

CAMPUS FACILITIES PLAN

NOVEMBER 2023

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INTRODUCTION

The University of Maryland (UMD) is a renowned institution known for its academic excellence, research innovation, and vibrant campus community, guided by its Strategic Plan, Fearlessly Forward: In Pursuit of Excellence and Impact for the Public Good

As one of the top research universities in the country and the flagship institution for the University System of Maryland (USM), UMD is driven by its commitment to academic excellence, innovative research, vibrant campus life, and a strong history of community engagement. With a distinguished faculty comprised of leading experts in various fields, the University offers a comprehensive range of rigorous academic programs that equip students with the knowledge and skills needed for success. Its world-class research enterprise located just outside of Washington D.C. fosters groundbreaking discoveries and solutions to global challenges, while its diverse and inclusive campus community provides a rich environment for personal growth and cultural exchange. The University of Maryland, College Park's exceptional blend of academic rigor, research prowess, vibrant campus life, and commitment to community make it one of the top public research institutions in the country.

Founded in 1856 as the Maryland Agricultural College, the University currently has 40,792 students and offers 104 undergraduate majors, 115 master programs, and 84 doctoral programs. As the largest institution in the state of Maryland and the Capitol region, UMD has over 400,000 alumni, produces over \$600M in research, and generates a \$3.7B annual economic impact on the state.

At the same time, the historic compact campus framework has grown and expanded rapidly, resulting in a number of conditions, including:

- Limited land available to accommodate long-term academic and research needs
- Aging facilities and infrastructure
- Existing campus topography and legacy circulation/ accessibility issues
- The need to implement sustainability and resilience improvements

To establish a strategy for addressing these elements, a comprehensive Campus Facilities Plan has been developed to ensure that the University's facilities align with the goals set by its strategic plan, Fearlessly Forward: In Pursuit of Excellence and Impact for the Public Good, and supplemented by complementary initiatives to serve as a roadmap for the near-term (10-year) and long-term growth and development of the university's physical infrastructure.

PURPOSE OF THE CAMPUS FACILITIES PLAN

The intent of a Facilities Master Plan set by the USM is to provide a strategic framework for developing and managing the physical infrastructure across its member institutions. The process involves analyzing current and projected needs, engaging stakeholders, and prioritizing investments to create an optimal environment for teaching, learning, research, and community engagement. It is supplemented by different physical space needs and climate-focused guidance, including:

University System of Maryland Facilities Master Plan Guidelines

Plan Maryland

Maryland Green Building Program

Climate Solutions Now Act

The facilities master plan process ensures a systematic and forward-thinking approach to campus planning, addressing both short-term needs and long-term aspirations.

The UMD Campus Facilities Plan

One of the primary purposes of the Campus Facilities Plan for UMD is to address the ever-evolving needs of the University community. With a growing student population and increased sponsored research awards, technological advances, and changing pedagogical approaches to learning, it is imperative to assess and anticipate the future demands on the campus facilities. The plan aims to identify areas where existing infrastructure can be enhanced, expanded, or repurposed to meet the evolving needs of students, faculty, and staff.

The Campus Facilities Plan is not limited to academic facilities alone; it encompasses the entire campus infrastructure. It includes instituting good planning practices to create a cohesive framework to support housing, intercollegiate athletics and recreational facilities, mobility, parking, and land assets. The plan aims to create a cohesive and vibrant campus environment that fosters community engagement, student success, and overall well-being by taking a holistic approach.

In addition to accommodating the changing academic landscape, the Campus Facilities Plan focuses on creating an inclusive and sustainable campus environment. The plan seeks to prioritize accessibility, ensuring that all members of the University community are able to seamlessly access facilities across the 1,340-acre campus environment and connect to the greater College Park community. Furthermore, sustainability is a critical key consideration, focusing on achieving the carbon-neutral 2025 goal by facilitating strategies to improve energy efficiency, institute green building practices, and leverage environmentally friendly transportation options.

Ultimately, the Campus Facilities Plan sets the stage for the future of the UMD. It establishes a long-term vision for the physical infrastructure that supports the University's mission and goals. By strategically guiding the development, renovation, and utilization of facilities, the plan aims to create an environment that fosters innovation, collaboration, and excellence across all aspects of campus life. The Facilities Master Plan is an investment in the University's future, ensuring it remains at the forefront of education, research, and service for years to come.

Strategic Acquisitions

The Campus Master Plan contains sites for all the facilities required to accommodate currently known campus needs. The University may consider purchase of additional properties on a case-by-case basis as they become available.

The Campus Facilities Plan will advance UMD's Mission, Vision, and Strategic Plan goals and objectives with key physical strategies including (but not limited to):

- **Guiding near- and long-term physical growth for the flagship College Park campus**
- **Identifying opportunities to strengthen connections with the greater College Park community**
- **Supporting and advancing university sustainability and resiliency goals**
- **Instituting good planning practices outlined from Plan Maryland**

A COMPREHENSIVE CAMPUS FACILITIES PLAN PROCESS

The Campus Facilities Plan is the result of visionary leadership, UMD's new Strategic Plan, and extensive collaboration with the campus community and its neighbors. Formal work on the Campus Facilities Plan occurred over 18 months and followed the three-phase process illustrated below. Throughout the process, the planning team benefited from the guidance and support of the UMD community, including the project's Steering Committee, University President Darryll J. Pines, faculty, staff, students, discipline specific workgroups, and external stakeholders. The result of this comprehensive planning process is an inspired and achievable plan for the campus that is rooted in both qualitative and quantitative assessments,

The first phase of the process involved data gathering, review of past plans and studies, outreach and engagement of internal and external stakeholders, and analysis. In addition, the concepts and values expressed in the University and divisional/college strategic plans were used to inform the Campus Facilities Plan and provide a holistic approach in documenting the campus' needs, strengths, challenges, and opportunities. A series of stakeholder meetings, workshops, and focus groups, helped to identify the needs of the campus and the surrounding community were discussed to understand key issues facing the university. The meetings included interviews with students, faculty, staff, Colleges and Schools, to gain insight on specific campus needs. Input was sought from external partners and neighboring communities to gain a comprehensive understanding of the broader needs and aspirations. Additional study and analysis by a multi-disciplinary team of space planners, engineers and designers provided specific analysis and national benchmarking of key campus issues. The common themes gathered from this effort served to form the basis for the Campus Facilities Plan's guiding principles and inform future development.

The second phase of the process incorporated data gathered, detailed analysis, and stakeholder input to develop a physical campus plan framework. The framework was based on an evaluation of campus facilities, infrastructure and utilities as well as an assessment of campus space, open space, mobility, parking, and sustainability goals. Planning models and concepts were tested and refined based on review and input from the Steering Committee and campus stakeholders.

The final phase of the process focused on establishing a preferred campus plan for both near-term and longer term campus development. The Campus Facilities Plan is responsive to institutional needs, historic preservation, future stewardship, and community goals/partnerships.

AN EXTENSIVE OUTREACH AND ENGAGEMENT STRATEGY

Engagement and collaboration are vital components of the Campus Facilities Plan. The University recognized the importance of gathering input from various stakeholders, including students, faculty, staff, and community members. Through open forums, live polling surveys, and workshops, the University sought to involve the entire campus community throughout the planning process, ensuring that diverse perspectives and ideas were incorporated into the final plan. This collaborative approach ensured that the Facilities Master Plan truly reflects the needs and aspirations of the entire University community.

Emerging Themes

Students, faculty, staff, and external campus constituents were engaged using multiple techniques, including over 100 focus group sessions, over 6,000 survey/live polling responses, and 100 online survey responses. A complete summary of the techniques is highlighted in the appendix, and feedback is integrated into the planning strategies. Key themes pulled from stakeholder engagement include:

FACILITIES AND PROGRAMMING

Enable a dynamic, innovative, and inclusive campus environment that supports cutting-edge academic programs, impactful research, vibrant resident life, and collaborative spaces for discovery and innovation.

PLACEMAKING

Enhance the campus environment to promote health and wellness, fostering collaboration while maintaining individual school/college identities, and creating visible spaces to showcase and encourage innovation throughout the institution.

CIRCULATION AND CONNECTIVITY

Improve campus scale, accessibility, and connectivity to create a more cohesive and inclusive campus environment.

SUSTAINABILITY

Maintain a commitment to infrastructure modernization, climate resilience, and sustainability integration into daily operations. It includes updating aging infrastructure, addressing flooding issues, and expanding sustainable practices throughout the campus to align with the University's sustainability and carbon reduction goals.

COMPLEMENTARY INITIATIVES

UMD Climate Action Plan 2.0

The University of Maryland's Climate Action Plan 2.0 is a comprehensive strategy aimed at mitigating greenhouse gas emissions, enhancing sustainability practices, and promoting resilience, and includes ambitious goals to achieve carbon neutrality by 2025. By pursuing this plan, the university strives to be a leader in sustainability, contributing to a more resilient and environmentally conscious future.

Purple Line

The Purple Line is a 16-mile light rail system designed to improve transportation connectivity within the greater region between Montgomery County and Prince George's County. For the University of Maryland, the Purple Line offers a vital connection, enhancing accessibility for students, faculty, and staff within and to-and-from the campus core with the Discovery District and beyond, enabling a seamless non-motorized alternative for individuals accessing the university's resources, facilities, and events.

AgroEcology Corridor

The University of Maryland's AgroEcology Corridor initiative is a transformative endeavor to integrate agriculture, ecology, and sustainable land use practices into a cohesive corridor connecting the campus with the surrounding landscape. This initiative seeks to create a living laboratory that combines research, education, and community engagement to address pressing environmental challenges and promote sustainable food systems.

Internal and External Resources

The Campus Facilities Plan draws upon divisional and unit strategic plans, initiatives, and partnerships. By incorporating these multifaceted perspectives, the Campus Facilities Plan aligns seamlessly with the university's overarching strategic vision. It becomes a reflection of the collective needs and aspirations of the entire campus community, both internal and external, ensuring a comprehensive and inclusive approach to planning for the future.

UMD TODAY

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UMD TODAY

UMD has a diverse and accomplished faculty, including Nobel laureates, Pulitzer Prize winners, and members of prestigious academic societies. As the flagship institution within the University System of Maryland, UMD's research enterprise is thriving with significant funding and groundbreaking discoveries in areas such as cybersecurity, climate change, and biotechnology. The University consistently ranks among the top public research universities in the United States, and its alumni have gone on to achieve success in various fields, including business, government, academia, and the arts.

UMD MISSION STATEMENT

Achieving excellence in teaching, research, and public service within a supportive, respectful, and inclusive environment is central to the mission and identity of the University of Maryland, College Park (UMD). As the flagship campus and a national leader in higher education, UMD strives to provide exceptional and affordable instruction for Maryland's most promising students, regardless of income. A pre-eminent locus of scholarship, the University builds and maintains a world-class capacity in the sciences, arts, and humanities to support ground-breaking discoveries that address the most pressing global challenges and inspire the human imagination. As one of the country's first land-grant institutions, UMD uses its research, educational, cultural, and technological strengths in partnership with state, federal, private, and non-profit sectors to promote economic development and improve quality of life in the State of Maryland. Diversity amongst our students, faculty, and staff is essential to this mission.

