

Realizing the Vision

2018 Facilities Master Plan
University of Maryland, Baltimore County

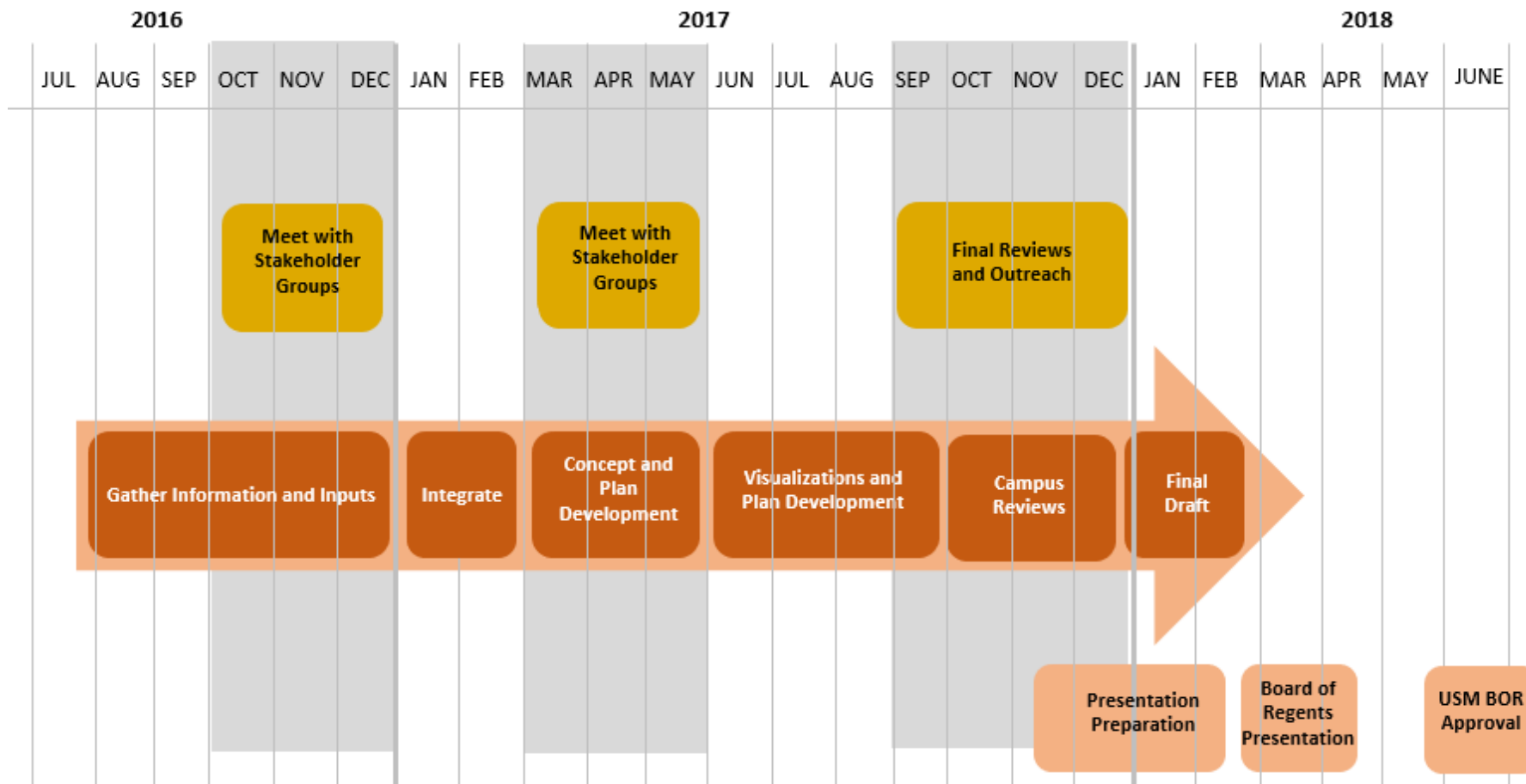


- Framework for orderly growth, linked to university mission and strategic plan
- Development plan for building renewals, new buildings, utility upgrades, and site improvements
- Strategy to address challenge of climate change
- Basis of capital plan



Schedule

UMBC 2018 Facilities Master Plan



- 1 Align campus development with UMBC's **strategic plan**.
- 2 Provide for **enrollment growth** in an intentional manner.
- 3 Assure the campus is **welcoming** and accessible.
- 4 Promote **meaningful interactions** through thoughtful planning.
- 5 Advance **carbon neutrality** and protect the natural environment through responsible stewardship.
- 6 **Optimize** utilization of existing resources.
- 7 Encourage interdisciplinary scholarship and research through **purposeful adjacencies**.





1968

Historic
Campus
Development



1978
Historic
Campus
Development



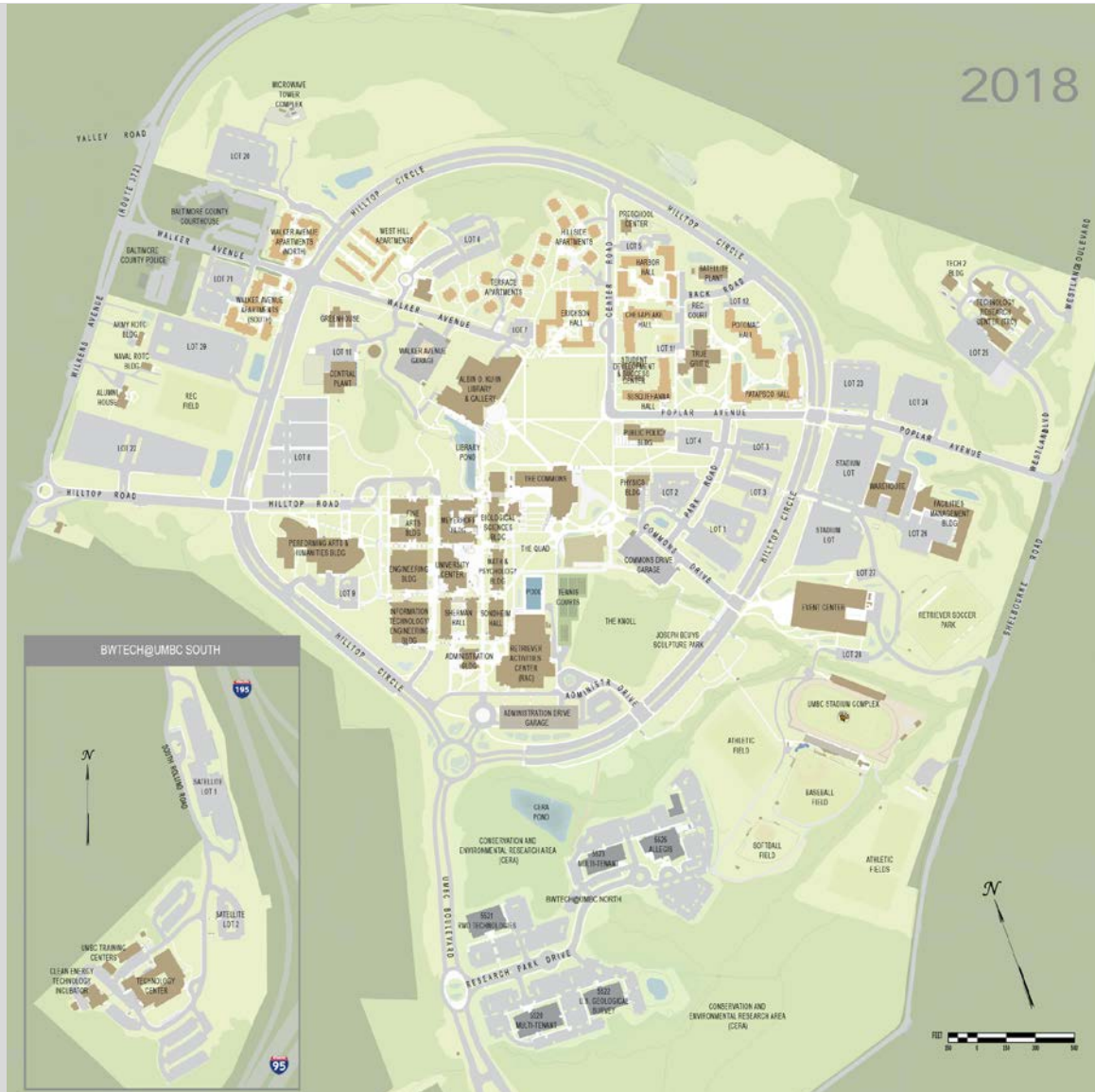
Historic
Campus
Development



Historic Campus Development



Historic Campus Development



Historic Campus Development



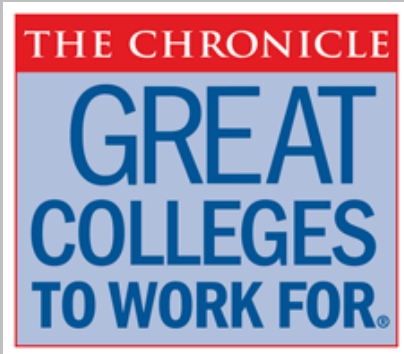
Most Innovative Schools

1. Arizona State University—Tempe
2. Stanford University
3. Massachusetts Institute of Technology
4. Georgia State University
5. Carnegie Mellon University
6. Northeastern University
- 7. UMBC**
8. University of Michigan—Ann Arbor
9. Harvard University
10. Duke University
10. Portland State University
12. California Institute of Technology



Best Undergraduate Teaching

1. Princeton University
2. Dartmouth College
3. Brown University
3. Rice University
5. Miami University-Oxford
6. University of Michigan—Ann Arbor
7. College of William and Mary
8. Georgia State University
9. Stanford University
10. Duke University
11. Yale University
12. Wake Forest University
- 13. UMBC**
14. Indiana University—Bloomington
15. University of Wisconsin—Madison
16. Vanderbilt University



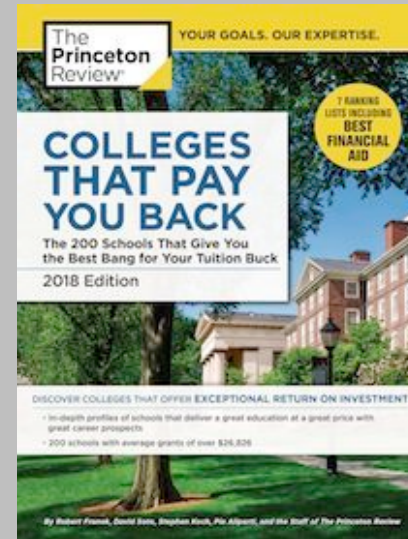
"Honor Roll"
excelled in nearly every
measured category



