

CAMPUS DEVELOPMENT PLAN



CAMPUS DEVELOPMENT PLAN

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Figure 6-1: Master Plan Framework Diagram

CAMPUS DEVELOPMENT PLAN

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CAMPUS DEVELOPMENT PLAN

The goal of the Campus Master Plan is to create a physical environment that is supportive of and inspirational to the fulfillment of the University's mission and that enriches the lives of all who live, study, teach and work at and around Howard University.

The Plan's recommendations are described in detail in this chapter and are focused on a framework that is both compelling and flexible to guide future growth.

PLANNING PRINCIPLES

The following set of planning principles were developed in response to the strategic initiative, the analysis findings and through the collaboration of Howard's administration, faculty, staff, students and steering committee with the design team.

They represent key characteristics of the campus and are to be used to evaluate subsequent amendments to the specifics of the Campus Master Plan.

1. Support Howard University's Academic Mission

Develop campus facilities with a level of quality consistent with the strong academic values of the Howard tradition that serve an increasingly diverse population of students, faculty and staff.

2. Improve the University Community's Quality of Life

Provide a physical setting that enhances the quality of life for students, faculty, staff, and visitors and reflects the academic values of a strong Howard tradition.

3. Implement Good and Smart Urban Design

Continue a strong composition of building density and mixed use, especially along Georgia Avenue with appropriate urban setbacks and strong streetscape design.

4. Improve the Public Realm

Enhance the physical setting of the campus cultural landscape to reinforce a unique sense of place that has memory and meaning for the campus community.

5. Enhance Connectivity and Walkability

Emphasize a network of high quality walkable spaces and strong pedestrian connections throughout the campus, on both the east-west and north-south axes and connectivity to public transportation.

6. Develop the Campus Edge

Balance a sense of internal security with a welcoming presence to create a clear and well defined sense of arrival and perimeter for a safe and thriving urban campus.

7. Embrace Sustainability

Adopt a physical plan, identify a process for its administration and stewardship, and establish a design culture that embodies and advocates the aims of sustainability to ensure the most cost-effective use of financial resources available to the University.

8. Preserve and Protect Historic Legacy

Respect historic landscapes and structures by building at a scale comparable with surrounding buildings and enhancing strong symbolic elements of the campus.

9. Foster Community Engagement

Support the collaboration with representatives from neighboring residential areas, as well as those from the District of Columbia and Federal governments for the purpose of enhancing the quality of life within the greater campus community.

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IN SUPPORT OF STRATEGIC GOALS

The planning process involved the review of Howard University's needs and the strategic initiatives felt necessary to maintain and improve its core academic mission and the development of a Master Plan designed to implement these strategic goals.

ACADEMIC RENEWAL

The primary strategic directions for Academic Renewal were developed by Howard University as an outcome of:

- The Middle States re-accreditation process;
- The completion of the Self Study Report which examined all aspects of HU's programs and services;
- Governing and supporting structures, resources, and educational outcomes in relation to the institution's mission and goals; and
- The President's Commission for Academic Renewal (PCAR) Initiatives which conducted a full review and evaluation of the University's academic programs.

Factored into this self-examination is the recognition of several external influences; a competitive post-secondary educational marketplace; an economic climate that requires more fiscal discipline; and students of African American descent who have more choices today than was true 50 years ago. Based on these factors the University has determined that academic offerings need to be more selective with a focus on becoming a world-class research institution.

The vision for Howard in the 21st Century is to create a setting conducive to academic excellence, with growth in research, technology and innovation. A second and equally important goal is the responsibility of the University to create positive zones of engagement, influence and revitalization.

The academic drivers for the Master Plan include:

- Expansion of Graduate Programs;
- Support for Research Growth;
- Promotion of Science, Technology Engineering and Mathematics (STEM) and Bio-Medical Research;
- Improvement in the Physical Condition and Technology throughout the Campus Facilities;
- Improvement of Housing; and
- Support of the Students First Initiatives.

Howard University is the country's top-ranked historically black college or university, and is one of the leading comprehensive research-oriented, private universities in the nation. Until 2006, the University held the Carnegie Foundation's designation as a "Doctoral/Research University-Extensive," one of only 151 such universities in the nation and the only HBCU in the top tier. The University is currently classified by the Carnegie Foundation for the Advancement of Teaching as RU/H: Research Universities (high research activity); it aspires to become a RU/VH: Research Universities (very high research activity).

The University will continue to focus on providing its predominantly African American population (student, faculty, and staff) with outstanding educational opportunities. Academics and research topics include those which disproportionately impact minority populations, particularly those related to the African Diaspora.

The demand analysis for academic space has determined that the University has a deficit of research space, in general. For example, the Physics Department has 3,000 SF of research space listed in the database and 27 faculty performing research. This is an average of roughly 110 ASF/faculty, significantly less than the average benchmark for Research VH (1,820 ASF/faculty). Similarly, the Chemistry Department has 18 faculty members using 12,200 ASF of research space (675 ASF/faculty); this is significantly less than the average benchmark of 3,020 ASF/faculty.

A high priority of the Campus Master Plan is to address this need with plans for an Interdisciplinary Science and Engineering (ISEI) / STEM Building and a Computational Science (CS) / Biomedical Science (BioS) Building with a combined total of 165,000 GSF of state-of-the-art research facilities. These two buildings are planned to be built in Phase One of the Development Plan.

The ISEI/STEM building will be located on Bryant and 6th Street and the CS/BioS Building will be located on Georgia Avenue at W Street. Both buildings are sited for their adjacency to existing physical and health sciences facilities.

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These new cutting-edge research buildings will be built to the highest standards to meet the needs of 21st Century research applications, advanced technology and emerging science. Modern research buildings are essential for: recruiting and retaining world-class faculty; improving access to and collaboration with multiple researchers; expanding the University's ability to turn research into real-world applications; and helping Howard University keep its competitive edge in securing grant awards.

Overall, the Master Plan has provided for a 34% increase in research facilities on the campus with a Nanotechnology Building planned for Phase Two and a Health Sciences / Medical Arts Building planned in Phase Three. A 61% increase in full Academic/Research facilities can be realized should the University develop all of the research facilities envisioned in the plan.

QUALITY OF LIFE

In an effort to holistically improve the University community's quality of life, the Students First Campaign (SFC) launched several initiatives to reinforce Howard's student-centered learning environment. Student Life functions were featured heavily among the eight target areas that the SFC identified for procedural and organizational improvements. To create a fully integrated Student Life experience, the University intends to supplement the SFC's level of service upgrades with a robust facility development program that addresses:

- Student Housing
- Wellness and Recreation
- Student Activities
- Student Administrative Services
- Athletics

The convergence of these planned initiatives is intended to cultivate a more lively and appealing campus experience that contributes to the University's recruitment and retention efforts, alumni relations, academic performance, and overall institutional profile.

STUDENT HOUSING

Creating a high caliber collegiate experience includes deliberate residential life strategies to develop and operate a housing system that provides: close proximity to academic life; a common or shared human experience; appropriately graduated levels of supervision, independence, and responsibility; easy access to academic counseling and mentorship; orientation to campus life and activities; and various opportunities for the development of professional and life-skills.

Howard University is committed to implementing these progressive residential life strategies through a "housing continuum" that responds programmatically to the evolution of student needs through matriculation. To address these issues, the University has devised a phased development plan that will create new residences, upgrade existing residences and re-purpose other properties that are currently used for student housing. The goal is to generate approximately 2,300 new beds with a net increase of over 1,100 beds that are strategically aligned with student demand in number, typology, and location. Additionally, undergraduates will be moved from halls situated beyond the edge of campus into a secure and nurturing environment designed to enhance their personal development and support their academic progress. The end result will allow Howard to house nearly 70% of its full-time student population, as compared to the almost 46% currently housed.

A centralized Underclassman Housing District will be developed in Phase One. This district is planned along the eastern edge of the campus, adjacent to similar existing student housing for the same population. The Phase One housing will be provided in two buildings that will create approximately 1,300 new beds. Housing in this zone will be designed to accommodate living-learning programs that support the academic mission.

The strong first year experience provided by this Underclassman District will be complemented by the subsequent development of an Upperclassman Housing District in Phases Two and Three. This second District will be located on the western side of Georgia Avenue to build upon existing densities of upperclassman housing and create a critical mass of student activity to invigorate the planned mixed-use corridor.

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INTERCOLLEGIATE ATHLETICS

Intercollegiate athletic (“ICA”) facilities and team performance at Howard should convey an institutional commitment to excellence, especially to potential students, student athletes, coaches, and alumni.

Howard’s athletic programs currently operate in functionally obsolete facilities primarily in John Burr Gymnasium. Access to these facilities is also limited as they support recreational sports, health and fitness-related academic programs, and open fitness activities, which is very unusual for a Division I program.

A light renovation of the John Burr Gymnasium Building in Phase One will focus on resolving near-term functional discrepancies. This renovation will be followed by the development of a Wellness and Recreation Center, which will alleviate scheduling pressures by removing academic and recreational users from Burr. Once Burr becomes a dedicated athletics facility, the ICA program will be able to operate autonomously and make strategic improvements to team performance in preparation for the construction of a new ICA Complex in Phase Three.

This new ICA Complex is planned as a state-of-the-art facility that includes a new arena and enhanced team support spaces ranging from individual team locker rooms to a robust academic support suite. As planned, this new facility will allow the Athletic Program to: attract dedicated administrators, coaches, and staff; recruit promising student-athletes; maximize efficiency and effectiveness of NCAA regulated coaching contact hours; and provide a high level of service to both team learning and experiential learning for affiliated academic majors with new athletic training and rehabilitation units.