FEARLESSLY FORWARD: IN PURSUIT OF EXCELLENCE AND IMPACT FOR THE PUBLIC GOOD

Accordingly, ensuring equal educational opportunity; hiring and retaining a diverse and exceptional faculty and staff; recruiting and graduating talented students from traditionally underrepresented groups; and providing a supportive climate for their well-being are top institutional priorities.

UMD VALUES STATEMENT

The University of Maryland (UMD) is a community of individuals living and working together to support and advance the educational and research mission of the institution. We aspire to become a community that is: United, Respectful, Secure and Safe, Inclusive, Accountable, and Empowered and Open to Growth.

Fearlessly Forward, adopted in the spring of 2022, serves as the Strategic Plan to steward UMD's Mission and Vision into the future. The plan presents a bold reimagining of what the university must be to uphold and expand our mission of service to humanity.

To achieve the *Fearlessly Forward* vision the university aims to:

Reimagine teaching and learning as inclusive, experiential, publicly engaged, creative, integrative, holistic and empowering

Take on Humanity's Grand Challenges with education, research, scholarship and creative activities and serve designed to accelerate solutions to humanity's grand challenges - within our communities and around the globe.

Invest in people, their well-being and advancement, and the conditions that support their ability to fully participate and thrive in our community, state, and world

Partner to advance the public good because our future is tied to and interconnected with our local, state, national and international partners. We will create and sustain partnerships that allow our research to have impact locally and globally, our education to prepare students for civic engagement and impact, and our service to create solutions for a more equitable, sustainable and resilient world.

Strategies from the Strategic Plan that inform the physical development of the campus include:

- Promoting multidisciplinary collaboration and experiential learning
- Engaged and impactful research and curricular innovations
- Addressing “grand challenges” across local and global scales
- Supporting civic engagement and lasting partnerships between students and the broader campus community
- Developing strategic research partnerships
- Strengthening social justice through relationship-building and community partnerships

Together, these elements serve to inform all aspects of the campus planning process and recommendations.

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Source: UMD 2022 Strategic Plan

INSTITUTIONAL PROFILE

The University of Maryland, College Park is the flagship institution of the University System of Maryland. With a community of over 40,792 students (Headcount enrollment), and 14,505 faculty and staff, UMD boasts a diverse student body with students from every U.S. State and over 120 countries and over 405,000 alumni as of 2022. This diversity of individuals is also reflected in its incredible offerings, with over 300 academic programs and strategic partnerships led by renowned faculty members that leverage UMD’s position as one of the top public research institutions in the country—set in an unparalleled collegiate setting in College Park just miles from Washington, D.C.

The University of Maryland stands as an esteemed institution, recognized for its academic prowess, innovative research contributions, and nurturing environment. With distinguished faculty, staff, and a thriving student community, UMD continues to shape the leaders of tomorrow and make a lasting impact on the advancement of society. The collective work of every member of our community contributes to the development of thoughtful, innovative approaches to solving problems on both local and global levels. To improve the lives of everyone, the University will continue to reimagine teaching and learning, push boundaries, search for solutions to the grand challenges, and to forge a diverse and inclusive community where our differences are celebrated and equity is relentlessly pursued. This Master Plan benefits from history, strategic direction, and historic tradition of planning, setting a vision for future development and capacity of the campus. This legacy is a catalyst for renewed commitment to innovation, achievement, and growth.

Academic

The University of Maryland is organized into 12 schools and colleges that are committed to change and progress through offering 104 undergraduate majors, 115 master's programs, and 84 doctoral programs. With a diverse array of programs UMD offers students a world-class education across various disciplines. The University ranks #12 among U.S. Public Institutions ranked as Best Global Schools and #19 among Top Public National Universities (U.S. News & World Report). The University continues to elevate the quality and accessibility of undergraduate education with programs that are comprehensive and challenging. These programs serve students as a foundation for advanced study, the workplace, and a productive, fulfilling life. UMD also continues efforts to attract larger numbers of academically talented students and to enroll, retain, and graduate more students from traditionally underrepresented groups. The University continues to provide the highest quality graduate and professional education at all levels. A defining aspect of the University as the state's flagship is the strength and breadth of doctoral programs and the important role they play in the dual mission of education and scholarship. UMD promotes interdisciplinary collaboration, encouraging scholars to bridge gaps between different fields of study. This approach cultivates creative problem-solving and solutions for complex issues. The University strives to make new discoveries in education and put those to work through innovation and entrepreneurship, advancing economic development, and transforming lives.

Research

As one of the world's premier research institutions with its strategic location and many partnerships with government and businesses, UMD conducts groundbreaking research on some of the biggest challenges facing our global community, including cybersecurity and terrorism, bioengineering, public health equity, food safety and climate change. UMD's research includes \$677M in sponsored research awards in FY22. Based on this track record of research excellence, UMD recently ranked #10 among public institutions for research and development spending and #16 overall in the National Science Foundation's Higher Education Research and Development Survey. The (new) National Quantum Lab at Maryland (Q-Lab) is the first of its kind in the nation to enable the scientific community to pursue world-leading research through hands-on access to a commercial-grade quantum computer, giving our faculty and students access to the most powerful computing in the world. UMD also has launched the Quantum Startup Foundry, one of our region's best business incubators for incentivizing quantum entrepreneurs and startups to locate businesses in College Park. Our research awards and expenditures are the highest ever, which is helping us achieve high-impact results in such vital areas as climate change, clean energy, public health and safeguarding the world's food supply. UMD's new strategic plan, Fearlessly Forward, outlines the vision to reimagine learning, invest in people, take on humanity's grand challenges and partner to advance the public good.

Faculty

Research and scholarship are core university missions. The University of Maryland takes immense pride in its attracting and retaining its distinguished faculty, renowned for their expertise and impact on their respective fields. There are over 4,311 full-time faculty members; 67 of these faculty are members of national academies, 2 are Nobel Laureates, 6 are Pulitzer Prize winners, 1 Emmy winner and scores of

Fulbright Scholars. Faculty members at UMD are accomplished scholars, earning prestigious awards, grants, and fellowships for their groundbreaking research. Faculty prioritize mentoring and guiding students, creating a supportive learning environment where individual growth and academic success are nurtured. In keeping with our commitment to inclusive excellence, our campus is expanding the ranks of new tenured and tenure-track faculty from underrepresented groups; building a pipeline to academic leadership for Black, Hispanic and American Indian/Alaskan Native faculty in the arts and humanities; taking purposeful steps to confront the historic marginalization of Maryland's Indigenous people; and prioritizing investments that lift up students with disabilities and communities of color.

Student Life

UMD Students, who include the highest achievers from all 50 states and 121 countries, enjoy experiences unique to our location just outside the nation's capital, including internships, research, leadership, and service opportunities. Students here create unique identities and grow as individuals, even as they are part of a close-knit and diverse community. A robust variety of resources supports student life at UMD which includes 800-plus student organizations, dozens of prestigious living and learning communities, and countless other ways to get involved. Diversity and inclusion are core to the mission and values of UMD, demonstrated through UMD's 5 out of 5-star rating by Campus Pride for institutional commitment to LGBTQ-inclusive policy, program, and practice. In addition, the University has developed five new cultural centers (in the Cole Student Activities Building) that will provide gathering spaces for Latinx; Asian Pacific Islander Desi America; Native America and Indigenous; Multiracial and Biracial students; and students with disabilities to ensure that every UMD student feels a sense of belonging on campus. UMD provides an extensive on-campus housing program with over 12,550 beds in 39 residence halls. Fraternity and Sorority life is made up of 58 chapters across four governing councils. In addition, students can access numerous on-campus facilities, from the Stamp Student Union and the Health Center to University Recreation and Wellness facilities and Career Counseling services. Students actively participate in community engagement and service-learning projects, making a positive impact beyond the campus. Cultural events, concerts, lectures, and performances enhance the social fabric of campus life, providing students with diverse and enriching experiences.

Arts

At the University of Maryland, the arts, the humanities and the sciences intersect to address important societal issues and shed new light on the human experience. The vibrant campus arts community collaborates with local and national cultural organizations such as the Phillips Collection, Kennedy Center and Folger Shakespeare Library. Student and faculty artists, designers, historians, writers and performers are exploring new media, presenting new perspectives, investigating new techniques and engaging new audiences. Through the new Arts for All Initiative, UMD is bolstering its campus-wide culture of innovation. This initiative pairs the arts with other disciplines such as the sciences and technology to develop reimaged curricular and experiential offerings that nurture dialogue, exploration, problem solving and action. The arts and humanities remain critical components to a high-quality education and serve to enhance the University's identity and its prestige. These components also serve as a contributing factor in attracting the top faculty, staff, students and perspective donors to the University.

Athletics

The University of Maryland has one of the nation's most recognizable and successful athletics programs. Known as the Diamondback Terrapins (or Terrapins/Terps for short) more than 550 student-athletes compete each year in 20 intercollegiate sports—12 for women and eight for men. Since 2005 alone, UMD has won 19 national championships, including NCAA titles in women's basketball, men's soccer, men's lacrosse, women's lacrosse, and field hockey. Since joining the Big Ten Conference in 2014, UMD has won a combined 32 regular season and tournament championships. While athletics will always remain outside of the academic enterprise, they do play a significant role in the identity and life of the University. Athletics serve as a catalyst which does contribute to student growth and as a member of the Big Ten Conference, collaborations with other member institutions has increased the University's national visibility as a world class academic institution.

Academic Programs

- College of Agriculture and Natural Resources
- School of Architecture, Planning, and Preservation
- College of Arts and Humanities
- College of Behavioral and Social Sciences
- Robert H. Smith School of Business
- College of Computer, Mathematical, and Natural Sciences
- College of Education
- A. James Clark School of Engineering
- The Graduate School
- Philip Merrill College of Journalism
- College of Information Studies
- School of Public Health
- School of Public Policy
- Office of Undergraduate Studies

CAMPUS CONTEXT

Location

Located 7 miles northeast of Washington, D.C., the University of Maryland is within the City of College Park and Prince George's County. Annapolis is located 30 miles to the east, and Baltimore is 30 miles to the northeast. This central location within the region gives UMD access to a rich concentration of

agencies and institutions, from federal offices and research centers to corporate headquarters and major residential population centers.

UMD is well-connected to many important regional destinations. Washington DC, Baltimore, and other regional cities are accessible via Interstates 495 and 95, located 3 miles north of campus. The University is also well-connected via transit, with a WMATA subway station on the Green Line and the historic MARC Camden Line connected via shuttle to the campus. The Purple Line is a new 16-mile light rail line that will strengthen connections between UMD and cities in Prince George's and Montgomery Counties, such as Bethesda, Silver Spring, and Takoma Park. The Purple Line will have five stations on campus.