"Best Value University"
for 8th year in a row



Top 2% of Universities
Worldwide



*"for students seeking a
superb education with
great career preparation
and at an affordable
price"*



One of the
World's Top Universities
for 6th consecutive time

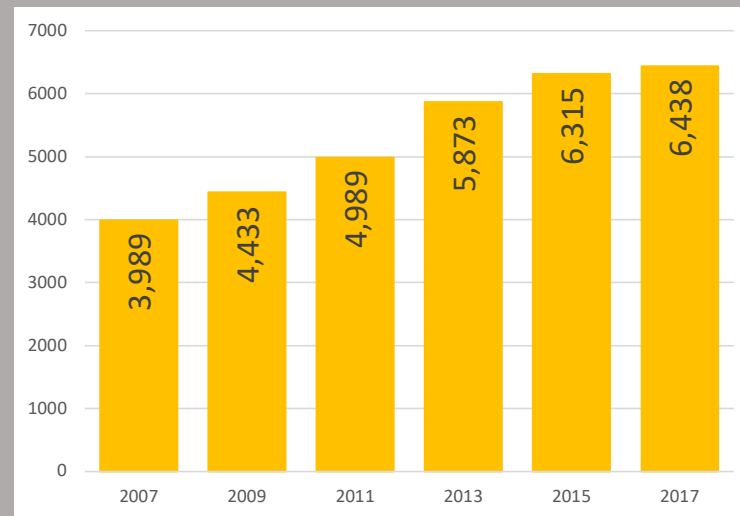


Making a Difference

UMBC 2018 Facilities Master Plan

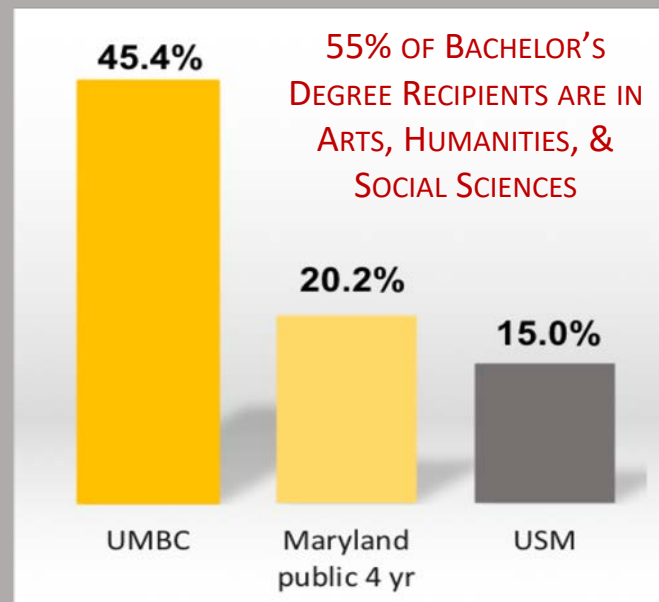


UNDERGRADUATE STEM ENROLLMENT





STEM BACHELOR'S DEGREE RECIPIENTS





Teachers of the Year

Washington Post

Sean Pang '09, '11 (2017)

Shalonda Holt '07 (2016)

Baltimore County

Corey Carter '08, '10



Lakeland Partnership

Sherman Family Foundation

Lakeland Elementary

Lakeland Middle School

Southwest Baltimore

Lakeland STEAM Center



Whiting Fellowship

Denise Meringolo, Professor of History
for Baltimore Uprising public history project



Proscenium Theatre

Black Box Theatre

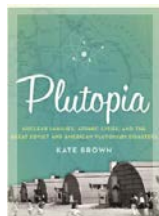
Concert Hall

Dance Cube



Faculty Making a Difference

UMBC 2018 Facilities Master Plan



Kate Brown, Professor of History
2016 Carnegie Fellow for nuclear disaster research
2016 Berlin Prize Fellowship



Anne Sarah Rubin, Professor of History and
Associate Director of the Imaging Research Center
eLincoln Prize
James Harvey Robinson Prize



George Derek Musgrove '97, Assoc. Professor of
History
Author of *Chocolate City: A History of Race and
Democracy in the Nation's Capital*



Jessica Berman, Director of Dresher Center for the
Humanities
The Inclusion Imperative supported by the Andrew
Mellon Foundation

Faculty Making a Difference

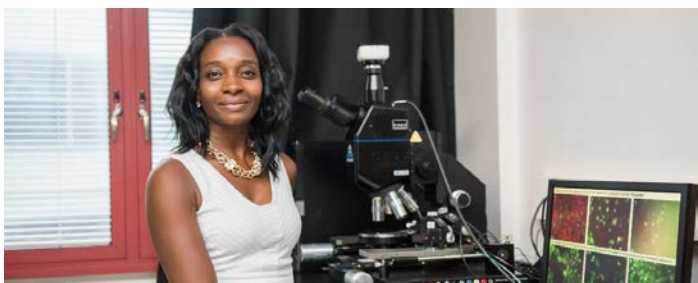
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Michael Summers, Professor of Chemistry & Biochemistry
Investigator with Howard Hughes Medical Institute
National Academy of Sciences Member
Retrovirus (HIV-1) Assembly and Structure



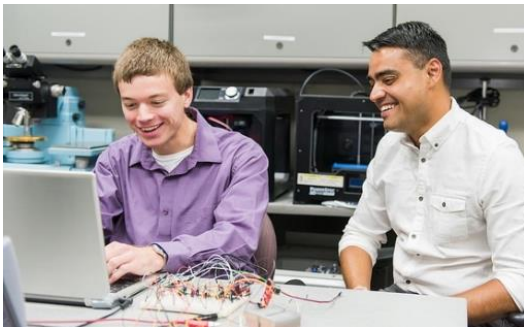
Govind Rao, Professor of Chemical, Biochemical, & Environmental Engineering and Director of Center for Advanced Sensor Technology
2017 Pioneer Award, Technologies Saving Lives & Empowering Patients
Portable bioreactors to rapidly manufacture medicines
Affordable incubator for vulnerable newborns in low-resource areas



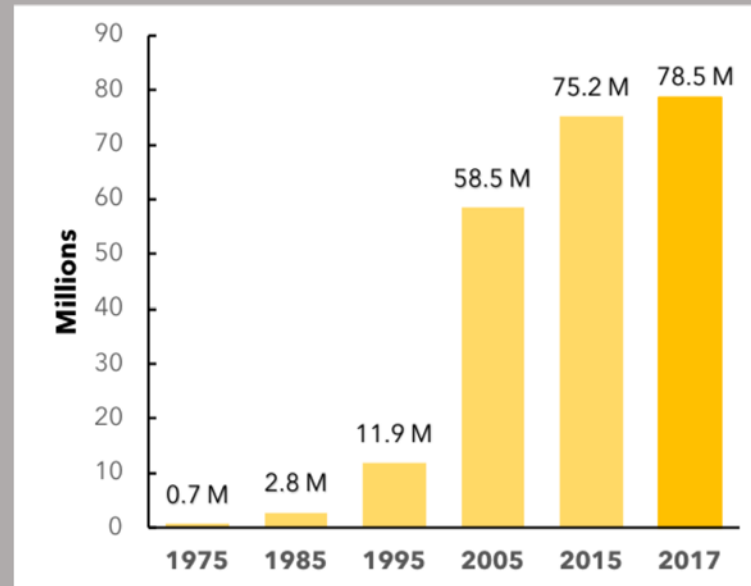
Gymama Slaughter, Associate Professor of Computer Science & Electrical Engineering
Human-Powered Biosensors (\$400,000 NSF CAREER Award)
Bioreactors for Life-Saving Organ Transplants (\$1.5M from U.S. Army Medical Research and Materiel Command)

Research Making a Difference

UMBC 2018 Facilities Master Plan



GROWTH IN RESEARCH EXPENDITURES



\$98 million in FY17 Extramural Research Awards



UMBC/UMB Partnership

Joint Degree Programs

- Graduate program in biochemistry and molecular biology
- Ph.D. programs in gerontology and in biostatistics
- Dual-Campus School of Social Work

Institute of Marine and Environmental
Technology (IMET)

Center for Brain Imaging Research (CBIR)

UMBC-UMB Research and Innovation
Partnership Seed Grant Program

Nuclear Magnetic Resonance Core Facility



bwtech@UMBC North

- Three incubators focused on cybersecurity, life sciences, and clean technology
- 130 companies
- 50% focused on cybersecurity and IT
- Over 1,600 direct jobs and 2,500 indirect jobs
- 1,000 annual student internships
- More than 25% of CEOs are minorities and 30% are women

UMBC GENERATES:



78,000 JOBS STATEWIDE,
including jobs held by alumni.
(3% of jobs in Maryland)



\$7.8 BILLION in household income
(4% of Maryland HHI)



\$531 MILLION in state and local
government taxes

Nearly 70%
of our 70,000
alumni live in
Maryland.

Source: Anirban Basu, Sage Policy Group report (2016)



UMBC defeats Vermont to win a bid to the NCAA men's basketball tournament

Making History!

UMBC 2018 Facilities Master Plan

The New York Times

Cinderella Story? It's True for U.M.B.C. in Academics, Too

By ERICA L. GREEN MARCH 17, 2018



THE BALTIMORE SUN

Never heard of UMBC? MIT has. And Cal Tech. And Harvard. And Stanford...



The Washington Post

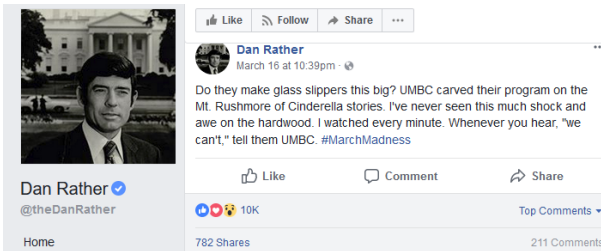
UMBC called 'Surgeon General approved' after upset

By Associated Press March 16

D.C. Sports Blog

Seth Davis apologizes after getting roasted by UMBC's Twitter account

By Dan Steinberg March 17 Email the author



L'ÉQUIPE

UMBC signe l'exploit du siècle dans le tournoi NCAA

Publié le samedi 17 mars 2018 à 10:18 | Mis à jour le 17/03/2018 à 11:40

En écrasant Virginia vendredi (74-54), UMBC, une université basée dans le Maryland, est devenue la première de l'histoire à éliminer d'entrée une équipe classée tête de série n°1.

Launch Point for Leaders

UMBC 2018 Facilities Master Plan

You'll find UMBC alumni making a difference at all levels—in Baltimore, across Maryland, and on the national stage.