WELLNESS & RECREATION CENTER

A new Wellness and Recreation Center (WRC) is planned for development in Phase One. The WRC will be located within the mixed-use cluster of activities between Georgia Avenue on the east, Eighth Street on the west, Bryant Street on the north and W Street on the south. This location is within easy walking distance of the underclassman and upperclassman housing districts.

The WRC’s programs will teach and encourage personal awareness of health and fitness using: a health and wellness suite, areas for weight training and cardiovascular exercise, multipurpose studios for group exercise and mind-body classes, basketball and multi-activity courts, an elevated jogging track, lounge/social space, locker rooms, support space, and a potential lap pool. The integration of underground parking is planned to support the other uses that will be located within the mixed-use zone that is in and around the building. The Center will also provide numerous employment opportunities for students, many of whom may reside in on-campus housing nearby. This will reinforce experiential learning and positively contribute to a holistic student-centered learning environment.

The Center will anchor the new residential community on the west side of Georgia Avenue, and will further stimulate the retail functions to be housed in the Howard Town Center. The site’s proximity to the Health Sciences Enterprise will create natural synergies that reinforce the institutional priority to encourage healthy, active lifestyles. The location is also intended to enliven the southern end of the Georgia Avenue corridor and increase the patronage of the ground-level retail outlets planned across the mixed use zone.

BLACKBURN UNIVERSITY CENTER

Centrally located on the high-traffic historic Upper Quadrangle, the Armour J. Blackburn University Center is the only student center facility at Howard’s central campus. As its name implies, the facility is intended to serve the entire University community, including local residents, and is governed and scheduled by the University administration. Aside from being the primary food service location for the central campus, the facility also accommodates large assembly events, meeting and conferencing activities, and a sizable passive recreation center.

As planned, Phase Two calls for an extensive renovation and expansion of the Blackburn Center to enhance its functionality and aesthetic appeal in an effort to create a new central space that provides multiple opportunities for experiential learning, personal development, and academic support. The architectural treatment of both the interior and exterior will be modified to reinforce visual connections by creating additional openings along the exterior façade, and between interior spaces.

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Existing functional adjacencies and patron capacities within the building will be reconfigured to allow more flexibility, and to further encourage increased collaboration and exchange between students, faculty, staff, alumni, and members of the surrounding community. Planning efforts have identified the need for: additional student organization and activity space, ergonomic seating and lounge areas for informal exchange and congregation, expanded food service and retail enterprises, and upgrades to meeting and conference space.

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GEORGIA AVENUE CORRIDOR

The proposed real estate strategy treats Georgia Avenue as a major, diverse commercial corridor – but one with a set of uses that create vibrancy, amenities and a clear set of gateways to campus.

A vibrant mix of uses is key to creating an urban commercial corridor around a university. Students, faculty, staff, and the community come together to activate a variety of residential, academic, retail and other programs that in turn attract visitors, entrepreneurs, and investors to the area.

The proposed commercial development of this corridor is supported by market analyses that suggest a robust demand of residential units – student, workforce affordable and market rate – as well as for retail. As to development models, the analyses do not distinguish between University development and private sector development, nor do they address the different ways in which Howard can engage the private sector. The realities of today's capital markets ensure that without the University's direct intervention, development projects along Georgia Avenue are highly unlikely in the short term.

One of the few project types being viewed favorably by the capital markets is student housing. The University is making a significant investment in the first phase of development to meet its housing demand – which in turn will incubate the market and make the surrounding parcels more attractive for private investment in the future.

By focusing residential and retail development here, the University can truly transform the safety, vibrancy, and the urban experience for its students, faculty, staff and community.

Georgia Avenue serves as the psychological boundary for the academic campus, although residential and some administrative programs are housed west of Georgia Avenue. The University owns and controls much of the east side of Georgia Avenue between Florida Avenue and Harvard Streets. These are largely academic buildings with their main entrances facing the campus, away from the street.



Figure 6-2: Retail Zones



Figure 6-3: Private Parcels Fronting Georgia Avenue

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RESIDENTIAL MARKET

Analyses suggest that the area surrounding the University, if developed properly, has the potential to attract 1,260 students, and 833 new rental units for faculty, staff, and community residents. New development should focus on quality units and associated amenities that support today's urban lifestyle. This potential market translates into roughly 1 million sf of residential development that can be absorbed over time.

Undergraduate Students: An estimated 59% of undergraduates currently reside on or near the campus in dormitories and private student housing. The Presidential Commission on Academic Renewal (PCAR) has begun to strategize about academic programs and the impact of those on housing models (residential colleges, living-learning communities, etc.) Analyses assume that HU, over time, will try to attract 75% of its undergraduate population on and around its campus to create community and foster a world class 24-7 academic environment. This would require the addition of 1,115 new undergraduate beds in the area surrounding the University. These beds can be provided either by the University or through private sector development.

Graduate Students: An estimated 45% currently reside on or near the campus in dormitories or private student housing. Interviews suggest that there is a lack of quality and/or affordable housing units for graduate students. It is assumed that HU, over time, will try to attract 50% of its graduate and professional students (excluding the Law School) on and around its campus. This would require the addition of 145 new graduate beds in the area surrounding the University. These beds can be provided either by the University or through private sector development.

Faculty and Staff: Analysis suggests that 355 out of 4,661 (not including student employees) total University faculty and staff, or 7%, live in the area immediately surrounding Howard's campus. Given the University's already significant investment in community housing, its mission to create a safe and vibrant commercial corridor, its investment in market rate projects such as the Howard Town Center, a goal of attracting 10% of the 4,149 employees outside the Study Area is reasonable. This would require the addition of an estimated 261 new rental units in the area surrounding the University, with 154 owner's units absorbed by the existing vacant housing stock.



Figure 6-4: On-Campus Student Housing

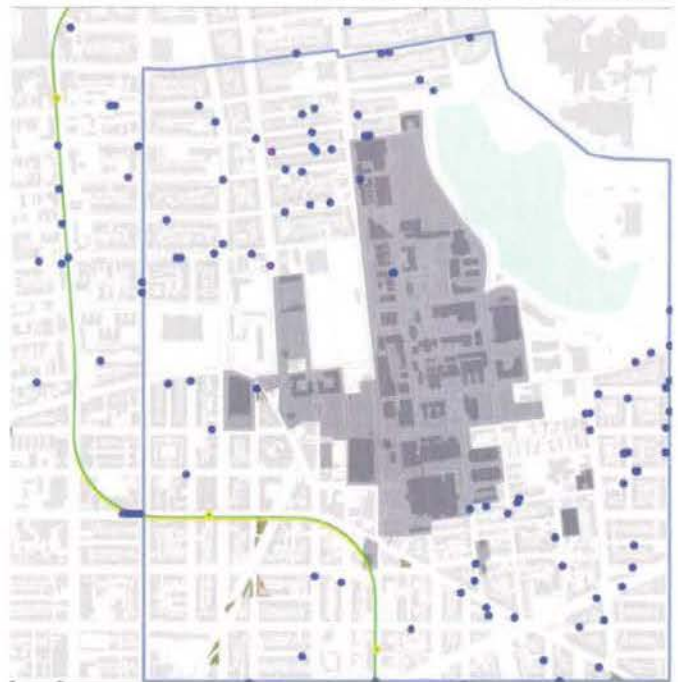


Figure 6-5: Off-Campus Student Housing

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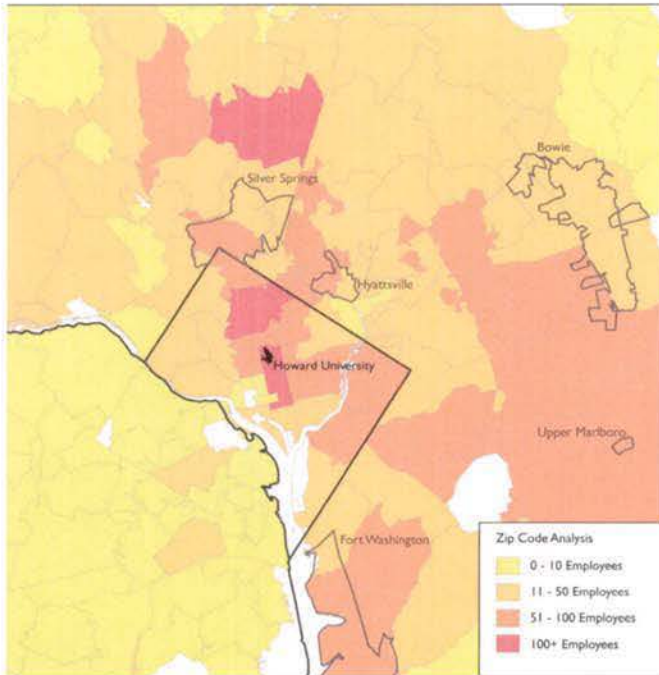


Figure 6-6: Faculty Housing by Zipcode



Figure 6-7: Faculty Housing Near Howard University

Community: The natural growth of Washington DC and the community surrounding the campus is estimated to create a market for an additional 572 rental units in the area surrounding Howard University over the next 5 years.

This analysis supports the development of up to 1,260 undergraduate and graduate beds, and up to 833 market rate and workforce affordable units over time to meet the demand from the University and the community.

RETAIL DEMAND

Retail activates streets, increases safety, and helps define the perception of a place. Competitive universities have vibrant retail corridors that serve the needs of students, faculty, staff and community members as well as attract visitors to the location. Successful university retail corridors can be limited to several blocks – they do not need to span the entire campus. The content and density of the commercial blocks are more important than the length of the commercial corridor.

An analysis of retail supply and demand in the area estimates that an additional 153,300 sf of retail can be absorbed by the market. This can have a transformative effect on the Georgia Avenue corridor.