Surrounding Area

The immediate surroundings at UMD are characterized by a suburban development pattern. However, recent development and new transit options are beginning to encourage a more walkable, urban character. Baltimore Avenue is an important commercial corridor, and the main campus is bordered by natural and open space assets like Paint Branch and the University Golf Course grounds, University Boulevard/U.S. Route 193, Campus Drive, Mowatt Lane, Knox Road, and Baltimore Avenue. The Discovery District, located at Baltimore Avenue and Campus Drive, is an important gateway that links the City of College Park to the UMD campus.

Discovery District

Established as an extension of the College Park campus experience, the Discovery District is a 150-acre mixed-use community that fosters entrepreneurship, research, and economic development. The Discovery District is a physical and intellectual hub where academia, industry, and government unite to drive innovation and create new opportunities.

The Discovery District also aims catalyze job creation and attract businesses and investments to the region. By leveraging the expertise and resources of the University, the district seeks to nurture startups and support the growth of existing companies. It provides access to state-of-the-art facilities, funding opportunities, mentorship programs, and a network of industry partners, creating an ecosystem that nurtures innovation and entrepreneurship. The intent is to benefit the University and its researchers and contribute to the economic vitality of the surrounding community and the broader region.

INSTITUTIONAL HISTORY

The University of Maryland, College Park has a rich and storied history spanning over 160 years. From its humble beginnings as the Maryland Agricultural College, established in 1856, the institution has undergone remarkable growth and transformation to become one of the nation's premier public research universities.

As the University expanded from a small college on the hill to a flagship University stretching across 1,340 acres, some of the most successful and defining elements of the campus layout have been altered, diminished, or faded from view. The clear organizational hierarchy, rich collection of signature open

spaces, extensive network of pedestrian-focused walkways, and sympathetic relationship with adjacent natural areas were all hallmarks of the historic and iconic early campus eras.

Recapturing the most successful elements of the historic campus while managing continued development requires the University to commit to the idea that each decision about where and how the University will grow must support a singular, cohesive, and comprehensive campus vision. The following observations on the evolution of campus are offered as lessons to inform future decision-making.

Early Years (1856-1912)

The institution was established on the ancestral lands of the Piscataway Tribe on 428 acres, with an initial enrollment of 34 students. It was a recipient of the Morrill Land Grant Act, which provided federal land grants for establishing colleges emphasizing agricultural and mechanical arts. With a small student body and limited facilities, the college aimed to educate students in practical skills and contribute to the development of Maryland's agricultural industry. During this time, the historic campus organization framed open spaces with buildings around what is known today as the Morrill Quadrangle. Notable buildings from this period still present include Taliaferro Hall and Morrill Hall.

The Contemporary Campus Core: Emergence from the Great Fire of 1912 (1913-1945)

The contemporary historic campus core emerged due to an extensive fire started during a Thanksgiving event that destroyed most buildings on the historic campus. This new campus core, extending north of Morrill Quad, resulted from multiple campus planning studies conducted in the 1940s. Those studies were built on the framework set by a compact academic and administrative core surrounded by lower-intensity uses, including student housing, athletics, and recreation. Residential communities of this era were clustered around individual open spaces, resulting in a cruciform campus shape with a clear hierarchy of organizing land uses. Several buildings and land assets from this period remain active, including Shoemaker Hall, Francis Scott Key Hall, T. Miller Administration Building, and McKeldin Mall.

Post-WWII Boom (1946-1987)

Fueled by the GI Bill, enrollment tripled to approximately 7,300 in just one year. This rapid spike in enrollment resulted in the rapid development of both low and high-rise construction surrounding the historic compact core, including residential communities (east across Baltimore Avenue, north of the athletics fields and stadium, and south past Morrill Hall) and an emerging engineering and science district along Paint Branch. During this time, vehicle ownership also increased in popularity, shifting the focus of new campus development from the traditional malls, quads, and courtyards that defined the campus core to large surface parking lots of campus roadways needed to accommodate the large influx of cars — thus defining the areas north of Campus Drive as more urban and sprawling. Buildings of this era began to take on a more utilitarian aesthetic, reflecting mid-century modern aesthetics, which typically lacked the traditional Georgian elements that defined buildings in the campus core. Example buildings from this period include McKeldin Library, Martin Hall, Kirwan Hall, Cole Fieldhouse, and the north campus residential communities.

The Flagship Institution for Maryland (1988-2022)

As the campus has continued to evolve, it has increased in density, the mix of uses, has pivoted to sustainable practices to achieve carbon-neutral operations and address impacts associated with climate change and has increased its presence within the City of College Park. New buildings have slowly but consistently replaced parking lots, campus development extends far east of Baltimore Ave, and a vibrant Discovery District is beginning to emerge, connected to the City and the region, the Purple Line promises to further connect the campus to the region and adjacent communities (new and established). The growth and prominence of the University's programs and partnerships have positioned it as a global leader in higher education, and the campus continues to evolve as a dynamic and resilient place of innovation, thought leadership, and a spirited community. Additions to the campus environment include

the Xfinity Center, Iribe Center, James A. Clark Hall, Edward St. John, and Clarice Center for the Performing Arts.

Recent Development: 2011 – 2022

Implementing the 2011 Facilities Master Plan advanced several major projects to support campus growth and address deficiencies on campus. Investments in recent years have included new construction, renovations, open spaces, and ongoing Purple Line construction.

New Buildings and Additions

- A. James Clark Hall
- Artemesia Building
- Brendan Iribe Center
- Cole Student Activities Building
- College Park City Hall (7401 Baltimore Ave)
- Cypress Building
- E.A. Fernandez IDEA Factory
- Edward St. John Learning and Teaching Center
- Fleet Services Building
- Heavy Equipment Building
- Johnson-Whittle Hall
- Maryland Stadium Concessions 6
- Physical Sciences Complex
- Prince Frederick Hall
- Pump Building
- Pyon-Chen Hall
- Seneca Building
- Shuttle Bus Facility
- Thurgood Marshall Hall
- University House
- Wye Oak Building

Renovations

- Cambridge Hall

- Chemistry Building
- Chincoteague Hall
- Dorchester Hall
- Greek House 171 Phi Sigma Sigma
- Greek House 176 Alpha Phi
- H.J. Patterson Hall (Wing 1)
- Pocomoke Building
- Severn Building

CAMPUS CONDITIONS

The campus conditions analysis aims to comprehensively assess the physical environment of UMD, including quantitative evaluations and qualitative analysis, such as the facility condition index, physical space needs, campus character, land assets, mobility, and infrastructure. Campus conditions are validated based on input collected throughout the outreach and engagement process. The results of this conditions assessment process inform the formation of the Guiding principles and the physical planning strategies across the campus.

An Iconic Campus Environment

UMD is one of the most recognizable campuses in the country. Founded in 1856, the campus is a vibrant and dynamic academic environment situated on rolling hills along the Anacostia Watershed. It features a mix of contemporary and traditional buildings nestled among green spaces and tree-lined walkways. It is widely recognized as one of the desirable University campuses in the country, in part due to several iconic places and spaces including McKeldin Mall, Chapel Lawn, the south campus quads, and notable recent buildings including the Iribe Center and IDEA Factory.

An Evolving Campus Framework

The organizing physical campus framework reflects development over 160 years since UMD's formation in 1856, resulting in a distinctive and varied campus environment comprised of many development styles shaped around different land asset typologies, from Jeffersonian-style quads (including Washington Quad), campus walks (including McKeldin Mall), to streets (including Regents Drive). The organizing framework can be characterized by gateways, plazas, signature open spaces, edges, and districts, some of which can be perceived as "iconic," meaning spaces that are memorable, distinctive, and widely recognized, evoking a sense of identity, pride, or inspiration for the UMD campus.

Yet at the same time, campus stakeholders have described the campus experience as perceptively "congested" and "sprawling" due to a lack of defined campus pathways and wayfinding. Additionally, the Purple Line light rail line will better-link the main campus and Discovery District but will also bisect the campus core into two halves. Future planning strategies should strengthen connectivity across campus and create opportunities for new and improved memorable places and spaces for UMD's future.

The Town-Gown Interface

The University of Maryland, College Park campus is bounded by several unique communities and corridors that contribute to the distinctive arrival experience for campus visitors and users. Route 1, or Baltimore Avenue, serves as the primary interface between UMD and the external campus environment and runs between the main campus and Discovery District. Downtown College Park, located to the south-east of campus, features a variety of mid-rise mixed-use activities, including restaurants, shops, and entertainment venues. To the northeast of campus, the Baltimore Avenue corridor is populated by new mid-rise residential development supplemented by small-scale retail and dining uses. To the south and east of campus and adjacent to the Discovery District lies the town of Riverdale Park, known for suburban residential development and transit-oriented development. To the west of campus is the UMD golf course across University Boulevard, a vehicular roadway that connects major regional arterials and lacks a strong sense of campus identity.

Gateways at Multiple Scales

Gateways for UMD can be described as a prominent and visually-distinctive entrance or transitional space that welcomes visitors to campus. Architectural elements, monumental signage, and landscape elements can define campus gateways. In many instances, campus gateways combine multiple components into a single transitional space, as is the case at the main entrance to campus on Baltimore Avenue, with the Iribe Center, Founder's Gate, landscape roadway median, and adjacent Engineering Fields working together to create a unique space that welcomes visitors to campus. In this example, those elements clearly represent various aspects of UMD's unique identity and values, and instill a sense of pride. With the completion of the Purple Line, the UMD campus will have six primary gateways and nine secondary gateways into campus. Four primary-vehicular gateways are located at the corners of the campus core. Each Purple Line stop will also act as a primary pedestrian gateway, with the stop at University Blvd and Campus Drive also serving as a primary vehicular gateway.

Gateways along University Boulevard:

Campus Drive: A proposed Purple Line stop will make this a significant pedestrian gateway into campus in what is expected to be a vibrant residential neighborhood.

Stadium Drive: This gateway primarily serves vehicular access to campus and provides direct access to Maryland Stadium and the northern residential communities.

Paint Branch Drive: This gateway is a primary vehicular access point and will become increasingly important if surface parking becomes more concentrated at the campus perimeter.

Gateways along Baltimore Avenue

Campus Drive: This gateway will serve as a key transitional space between the Discovery District and the rest of the campus.

Baltimore Ave - UMD (Purple Line stop): This Purple Line stop will make this a significant pedestrian gateway into the main campus and Discovery District.

Campus Center:

Campus Drive - UMD (Purple Line Stop): This station stop will be a significant student hub and gateway into campus, providing direct access to the Stamp Student Union, Health Center, Maryland Stadium, and the campus core.

Secondary Entrances

Numerous secondary entrances along Knox Road and Mowatt Lane are utilized primarily by students living in and around College Park. These secondary entrance locations should be directly connected to off-campus sidewalks and pathways with the greatest pedestrian flow into campus to increase safety and security at the campus perimeter.

Memorable Places, Pathways, and Nodes

Iconic or memorable spaces, whether buildings, pathways, open spaces, or gathering areas, serve several functions for UMD's campus. These functions include (but are not limited to):

- Contributing to a strong sense of campus identity that represents UMD's history and traditions
- Supporting a positive campus experience by facilitating opportunities for socialization or introspection
- Boosting public perception of the institution to attract potential students, faculty, staff, and visitors.