U.S. Surgeon General
Jerome Adams '97, M4



President
Clemson University
James Clements '85, M.S. '91, Ph.D. '93



Director, Applied Physics Laboratory
Johns Hopkins University
Ralph Semmel, Ph.D. '92



Vice Provost for Information
Technology and CI
Johns Hopkins University
Stephanie Reel '85



Dean of the School of Dentistry
University of Maryland
Mark A. Reynolds '78



President and CEO
Winthrop Rockefeller Foundation
Sherece West-Scantlebury, Ph.D. '07



President/CEO
Associated Black Charities
Diane Bell McCoy '73



Co-founder and Chair, Betamore
Chair, Baltimore Angels
Greg Cangialosi '96



Founder and CEO,
Center for Urban Families
Joseph T. Jones, Jr '06



Vice President & General Manager at
Lockheed Martin RMS—Cyber, Ships &
Advanced Technologies
Chair, Greater Baltimore Committee
Stephanie Hill '86

Launch Point for Leaders

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Speaker Pro Tem
Maryland State Delegate
Adrienne Jones '76



Maryland State Delegate
Haven Shoemaker '87



Maryland State Delegate
Charles Sydnor III, M.P.R. '00



Delegate
Mark Chang '99



Chief of Staff
Office of the Governor,
Matt Clark '00



Deputy Chief of Staff,
Office of the Governor,
Tiffany Robinson '97



Maryland State Senator
James Mathias '74



Howard County Executive
Allan Kittleman '81

UMBC
BY THE NUMBERS
FALL 2017



13,662 students



faculty and staff

1,019

1,930



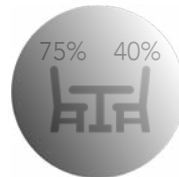
4.0 million

gross square feet (GSF)