Equally important to the new quantity of retail is the quality of retail. The merchandising plan for this new corridor should be developed holistically to meet the retail needs of the surrounding area, and to create an inviting urban university environment that promotes Howard and attracts visitors from around the city.

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LOWER GEORGIA AVENUE – BETWEEN FLORIDA AVENUE AND BARRY PLACE NW

This stretch of Georgia Avenue between Florida Avenue and Barry Place NW has the potential to become Howard's core commercial district becoming a central location for uses such as residential, general retail, housing, and fitness services.

South Georgia Avenue should be developed in a way that attracts regular foot traffic along the east-west axis from campus across the Avenue to clusters of Howard facilities. Improved east-west connections are crucial to the success of this corridor, helping to connect the campus to the U Street Metro stop and the residential developments to the west. This part of Georgia Avenue is also a natural location for the placement of University uses that generate heavy pedestrian foot-traffic, particularly in the evenings.

Given the robust market for residential and retail around Howard, it would be appropriate for the University to pursue partnerships with private developers in this part of the corridor. The University has entered into an agreement with a private developer for the Howard Town Center (HTC). HTC be a mixed use project with market rate and affordable rental units, retail, including a grocery, and two levels of parking. It will activate Georgia Avenue, between V and W Streets, and revitalize this important corridor.

The Wonder Plaza Building on Georgia Avenue between College Street and Bryant Street is owned by Howard University with retail space on the ground floor. The Wonder Plaza building is currently only 57% efficient. The Howard University Bookstore is also currently housed near this location in the Howard Center. The Campus Development plan proposes that a new School of Communications (168,000 GSF) with ground level retail and an underground parking structure be constructed on the Wonder Plaza Building site, following its demolition.

The Howard Center located on the southeast corner of Bryant and Georgia Avenue is also slated for demolition in the Master Plan. It will be replaced by a mixed use facility for Academic space, Support Facilities, Public Safety space, plus ground level retail. The surface parking lot adjacent to the Howard Center is the proposed new site for the Computational Science (CS) / Biomedical Science Building planned for Phase One.



Figure 6-8: Lower Georgia Focus Area

MID GEORGIA AVENUE – BETWEEN BARRY PLACE NW AND EUCLID STREET NW

This stretch of Georgia Avenue between Barry Place NW and Euclid Street NW is comprised of several Howard University academic and administration buildings and historic Banneker Recreational Park. This section of Georgia Avenue affords the opportunity to create an improved Campus edge and develop a partnership with the City to create a vibrant and welcoming green space that benefits both the campus community and the surrounding residential neighborhood.

The academic and administration buildings along this stretch of Georgia Avenue focus their entrances inside the campus proper. These include the School of Business, the Miner Building, the Johnson Administration Building, and the School of Social Work. The Georgia Avenue frontage of many of these buildings include parking lots, loading docks, and back entrances.

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Figure 6-9: Mid Georgia Focus Area



Figure 6-10: Upper Georgia Focus Area

The University can focus on creating new front doors for these buildings and developing creative solutions to service uses on Georgia Avenue. It can also consider changes of uses in these buildings that put programs with a more public face closest to its most public locations. These interventions improve the University's frontage on the corridor and bring increased foot traffic.

The public recreation center and public school also offer an opportunity to create partnerships with the City. The large recreation and green space, instead of being a barrier to the western neighborhood, can be seen as a 'central park' with improved east-west connections through the space. Workforce housing could front the western edge of this 'park' on 9th Street. Improvements to landscaping, paving and fences could make the space feel more open and part of the corridor.

UPPER GEORGIA AVENUE – BETWEEN EUCLID STREET NW AND COLUMBIA ROAD NW

This stretch of Georgia Avenue between Euclid Street NW and Columbia Road NW affords the opportunity for new academic space, faculty and staff housing initiatives and an improved frontage for the University's athletic facilities, including ground floor retail. The residential neighborhood between Georgia Avenue and Sherman Avenue on this stretch represents an opportunity to partner with the community to promote home ownership for faculty and staff through housing incentives such as mortgage assistance and matching grant programs.

The eastern side of this stretch of Georgia Avenue could bookend the development proposed for the southern edge of campus and become the new gateway to Howard's major event facilities for athletics, performing arts, and student center activities. Various options exist to enhance the athletic facilities for improved game day experiences, including integrated underground parking, ticketing, pre-event staging, and a general celebration of Howard features.

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PUBLIC REALM

The public realm is the system of streets, entries, open spaces and vegetation that create a welcoming environment for the University campus and surrounds. A successful public realm at Howard University will:

- Promote interdisciplinary opportunities;
- Emphasize a network of high quality walkable spaces;
- Reinforce and improve the Campus edges; and
- Balance a sense of internal security with a welcoming presence.

The outdoor spaces on the University campus should be memorable and express imagination, a sense of place, and ecological awareness. The Master Plan provides recommendations for renovations of the Main and Lower Quads, a gateway improvement for Howard Place and streetscape improvements throughout the campus that will renew the University's image. All of these measures are conceived with an "economy of intervention", so that each landscape improvement will be recognized as part of the "green infrastructure" of the Campus in order to address the problems of air pollution abatement, stormwater management and urban heat island effects.

SMART GROWTH

Howard University is a respected global academic center. It is also a vital local D.C institution, committed to the economic, intellectual, social, and cultural vitality of the city and the neighborhoods that surround it. Gradually over the next ten year planning period, the Campus Master Plan will improve the urban environment with benefits for both the academic and the surrounding communities.

The Master Plan framework includes approximately 2.7 million GSF of new space for teaching, research, underground parking, student and workforce housing and support services. The Plan calls for the demolition of about 0.9 million GSF of existing space, resulting in a net addition of 1.8 million of GSF of new space. Of this 1.8 million GSF, 0.7 million GSF are residence halls. The Plan features new facilities for recreational and commercial activity. Improved, pedestrian-friendly streets and publicly accessible open spaces will provide east-west connections from the campus interior to Sherman Avenue.

This kind of smart growth will generate new local jobs for a diversity of people, and result in maintaining Howard University as a world center for knowledge, creativity, and solutions for society's challenges.

As an urban campus, Howard University will address the function of the campus from an urban design perspective and adopt strategies that:

- Respect historic landscapes and structures by building at a scale comparable with surrounding building heights;
- Continue a strong composition of buildings and open space along primary city streets, such as Georgia Avenue with appropriate urban setbacks and strong streetscape design;
- Create a clear and strong sense of arrival and perimeter for the campus boundaries;
- Promote sustainable urban design through such measures as: density and connectivity to public transportation; improvement of the existing street grid; and better pedestrian access; and
- Require buildings to be set back from the street to create wider sidewalks and allow for trees to be planted.

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PROGRAM & PHASING

The development program for the University is a mixture of new construction and repair and renovation of existing facilities that will be implemented in four phases as described below:

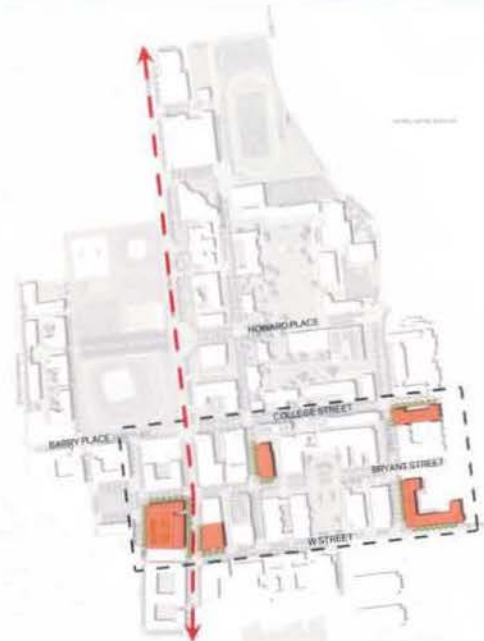
Phase One includes: two research facilities; underclassman housing; the Campus Wellness and Recreation Center; and the Howard Town Center mixed use development.

Phases Two and Three continue the development of the University's research capacity, the enhancement of student quality of life improvements, and the redevelopment and upgrading of academic instructional spaces and athletic facilities.

The future capacity of the campus boundaries was explored in Phase Four and several building sites are identified for Academic/Research/Housing facilities.

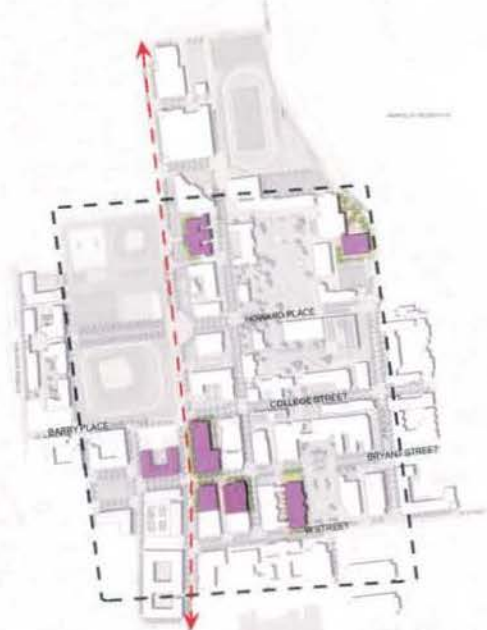
Throughout each of the planned Phases, critical facility renovations and upgrades will take place in existing buildings. Overall, the development program emphasizes:

- Priority research projects that fulfill the goals of the academic plan;
- Upgrades in existing facilities that improve structural soundness, energy efficiency, ADA compliance, and technological capacity; and
- Projects whose development and operations are designed to enrich students' campus quality-of-life experience.