Several spaces exemplify iconic UMD places, pathways, and nodes, including:

- **McKeldin Mall:** McKeldin Mall is a cherished and symbolic heart of the campus and the signature gathering place of the University of Maryland, College Park campus. It serves as a central hub for students, faculty, and visitors, fostering a sense of community and providing a vibrant outdoor space for various activities and events. The Mall's iconic design features an expansive green lawn, shaded walkways, and cascading water features flanked by academic and administrative uses. It is considered one of the country's most elegantly designed and maintained collegiate malls.
- **Baltimore Avenue Corridor:** Route 1, or Baltimore Avenue, serves as the "front entrance" and the transition between UMD, the Discovery District, and the greater community. It includes several key campus entries, including Campus Drive and Regents Drive. It will be further-enhanced by the State Highway Administrations' complete streets project and a new Purple Line light rail station and multi-purpose path adjacent to Ritchie Coliseum and across from Reckord Armory. Additional notable buildings and spaces that face this corridor include Thurgood Marshall Hall, Chapel Lawn, the Engineering Fields, Fraternity Row, Rossborough Inn and the Iribe Center's open space along Paint Branch.
- **Stamp Union:** Stamp Union is a vibrant node of student activity and community engagement on campus. It is a multi-purpose facility that offers a wide range of services, resources, and spaces to enhance the student experience. It is a central gathering place where students can socialize, study, attend events, and access important resources.

- **South Campus Quads:** The South Campus Quads offer a picturesque and inviting residential space of reprieve for students. These quads comprise interconnected residential buildings surrounding open green spaces and courtyards. Washington Quad, in particular, features a multi-purpose space for relaxation and recreation.
- **Memorial Chapel:** The Memorial Chapel, an iconic 1950s structure, prominently sits atop Chapel Lawn overlooking Baltimore Avenue. It is recognized for its distinctive steeple, visible from various locations across campus. The Chapel serves as a venue for a variety of services, weddings, and gatherings.
- **Campus Arboretum:** In 2008 the campus was designated as an Arboretum & Botanical Garden (ABG), further revealing and advancing the value of campus natural resources as an instrument of pedagogy, research and community engagement.

UMD's Campus Districts

Districts across the UMD campus can be described as distinct and identifiable areas encompassing buildings, facilities, or functions with a shared purpose or theme, such as academic, residential, or athletics/recreation. The district may also include distinctive elements that make them unique, including (but not limited to) the primary users, location on campus, development history, and architectural style. Based on different periods of growth over time and the distribution of academic units, the UMD campus can be separated into multiple campus districts, highlighted in the diagram to the right.

- **Northern Campus Core:** As the northern half of the campus core above Campus Drive, this district is defined by a mixture of student services, ICA, RecWell, and academics/research. Notable buildings and spaces include Stamp Union, Cole Fieldhouse, SECU Stadium, Shipley Field, Hornbake Library, and Hornbake Plaza Frederick Douglass Square.
- **Southern Campus Core:** The Southern Campus Core is often-recognized as the historic heart of campus and is primarily served by academic and administrative uses clustered around McKeldin Mall, including the McKeldin Library, T Miller Administration Building, Record Armory, and Edward St. John Learning and Teaching Center (ESJ). Older aging residence halls are located to the west, where they were originally located on the campus perimeter.
- **Science and Technology:** Occupied primarily by the School of Engineering and College of Mathematics and Natural Sciences, this area reflects auto-centric post-WWII growth of low-rise modernist buildings clustered around surface parking lots. More recent developments, including the Iribe Center, and IDEA Factory, reflect a refocus on denser, infill-focused spaces to accommodate next-generation research and learning spaces at higher densities to promote collaboration between academic units.
- **North Campus Village:** The North Campus Village is primarily-served by Resident Life where mid-century residential communities of Denton, Ellicott, and Cambridge serve as hubs for student life. This district is also occupied by the Eppley Recreation Center (ERC), School of Public Health, and recent additions to Resident Life including Johnson-Whittle Hall, Pyon-Chen, and Yahentamitsi Dining Hall. LaPlata Beach serves as an informal gathering space in the center.

- **South Campus Village:** This district includes several clusters of activity, including academic and research uses to the west along Mayer Mall at Van Munching Hall and the Architecture Building, Resident Life facilities clustered around quads including Washington Quad, and the historic center of campus at Morrill Quad capped by Morrill Hall, Shoemaker Hall, and the aging LeFrak Hall. This district includes multiple pedestrian-focused portals into campus from the south leading into Downtown College Park.
- **Paint Branch Athletics:** Further to the north, the Paint Branch Athletics District serves as a hub for ICA activity, dominated by the Xfinity Center. This area is also occupied by administrative service-oriented functions to the west, numerous surface lots, and includes a north campus gateway at Paint Branch Drive and University Boulevard.
- **Western Campus Gateway:** While the Western Campus Gateway is not built-out in comparison to other districts within the campus core, this area is located along the Purple Line and is currently populated with surface lots and Ludwig Field, and the Clarice Smith Performing Arts Center. This district has two primary entries into campus along University Boulevard at the intersections with Campus Drive and Stadium Drive.
- **University Boulevard:** The University Boulevard District is located close to the Resident Life uses, SECU Stadium, and Clarice Smith Performing Arts Center to the east of University Boulevard and is currently occupied by the UMD Golf Course and Natural Archives.
- **Discovery District:** The Discovery District serves as a physical and intellectual hub where academia, industry, and government come together to drive innovation and create new opportunities, and it aims catalyze job creation and the attraction of businesses and investments to the region. It comprises major research, including IonQ and ARLIS, incubator spaces, and The Hotel at UMD. It is supplemented by undergraduate and graduate student housing along Fraternity Row and Leonardtown. The Discovery District is complemented by development by College Park Airport and is further-supported by the Purple Line and College Park/U of UMD Metro Station. The Discovery District is also connected with Riverdale Park and College Park to the west.

Campus Buildings

UMD's campus buildings vary in age, scale, architectural style, and condition, and support a variety of necessary functions, including academic and research, administrative, auxiliary (including Resident Life facilities), and athletics/recreation. Over 300 campus buildings were evaluated to determine their ability to support UMD's mission, values, and Strategic Plan or if they would better-serve as renovation or redevelopment opportunities to accommodate evolving changes in teaching, research, and student life.

The evaluation of UMD's buildings involved two primary approaches, assessing the physical and the perceived functional condition of a building. The physical condition of UMD's campus buildings reflects the University System of Maryland's annually updated Facility Quality Index (FQI). The perceived functional building condition takes into account multiple qualitative inputs, including feedback collected during campus tours and stakeholder interviews, and building measurements to identify the viability of being adapted to support future practices and space needs.

An assessment of both physical and functional building conditions led to the following findings:

- **Physical Condition:** Of the buildings reviewed, over 150 of the buildings require "Comprehensive Modernization" per the 2021 FQI summary. This indicates a significant backlog of buildings with MEP systems at or near the end of their service life. This results in significant difficulties in maintaining suitable teaching, learning and research conditions. A large percentage of the most poorly rated buildings exist in the campuses' historic core.
- **Perceived Functional Condition:** Over 59 buildings were noted as having a low perceived functional adequacy, meaning their existing configuration limits opportunities to support their desired use, the building footprint limits renovation opportunities, or campus stakeholders shared concerns with the use of the site. Of the 59 buildings identified, 19 buildings served academic and research functions. Of those, 13 buildings were noted as having both a low functional adequacy and in need of a Comprehensive Modernization based on their FQI rating, including LeFrak Hall, Preinkert Hall, Benjamin Hall, McKeldin Library, Jimenez Hall, Hornbake Library, Marie Mount Hall, and Martin Hall.
- **Perceived "Iconic" Buildings:** Additionally, multiple buildings were noted as having an "iconic" quality that contributed positively to the campus identity and may be best-suited for renovation versus complete redevelopment, including (but not limited to) McKeldin Library, Martin Hall, Reckord Armory, the UMD Chapel, and Morrill Hall.

Land Assets

The UMD campus comprises a broad range of land asset typologies at various scales that form an extensive and rich public realm experience. These landscape asset typologies uniquely contribute to the pedestrian experience and overall campus experience. Legacy landscape assets within the Campus Core exhibit a formal landscape language and expression that relate to historical architectural and campus design movements. Consideration should be given for future development to promote contemporary landscape design that emphasizes principles of social and ecological resilience, as well as equity, inclusion, and health. A summary of existing conditions by district indicated the following:

- **The Northern Campus Core** contains several large athletics fields and several smaller plazas and courtyards, resulting in few mid-sized accessible landscape spaces. The scale of the athletic fields, Shipley Field, SECU Stadium, and their relative inaccessibility, impedes north-south pedestrian connectivity between Campus Drive South and the North districts.
- **The North Campus Village** is similarly deficient in medium-sized accessible landscape spaces. Three quads associated with residential buildings in the Northwest district could fulfill this need but currently are occupied with buildings housing the Denton Community Center, Ellicott Diner, and Cambridge Community Center, respectively.
- **The Science and Technology District** is relatively dense, with a high proportion of impervious surfaces, both buildings and paved surfaces to improve stormwater management. Given its proximity to Paint Branch and its floodplain, this district presents unique opportunities for the campus to engage with the landscape character of Paint Branch and act as a connection to the larger riparian system.
- As development pressures increase in the **Western Campus Gateway** and **Paint Branch Athletics Districts**, consideration should be given to balancing development with protecting environmentally sensitive areas, with a focus on stormwater management, retention of canopy cover and showcasing the campus as an arboretum and botanical garden.
- **The Southern Campus Core** contains significant legacy landscape assets, such as McKeldin Mall, Chapel Lawn and Chapel Fields, and Engineering Fields. While this district has a relatively high amount of accessible open space, parking and service areas disrupt the pedestrian experience, mainly north-south connectivity.
- **The South Campus Village**, particularly Morrill Quad, the Garden of Remembrance and Reflection, and the Chapel Lawn represent some of the most significant landscape expressions of the UMD campus as an Arboretum and Botanical Garden and should be maintained and improved in the future.

Significant woodlands and riparian systems surround the UMD campus. Efforts should be made to add to existing forest conservation areas. Improved connections between campus and forest areas and carefully designed and managed pedestrian access within forest areas is recommended. Woodland trails, boardwalks, etc., could improve perceptions of the surrounding forests as a resource for education and the health and well-being of students, faculty, and staff.

In addition to assessing land asset typologies, useable campus open spaces were evaluated. The analysis of usable open spaces (including open lawns, recreational fields used for informal gatherings, formal open spaces, plazas, and courtyards) illustrates the relative lack of usable open space north of Campus Drive, particularly in the North Campus Core and Science and Technology Districts. It highlights the need to better-balance the distribution of land uses in those areas to provide a campus setting with more community and environmentally-focused landscape spaces. Landscape design should support north-south connectivity in particular and reinforce district characters to support wayfinding and psychological awareness across campus. These needs were further reinforced by heat mapping of the Washington D.C. metro region, highlighting increased heat levels in areas on and around campus, where development is significantly more dense than

surrounding areas. Additionally, expanding the existing open space network will play a critical role in addressing flooding and make vital connections to the larger environmental network, which extends into College Park and beyond.