73 buildings

main campus



highly residential

freshmen/undergraduates
living on campus

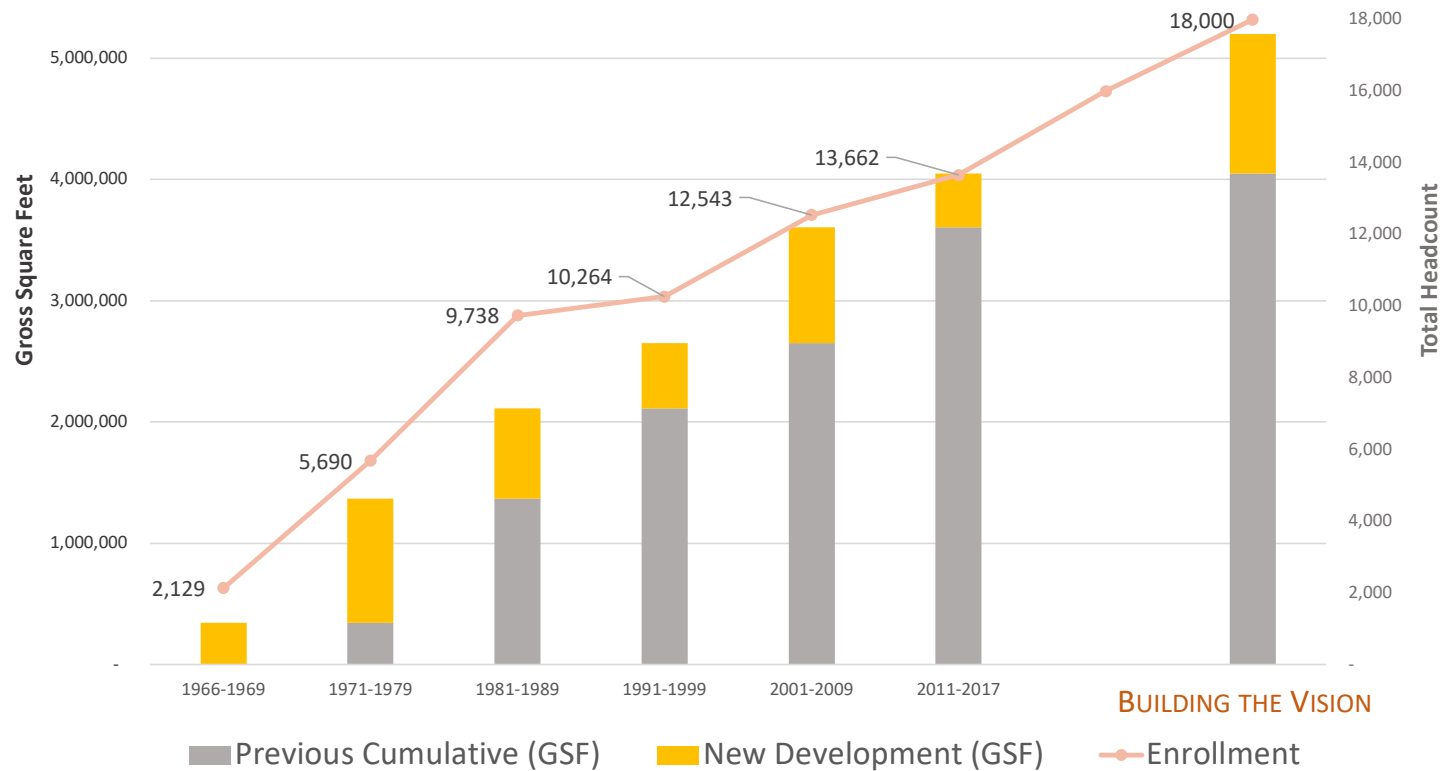


4,000 beds

in residential communities

Space Needs Tied to Enrollment Growth

UMBC 2018 Facilities Master Plan

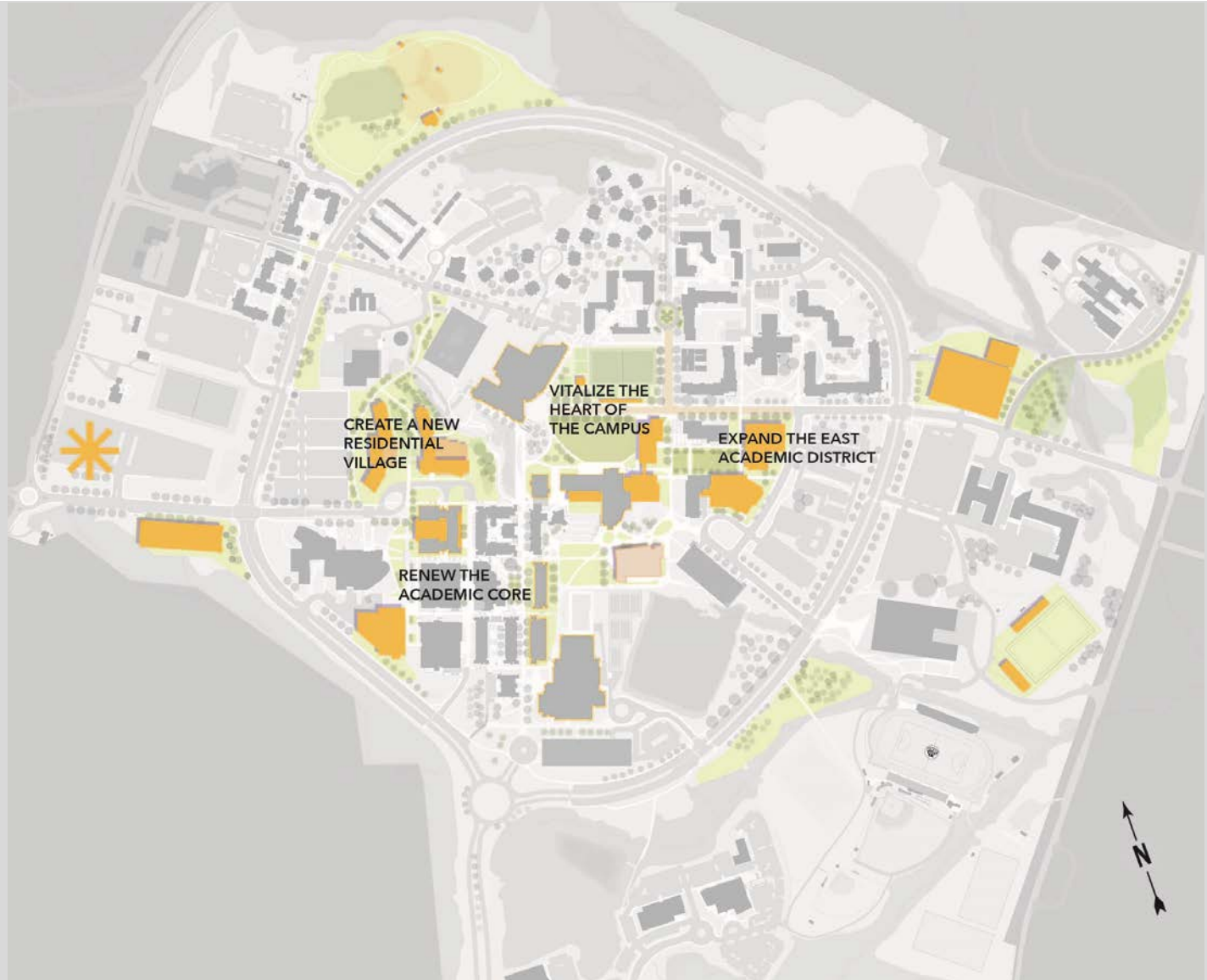


Building the Vision

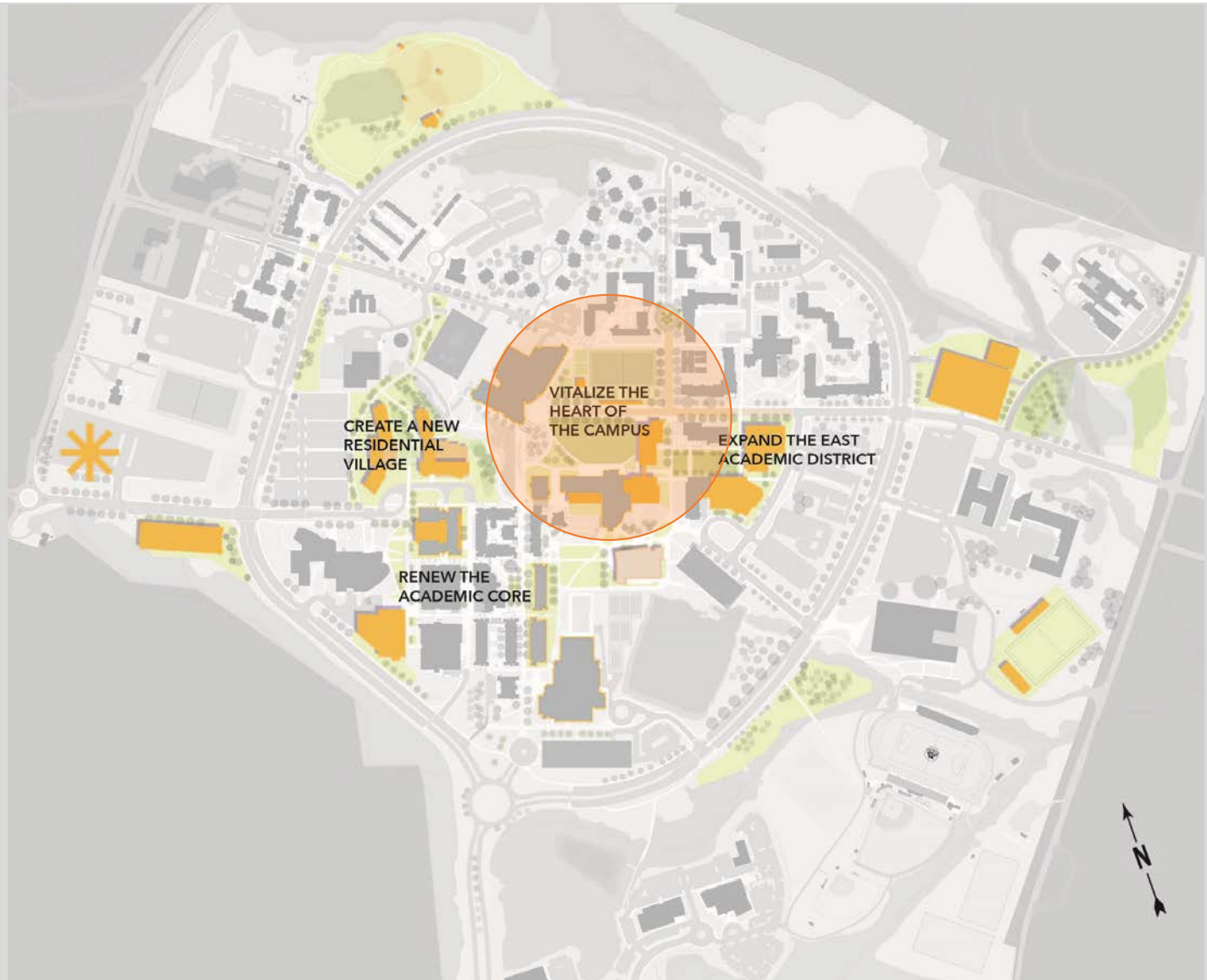
UMBC 2018 Facilities Master Plan



Key Planning Concepts



Vitalize the Heart of the Campus



Vitalize the Heart of the Campus

UMBC 2018 Facilities Master Plan



New Informal Recreation Park

The Commons Renovation and Addition

New Student Services/Student Life Building

Central Green

AOK Library & Gallery Renewal

New Informal Recreation Park

UMBC 2018 Facilities Master Plan



courts
ball field
pavilion
equipment storage
viewing pergola

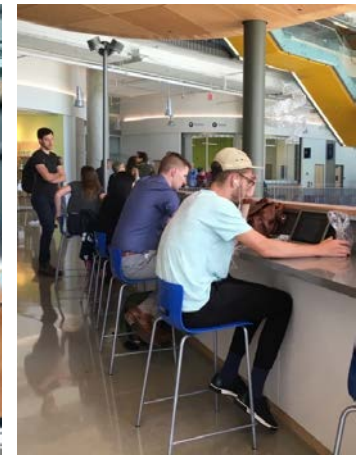


New Student Services / Student Life Building

UMBC 2018 Facilities Master Plan

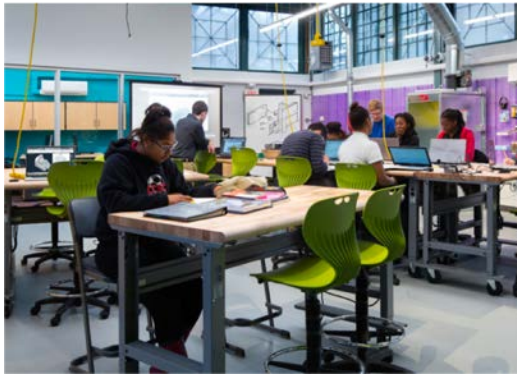


Framing an Improved Central Green



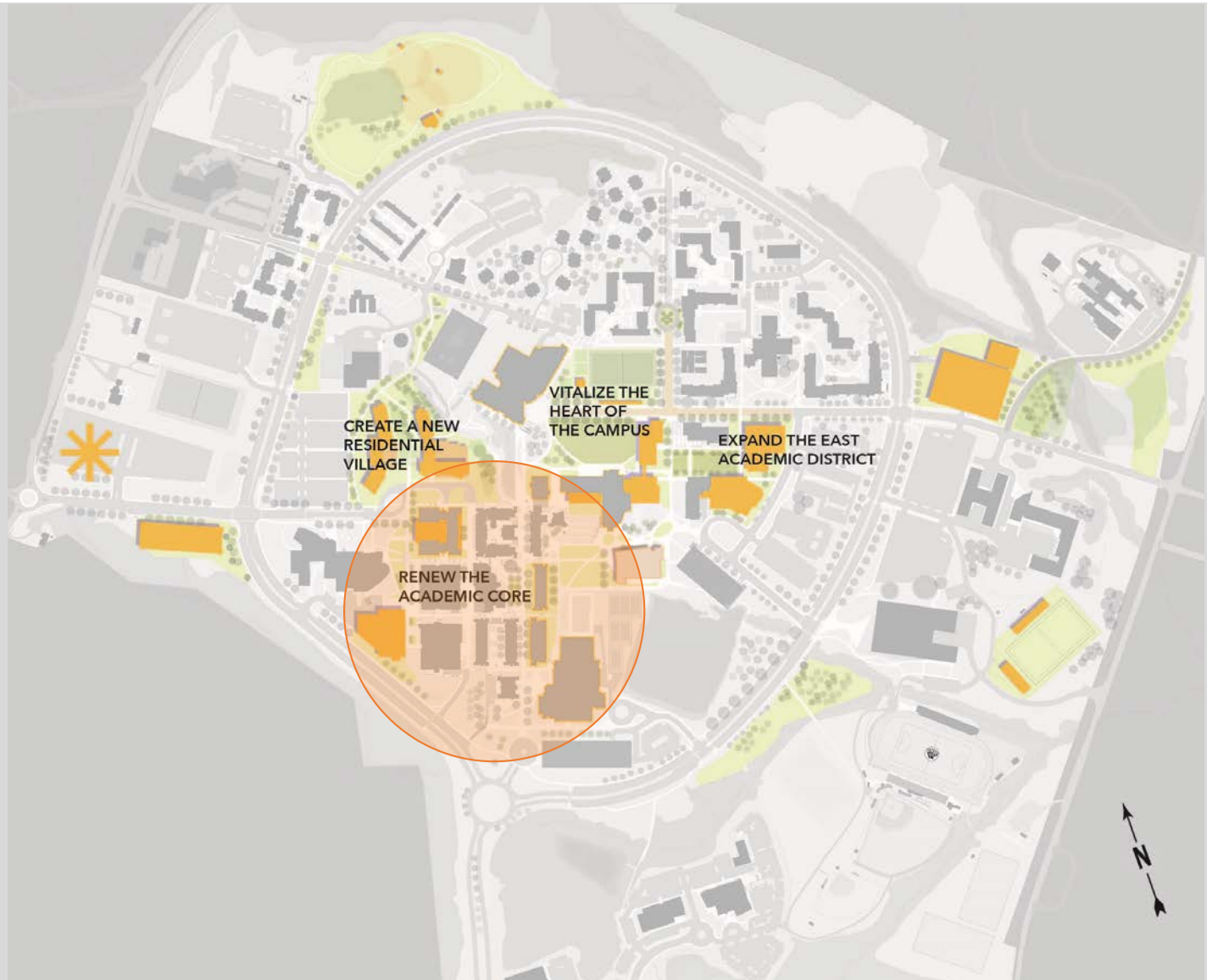
Albin O. Kuhn Library & Gallery Renewal

UMBC 2018 Facilities Master Plan



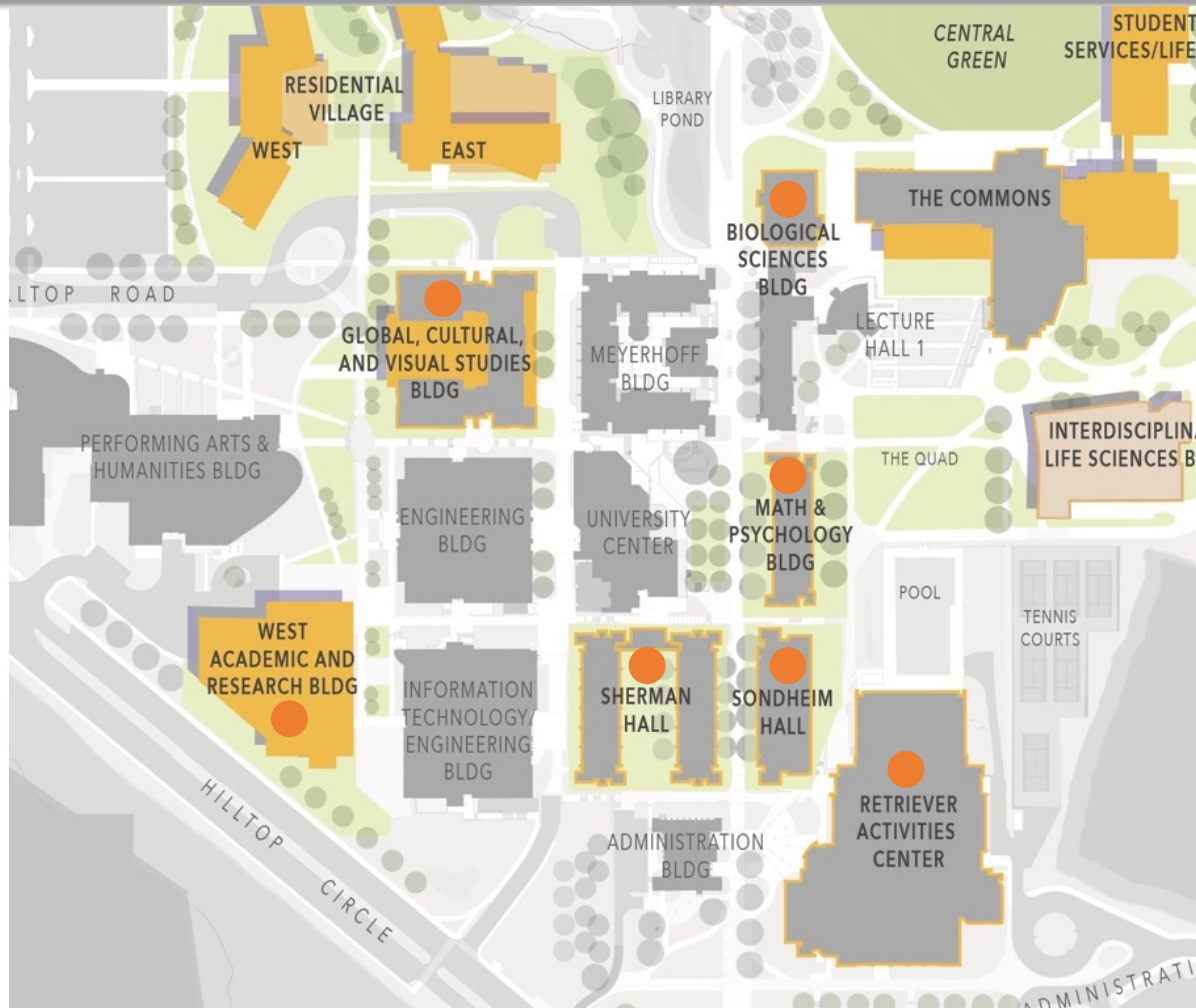
24 HR STUDY • recharge **learning commons**
focus • *Faculty and Graduate Research*
3D design and printing • collaborate