PHASE ONE PERCENT INCREASE IN TOTAL GSF:

Academic/Research:	6%
Recreation:	68%
Housing:	29%



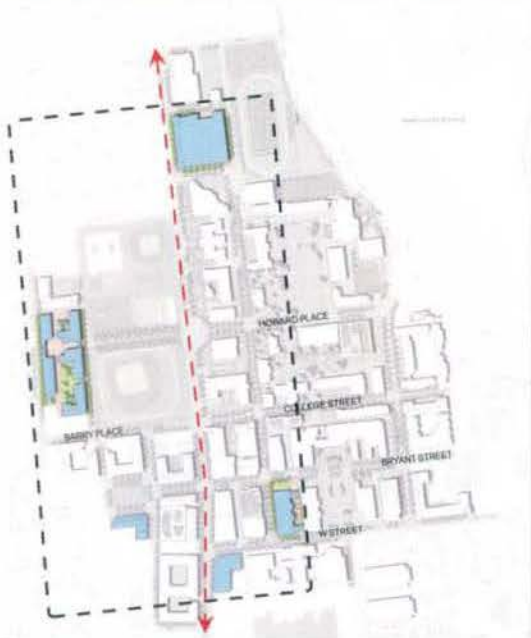
PHASE TWO PERCENT INCREASE IN TOTAL GSF:

Academic/Research:	17%
Support Services:	62%
Housing:	5%

Figure 6-11: Phasing Breakdown Diagrams

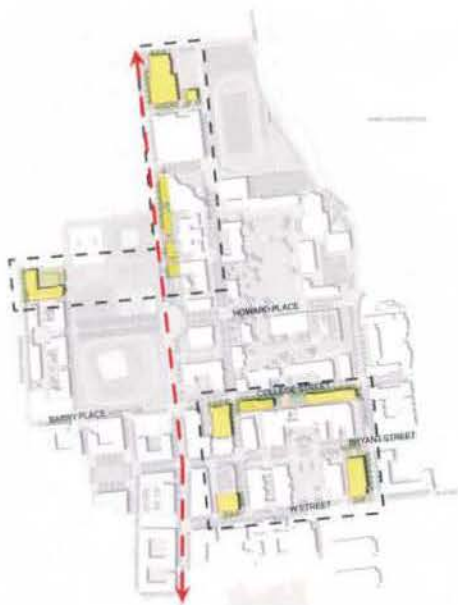
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PHASE THREE PERCENT INCREASE IN TOTAL GSF:

Academic/Research:	6%
Housing:	15%
Athletics:	3%



PHASE FOUR PERCENT INCREASE IN TOTAL GSF:

Academic/Research:	55%
Recreation:	68%
Housing:	56%

Figure 6-11 (continued): Phasing Breakdown Diagrams

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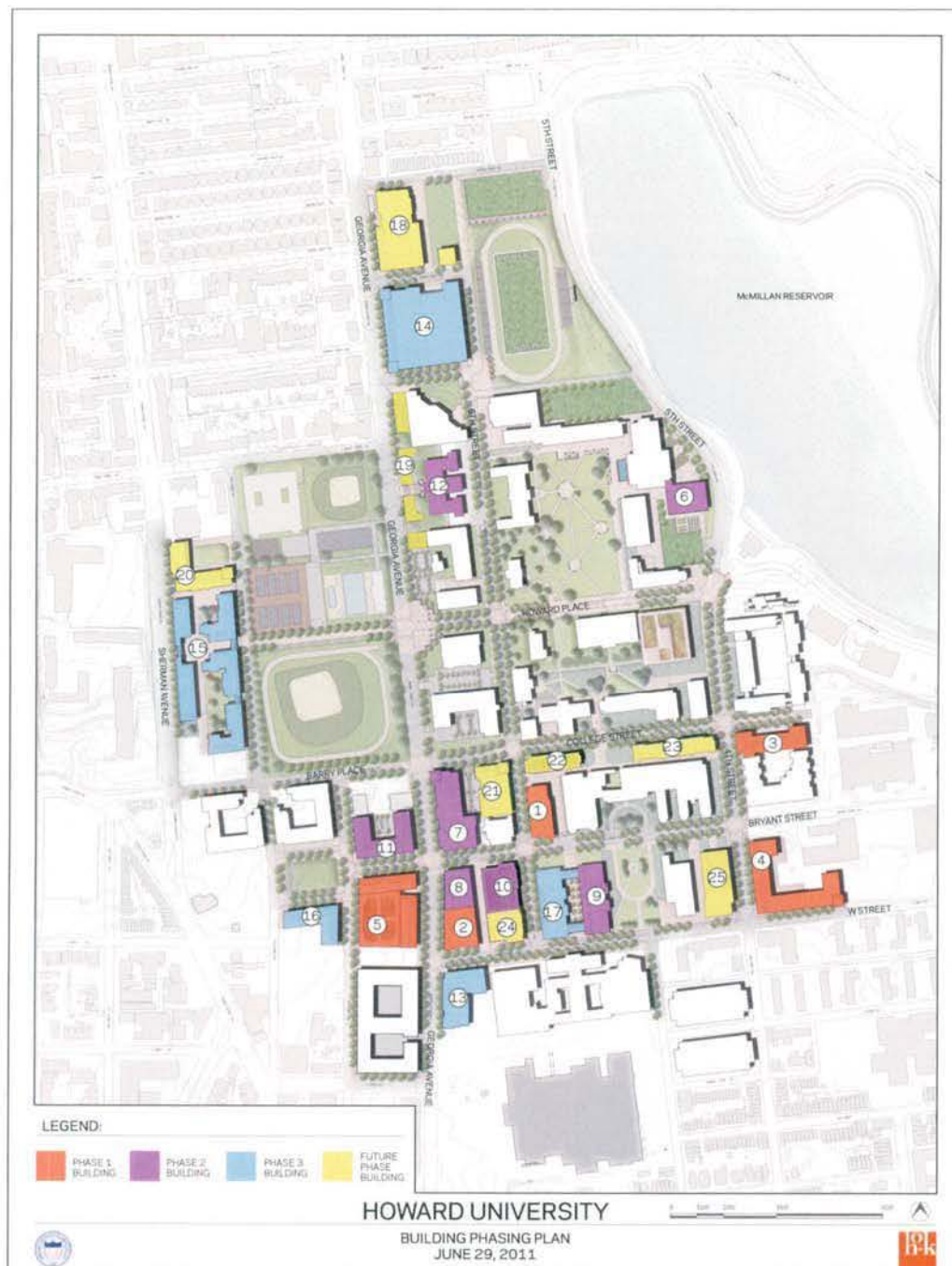


Figure 6-12: Building Phasing Plan

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Table 6-1: Proposed Program Elements

Location Key	Building Name/Function	Proposed Bldg Height Approximate Feet	Proposed Footprint size (gsf)	Total size (gsf)	Proposed Parking Structures # of levels	# of spaces
Phase One (1-3 years)						
1	Interdisciplinary Science and Engineering Bldg. (ISEI) / STEM	50-60	12,800	65,000		
2	Computational Science (CS) / Biomedical Science (BioS) + Retail	90-110	16,500	100,000	3	150
3	Under Classman Residential Hall #1	70	17,224	138,666		
4	Under Classman Residential Hall #2	60	37,530	251,431		
5	Campus Wellness and Recreation Center / Upper Classmen Res. + Retail Upper Classman Residential (upper stories)	90-110 (above)	55,000	178,750	3	345
Total				733,847		495
Phase Two (3-5 years)						
6	Blackburn Center Renovation	30-40	35,000	105,000	3	255
7	School of Communications + Retail	90-110	28,000	168,000	2-3	285
8	Academic / Support Facilities / Public Safety Building	90-110	28,000	168,000	2-3	225
9	Nursing Allied Health + Pharmacy	50-60	20,000	100,000		
10	Nanotechnology Building	70-80	20,000	120,000		
11	Upper Classman Residence Hall #1 + Retail	90-110	14,000	98,000	3	155
12	Miner Building Renovation			82,737		
Total				841,737		920
Phase Three (5-7 years)						
13	Future Healthcare Sciences / Medical Arts + Retail	90-110	25,000	175,000	2-3	360
14	Intercollegiate Athletics Complex + Retail	40-60	80,000	160,000	3	510
15	Graduate / Work Force Housing	50-60	75,751	234,000		
16	Upper Classman Residential Hall #2	90-110	24,000	192,000		
17	Teaching and Learning Building	50-60	31,000	155,000		
Total				741,000		870
Future Phase Capacity						
18	Academic / Residential + Retail	30-50	45,481	136,443		
19	Institutional Infill	15-20	21,180	21,180		
20	Middle School	40-50	20,000	80,000		
21	Academic / Research	40-50	16,000	64,000		
22	Academic / Research	40-50	17,000	68,000		
23	Academic / Research	40-50	16,000	64,000		
24	Academic / Research	70-80	14,000	84,000		
25	Academic / Research	50-60	31,000	155,000	2	190
Total				672,623		190

Table 6-2: Phasing Breakdown

PHASE ONE PROGRAM INFORMATION									
	Administration								
	Academic GSF	GSF	Recreation GSF	Athletics GSF	Housing GSF	Maintenance GSF	Hospital GSF	Other GSF	Grand Total
New Developments									
Interdisciplinary Science + Engineering Building (ISEI) / STEM	65,000								65,000
Computational Sciences (CS) / Biomedical Science (BioS) + Retail	80,000							20,000	100,000
Under Classmen Hall #1					121,646				121,646
Under Classmen Hall #2					247,647				247,647
Campus Wellness / Recreation / + Retail			130,000					48,750	178,750
TOTAL OF NEW DEVELOPMENTS	145,000	-	130,000	-	369,293	-	-	68,750	713,043
Buildings to be Demolished									
Mental Health Clinic							12,700		12,700
West Wing of CB Powell	16,800								16,800
TOTAL OF EXISTING DEVELOPMENTS TO REMAIN	2,070,715	387,426	190,812	372,131	1,271,426	310,373	873,240	204,372	5,680,495
TOTAL PROPOSED	2,215,715	387,426	320,812	372,131	1,640,719	310,373	873,240	273,122	6,393,538
Percent Change from Existing HU Central Campus	6%	0%	68%	0%	29%	0%	-1%	34%	12%