Mobility

A multi-modal assessment focused on opportunities to enhance the safety, accessibility, efficiency, and convenience of movement to-from and across campus. Several existing and past studies and plans were reviewed, including previous master plan recommendations that have not yet been implemented, relevant mobility and infrastructure data using GIS, and capturing input from campus stakeholders. Potential opportunities include improving pathways, wayfinding, complete streets (sidewalk, roadway, landscaping, below-ground infrastructure improvements), and parking while planning to integrate the Purple Line light rail. By prioritizing pedestrian/wheeled user access and optimizing parking locations, the University seeks to create a more pedestrian-friendly campus environment that promotes sustainable operations and fosters a community and well-being among students, faculty, staff, and visitors.

Findings:

- The Purple Line, the rapidly developing Discovery District, and the increase in on-campus student housing create unique opportunities for increased campus connectivity and for greater multimodal access.
- The topography of the campus creates challenges to universal access and limits the functionality of specific campus pathways. Multiple locations (highlighted below) also have higher crash risk, including Regents Drive in front of the Garage and Paint Branch Dr by Lot 11b due to the combinations of modes and directionality of travel through the campus. While these safety challenges already exist, the development of the Purple Line will encourage more UMD students, staff, faculty, and visitors to use alternative modes of transportation in and around the campus and will improve mobility but will also require special care to ensure safe vehicle-pedestrian interactions, especially near Purple Line stations and intersection crossings.
- During engagement, the campus was simultaneously described as “sprawling” and “congested.” It is directly attributed to a spiderweb network of many campus pathways with no clear orientation of hierarchy of use and the lack of connected pathway networks, particularly in the north-south direction (illustrated below). Filling gaps in the internal and external bicycle network has the potential to encourage people to use more active modes of transportation. Additionally, connecting the sidewalk network and improving wayfinding can provide a sense of purpose for users, create or enhance the sense of place, and make walking a more reliable mode of travel.
- Addressing climate concerns by bolstering multimodal options and creating complete streets throughout campus can decrease the University’s carbon footprint.

Parking Inventory and Utilization

Parking at the University of Maryland is regularly assessed and managed to efficiently accommodate the needs of students, faculty, staff, and visitors while promoting alternative transportation options and

sustainable practices. This assessment is updated periodically and further-informed by Purple Line light rail ridership projections. The summary of current and projected parking needs suggests that the existing parking supply may continue to support evolving campus needs. When examining both congestion and areas where collisions between vehicles and other modes, including pedestrians, have occurred, it is recommended that parking be consolidated at the peripheries of campus and within parking structures where possible to reduce vehicular traffic within the core and allow these internal lots to be re-purposed for more active uses at higher densities.

Utilities Infrastructure and Energy System Assessment

The assessment of UMD's utilities infrastructure and energy systems involved thoroughly examining the campus's utility networks, including stormwater, electricity, water, heating, cooling, and other energy-related systems. This comprehensive evaluation encompassed data collection and review, site visits and interviews with campus stakeholders, and technical analysis to identify existing infrastructure conditions, potential inefficiencies, and improvement opportunities to support Climate Action Plan 2.0 goals and responsible resource management.

Stormwater

As part of the Climate Action Plan 2.0, UMD has established goals to implement stormwater-focused improvements to enhance stormwater management and mitigate the impact of storm events on campus. These goals include implementing green infrastructure practices, enhancing stormwater retention and treatment systems, and promoting sustainable stormwater management techniques. These efforts align with the University's commitment to environmental stewardship and creating a more sustainable and resilient campus community.

To-date, UMD has over 170 stormwater control facilities and drainage discharging stormwater into Paint Branch and Northeast Branch Creek, leading to the Anacostia River and the Chesapeake Bay. Since 1982, UMD has complied with construction and stormwater requirements for development through onsite controls such as ESDs, and a regional "stormwater bank" negotiated with MDE. The "stormwater bank" consists of a sand filter constructed at the base of the lawn of the President's Residence (now University House). Despite all the original impervious area bank credits having been spent, the University maintains a bank credit balance by the excess treatment of previously untreated impervious surfaces and exceeding minimum treatment requirements on redevelopment projects.

Stormwater-Related Findings:

- Based on the anticipated impacts resulting from climate change, the campus is faced with the following stormwater-related factors:
- A high percentage of impervious surfaces in the main campus (over 50%) may lead to increased runoff and localized flooding during storms.
- Higher storm intensities may lead to increased flow of sediment and pollutants to Chesapeake Bay and its tributaries, particularly in areas without stormwater management control, resulting in degraded water quality.
- According to the FEMA-commissioned report, *The Impact of Climate Change and Population Growth on the National Flood Insurance Program through 2100*, flood-prone land is projected to increase by 40 to 45% over the next 90 years due to climate change and growth.

- Insufficient existing stormwater infrastructure will exacerbate the impacts of intense rainfall and making efforts to improve water runoff quality more challenging.

The following are determinations based on a review of available data and visits to the University's main campus:

- The University has experienced flooding at six facilities due to current site conditions and at eight facilities due to structural-related issues.
- Current stormwater management system pipes are aging. The systems requires analysis to determine possible upsizing to accommodate recent and future development.
- UMD, and other contributors within the watershed, are being compelled by evolving stormwater regulations to reduce their respective water footprint to improve water quality in the Anacostia River and the Chesapeake Bay.
-
- A site-specific design analysis at each facility experiencing flooding to identify potential solutions.
- A stormwater master plan should serve as an implementation roadmap for meeting future stormwater management initiatives, both required and elected.

Heating Hot Water

UMD operates local heating hot water networks with hot water generation (180 F or higher) via campus steam in SCUBs. As a result, consideration could be given to exploring the potential conversion of existing networks to low-temperature hot water (140 F or less), and creating new networks with hot water generated electrically via Thermal Plants.

Chilled Water

Overall, the chilled water generation infrastructure throughout the campus is aging. Over 1/3 of all capacity is generated by equipment over 25 years old, and only slightly over 10% of all capacity is generated by equipment installed in the past 10 years. Additionally, satellite campus utility buildings are due for upgrades/replacements of chillers and auxiliary equipment. There is a small amount of spare capacity in existing SCUBs, but most have peak demands more than firm capacity. When one chiller is offline, it cannot meet peak demand.

Given the age and condition of SCUBs, significant investment may be necessary to increase operating efficiencies across campus. It represents an opportunity to be explored in

consolidation with fewer thermal plants that produce low-temperature hot water via heat recovery chillers.

Water/Sanitary Sewer

Water and sewer utilities were assessed to determine areas of capacity constraints, opportunities for expansion, redundancy issues, and maintenance needs to address problems related to aging infrastructure and evaluate options for more robust and resilient systems.

Findings:

- The water and sanitary sewer networks lack the redundancy necessary to serve the UMD during disruptions that could arise due to maintenance or incidents related to aging infrastructure (i.e., pipe breaks).
- Currently, utilities are largely constructed as part of individual development projects and lack long-term planning with respect to utility corridors, ongoing operations (many utilities are placed under amenity areas inhibiting the use of those spaces during repairs/upgrades, etc.), and capacity upstream and downstream when making connections for a project and impacts of a development project on the overall utility network.
- There are opportunity areas for utility corridors and additional connections to the public system.
- Some areas of campus lack wet utility infrastructure to support future construction.

Steam/Condensate

- The steam distribution system is inefficient, with distribution losses in excess of 20% and significant maintenance required by the 3rd party operator. Currently, the CHP plant produces steam via cogeneration with natural gas turbines and via natural gas boilers. To achieve net zero carbon goals, this plant must eventually convert to renewable fuels or be replaced with regional thermal plants producing hot water electrically.
- The oldest sections of the steam distribution system are in the historic core of the campus.
- Consideration should be given to exploring options for the phased elimination of the steam system in concert with other campus infrastructure upgrades and building projects.

Electrical

The majority of UMCP's campus is served electrically from the underground distribution system that originates at the Mowatt substation. At Mowatt, utility service is provided by three 13.8 kV services from Pepco Substation 189. At the Pepco substation level, the three services originate from separate bus segments, each served by a 30 MVA transformer. Per the 2012 RMF Utility Master Plan, the firm capacity of the Mowatt substation is 58 MW. This firm capacity assumes that one of PEPCO's three services may be out of service due to maintenance or equipment failure. The Mowatt appears to be in good condition. The switchgear appears in good condition, having benefited from regular preventative maintenance. The protective relays for the Mowatt substation were recently upgraded with modern solid-state relays.

Electrical Power

PEPCO provides campus power utility via the Mowatt substation, by the Combined Heat and Power Plant (CHP) and by photovoltaics on five campus sites. There is a relatively small amount of spare capacity on the Mowatt Substation and on the campus distribution network upon which PEPCO and CHP power is transmitted to the buildings. The Mowatt substation represents a single point of failure which can and has caused serious disruption to University Operations. Consider establishing a second campus service for external grid power to operate in conjunction with the Mowatt substation to increase capacity and enhance reliability/resiliency.

Electric Vehicles and Buses

UMCP currently operates a fleet of cars, trucks, and buses that support campus operations. At this time, electric vehicles are supported on campus as an amenity for students and staff who may access electric vehicle supply equipment (EVSE), or EV chargers, at selected locations on campus. As of 2022, the campus owns and operates 26 Level 2 EV chargers across 10 locations on campus. There are plans to provide more chargers in the near future, and a pay-to-charge structure is planned for implementation in the near future. Consideration should be given to the impact of both private vehicles and UMD's growing electric fleet on campus electrical infrastructure.

IT/Telecom

The backbone of telecommunications and networking at UMD is the network of duct banks that provide conduits for connections between buildings. On the core campus, this network was built in 1990, and has continued to be updated and expanded with new construction. It is reasonable to expect at least another 30 to 50 years of useful life from the conduits themselves. To ensure reliable operation, it is critical that multiple paths exist between all buildings and critical consolidation points (data hubs). As campus buildings and quads are re-developed, investment in the duct bank network must be made to ensure high quality, reliable networking.

Many of the conduits in the telecommunications network on campus contain copper wiring that is reaching the end of its service life and that is also no longer needed as fiber optics continue to replace copper. In the next decade, UMD should plan to fully abandon its outside plant copper wiring, consistent with the practice being followed by telecommunications companies such as Verizon. The copper wiring could either be abandoned in place or removed to provide space for additional fiber optic cables. Salvage value of the copper cable could at least partially offset the cost of its removal.

Energy/Carbon

The CHP plant, producing steam and electricity from burning natural gas, is the most significant source of campus carbon emissions. A key recommendation includes exploring reducing requirements for fossil-fuel produced heat in concert with planning for new and renovated facilities such as a thermal plant strategy.