Renew the Academic Core



Renew the Academic Core

UMBC 2018 Facilities Master Plan



**Retriever Activities Center
Renewal**

**Five Academic Building
Renovations**

**New Academic and Research
Building**

Retriever Activities Center Renewal

UMBC 2018 Facilities Master Plan



STRENGTH • Fitness • HEALTH SERVICES
Physical Conditioning • WELLNESS
Outdoor Adventure • RECREATION



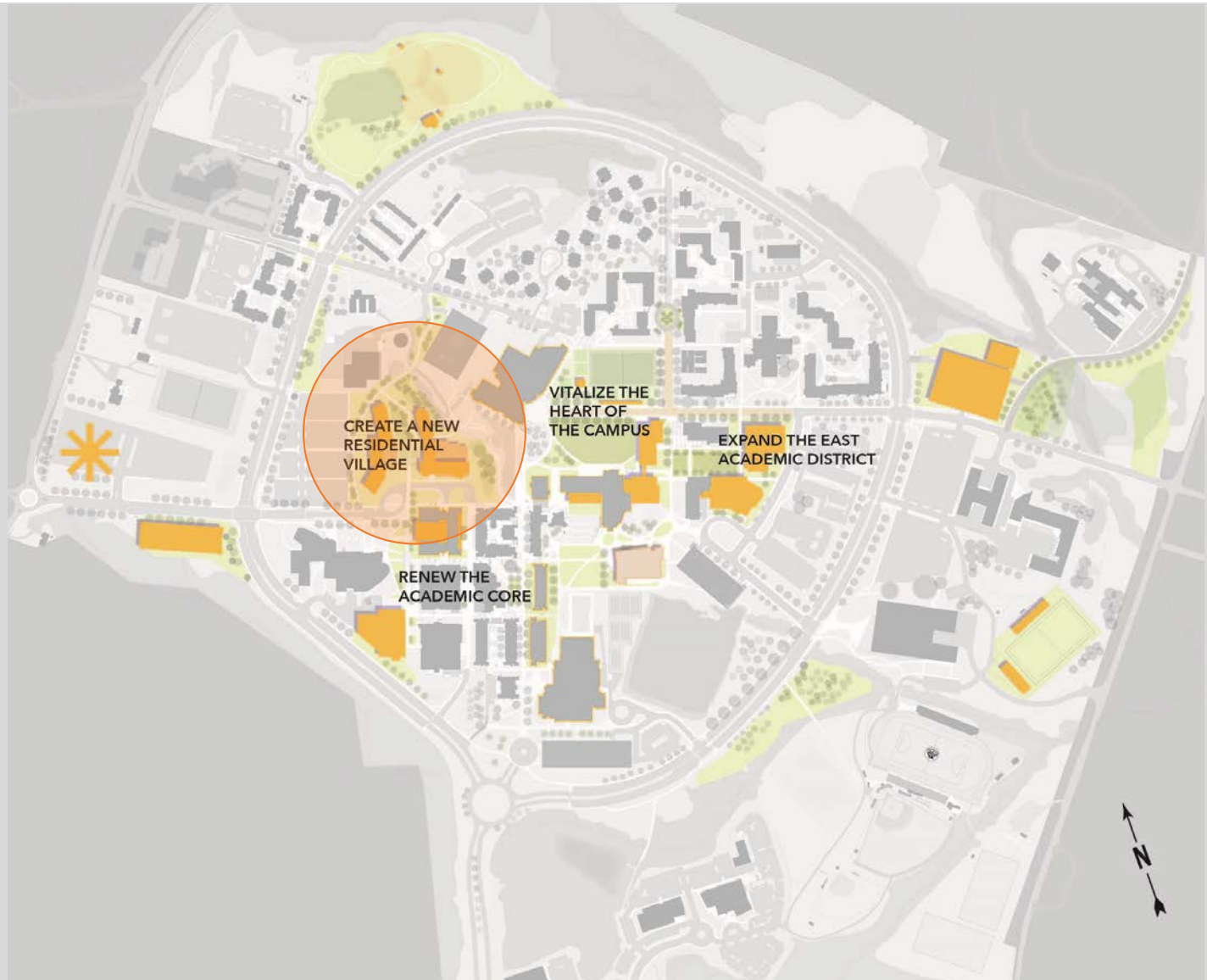
West Academic and Research Building

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MULTI-DISCIPLINARY • Research
Teaching Labs • HANDS ON LEARNING