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

Table 6-2: Phasing Breakdown (continued)

PHASE TWO PROGRAM INFORMATION									
	Academic GSF	Administration GSF	Recreation GSF	Athletics GSF	Housing GSF	Maintenance GSF	Hospital GSF	Other GSF	Grand Total
New Developments									
Blackburn Center Renovation								105,000	105,000
School of Communications + Retail	140,000							28,000	168,000
Academic / Support Service / Public									
Safety Building + Retail	90,000					50,000		28,000	168,000
Nursing and Allied Health + Pharmacy	100,000								100,000
Nanotechnology Building	120,000								120,000
Upper Classmen Residential Hall #1					84,000			14,000	98,000
Miner Building Renovation	82,737								82,737
TOTAL OF NEW & RENOVATED DEVELOPMENTS	532,737	-	-	-	84,000	50,000	-	175,000	841,737
Buildings to be Demolished									
Academic Support Building A	20,710								20,710
Academic Support Building B	20,710								20,710
Wonder Plaza/Tech Center		110,000							110,000
Howard University Center		90,157							90,157
Annex I	68,000								68,000
Annex II	10,000								10,000
Old SAS/PFM	36,730								36,730
SIO College/People Soft Work Site								6,600	6,600
TOTAL OF DEVELOPMENTS TO REMAIN (Existing + Ph 1)	2,047,782	187,269	320,812	372,131	1,640,719	310,373	873,240	266,522	5,904,409
TOTAL PROPOSED	2,580,519	187,269	320,812	372,131	1,724,719	360,373	873,240	441,522	6,738,409
Percent Change from Phase One	17%	-52%	0%	0%	5%	16%	0%	62%	7%

PHASE THREE PROGRAM INFORMATION									
	Academic GSF	Administration GSF	Recreation GSF	Athletics GSF	Housing GSF	Maintenance GSF	Hospital GSF	Other GSF	Grand Total
New Developments									
Intercollegiate Athletic Complex				144,000				16,000	160,000
Graduate/Work Force Housing					234,000				234,000
Upper Classmen Residential Hall #2					192,000				192,000
Teaching and Learning Building	155,000								155,000
Future Healthcare & Science + (Retail)	150,000							25,000	175,000
TOTAL OF NEW DEVELOPMENTS	155,000	-	-	144,000	426,000	-	-	16,000	741,000
Buildings to be Demolished									
Burr Gym				134,356					134,356
Cook Hall					83,444				83,444
Howard Manor		75,000							75,000
Bank Building/University Warehouse #2						47,500			47,500
Effingham Apartments					84,000				84,000
Medical Arts Building							30,396		30,396
Early Learning Center								8,816	8,816
TOTAL OF DEVELOPMENTS TO REMAIN (Existing + Ph 1,2)	2,580,519	112,269	320,812	237,775	1,557,275	312,873	842,844	432,706	6,305,293
TOTAL PROPOSED	2,735,519	112,269	320,812	381,775	1,983,275	312,873	842,844	448,706	6,952,293
Percent Change from Phase Two	6%	-40%	0%	3%	15%	-13%	-3%	2%	3%

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Figure 6-13: Potential Demolition Plan and Historic Buildings to remain.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

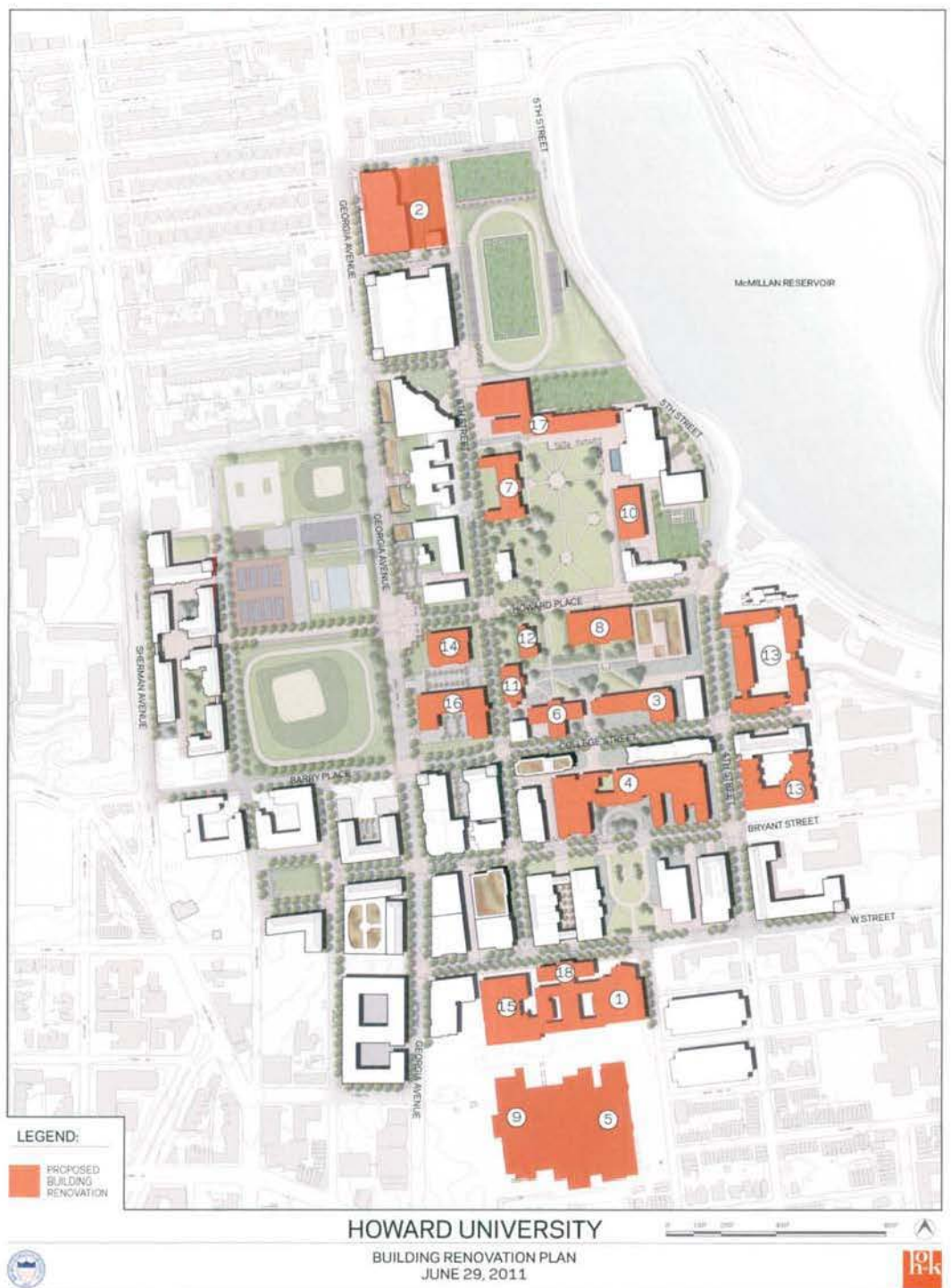


Figure 6-14: Building Renovation Plan

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

Table 6-3: Building Renovation Program

Howard University								
Building Renovation Program								
	ADA	EH&S	ROOFS & SW MGMT	BUILDING ENVELOPE	HVAC	AESTHETICS	SECURITY	
BUILDINGS								
① School of Medicine (Adams)	●	●	●	●	●	●	●	
② Athletics	●	●	●	●	●	●	●	
③ Biology	●	●	●	●	●	●	●	
④ C.B. Powell	●	●	●	●	●	●	●	
⑤ Cancer Center	●	●	●	●	●	●	●	
⑥ Chemistry	●	●	●	●	●	●	●	
⑦ Douglass Hall	●	●	●	●	●	●	●	
⑧ Founders Library	●	●	●	●	●	●	●	
⑨ Howard Hospital	●	●	●	●	●	●	●	
⑩ Locke Hall	●	●	●	●	●	●	●	
⑪ Physics	●	●	●	●	●	●	●	
⑫ Rankin Chapel	●	●	●	●	●	●	●	
⑬ Residence Life	●	●	●	●	●	●	●	
⑭ School of Architecture	●	●	●	●	●	●	●	
⑮ School of Dentistry	●	●	●	●	●	●	●	
⑯ School of Engineering (Downing)	●	●	●	●	●	●	●	
⑰ School of Fine Arts (Childers Hall)	●	●	●	●	●	●	●	
⑱ School of Medicine (Seely Mudd)	●	●	●	●	●	●	●	
Legend								
Substantial	●							
Partial	●							
Minimal	●							