Findings

- PEPCO provides campus power via Mowatt Substation with 58 MW firm capacity. There appears to be approx. 5 MW spare capacity based on peak demands recorded in the past year.
- Many of the 10 campus feeders originating in Mowatt are at or near being fully-loaded. It may require significant investment to serve new construction on campus.
- The CHP plant can feed up to 25 MW of the 58 MW Mowatt capacity. The present feeder arrangement does not allow the use of the CHP capacity when service to Mowatt is interrupted. It was demonstrated in a recent campus power outage (7-12-22).
- There is approx. 3 MW dc PV generation spread over five campus sites.
- Consideration should be given to exploring additional services from PEPCO in concert with campus development, the potential for added PV on campus, and feeder arrangement/capacity to serve new development and to increase reliability/resiliency.
- The following impacts should be evaluated: electrical vehicle charging to peak electrical demand, electrification of heating to peak capacity/demand, high-performance new and renovated construction to peak demands, and the potential to add a SCADA system to monitor load switches and/or smart grid controls.

PHYSICAL SPACE NEEDS ASSESSMENT

A space needs assessment was conducted to inform existing potential deficiencies, anticipated near-term (10 years) allowances, and long-term (10+ years) planning scenarios. “Needs” vary in scale/type, and can be summarized into the following categories:

Physical space allowances: Academic and research, administrative and support, Intercollegiate Athletics (ICA), and Division of Student Affairs (DSA)

Additional campus needs: mobility, land assets, and infrastructure

Physical space needs were examined in two ways:

10-Year Plan: Focused on addressing current deficiencies and meeting requirements based on approved 10-year enrollment projections

Planning Scenario: Focused on proactive planning to reflect evolving potential changes to enrollment, teaching, research, and student support-related practices

The space needs assessment process was based on the University System of Maryland and Department of Budget Management guidelines, peer institution benchmarking, and input from campus stakeholders. In addition, the program summary incorporated analysis from previous planning studies and divisional strategic planning efforts. The results of the space needs assessment are illustrated in the chart to the right.

Campuswide Space Needs Findings:

The following figure summarizes the space needed to support UMD’s current and potential future student complement, by major space category.

- There is a calculated current net allowance for roughly +1.2M additional NASF, primarily to support UMD’s extensive research activity.
- Aside from research facility needs, there are also allowances for additional library study space, general use, and offices. It is important to note that spaces in these categories may still require renewal and/or replacement to accommodate contemporary pedagogical methods and specific disciplinary requirements.
- All space categories will require additional square footage by 2032 based on the University’s historic growth pattern. Inclusive of all space categories, there is a projected need for over +1.8M NASF of additional space.

- Division of Student Affairs Facilities Strategic Plan housing analysis currently projects the need for an additional 1,400 undergraduate residential beds on the College Park campus. This is based on student demand and known nearby private student housing developments. Any additional nearby private student housing developments could reduce the current estimated need.
- Campus stakeholders have also identified a “need” of an additional three fields. Athletics and DSA Recwell have the opportunity to potentially share existing fields, which would supplement the need for new additional fields.

OPPORTUNITY SITES

With growth of over 1.4 million gross square feet (GSF) in the last ten years (excluding housing), mainly on surface parking lots and previously undeveloped areas, the University’s ability to readily-develop land with new buildings is quickly diminishing. To accommodate long-term growth on the main campus, UMD must critically assess opportunities to replace existing buildings with significant maintenance issues or poor programmatic fit to function.

The resulting opportunity sites are informed by the results of the conditions assessment and offer strategic opportunities to create innovative and purposeful spaces that align with UMD’s Strategic Plan and includes the potential to accommodate the following:

Readily Developable Sites: Sites with no existing construction and/or vacant/to-be-demolished buildings. 500,00 GSF

Additional Opportunities: Sites with poor condition ratings and existing use that could be re-accommodated elsewhere. 3,000,000 GSF

By prioritizing readily-developable sites, the recommended campus plan framework illustrated in the following section can meet the evolving needs of the UMD community while at the same time enhancing the overall campus experience.

The University’s desire to have innovative and cross-cutting academic and research programs suggests the prioritization of a compact and dynamic academic core, where physical adjacencies spur collaboration and innovative partnerships. To achieve that goal, some “gaps” in the current academic core should be bridged over time with future academic uses, and non-academic uses should be relocated to adjacent areas and supporting spaces. Student residential communities thrive with a rich collection of amenities and access to health and wellness resources, which suggests that the perimeter residential community model should be strengthened and expanded.

3 THE CAMPUS FACILITIES PLAN VISION

CHAPTER CONTENTS:

- **Campus Facilities Plan Vision**
- **Guiding Principles**
- **Campus Facilities Plan Framework**
- **Key Campus Framework Strategies**
- **High-Impact Campus Environments**
- **Holistic Placemaking**
- **People-First Mobility**
- **Sustainable Stewardship and Investment**

CAMPUS FACILITIES PLAN VISION

The Campus Facilities Plan vision emerges as a comprehensive and enduring framework encompassing every facet of our campus, from land use and mobility to land assets and infrastructure development. Drawing strength from the Strategic Plan and emerging Guiding principles, this visionary plan fearlessly confronts challenges and highlights opportunities unearthed throughout the planning process. As the Campus Facilities Plan takes shape, it charts a future-ready environment that accommodates evolving physical space needs and boundless possibilities for the entire campus community.

District-scale studies delve into specific areas to support tailored development strategies that enhance elements of the campus-wide vision. Overall, the Campus Facilities Plan aims to support a vibrant, resilient, and inclusive campus environment that fosters academic excellence and enriches the experiences of all who call UMD home.

GUIDING PRINCIPLES

The Campus Facilities Plan is stewarded by a set of Guiding principles to guide the campus-wide framework plan, district-scale studies, and implementation strategy. Guiding principles reflect goals established by the UMD's Strategic Plan, current and projected campus needs, and broader state-wide initiatives, including Plan Maryland and the Climate Solutions Now Act.

HIGH-IMPACT CAMPUS ENVIRONMENTS

Establish a physical campus framework that guides the University toward excellence in research, learning, resident life, Intercollegiate Athletics, and community partnerships.

PEOPLE-FIRST MOBILITY

Develop an accessible, people-first, and connected campus mobility experience that is integrated with the greater College Park community and beyond.

HOLISTIC PLACEMAKING

Create a connected framework of vibrant and expressive districts and places that reflect University values, diverse community needs, and campus heritage.

SUSTAINABLE STEWARDSHIP AND INVESTMENT

Chart a path toward sustainable campus growth and invest in the long-term resilience of the campus to take on the grand challenges of tomorrow.

HIGH-IMPACT CAMPUS ENVIRONMENTS

Establish a physical campus framework that guides the University toward excellence in research, learning, resident life, Intercollegiate Athletics, and community partnerships.

Key strategies include:

- Reimagine learning through new high-impact, multi-disciplinary, and experiential environments
- Right-size and upgrade buildings to meet today's space and accessibility needs
- Advance excellence in sponsored research by identifying opportunities for collaborative, readily-adaptable, and secure facilities
- Optimize programmatic adjacencies
- Cultivate an environment that values experiential learning through continued growth, visibility, and accessibility of the research enterprise
- Create a seamless Discovery District connection from College Park Metro to the Main Campus
- Integrate academic, research, student affairs, ICA, and other spaces to best serve the campus community
- Support updates and expansion of student services, including updated residence halls, health and wellness facilities, dining services, and recreation facilities
- Support the expansion of Intercollegiate Athletics facilities to meet Big10 Conference standards

- Guide edge and Discovery District development toward shared University and community goals

HOLISTIC PLACEMAKING

Create a connected framework of vibrant and expressive districts and places that reflect University values, diverse community needs, and campus heritage.

Key strategies include:

- Strengthen and update individual campus district identities
- Extend the framework of legacy landscapes
- Create multi-functional open spaces
- Enhance access, stewardship, and usage of environmentally sensitive areas
- Seek opportunities to promote and highlight initiatives focusing on ADA accessibility, diversity, and inclusion
- Create high-quality visitor experiences
- Prominently showcase University values through campus art, wayfinding, and exterior design elements

PEOPLE-FIRST MOBILITY

Develop an accessible, people-first, and connected campus mobility experience that is integrated with the greater College Park community and beyond.

Key strategies include:

- Seamlessly connect the campus to regional transportation nodes and corridors
- Create new and iconic campus-wide circulation corridors
- Ensure campus-wide accessibility and safety for pedestrians and wheeled users
- Limit vehicular access to the campus core
- Optimize existing surface lot land with parking garages
- Create a hierarchy of campus gateways through landscape and wayfinding improvements

- Envision a comprehensive and cohesive wayfinding system that reflects University values and identity

SUSTAINABLE STEWARDSHIP AND INVESTMENT

Chart a path toward sustainable campus growth and invest in the long-term resilience of the campus to take on the grand challenges of tomorrow.

Key strategies include:

- Promote strategies at multiple scales to help the campus achieve carbon-neutral operations
- Support University-wide sustainability goals by leveraging infrastructure, environment, mobility, and building improvements
- Connect campus environmental systems with the greater Anacostia Watershed
- Highlight opportunities to mitigate impacts of extreme weather events
- Make sustainability an engaging part of the University experience
- Plan for future growth at appropriate and contextual levels of density
- Seek district-specific opportunities to increase permeable surfaces, tree canopies, and native landscapes

CAMPUS FACILITIES PLAN FRAMEWORK

Organizing Land Use Framework

The Campus Facilities Plan framework reestablishes a tiered hierarchy of uses, placing academics and research at the heart of the campus core, drawing inspiration from the historic organizing plans that emerged after the Great Fire of 1912. The core is then be bounded by Student Affairs and space for ICA venues, fields, and consolidated parking. Extending eastward, the academic and research precincts merge seamlessly with the vibrant Discovery District, further enhancing the relationship between UMD and the City of College Park. This clear organization of uses enhances UMD's academic and research endeavors, strengthens Resident Life experiences, and fuels economic development that fosters a mutually beneficial partnership that promotes growth for the broader College Park community.

KEY CAMPUS FRAMEWORK STRATEGIES

The campus framework accommodates up to 3.9M GSF of net-new construction of Academic, Research, Auxiliary, and ICA (not including housing, parking, and public-private partnership development). Key campus framework strategies and organizing elements align with the key recommendations illustrated under the Guiding principles, and they include:

Strengthening the Academic Core Foster collaborative and adaptable academic and research facilities to support cutting-edge innovation and partnerships across the campus core.

Placing Research at the Forefront Showcase high-impact research and elevate the visibility and accessibility of the research enterprise.

Investing in Sustainable Infrastructure

Advance UMD's sustainability goals through comprehensive modernizations of campus infrastructure paired with compact development and multi-modal improvements.

Capitalizing on Transit Opportunities Promote an accessible and compact transit-oriented campus experience through strategic infill development along the Purple Line

Promoting Health and Wellness Create new and iconic campus-wide connections and spaces that integrate wellness across the campus.

Supporting Building Champions Improve and expand Intercollegiate Athletics facilities to advance Big10 goals and support the Terps continued success.