Create a new Residential Village



Create a New Residential Village

UMBC 2018 Facilities Master Plan



Two New 320-bed Residences

Dining

Learning commons

Pedestrian pathway and bridge

New Residential Village

UMBC 2018 Facilities Master Plan



MORE BEDS • integrated learning facilities

Living Learning Community

Study Spaces • **Maker Labs** • **Dining**

New Residential Village

UMBC 2018 Facilities Master Plan

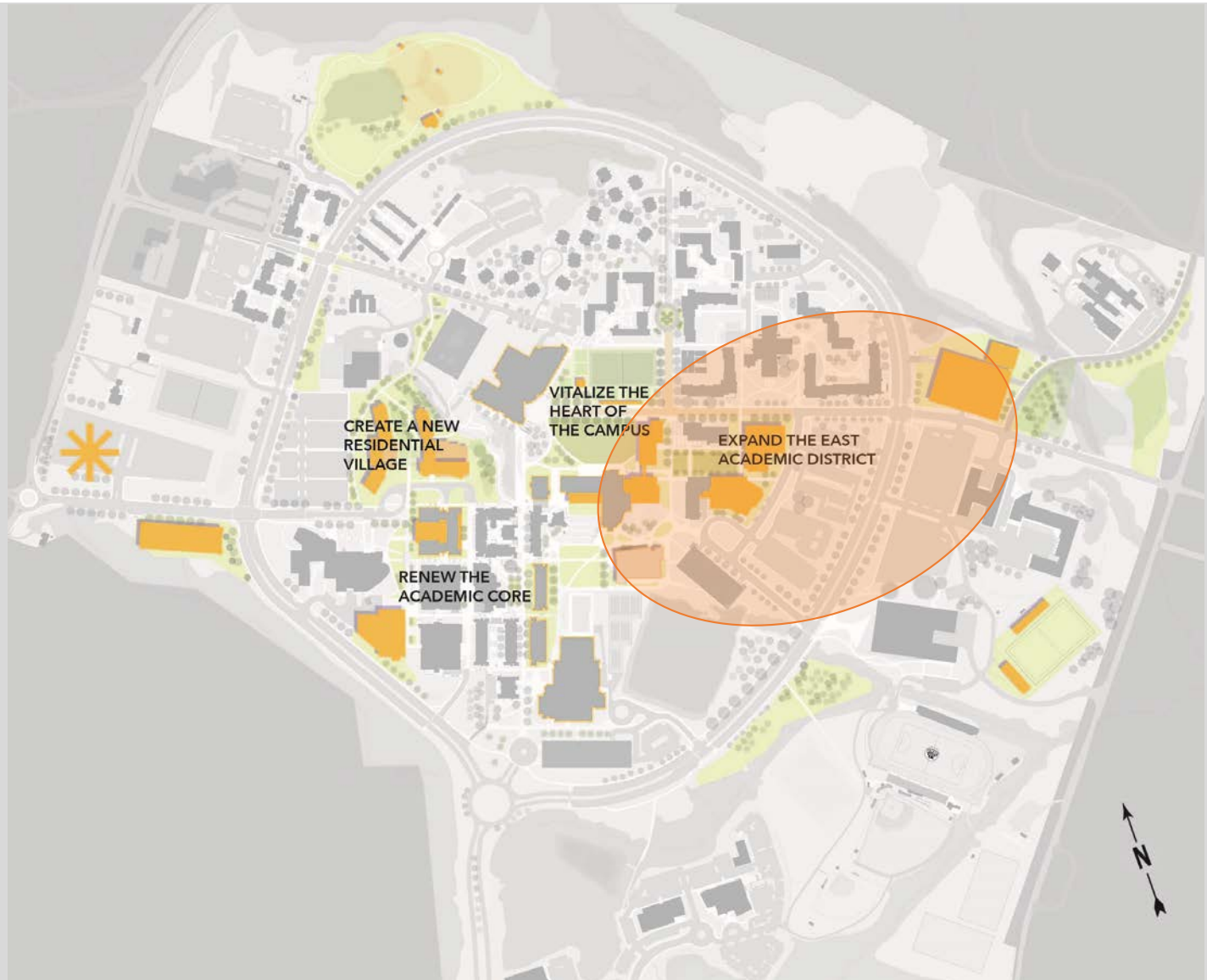


MORE BEDS • integrated learning facilities

Living Learning Community

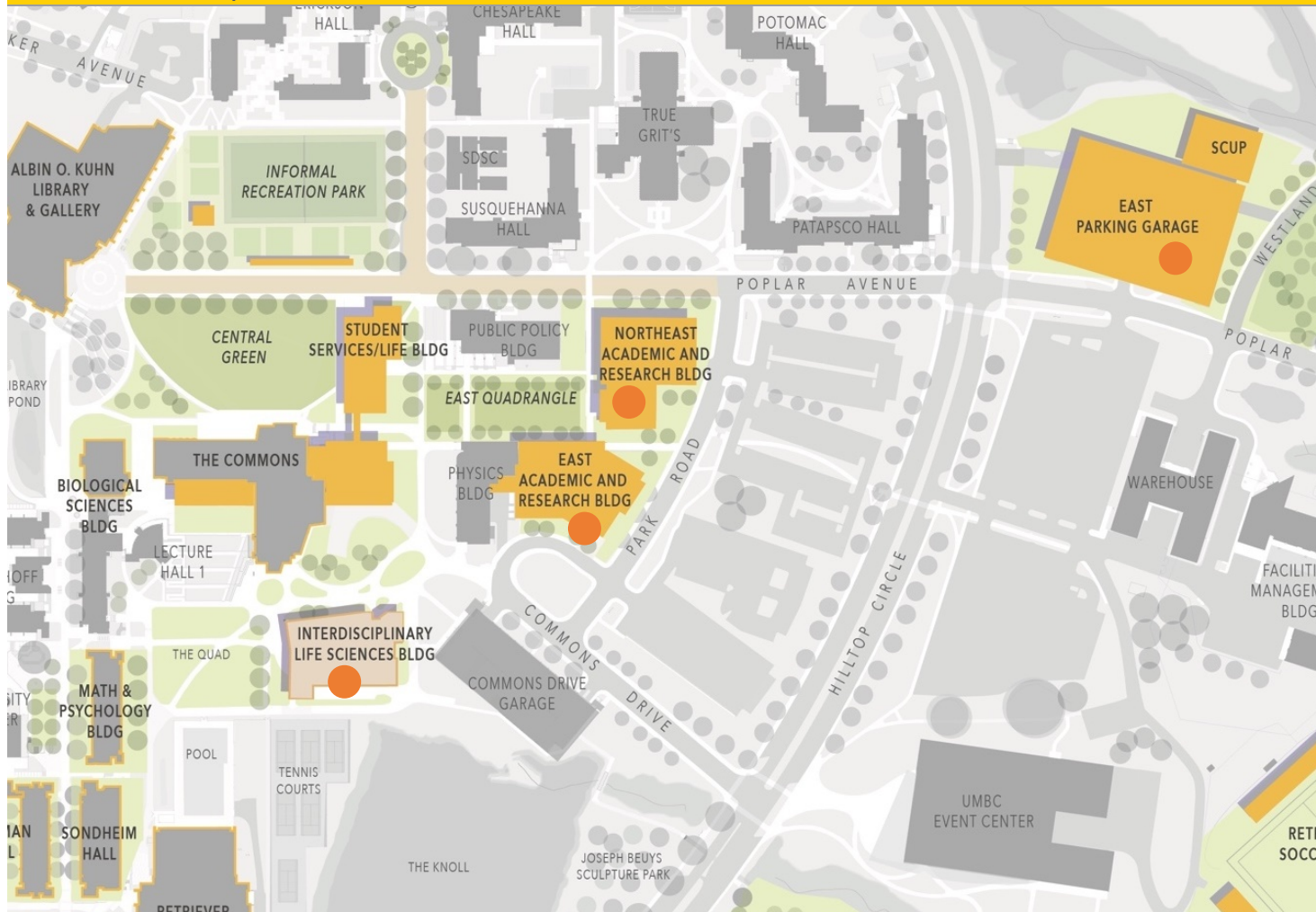
Study Spaces • **Maker Labs** • **Dining**

Expand the East Academic District



Expand the East Academic District

UMBC 2018 Facilities Master Plan



New Interdisciplinary Life Sciences Building

Two New Academic and Research Buildings

New Parking Garage

Interdisciplinary Life Sciences Building

UMBC 2018 Facilities Master Plan

Under Construction

Interdisciplinary Research Labs

Shared Core Research Facilities

Innovative Teaching Classrooms and Labs





multi-disciplinary • advanced technology

Building on Success

Active-learning • Applied research



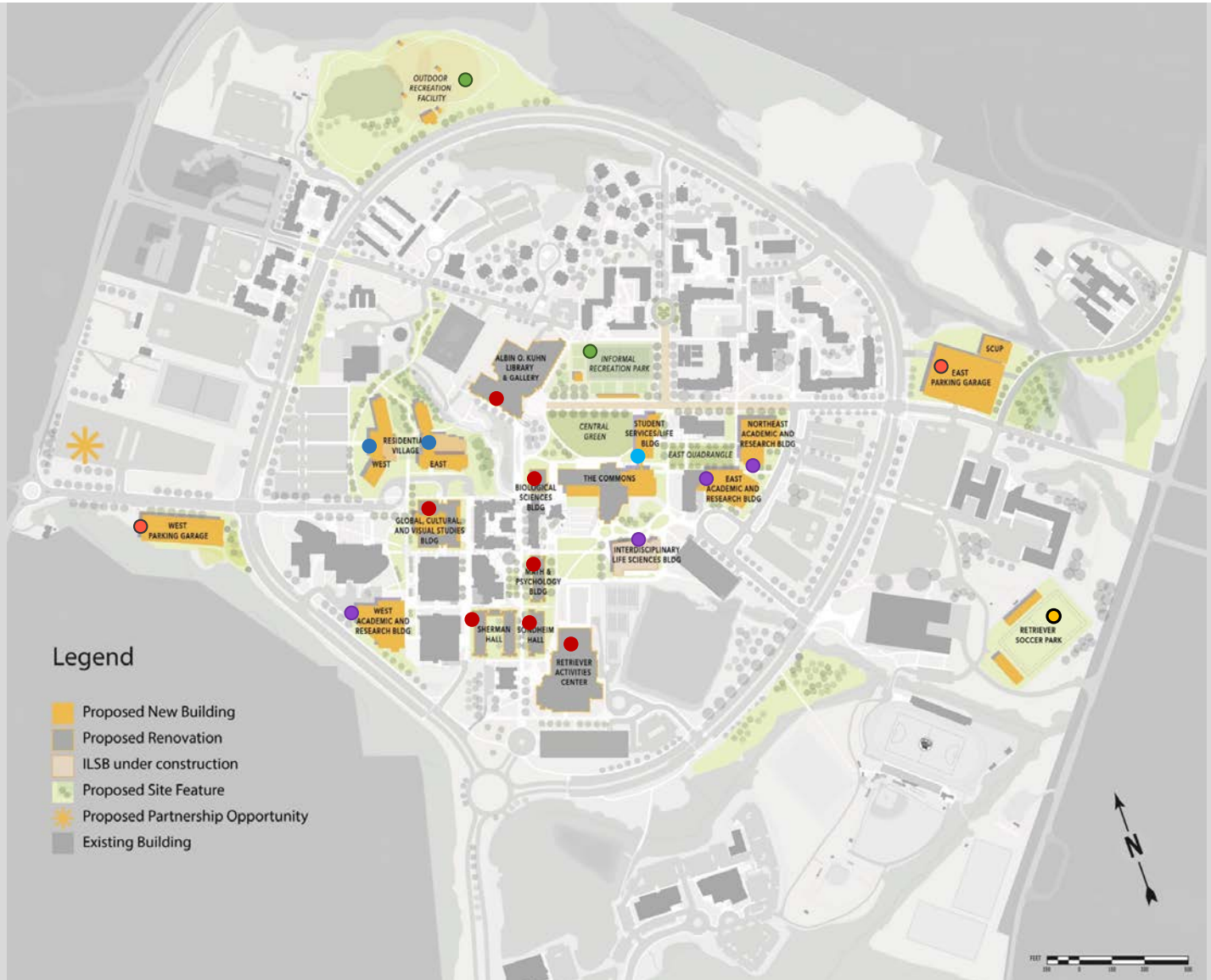
Guiding Our Future

UMBC 2018 Facilities Master Plan



Implementation Plan

- 7 Building Renovations
- 4 New Academic Buildings
- 2 New Residential Buildings
- 1 New Student Life Building
- 2 New Parking Garages
- 2 New Recreation Areas
- 1 Renovated Sports Facility