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

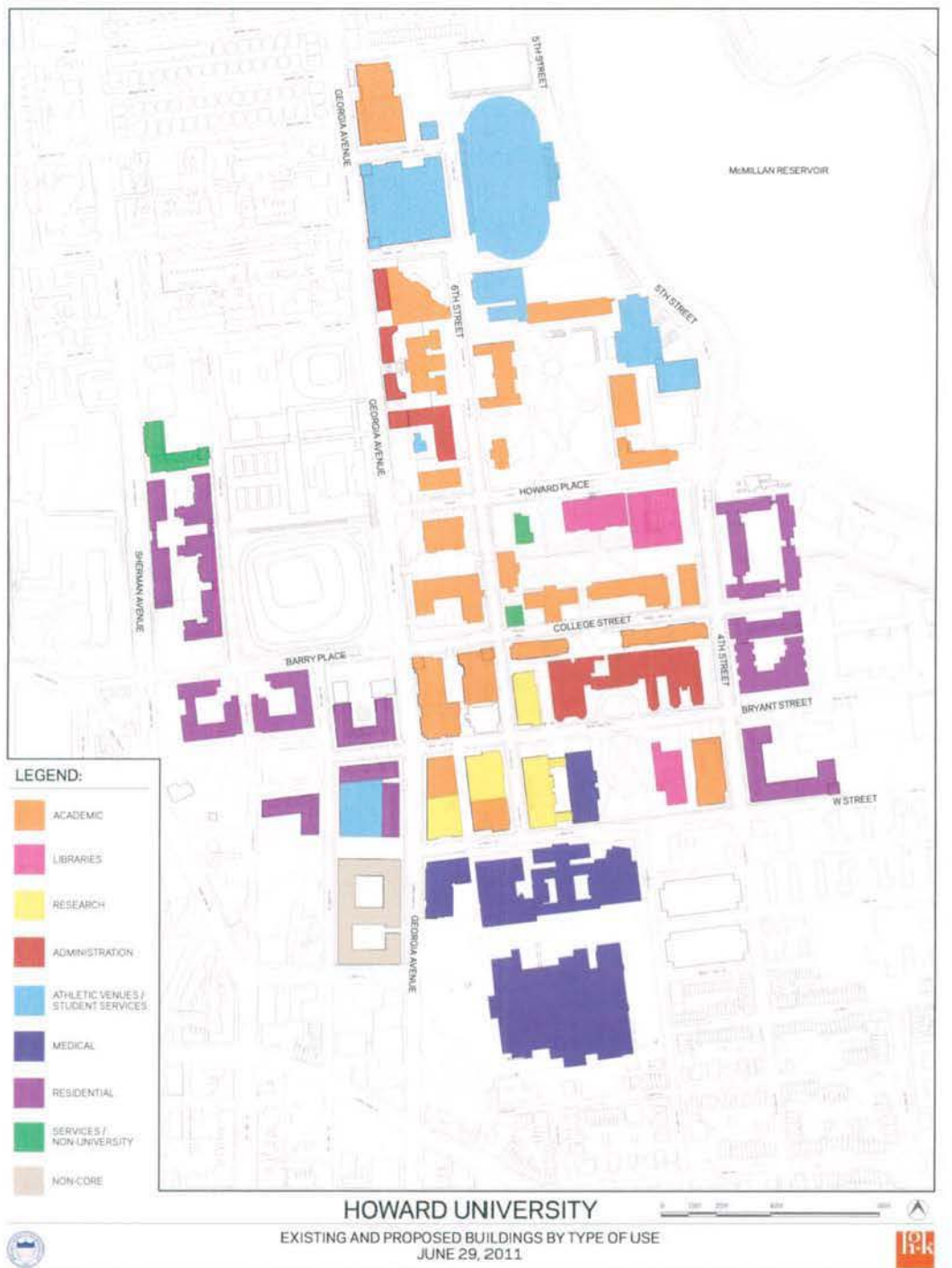


Figure 6-15: Existing and Proposed Building by Type of Use

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

PROPOSED LAND USE AND ZONING

A modest addition to the campus boundary is proposed with the inclusion of square 2872 (lots 266-271, 803, 820, 822-824) bounded by Barry Place on the north, Sherman Avenue on the south and east and Florida Avenue on the west. In Case No. 06-09, the Zoning Commission granted the University a five-year temporary use of this site as a parking lot in 2006. The University plans to continue that use in the foreseeable future.



Figure 6-16: Square 2872 highlighted on Zoning Map

The north area is intended to remain the concentration for athletic functions and the stadium will remain as the focus of this area in its current 4th Street location. Proposed improvements to the gymnasium in the near term and the development of a new athletics complex and support functions, the addition of parking, and proposed pedestrian improvements will strengthen this part of the Campus as the athletics and events hub. The Yard will remain the focal point for the central part of the Campus. The historic academic concentration of uses will continue in this University core area. Improvements to the institutional character of the uses along Georgia Avenue are intended to solidify the presence of the University in this area. And finally, the southern end of the Campus will continue to be a focus of the health science uses including the hospital, and health science related academic and research uses.

The major changes to the Campus's land use pattern are planned for the Georgia Avenue frontage south of Barry Street, along Bryant Street extending into the parking fields to the west of Georgia Avenue, and in the parking field on Sherman Avenue.

GEORGIA AVENUE FRONTAGE

The University intends to revitalize Georgia Avenue between Barry Street and V Street through the creation of

a mixed-use district. Proposed uses include academic and research buildings, such as the Computational Science (CS) / Biomedical Science and School of Communications building, which are planned to be located on the east side of the avenue. In addition, student housing, market rate housing and a Wellness and Recreation Center are planned to front the west side of Georgia Avenue. Each of these uses will be complemented by ground floor retail uses fronting on Georgia Avenue to provide needed goods and services to the Campus and surrounding communities. The addition of retail will add vitality and life to the neighborhood and improve the pedestrian experience. Below-grade parking will be provided under several of the proposed buildings to replace existing surface spaces; serving academic requirements, retail, the Wellness and Recreation Center and visitors.

BRYANT STREET CORRIDOR

The University intends to strengthen the east-west connection of the Campus across Georgia Avenue by concentrating Campus residential uses and complementary academic and research uses along Bryant Street. The Georgia Avenue parking fields are intended to be redeveloped as a Campus residential enclave. This will include several multistory Campus housing buildings with supporting services. The new residential enclave will be constructed around a new Campus green which acts as the focus and an amenity space for this concentration of student life.

The additional residential uses here will tie the existing Howard Plaza Tower buildings, the largest existing student housing buildings, into the remainder of the Campus and provide an appropriate residential experience for students while extending the Campus functions across Georgia Avenue. This western anchor of residences is complemented by a similar concentration of Underclassman housing proposed for the east end of the Bryant Street connector. Building upon the existing housing of Baldwin/Crandall/Frazier/Truth/Wheatley Hall and Bethune Annex Hall, the University will add two new housing residences along 4th Street, to create an underclassman community near the core of the Campus. Finally, the Bryant Street corridor will become the heart of the health science related schools and the focus of new research buildings with the addition of several new academic and research buildings. Below-grade parking will be provided within this corridor under several of the proposed buildings.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

SHERMAN AVENUE

The Master Plan proposes the addition of work-force housing on its existing parking field on Sherman Avenue. The addition of housing in this location will complement the surrounding neighborhood as well as be linked to the Campus via an improved pedestrian connection through Banneker Recreation Center. This housing is intended to provide additional opportunities and incentives for faculty, staff and graduate students to live within walking distance of the Campus thereby discouraging peak commuter travel. Residential parking needs will be met on this site as well.

PROPOSED ZONING CHANGES

The basic existing pattern of zoning is appropriate for the Campus, however, there are several proposed modifications suggested along Georgia Avenue to bring the underlying zoning in line with the proposed University uses.

The Master Plan recommends changing the zoning designation of the properties on the east side of Georgia Avenue which are currently zoned CM2 and CM3. The CM2 and CM3 zones are light manufacturing zones which were consistent with the historic use of the site, but are not in line with the current or proposed University functions, are not compatible with surrounding zoning designations, and are not consistent with the Comprehensive Plan for the Nation's Capital. The CM zones specifically exclude residential uses and are not intended as mixed-use zones. Therefore, they are detrimental to the creation of the proposed mixed-use character of Georgia Avenue. It is essential for a successful mixed-use district to combine office, research, academic, retail and residential uses. The retail and residential uses will promote 24 hour activity in the corridor which is vital to its success.

The CM2 and CM3 zones are proposed to be rezoned to CR as a part of this Master Plan process. The CR zone is intended for mixed-use commercial and residential developments, consistent with the land use pattern proposed in the Campus plan. The CR zone is also consistent with existing zoning of the Howard University owned property immediately across Georgia Avenue as well as the DUKE small area plan and the Comprehensive Plan, which contemplate moderate density mixed-use development. This zone allows 90ft. heights and a 6.0 FAR (3.0 of which may be devoted to non-residential use).

Finally, the CR zone requires further processing for University uses so additional review of any new University development on these properties is ensured consistent with the rest of the Campus. In summary, the CR zone is appropriate as it will help to achieve planning goals of creating new mixed-use development at appropriate densities and heights, which are consistent with the Campus plan and compatible with the surrounding area.

PROPOSED FAR

Per existing zoning, the allowable FAR's on campus range from 1.5 to 6.0. The existing average aggregate FAR for the Howard University campus is 1.30. This has been calculated using existing building square footage divided by the total land area currently owned by the University. Public roadways (measured from back of sidewalk) that extend through the campus have been excluded from the calculation. The University proposes the removal, replacement and addition of buildings over the life of the master plan. The net change of square footage and resultant change to the average FAR is depicted per phase on the accompanying chart. Per Section 210.3 of the Zoning Regulations, all R-1 through R-5-B zoned land within the Campus shall not exceed a combined FAR of 1.8. Further, the aggregate FAR of the R-5-C through R-5-E zoned land within the Campus shall not exceed 3.5. The chart on the opposite page provides a comparison of the FAR in the applicable zones located within the plan boundaries for the current and proposed conditions.

