small Fitness Areas Help Activate Spaces along Trail Corridor

04 **TRANSITION LANDSCAPES**

Transition landscapes consist of secondary corridors and spaces between quadrangles, greens, plazas, courtyards, parking lots, and pedestrians malls. Transition landscapes are typically areas that help ground buildings, connect and frame views of adjacent open spaces, and highlight building entry points.

PAVING AND MATERIALS

Since many of these transition landscapes are along secondary pedestrian routes, paving is typically concrete with pavers only at critical intersections or building entries. Plantbeds near building foundations should include maintenance strips that consist of stone aggregate or mulch to allow for easy access to window and facade cleaning.

FURNISHINGS

Pedestrian light fixtures and the occasional bench or seat wall are typical elements that help define the character of these spaces. Spacing of these elements should consider winter snow maintenance and plowing.

PLANTING

Planting should consist of low-maintenance groundcovers with occasional groupings of shrubs and flowering ornamental trees that frame views and identify building entries. Plantings should allow for views in and out of windows in adjacent buildings.

Existing Building Edge and Supportive Landscape

Maintenance Access, Drip-lines

Clean, Simple Groundcovers

Elevated Edges for Seating

University of Illinois, Urbana-Champaign, IL

University of Illinois, Urbana-Champaign, IL

University of Michigan, Ann Arbor, MI

1.5' to 2' Maintenance Strip

4' MINIMUM LAWN OFFSET

8' TO 16' GROUNDCOVER AND SHRUB

BUILDING EDGE

05 **PEDESTRIAN MALLS**

Pedestrian malls are the primary routes that connect significant buildings and open spaces, and often accommodate other circulation types, such as bicycles, service equipment, and emergency vehicles.

PAVING AND MATERIALS

Specialty paving consisting of high quality pavers are typical used to help define the overall character of the pedestrian malls. Concrete and special jointing can also be used, but should contrast the secondary pedestrian routes. When selecting pavers and subbase systems, special consideration should be focused on making sure the selections support fire trucks and service vehicles. Durable permeable pavers are also widely available and will help reduce stormwater runoff.

FURNISHINGS

Benches, pedestrian lighting, and occasional banners should help define the character of the pedestrian mall. Lights should be offset a minimum of 2' from the edge of walk to accommodate snow removal and minimize accidental damage.

PLANTING

Canopy trees should line both edges of the pedestrian mall and be spaced to accommodate lighting and seating areas. Trees should be offset a minimum of 6' from the edge of walk to accommodate snow removal and minimize accidental damage. Trees should be high branching, salt tolerant and should not be planted in a monoculture.

Potential Existing Corridors for Conversion

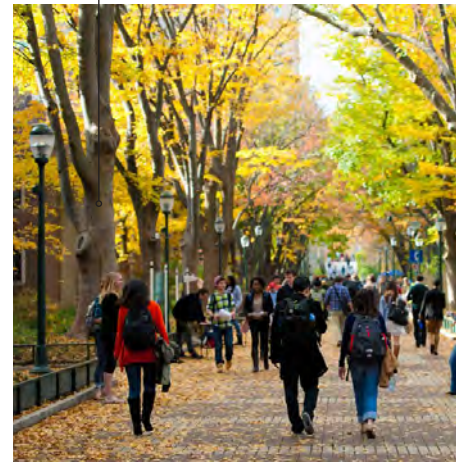Pavers Able to Withstand Emergency and Service

Buildings Define Edge

University of Chicago, Chicago, IL

Lighting Defines Edge

University of Illinois, Urbana-Champaign, IL

Trees Define Edge

University of Pennsylvania, Philadelphia, PA

8' MIN. AMENITY ZONE | TYPICALLY 16' TO 22' CORRIDOR | 8' MIN. AMENITY ZONE

06 **STREETSCAPES**

Streetscape refers to the holistic design, use, and appearance of corridors within a dedicated right-of-way providing circulation for a variety of transit types that include vehicles, pedestrians, and bicyclists.