Enriching the Campus Experience Create nurturing and engaging environments for a wide range of student services, including updated residence halls, health and wellness facilities, dining services, and recreation facilities.

HIGH-IMPACT CAMPUS ENVIRONMENTS

Supporting the continued development of high-impact campus environments requires a higher level of clarity around the organization of campus uses. The University's desire to have innovative and cross-cutting academic and research programs suggests prioritizing a compact and dynamic academic core, where physical adjacencies spur collaboration and innovative partnerships. To achieve that goal, some "gaps" in the current academic core should be bridged over time with future academic uses, and non-academic uses should be relocated to adjacent areas and supporting spaces. Student residential communities thrive with a rich collection of amenities and access to health and wellness resources, which suggests that the perimeter residential community model should be strengthened and expanded.

Additionally, Intercollegiate Athletics seeks to shift it toward an “athletics village” model where facilities can be co-located to the northeast and west areas of campus, taking advantage of shared-use facilities and ease of access for large events.

KEY PROJECTS & INITIATIVES

- **Strengthen the Academic Core:** Promote higher-density infill development and redevelopment within the campus core.
- **Renew North and South Student Life Villages:** Revitalize Resident Life communities to the north and south with new and updated residential, dining, and RecWell facilities.
- **Develop Terrapin Athletics Districts:** Focus RecWell and Intercollegiate Athletics facilities to the campus perimeter.
- **Activate the Discovery District Innovation Corridor:** Activate this corridor with mixed-use development that supports growing the University research enterprise and strategic partnerships.
- **Bolster Student Support Spaces in the Campus Core:** Renovate and expand Stamp Student Union, the Health Center, and McKeldin to support the student experience.
- **Expand Programming at the UMD Golf Course:** Consider long-term needs to incorporate potential student and athletics-focused uses along the University Boulevard frontage.

HOLISTIC PLACEMAKING

The campus landscape and setting play a critical role in improving the campus ecosystem, fostering community, connecting to adjacent communities, and reflecting campus heritage – but as the campus exists today, the landscape quality and quantity vary greatly across campus. As the campus developed rapidly after WWII, the traditional pattern of buildings surrounding quads, malls, and courtyards gave way to more sprawling and urban districts north of Campus Drive.

The analysis of usable open spaces (including open lawns, recreational fields used for informal gatherings, formal open spaces, plazas, and courtyards) shown below illustrates the relative lack of usable open space north of Campus Drive. It highlights the need to balance the mix of land uses in those areas to provide a campus setting with more community and environmentally-focused landscape spaces. These needs were further reinforced by heat mapping of the Washington D.C. metro region, highlighting increased heat levels in areas on and around campus, where development is significantly more dense than surrounding areas. Additionally, expanding the existing open space network will play a critical role in addressing severe flooding

and make vital connections to the larger environmental network, which extends into College Park and beyond.

KEY PROJECTS & INITIATIVES

- **Extend McKeldin:** Extend the presence and pathway from McKeldin Mall to the west into Lot 1 and to the east into a new Armory Plaza, both of which serve as entries and arrival points to the campus.
- **Develop a Gateway Plaza:** Establish a new gateway plaza at the foot of the iconic Armory Building that greets visitors from the new Purple Line station across Baltimore Avenue.
- **Create a new Stamp Union Lawn:** Relocate Shipley Field and create new open space that allows students and events to flow out from the Union into the adjacent lawn space.
- **Better Integrate the Paint Branch:** Develop a new signature open space extending from Paint Branch that provides critically needed outdoor gathering space in the northeast, mitigates flood risk and reduces the district's heat island effect with resilient planting and landscape design.
- **Complete Development of Mayer Mall:** Use redevelopment and infill to fulfill the original vision of Mayer Mall as a dense and active node at the southwest end of the campus academic spine.
- **Develop a Central Campus Hub:** Create a new transit plaza that boldly welcomes visitors to campus with an iconic new space that unites the street with adjacent frontages of Cole Fieldhouse, Stamp Student Union, and a new academic building.
- **Create a Champions Plaza:** A signature new plaza that anchors the future northwest athletics village and provides space for gameday events and programming.

PEOPLE-FIRST MOBILITY

The campus's size and urban context, transit access, and largely orthogonal organization of buildings present tremendous opportunities to enhance the existing circulation system and promote a people-first approach to mobility. Major campus streets can be reimagined as generously landscaped, multimodal corridors that bind the campus core and safely provide access from conveniently-located parking areas. New campus-wide pathways can resolve

existing north-south circulation constraints and provide safe access to the campus core for bikes and scooters.

A hierarchy of streets and pathways will be connected to the University's existing and new transit gateways, providing ease of travel and effective last-mile solutions. Lastly, new and renewed campus entries along the perimeter will be part of a more natural and intuitive wayfinding and arrival experience that directs users more efficiently to their final destination and reduces congestion in the campus core.

Wayfinding: Campus Gateways

The main campus edge will feature a clear hierarchy of gateways, with pedestrian-scale entries to the south and larger-scaled entries along Baltimore Ave and University Blvd. Notable additions to the existing gateway network include new vehicle-oriented entries at University Blvd and Campus Dr, Regents Dr and Baltimore Ave, Paint Branch Dr and University Blvd, as well as integration with the new Purple Line station at Baltimore Ave. Moreover, enhancing pedestrian-scale entries to define the campus edge with mixed-use development in Downtown College Park will play a crucial role in the overall plan.

KEY PROJECTS & INITIATIVES

- **Develop a Wellness Loop:** A unique 5K multi-purpose loop that connects the campus core with perimeter natural areas and pathways to regional amenities.
 - **Create Signature Campus Walks: Terrapin Way:** Develop a new signature north-south at-grade/fully-accessible connector, Terrapin Way, that connects pedestrians and wheeled vehicles from student communities to the academic core.
- Develop a new, branded **Innovation Walk** to showcase special initiatives along the primary pedestrian route that connects the academic core from the southwest to northeast areas of campus.
- Define a new **Frederick Douglass Walk**, a secondary north-south walk that further connects southern and northern residential communities to the campus core along a fully accessible and bike-friendly pathway.
-
- **Streets for All:** “Complete Street” improvements that improve safety and the overall experience of campus circulation while providing for efficient sharing of roadways space between pedestrians, bikes/scooters, vehicles, and landscape areas.
- **Strengthen Campus Gateways:** New and renewed campus entries that clearly reflect the identity of the University and initiate the wayfinding process for campus visitors.

- **Optimize Parking:** Maintain available parking, including preserving accessible and service vehicle-focused parking within the campus core, while consolidating large parking areas to the campus perimeter and connecting visitors to their final destinations with more desirable pathways and last-mile solutions.

SUSTAINABLE STEWARDSHIP & INVESTMENT

UMD has established bold and visionary goals for bolstering sustainability and responsible land stewardship on campus and throughout the state. The resulting strategies for campus support a clear path toward carbon neutrality and the highest level of environmental stewardship.

Among the strategies represented in the plan are shifting away from the aging central steam system to more efficient “energy districts,” continued and targeted building upgrades, significant increases to the University’s electrical vehicle fleet, and innovative landscape and stormwater infrastructure improvements to minimize the impacts of flooding events.

KEY PROJECTS & INITIATIVES

- **Establish Sustainable Energy Districts**
- Transition from a centrally focused and steam-based energy network to a distributed low-temperature hot water-based district system to support the University’s future energy program. This program will replace, renew and modernize the campus energy system to meet its future sustainability goals - including decarbonization of the campus energy system by 2025.
- **Integrated and Innovative Stormwater Solutions**
- Reduce environmental impacts of heavy rain events by employing low-impact development strategies and Environmental Site Design (ESD) elements in lower-density campus areas and robust stormwater facilities, such as underground detention, rain gardens, and green roofs in higher-density areas.
- Limit on-campus development in flood-prone areas and take proactive measures to address the impact of campus development on off-campus areas.

21st-Century Campus Facilities & Infrastructure

- Align University development practices with statewide policies from the new Climate Solutions Now Act and other climate-related plans and programs.
- Ensure that building construction and renovation meet standards of the State of Maryland’s Green Building Program.

- Prioritize the renewal of buildings that have high functional value and fit for future programs.
- Target the redevelopment of aging buildings with low functional adequacy and performance.
- Pair roadway and open space improvements with upgrades to underground utility corridors.
- Provide electrical capacity to support further electrification of campus buildings, vehicles, and infrastructure.

4 IMPLEMENTATION AND PHASING

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Northern Campus Core

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Phasing Strategies

University of Maryland Campus Facilities Plan

NEAR-TERM (10-YEAR) PLAN

The Near-Term Plan and projects (highlighted below) are guided by the land use framework and reflects State- and System-Funded 10-year projects. While projects are subject to change, the Near-Term Plan represents a preferred strategy for physical campus organization and reflects 1.2M GSF in net-new development (not including housing, public/private partnerships, or parking).

State-Supported 10-Year Projects

- 1 Chemistry Building Wing 1
- 2 Stanley R. Zupnik Hall
- 3 College of Information Studies Renovation
- 4 Health & Human Sciences Building
- 5 Earth & Climate Science Building
- 6 Campus Site & Safety Project
- 7 AI & Machine Learning Building / A.V. Williams & Armory Plaza
- 8 Regents Drive Extension
- 9 McKeldin Library Addition & Renovation
- 10 Architecture Building Addition & Renovation
- 11 Benjamin Building Addition & Renovation
- 12 Francis Scott Key Hall Renovation
- 13 New BSOS Building & LeFrak Demolition
- 14 Turner Hall Renovation

System-Funded 10-Year Projects

- 1 Field Hockey Renovation & Addition
- 2 Basketball Performance Center
- 3 Ellicott Hall Renovation
- 4 Hagerstown Hall Renovation
- 5 Leonardtown Graduate Housing (Public-Private Partnership)

- 6 Discovery Point (Public-Private Partnership)
- 7 Soccer Field & Track Renovation
- 8 LaPlata Hall Renovation
- 9 Hotel Drive Parking Garage
- 10 Construct 2 New Recreation Fields
- 11 Health Center Addition & Renovation
- 12 South Campus Dining Hall Renovation
- 13 South Campus Recreation Center
- 14 Cumberland Hall Renovation
- 15 Centreville Hall Renovation
- 16 Bel Air & Chestertown Demolition & New Housing
- 17 New Baseball Stadium / Development Center & Stamp Union Lawn
- 18 Montgomery Hall Demolition & New Housing
- 19 Paint Branch Garage & Mobility Hub
- 20 Relocate Athletic Practice Fields (3)
- 21 Campus Farm Improvements
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CAMPUS DISTRICT FRAMEWORKS

The following district-scale frameworks describe planning approaches that leverage the unique potential of each distinct area of the campus. Each district framework balances district-specific conditions with campus-wide needs and opportunities. Guidance is provided on specific development opportunities, development capacity, key open spaces, placemaking opportunities, and potential infrastructure projects.