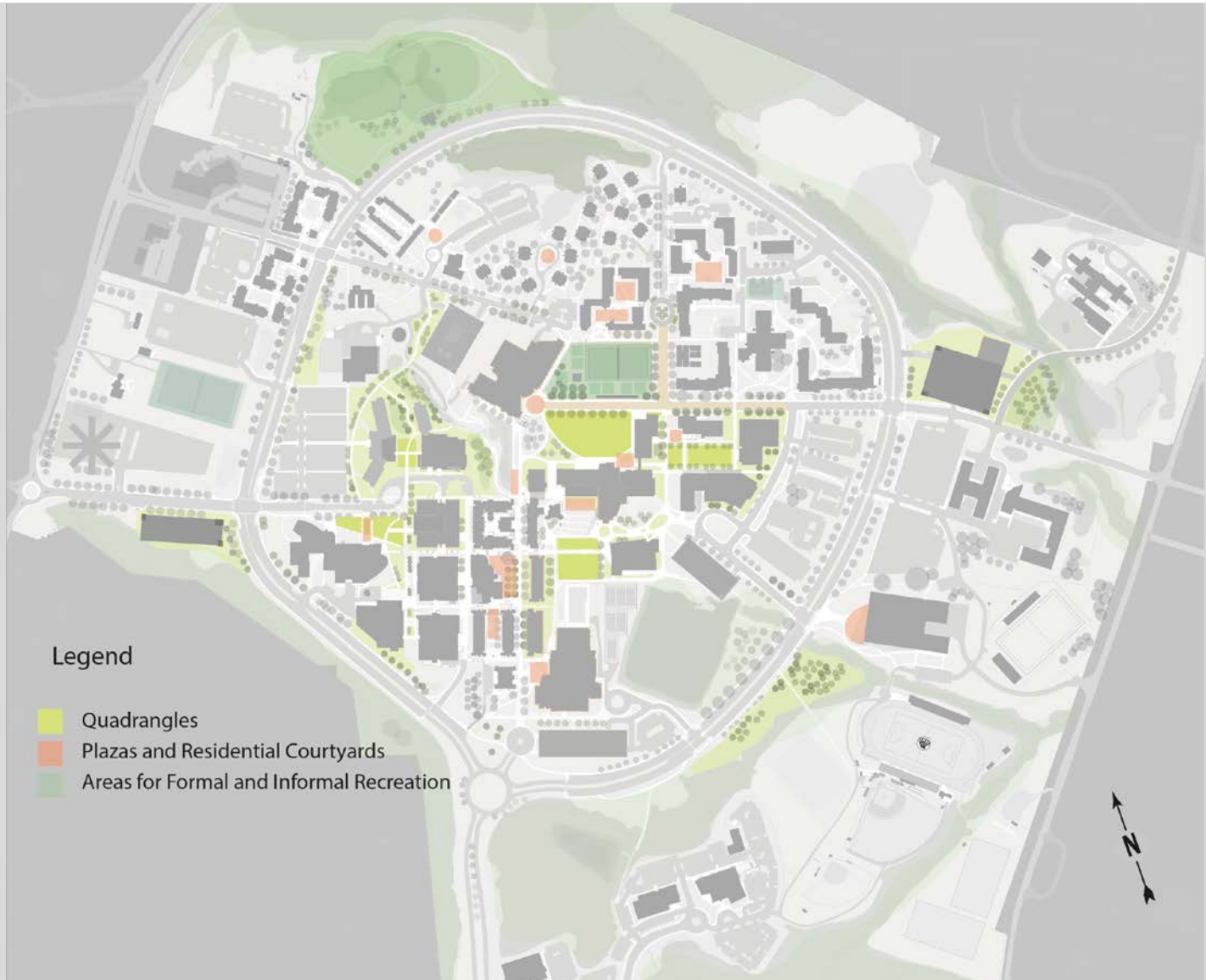


Open Space Framework

Enhance our network of plazas and green quadrangles

Create places to rest, meet friends and share ideas

Support student events and key university celebrations



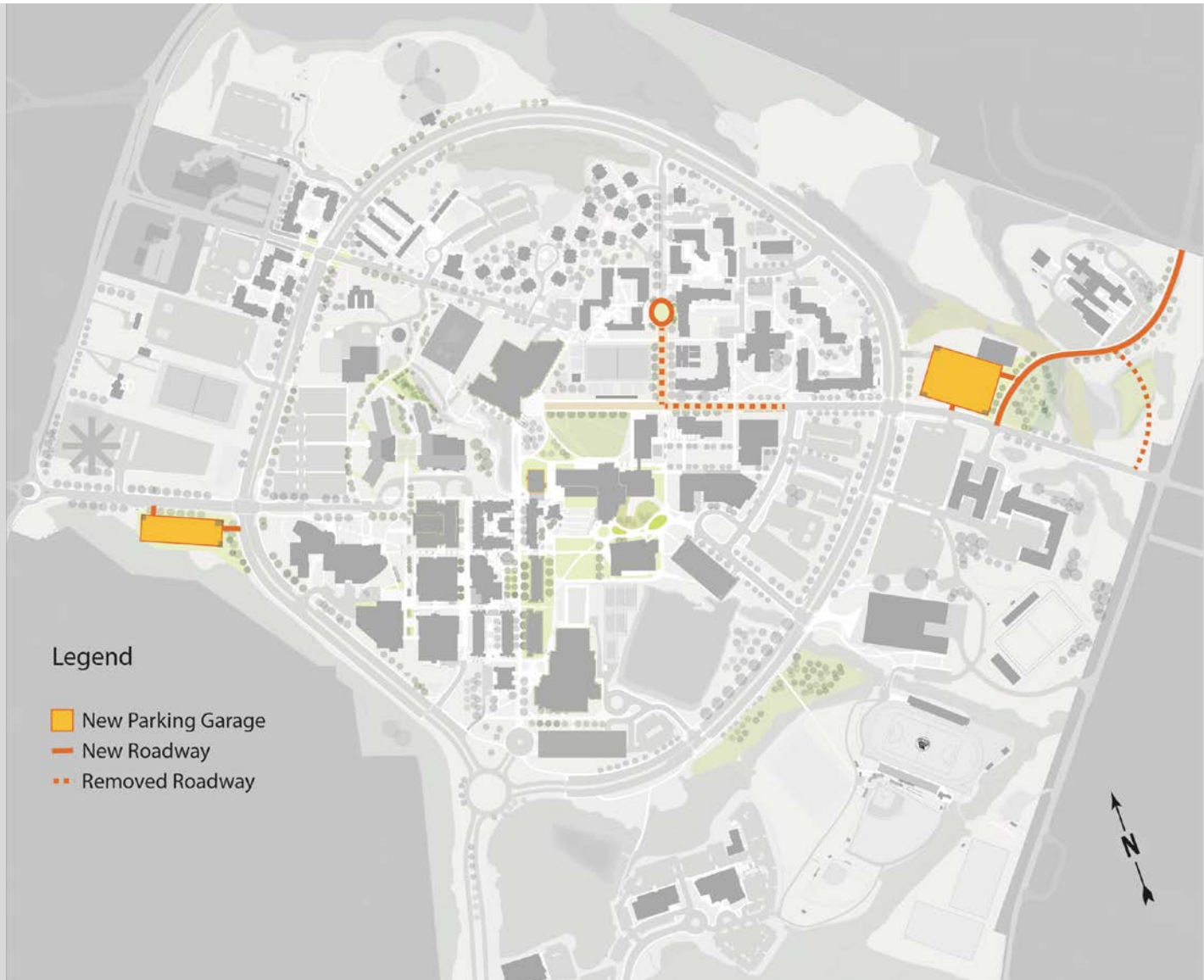
Parking and Circulation

Shift parking outside of Hilltop Circle as new buildings are located on parking lots