Streetscapes should allow for the efficient transit of motorized vehicles, but should put a strong emphasis on pedestrian and bicycle transit and safety. Vehicular travel lanes should be minimal in width, with an optimal lane width of 10'-12'. Pedestrian sidewalks should be a minimum width of 6', with an optimal width of 8'-10'. Ideally, pedestrian sidewalks will be separated from the vehicular travel lanes by a curb and buffer, such as a lawn or planted terrace, which should be a minimum width of 6'.

In some cases, bicycle lanes may be incorporated into the street and be designated by painted striping. In this case, the bicycle lane should be a minimum width of 5'.

PAVING AND MATERIALS

Vehicular travel lanes are generally constructed of asphalt or concrete, and use of special materials, such as brick or concrete pavers, to define special districts or key pedestrian crossings. Sidewalks are typically constructed of concrete, and should incorporate a finish that provides traction, such as a medium broom finish perpendicular to the travel direction. In special locations or districts, sidewalks may be constructed from specialty materials such as pavers made from clay, concrete or other materials.

FURNISHINGS

Lawn and paved terraces provide good opportunities for integrating other streetscape amenities, such as lighting, benches, trash receptacles, regulatory signage and transit stops. If there is not a lawn or paved terrace, these amenities are typically found along the back side of the sidewalk. All furnishing selections should provide an aesthetic character that is consistent and complements USI's campus image.

PLANTING

When implemented, tree species should be carefully selected. Trees should be high branching, salt tolerant and should not be planted in a monoculture.

Existing University Boulevard Corridor

Trees and Pavers
Help Define Overall

Raised Crossings
to Slow Traffic

Penn State University, University Park, PA

Amenity Zone for Seating,
Bicycle Parking, and Planting

University of Wisconsin-Madison, Madison, WI

Portals at Street Edge
Help Define Primary
Entries into Campus Core

Marquette University, Milwaukee, WI

07 PARKING LOTS AND SERVICE DOCKS

Parking lots and service docks are an essential infrastructure component to an academic campus. Parking lots provide vehicular parking for staff, visitors, commuting students and general campus service vehicles. Service docks function as an area to load and unload goods supporting the campus building.

PAVING AND MATERIALS

Parking lots and service areas should be constructed of durable materials, such as asphalt, and concrete, but may also incorporate materials such as standard and pervious pavers.

FURNISHINGS

Parking lots should be well lit, secure, and support USI's campus image. Secondary pedestrian lights should highlight walks within parking lots. Service docks should be well lit and should be contained within a building or provide an exterior screen or gate along primary open spaces and pedestrian corridors.

PLANTING

Parking lots should include trees and vegetation to provide shaded corridors, manage stormwater, and improve viewsheds. Vegetation should be carefully selected within parking lots to minimize damage to vehicles that might occur from fruit or nut bearing species, or from wildlife that may be attracted to vegetation. Personal safety and viewsheds throughout parking lots should be considered when selecting plant materials and determining location.

Whenever possible pervious paving, bioswales and other stormwater plantings should be used to help slow, filter, and infiltrate stormwater runoff on-site as means to help protect the adjacent woodlands from erosion and improve water quality in the lakes.

Existing Parking Median

Existing Loading Dock

Vegetated swale captures stormwater runoff

Loading Dock Gate Helps Screen Views and Controls Access

Trees help shade vehicles and soften views of large parking lots

Delta College, Bay City, MI

08 NATURALIZED LANDSCAPES

The surrounding woodlands and lakes comprise a majority of the naturalized landscape on USI's campus. Woodlands are not just about trees and tree canopy but include the understory, ground plain and the interactions that occur between plants and animals within them. A healthy understory is comprised of shade tolerant flowering and shrub species and an herbaceous ground plain including spring ephemerals and native grasses and sedges with a fully intact leaf litter.

The lakes and their aquatic habitat consist of natural and created features and each is unique to its location and in its function. In the instance of the two lakes, the top of bank defines the outer limits of the aquatic resource. Riparian edges are natural and constructed vegetative buffers that serve as a transition between the aquatic and terrestrial habitats and are equally unique to its location and function. These habitats have the greatest species diversity since they are the zone where aquatic and terrestrial plants and animals overlap.

PAVING AND MATERIALS

Paving such as concrete and pavers should be used sparingly and only on a primary accessible routes, overlooks and gathering spaces. On Woodland trails mulch or compacted stone fines (with a binder) should be the primary material. Along the lake and other riparian edges boardwalks should be used to minimize the environmental impact.