Table 6-4: FAR Comparison by Phase

FAR COMPARISON			
	Land Area	Overall Building Area (sf)	FAR
Existing			
Total	4,379,534	5,709,995	1.30
Proposed			
Phase 1	4,379,534	6,297,712	1.44
Phase 2	4,379,534	6,738,409	1.54
Phase 3	4,379,534	6,952,293	1.59
Future Phase	4,379,534	7,658,416	1.75

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

Table 6-5: Residential FAR Comparison

RESIDENTIAL FAR COMPARISON						
	Allowable FAR	Land Area (SF)/ Existing Zoning	Existing Building SF	Existing FAR	Proposed Building SF	Proposed FAR
R4	n/a	91,430	152,278	1.67	152,278	1.67
R5B	1.8	2,459,512	2,849,965	1.16	3,029,249	1.23
R5E	6.0 (5.0 res.)	116,395	573,684	4.93	573,684	4.93

*Note that an anomaly exists with respect to the aggregate FAR of the R-5-C through R-5-E zones due to the fact that the University owns no R-5-C or R-5-D land. The Campus only includes R-5-E land and it has been developed with the high rise Howard Plaza doms to an FAR of 4.93 pursuant to a rezoning in 1986 (Z.C. Order No. 506).

ALLEY CLOSURES

Three potential alley closings have been identified in the proposed Master Plan to create larger contiguous parcels that allow the redevelopment of these blocks for academic and support uses and/or contiguous efficient underground parking. These include:

1. Square 3065, north-south alley between Georgia Avenue and Sixth Street that extends from Bryant on the north to W Street on the south – The Master Plan envisions the retention of a private alley in this location to allow for appropriate off-street access to loading and/or parking. The alley closure would, however, allow for the creation of large contiguous below-grade parking facility thereby making the most efficient use of below-grade space.
2. Square 2875, north-south alley between 8th and 9th Street with westward connection to 9th Street – Howard University owns property on either side of this alley. Since the alley bisects the Howard University property it is difficult to develop Campus housing surrounding the new quad as proposed if the alley were to remain as is. The Master Plan recommends seeking at least a partial closure of the alley to allow for the proposed Campus housing as well as for efficiently configured potential below-grade parking beneath the building.
3. Square 3058, north-south alley between Georgia Avenue and Sixth Street that extends from Girard on the north to Fairmont on the south. The Master Plan envisions the reconstruction of Burr Gymnasium on this block. Due to the nature of such a facility a large footprint is required, thereby necessitating the elimination of the alley to consolidate the property owned by Howard University that surrounds the alley.

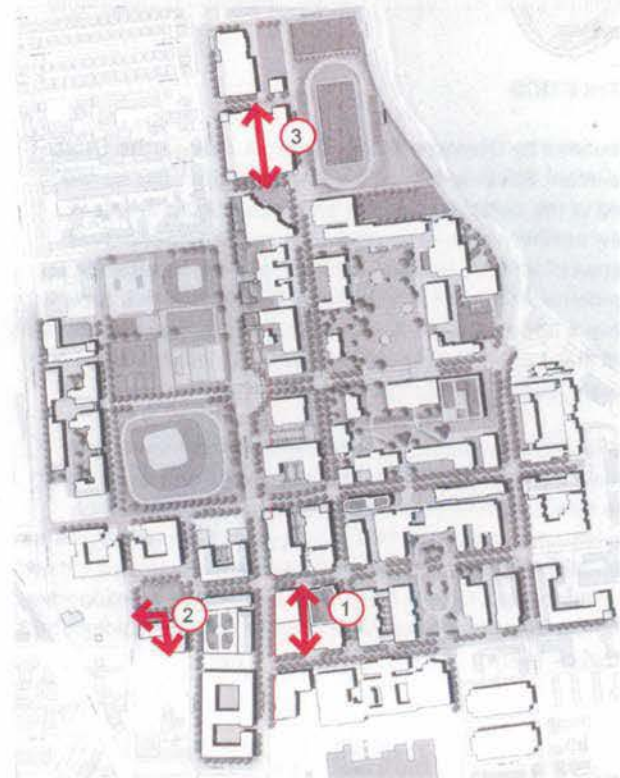


Figure 6-17: Alley Closure Diagram

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

USE ZONES, BUILDING PLACEMENT AND MASSING

Howard University's characteristic mix of uses will be maintained throughout the Campus.. The focus of future construction will be to strengthen adjacencies and collaboration.

All academic buildings will be kept within the confines of the campus, but some functions that have public appeal (retail, bookstore, restaurants, etc.) will be established on Georgia Avenue at the ground level. Another important concept is to establish an institutional presence on Georgia Avenue where the University buildings turn their backs to the street and present only loading docks and surface parking lots with new facilities that engage the community and landscaping that enhances the streetscape. Underclassman Housing will be expanded and improved on the east side of Campus and Upperclassman Housing will be expanded and improved on the west side of Georgia Avenue, along with the new Wellness and Recreation Center, retail and underground parking.

ATHLETICS

Bounded by Gresham Place, Georgia Avenue, 5th Street, Fairmont Street and the Fine Arts Complex, the northern end of the campus provides an opportunity to create a new northern gateway with an expanded and improved series of athletic facilities, and a major car storage facility (underneath a turf practice field). Buildings in this zone will have a large footprint due to space needs, and their designs will make use of below-grade space to minimize scale and height, especially along Georgia Avenue.

Following the demolition of Effingham Apartments, the Howard Manor, University Warehouse #2 and Cook Hall, the new Intercollegiate Athletics Complex (IAC) will be constructed. Once the IAC is built, Burr Gymnasium will be demolished. As more detailed plans are developed, other considerations for the use of this site include an expanded running track, improved bleachers for Greene Stadium and practice fields.

MID GEORGIA AVENUE

This area includes facilities on Georgia Avenue, between 6th Street and Georgia Avenue, between Howard Place and Fairmont Street. The rear or sides of the School of Business, the Johnson Administration building, Howard Hall and the School of Social Work front on Georgia Avenue. Only the Miner Building currently faces Georgia Avenue.

An important aspect of this zone includes enhancing and protecting views of the Miner Building and Howard Hall, as well as renovating the Miner Building. In addition to its academic use by the School of Education, potential reuse of the Miner Building may include uses as a gallery and event space or as a site for the the Moorland Spingarn Research Center.

New facilities will be designed to not block the views of the historic buildings, but rather to enhance the setting and to provide better access. As such, the buildings could include accessible green roofs that would serve as upper level plazas that create new open space for the campus.

ARTS AND EVENTS

The Arts and Events Zone occupies the northern and eastern sides of the historic quad. The Yard, the Fine Arts Complex, Blackburn University Center, Locke Hall, Academic Support Buildings A and B, and the Middle School are the core of this zone.

The Plan for this area includes the expansion and renovation of Blackburn University Center. The topography here provides an opportunity for a large car storage facility – accessed from 4th Street, and located below new construction. The demolition of Academic Support Buildings A and B (intended to be temporary buildings) behind Locke Hall will provide the opportunity to develop the Blackburn University Center addition, underground parking and a new open space area that could serve as a garden to supply fresh produce to the restaurants in Blackburn.

The scale of buildings in this area will be carefully considered to respect the history of the Yard, as well as to preserve views from the Yard to McMillan Reservoir.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Figure 6-18: Use Zones and Massing Diagram

ADMINISTRATION

The C. B. Powell Building and the Ralph J. Bunche Building create a central historic presence in what is being described as the administration zone.

During the design charrette, it was suggested that this area could form a new, centralized administration zone for the University. The most historic elements of C.B. Powell could be preserved and renovated to accommodate functions currently housed in the Johnson Administration Building.

Other considerations for the adaptive reuse of the historic building included faculty offices, housing, gallery and event space, or use by the Moorland Spingarn Research Center. The intent is to restore the building to its original character. For this site, no major new buildings are contemplated. Instead, the focus is on renovation and refitting an appropriate program to the historic structure.

HOUSING AND SCHOOL

Comprised largely of surface parking lots, this area is located along the western edge of the University's property and is bounded by Sherman Avenue, Barry Place and 9th Street just south of Euclid Street.

Plans include: the relocation of the University's Middle School of Mathematics and Science (MS)² (currently housed in the old Human Ecology Building located on the Yard); a replacement for the Early Childhood Learning Center and new faculty and workforce housing. This relocation would allow the Middle School to expand to its chartered capacity.

Buildings will be massed and scaled to blend with the surrounding neighborhood context. Building design will incorporate terminating the long visual axis from the Yard through Banneker Park to this site.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

RESEARCH AND SCIENCE

New academic and research buildings are planned for the area bounded by Howard Place, Georgia Avenue, 4th Street and Bryant Street. A site, adjacent to C.B. Powell, is planned for a new STEM research building once some of the more recent additions to the C.B. Powell building are razed. Future building sites (for research) can be available if buildings along the south side of College Street are demolished.

Additional opportunities in this zone include the removal of the Early Childhood Learning Center and the re-purposing of Chauncey Cooper Hall. A new facility is planned that will combine Nursing, Allied Health & Pharmacy. Another planned research facility is the Nanotechnology Building at the southwest corner of 6th and Bryant Streets.

New buildings developed in this area must respect the scale and massing of existing campus buildings, especially the C. B. Powell building, Power Plant and other historic buildings.

HOUSING

On the east side of Campus, east of 4th Street, between McMillan Drive and W Street, new Underclassman Housing is proposed to meet the immediate need for housing. This site will include renovations to existing buildings and new buildings to the north and south of Bethune Annex.

In addition to the residential space, dining-living-learning in residence faculty units and other amenities are planned for this zone. New housing will complement the scale of existing residence halls.