Improve campus access from Westland Boulevard

Increase safety - pedestrianize Poplar Avenue

Celebrate portals to campus



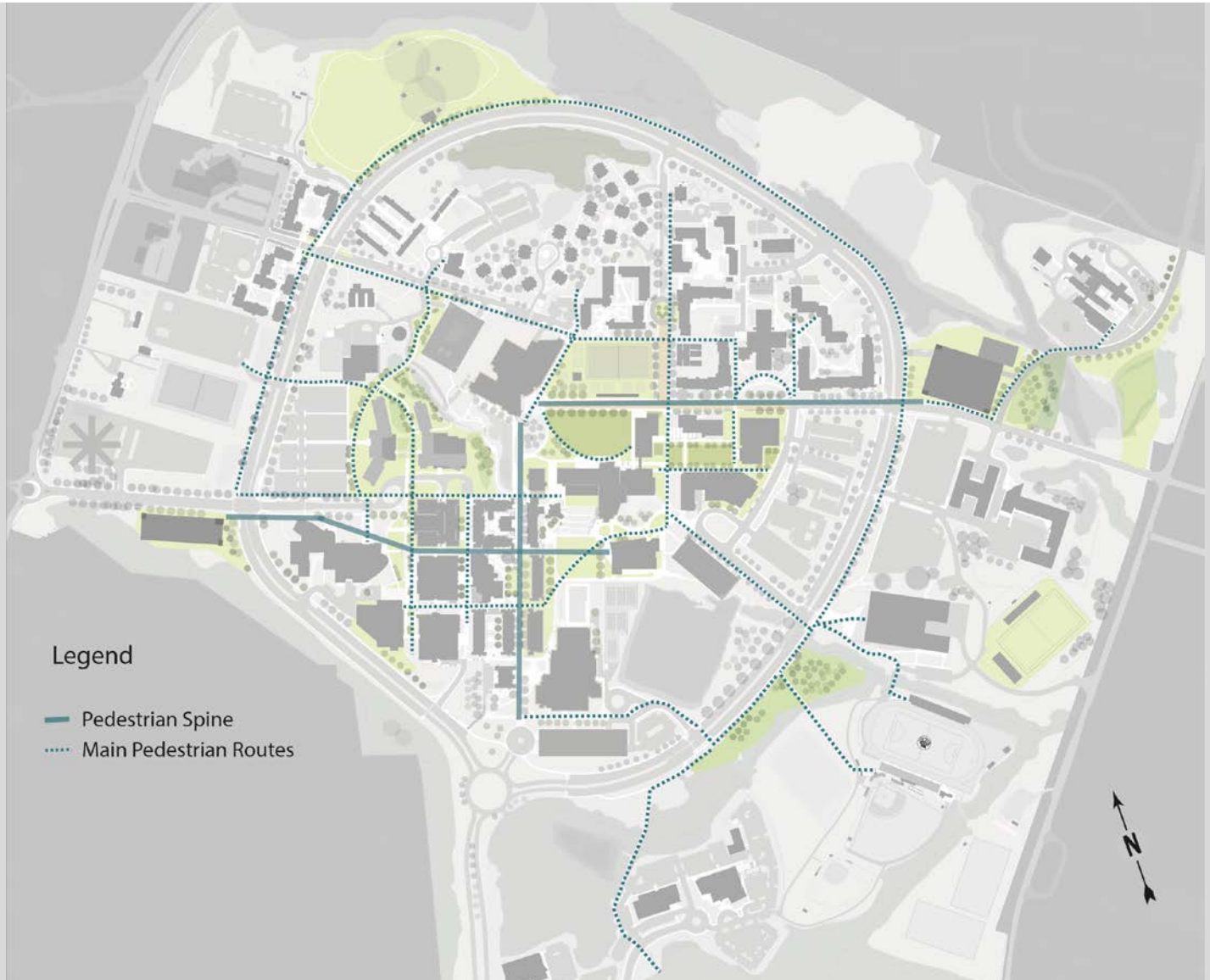
Pedestrian Framework

Clear hierarchy of paths

New linkages between residential and the academic core

New bridges traverse the topography

Placement of parking garages to reinforce pedestrian movement



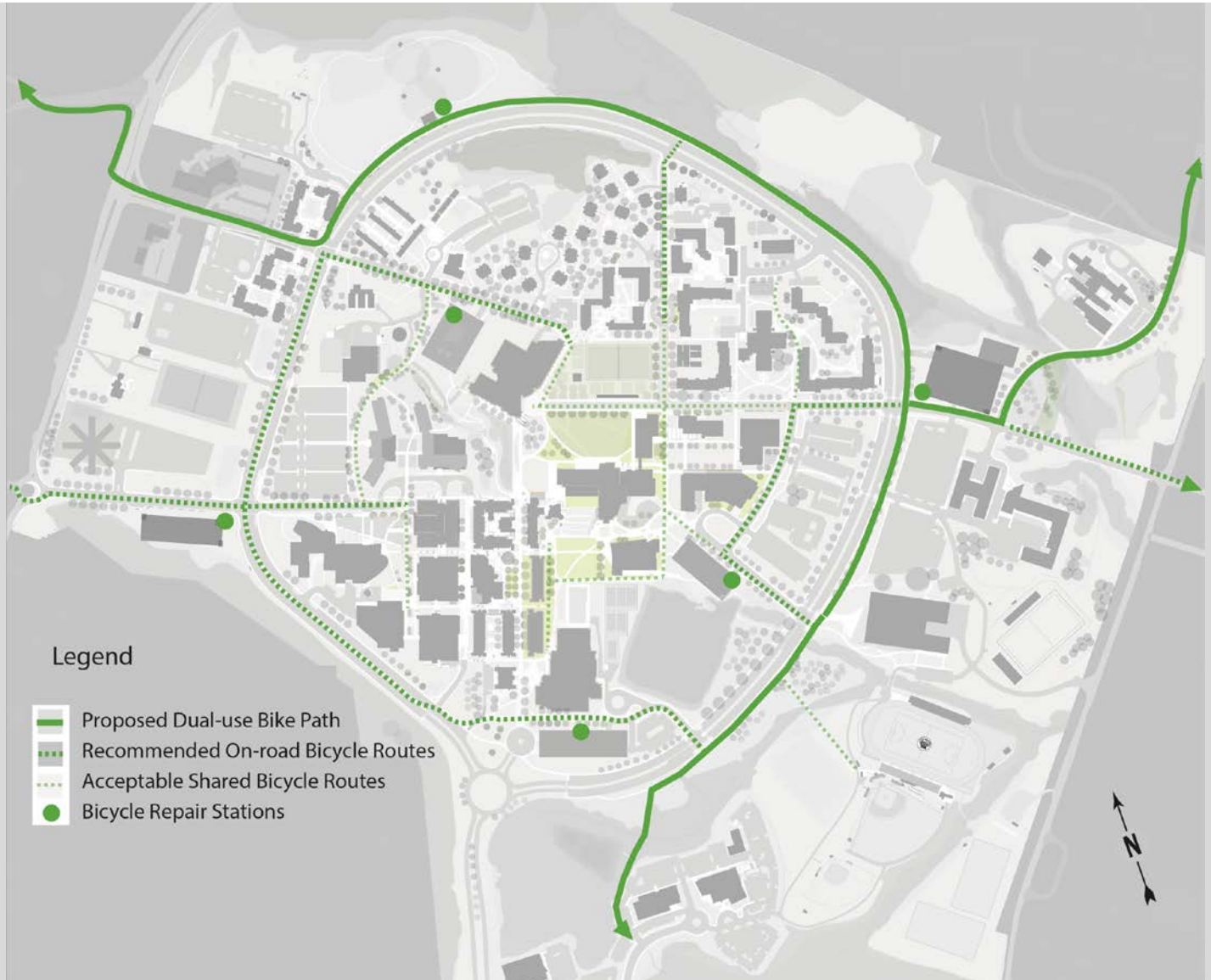
Bicycling

Improve connectivity to adjoining communities and surrounding housing

Covered parking and repair facilities at green dots

Dual-use bicycling and running path on north and east sections of the loop road

Bicycle racks and marked paths strategically located to minimize conflicts with pedestrians



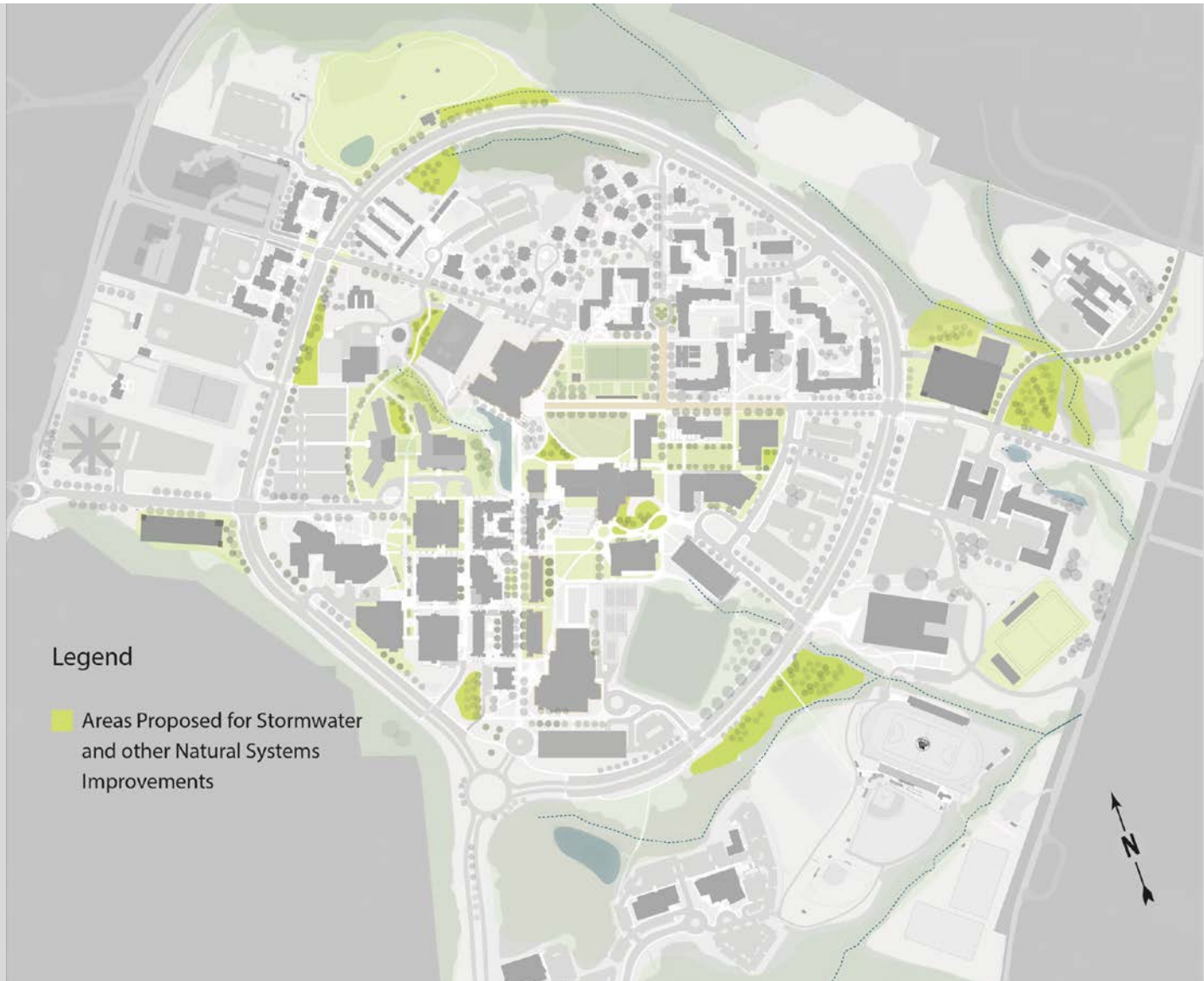
Natural Systems Improvements

Targeted stormwater improvements, like new wetlands, gardens, and forest buffers address SWM at watershed scale

Protecting our streams and stream banks

Blending of working landscapes into our open spaces

Reducing mowed lawns, especially on steep slopes



Implementation Plan



1.1 million

New Buildings (GSF)



1.0 million

Total Renovations (GSF)



650 thousand

Additional Teaching and
Research Space (GSF)



450 thousand

Additional Student
Affairs Space (GSF)



640

Additional Beds



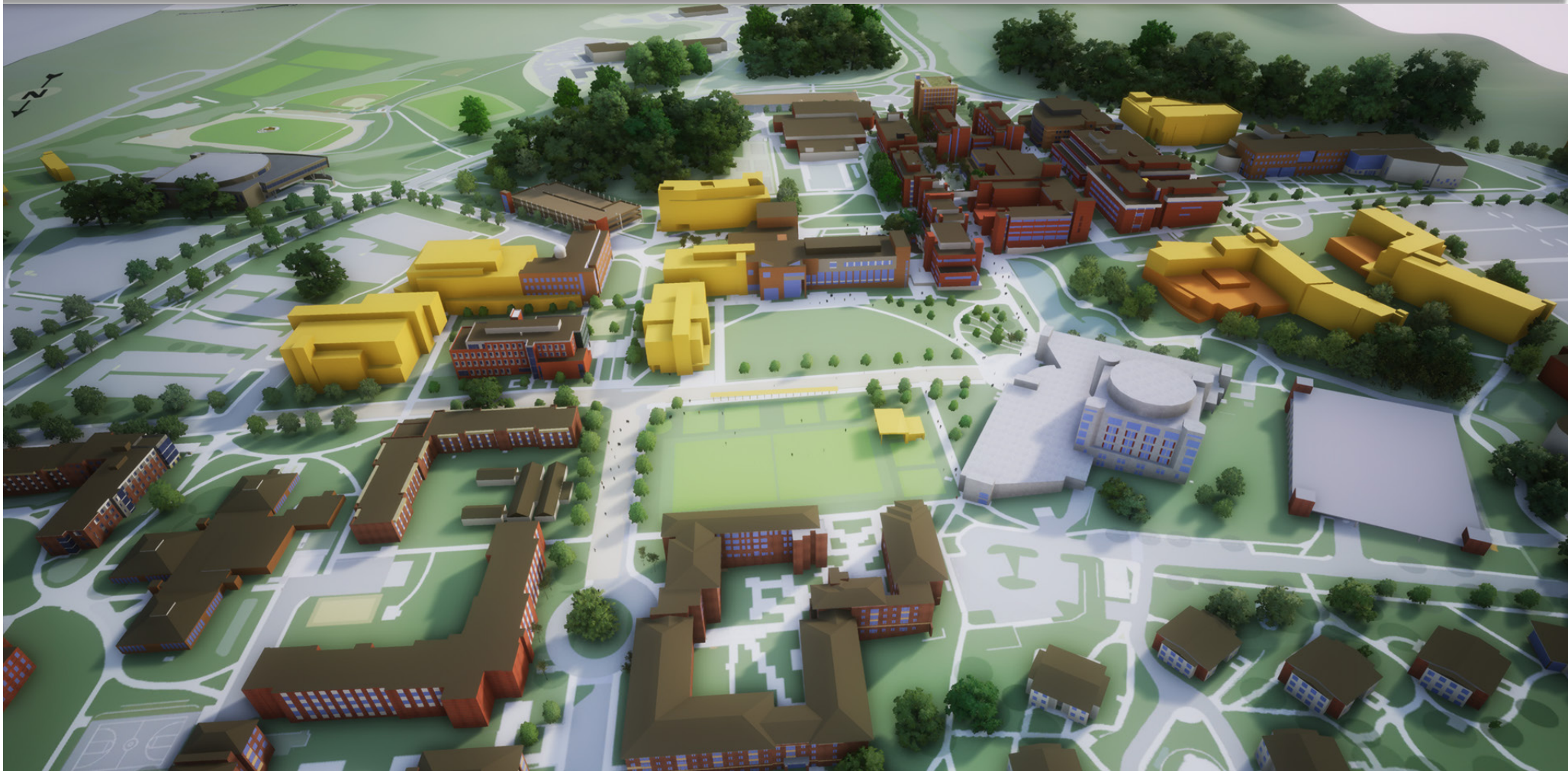
3

New or Renovated
Recreation Facilities



Modeling the Master Plan in 3D

UMBC 2018 Facilities Master Plan



Modeling the Master Plan in 3D

UMBC 2018 Facilities Master Plan