NORTHERN CAMPUS CORE

A CENTRAL HUB AND NEW CAMPUS GATEWAY

Current Conditions

Centrally located athletics facilities and fields that constrain north-south circulation and inhibit academic expansion from the north and east.

- Elevation changes from north to south that challenge ADA accessibility.
- Relative lack of usable open space, particularly around the Stamp Student Union.
- Campus Drive lacks a strong sense of arrival and uniform university branding in the streetscape.

Key Opportunities

- Bridge elevation changes between the Heritage Community and Fieldhouse Drive with Terrapin Way, a partially elevated walkway that spans Stadium Drive and descends into the Stamp Union Lawn.
- Relocate Shipley Field and create new lawn space that fronts an expanded and renovated Stamp Student Union and new academic buildings.
- Relocate ICA fields to provide space for academic and research infill in the Campus Core, bridging adjacent academic uses along Stadium Drive and east in the Science and Technology District.
- Create a cohesive streetscape design along Campus Drive and a civic-scaled transit plaza around the new Campus Drive - UMD Purple Line stop.
- Transform Fieldhouse Drive into a limited access roadway.

SOUTHERN CAMPUS CORE

THE RENEWED HEART OF CAMPUS

Current Conditions

- Prevalence of older, outdated instructional spaces along McKeldin Mall.
- Understated campus gateway along Baltimore Avenue at the future Rossborough Lane entry.
- An isolated Resident Life community at North Hill, with an aging and undersized facilities.
- Lack of safe bike and scooter access, constraining overall connectivity and mobility in the area.
- Elevation changes that create accessibility issues and stormwater management challenges.

Key Opportunities

- Extend McKeldin Mall pathways to Baltimore Avenue and foreground the historic Armory facade and signature new academic building in a grand new plaza fronting the Baltimore Ave - UMD Purple Line stop.
- Reimagining McKeldin Library as a vital student hub with a new western addition that connects to Terrapin Way, a major north-south circulation route.
- Renewal and potential expansion/redevelopment of poorly-rated buildings along McKeldin Mall.
- Redeveloping the North Hill community as an academic bridge between adjacent learning spaces.
- Renovation and expansion of the Health Center in a highly visible and central location along Campus Drive.
- New linear open space that visually connects Mayer Mall to the primary entry of Cole Field House.
- Integration of key circulation routes to connect the campus core to surrounding district - Terrapin Way, Innovation Walk, Frederick Douglass Walk, and the 5K Wellness Loop.

SCIENCE AND TECHNOLOGY

A DYNAMIC SCIENCE, TECHNOLOGY, AND INNOVATION DISTRICT

Current Conditions

- Dense footprints with limited readily developable land.
- Predominately urban character with insufficient useable open space and lack of connections to the adjacent Paint Branch corridor.
- Juxtaposition of large, state-of-the-art science and engineering buildings alongside smaller, outdated structures.
- Bounded by two creeks, Campus Creek to the north and Paint Branch to the south, that create low-localized flood risk and limit expansion of facilities to either direction.

Key Opportunities

- Phased infill and redevelopment of undersized and aging facilities that are not well-suited for modern academic and research uses.

- Integrating the Paint Branch landscape into the district with linear green spaces along the waterway and a new green space each of the Jeong H. Kim.
- Transformation of secondary streets to more flexible, limited access roadways that can be used for outdoor learning and social spaces.
- Extensive stormwater investments in landscape spaces, streetscapes, and hardscape plazas to mitigate runoff into the adjacent creeks.
- Coordination of energy-intensive new construction with future energy infrastructure improvements to ensure campus carbon reduction goals are addressed while providing necessary capacity and resilient back-up to serve future academic and research programs.
- Development of Innovation Walk's northernmost segment. Innovation Walk is envisioned as a branded campus route that circulates through the entire academic core and showcases academic and research achievements in building ground floors, streetscapes, and open spaces.

SOUTH CAMPUS VILLAGE

A LIVELY AND BETTER-CONNECTED LIVING-LEARNING COMMUNITY

Current Conditions

- Mix of academic and resident facilities of varying ages and conditions, framing high-quality open spaces and pedestrian pathways.
- Multiple points of entry along the southern edge.
- An aging dining hall and the need for an indoor recreational center.

Key Opportunities

- Completing Mayer Mall with new academic buildings on the northern end framing an extended open space that aligns with a future open space connecting to Cole Field House.
- A southern hub of Resident Life amenities located along a designated South Campus Walk that connects Chapel Lawn to Mayer Mall.
- New pedestrian entries along the campus edge to align with off-campus development and are enhanced for improved safety and accessibility.
- Preservation and enhancement of Washington Quad and Morrill Quad.

- Integration of key circulation routes to connect south campus and off-campus residents to the campus core - Terrapin Way, Innovation Walk, Frederick Douglass Walk, and the 5K Wellness Loop.

NORTH CAMPUS VILLAGE

A REJUVENATED NORTH LIVING-LEARNING COMMUNITY

Current Conditions

- Aging resident facilities in need of renewal.
- Poor connectivity to the northern natural areas and the southern academic core.
- School of Public Health in remote academic location.

Key Opportunities

- Targeted renovation and redevelopment of the north campus residential communities.
- Improved connectivity with a new east-west North Campus Pedestrian Walk, integration with the north-south Terrapin Way, Frederick Douglass Walk, and 5K Wellness Loop.
- Long-term utilization of the Public Health Building as surge space to support future academic development across campus.
- Development of Jull Hall and Q1 parking lot site as a key academic site that supports the expansion of science and technology programming along Stadium Drive.

PAINT BRANCH ATHLETICS

A SIGNATURE ATHLETICS AND RECREATION PRECINCT

Current Conditions

- Underutilized land occupied by surface parking.
- Limited connectivity to nearby natural areas.
- Proximity to Baltimore Avenue.
- Poorly-defined northern campus gateway

Key Opportunities

- Transformation of existing parking lots into new athletics facilities to create a northern “athletics district.”

- Creating a signature new “Champions Promenade” in the core of the district to connect facilities and provide gathering space around Xfinity and new sports fields.
- Creating a new campus entry and parking garage on an extension of Regents Drive to Baltimore Avenue to provide more direct access to sports facilities and relieve daily congestion in the core of campus.
- Potential expansion of clustered RecWell playing fields along Paint Branch Drive.
- Continued preservation and enhancement of large wooded and environmentally sensitive areas along University Boulevard and Paint Branch Drive.

WESTERN CAMPUS GATEWAY

A MODEL TRANSIT-ORIENTED RESIDENTIAL COMMUNITY

Current Conditions

- Extensive surface parking areas.
- Undersized and aging Ludwig field.
- Lack of amenities around the Clarice Smith Performing Arts Center and sporting venues

Key Opportunities

- Redevelopment of surface lots as a mixed-use, predominately residential village with structured parking and amenities to serve the resident community and adjacent sports and performance venues.
- Expanded soccer stadium fronted with a new athletics plaza that can be used for pregame events for soccer and football.
- New open spaces and quads that can be used for pregame football gatherings.
- Signature gateway to mark western entry into campus.
- Focus on stormwater management practices to mitigate runoff issues.
- Enhancement of wooded areas and landscape around the University House.

DISCOVERY DISTRICT (WEST)

A BOLD NEW CAMPUS GATEWAY

Current Conditions

- An emerging mixed-use innovation district and off-campus housing community development.
- New campus gateway and signature buildings around the Baltimore Avenue-UMD Purple Line station.
- Reimagining Greek life facilities to meet resident needs and new operations models.

Key Opportunities

- Supporting the growth of the Discovery District by co-locating complementary University programming and facilities with new mixed-use development.
- Identifying suitable locations for new parking garages to support growth in the Discovery District and to serve University uses on both sides of Baltimore Avenue.
- Exploring opportunities for renovation and redevelopment of “Fraternity Row” while preserving the central open space and scale of the surrounding buildings.
- Coordinated development between Old Leonardtown redevelopment and future Fraternity Row complex renovation, including walking paths, service areas, and other public realm elements.
- Ensuring bike and pedestrian routes safely and efficiently connect the district with the main campus and downtown College Park.
- Potential expansion of the Gateway Plaza across Baltimore Avenue through the intersection, connecting to the Baltimore Ave - UMD station stop area.

DISCOVERY DISTRICT (EAST)

A PLACE WHERE INDUSTRY, GOVERNMENT, AND RESEARCH COME TOGETHER, CREATING A THRIVING INNOVATION ECOSYSTEM

Current Conditions

- Significant distance from the main campus with poor bike and pedestrian connections.
- Lack of supporting amenities to create a vibrant mixed use environment.
- Convenient access to vast public park spaces.

Key Opportunities

- Leverage large sites for partnerships, high-impact research facilities, and transit-oriented mixed use development.
- Connect to the main campus, adjacent natural areas, and the region with the Purple Line, roadway, bike, and pedestrian routes.

PHASING STRATEGIES

The Campus Facilities Plan was developed with a rationale for implementing near-term capital projects in a sequence that ensures the best use of University and State resources to achieve campus improvements efficiently. The sequencing rationale also considers any enabling projects necessary to realize projects from the University's current Capital Improvement Program (CIP). The implementation of near-term projects involves several potential phasing strategies, which factor the following considerations:

- Aligning construction schedules to minimize disruptions to campus operations and services.
- Optimizing campus surge space to ensure program continuity during construction. Building projects are also recommended to include improvements to adjacent open space improvements.
- Bundling project components to leverage various funding sources
- Purposeful consideration of the academic calendar and leveraging summer and winter breaks for starting major construction activities for all projects.

The Capital Improvement Program (CIP) and the System Funded Construction Program (SFCP) are evaluated and prioritized annually to reflect current campus needs. Although the Campus Facilities Plan suggests a general order, the sequencing order may be adjusted over time to reflect the most pressing university needs. Key findings that influenced project sequencing are listed below:

- School Public Health Relocation – Prioritization of the relocation of the School Public Health Building within the campus core at the Cole Student Activities Building shell space and nearby district allows for the repurposing of the existing building as a surge space to provide needed flexibility for renovation projects.
- Earth and Climate Science Building – Requires demolition of Jule Hall for new construction.

- A.I. and Machine Learning Building – Requires the partial demolition of A.V. Williams and development of Paint Branch Green once construction of the new building is complete.
 - School of Architecture, Planning & Preservation Expansion/Renovation - Involves demolition of Preinkert site after the completion of the addition and renovation project to prepare the site for redevelopment.
 - BSOS Building – To be completed after the School of Architecture, Planning & Preservation project (Preinkert demolition) and involves demolition of LeFrak once new building is complete to prepare the site for future redevelopment.
 - New Parking Garage (Lot 11) – To be completed to enable the relocation of the Athletic fields from the campus core to the Paint Branch District.
 - Stamp Union Lawn – To be completed after Shipley field relocation to Paint Branch District.
- Complete Streets Improvements – To include upgrades to adjacent underground utilities.

The phasing sequencing of these projects illustrates the thoughtful and strategic approach adopted in the Campus Facilities Plan to bring about efficient transformative improvements to the University of Maryland College Park campus.

ACKNOWLEDGMENTS

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