FURNISHINGS

At key overlooks provide benches, seat walls, tables, and shade structures that can function as immersive outdoor classrooms supporting academic initiatives.

PLANTING

Aquatic and emergent vegetation should be integrated into the lake edges to help reduce erosion, improve water quality, and provide habitat. Keep dead trees only where appropriate and safety is not an issue. Allow down trees that are not impacting trails to accumulate on the ground so they can function as habitat for woodland amphibians and small mammals.

Existing Seating Node in Natural Area

Existing Trails in Natural Area

Immersive Outdoor Classroom

University of Wisconsin-Madison, Madison, WI

Pitzer College, Claremont, CA

Crosswinds Marsh, New Boston, MI

Vegetated Edge Reduces Erosion and Improves Water Quality

LANDSCAPE MAINTENANCE

Landscape Maintenance Guidelines are established to provide a standard of care for preserving the structure, quality, character and health of both intentional and natural campus landscape at USI.

LEGEND

- ● ZONE 01
- ● ZONE 02
- ● ZONE 03

LANDSCAPE MAINTENANCE BY ZONE

USI should implement the following maintenance zones to prioritize anticipated levels of maintenance required for each zone. Highly visible areas of campus including entrances and high pedestrian activity areas should receive the most amount of maintenance, secondary areas of campus should receive less maintenance and more passive campus open spaces and campus edges with little or no pedestrian activity should receive little to no maintenance.

Zone 01
High visibility open spaces such as primary pedestrian malls, plazas, quadrangles, and streetscapes

- Highest water use and maintenance attention
- Highest level of landscape design, including more annuals, perennials, shrubs and ornamental shrubs

Zone 02
Secondary open spaces such courtyards, intramural recreation areas, transition landscapes and shared greens

- Moderate water use
- Open lawns, canopy trees, and select areas with shrubs and ornamental trees along buildings

Zone 03
Tertiary open spaces such parking lots, service areas, and natural areas

- Low water use
- Minimal tree maintenance in natural areas
- Mostly native grass, wildflower mixes and no-mow mixes with minimal maintenance

LANDSCAPE MAINTENANCE BY TYPE

Sustainable approaches provide the underpinning to each of the following categories of landscape typology.

Trees Recommendations

- All trees should have mulch saucers in turf areas; lightly toss mulch with rake monthly to keep it fresh and to prevent lawn clippings from covering it up.

- Tree wrap on all young and/or newly planted trees, at least during the winter months.

- Instill (monetary) penalties if contractors damage trees.

- Do not use monocultures of trees anywhere, especially in street tree planting programs, in case of complete decimation of species.

- Develop a list of usable trees based on soil type and hydrology. Do not avoid tree species because they are not considered a "pretty" tree if it will be successful.

- Ensure that each newly planted tree has room for root expansion.

Turf Recommendations

- Set a standard for mowing heights. The proper mowing height is dependent on the species of grass; generally, a Kentucky bluegrass mix should be mown 2 to 3" tall in spring and fall and to 3.5" height in summer. Tall fescue turf should always be mown 3 to 3.5' tall.

- Do not try to grow turf in shade. Fescue blends can be successful in shade but consider low-maintenance, drought-tolerant ground covers instead.

- Remove turf from narrow, undersized, hard to mow areas and consider installing groundcovers or shrubs.

Plant Bed Recommendations

- If plant beds are overrun with weeds, the plants and soil should be removed and the bed re-planted. Beds should receive mulch (but never more than 2" depth) to reduce weed growth. Maintenance crews should rely on hand-pulling of weeds instead of spraying herbicides

- Revisit each landscape bed, starting with high visibility areas, and infill gaps with appropriate plant material. Use tried and tested, reliable landscape plants if the bed has been difficult to establish

- Methods of edging include spaded, steel and stone. Lawn grasses will always invade mulched beds if there is no effective separation, and hand edging by spade is recommended as the preferred method, creating a strong, clean, defined bed edge.

- Invest in and install more quick-couplers across the campuses to ensure available irrigation for landscape beds if automatic irrigation is not available.