MIXED USE

The blocks surrounding on the intersection of Georgia Avenue and Bryant Street are intended to function as a new gateway to the University with: revitalized retail uses; a welcoming function for visitors and new students; and additional space for a range of uses. Planned facilities include: Computational Science (CS) / Biomedical Science (+ Retail), The School of Communications (+ Retail) and an Academic / Support Facilities / Public Safety Building (+ Retail). During the design charrette, participants discussed other uses such as a welcome center, alumni center, faculty club, and housing. Underground car storage is also planned for this area.

Upperclassman Housing is proposed for the west side of Georgia Avenue adjacent to Howard Plaza Towers. Barry Place on the north, Sherman Avenue and Florida Avenue on the west, 8th Street on the east and W Street on the south form the boundaries for the upperclassman community. The housing will face on a new Residential Quad. In addition to the residential space, dining and other amenities will be provided in this zone.

This area also includes the proposed Wellness and Recreation Center with ground level retail, underground parking and more residential housing on the upper levels. Because of the existing fabric surrounding the site and new residential development along Florida Avenue, some building heights in this area could be in the 90-110 foot range.

HEALTH SCIENCES

The southern section of the Campus from Georgia Avenue on the west, to 4th Street on the east, Bryant Street on the north, and Florida Avenue on the south will continue to accommodate current and future health science-related functions and facilities.

Howard University Hospital is expected to remain on this site, with opportunities for phased renovation. It was not a part of this Master Plan study, but a separate Master Plan for Howard University Hospital should be conducted to explore the future needs of the hospital. The area between Bryant and W Streets is being considered for facilities including: a new College of Pharmacy, Nursing, Allied Health, a Health Sciences / Medical Arts Building and other future health related uses.

ACADEMIC/RESEARCH USES

All buildings fronting on Georgia Avenue could potentially include a retail base in this area. An additional major underground car storage facility could be developed in this area..

Most buildings are expected to be 6 to 9 stories above grade (similar in scale to the hospital). New buildings along Bryant Street will include a setback to accommodate a more pedestrian friendly streetscape connecting residential uses to the east and the west sides of the Campus.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Figure 6-19 Perspective drawing of proposed School of Communications at Georgia Avenue between College and Bryant Street



Figure 6-20: Perspective drawing of Bryant Streetscape renovation and proposed Teaching and Learning Center (right foreground) with Allied Health, Nursing and Pharmacy Building (adjacent)

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Figure 6-21: Perspective drawing of proposed Residential Quad at 8th and Bryant Street



HOWARD UNIVERSITY

MASTER PLAN
JUNE 29, 2011



Figure 6-22: Illustrative Master Plan

PHASE ONE (1-3 YEARS)

- ① INTERDISCIPLINARY SCIENCE ENGINEERING BUILDING (ISEE) / STEM
- ② COMPUTATIONAL SCIENCE (CSI) / BIOMEDICAL SCIENCES (BIO)SI + RETAIL
- ③ UNDER CLASSMAN RESIDENTIAL HALL #1
- ④ UNDER CLASSMAN RESIDENTIAL HALL #2
- ⑤ CAMPUS WELLNESS / RECREATION / AND UPPER CLASSMAN RESIDENTIAL + RETAIL

PHASE TWO (3-5 YEARS)

- ⑥ BLACKBURN CENTER RENOVATION
- ⑦ SCHOOL OF COMMUNICATIONS + RETAIL
- ⑧ ACADEMIC / SUPPORT SERVICE / PUBLIC SAFETY BUILDING + RETAIL
- ⑨ NURSING, ALLIED HEALTH + PHARMACY
- ⑩ NANOTECHNOLOGY BUILDING
- ⑪ UPPER CLASSMAN RESIDENTIAL HALL #1 + RETAIL
- ⑫ MINER BUILDING RENOVATION

PHASE THREE (5-7 YEARS)

- ⑬ FUTURE HEALTH SCIENCES / MEDICAL ARTS + RETAIL
- ⑭ INTERCOLLEGIATE ATHLETICS COMPLEX + RETAIL
- ⑮ GRADUATE / WORK FORCE HOUSING
- ⑯ UPPER CLASSMAN RESIDENTIAL HALL #2
- ⑰ TEACHING AND LEARNING BUILDING

PHASE THREE (5-7 YEARS)

- ⑬ FUTURE HEALTH SCIENCES / MEDICAL ARTS + RETAIL
- ⑭ INTERCOLLEGIATE ATHLETICS COMPLEX + RETAIL
- ⑮ GRADUATE / WORK FORCE HOUSING
- ⑯ UPPER CLASSMAN RESIDENTIAL HALL #2
- ⑰ TEACHING AND LEARNING BUILDING



Figure 6-23: Landscape Plan

LANDSCAPE IMPROVEMENTS

- ① THE MAIN QUAD RENOVATION
- ② THE LOWER QUAD RENOVATION
- ③ HOWARD PLACE GATEWAY
- ④ CAMPUS STREETSCAPES
- ⑤ EAST-WEST PEDESTRIAN CONNECTION
- ⑥ THE FOUNDERS LIBRARY ROOFTOP
- ⑦ NEW CENTRAL QUAD

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

CAMPUS LANDSCAPE PLAN

The Campus landscape is a treasured amenity that is remembered, by students, faculty and alumnae, as a special quality of a university.

The design of the landscape at Howard University is equally as important as the design of its buildings. The campus landscape plays many roles in academic life. People gather for a common educational pursuit, but the value and the pleasure of a college campus comes from the daily life of the place. The campus landscape should provide a rich variety of open spaces, and a counterpoint to the intensity of urban and academic life.

Significant landscape improvements are proposed in the Master Plan to raise the general quality and first impressions of the Campus.

The Landscape Plan reinforces the principal organizing elements of the Campus - the Main, Lower and Southern Quads - and is designed to extend the picturesque quality of the best landscape area - the Main Quad, known as 'The Yard' - out to the limits of the Campus.

The Campus is by definition a place to encourage and foster face-to-face meetings and discussion. There are few places to sit and meet on the Campus now and this will be addressed in the future design of paths and individual building sites. Special emphasis will be placed on creating sheltered seating areas that can extend the period of outdoor use on the Campus.

The fundamental pedestrian nature of the campus is to be reinforced by improving the existing system of walkways. These will include establishing better connections between Georgia and Sherman Avenues and the interior of the Campus.

Landscape improvements will present a unified impression of the Campus edges and its principle entry routes. The Campus has used a number of different paving and site furnishings throughout the Campus. A goal will be to adopt a consistent campus-wide standard for these elements. A detailed study will enable the University to develop extensive landscape renovation work that can complement proposed building renovations and create design guidelines for:

- Paving for sidewalks and pedestrian walkways
- Curbs
- Roadway paving
- Furniture, including benches, trash bins, bollards, bicycle racks and traffic control devices.

Key Landscape Proposals include:

- The Main Quad Renovation
- The Lower Quad Renovation
- Howard Place Gateway
- Campus Streetscapes
- East-West Pedestrian Connection
- Undergraduate Library Rooftop
- New Residential Quad

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

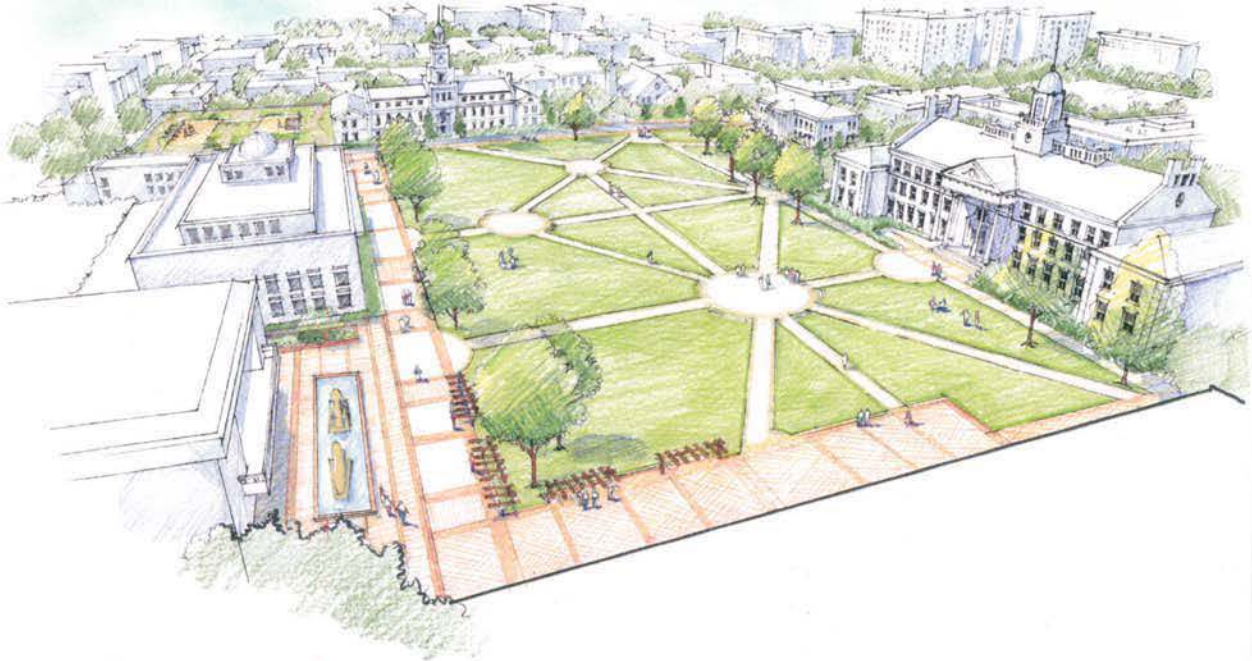


Figure 6-24: Perspective drawing of proposed Main Quad Renovation

THE MAIN QUAD RENOVATION

The Main Quad known as the 'Yard' is the most significant open space on the Campus and an important cultural landscape. The Yard is in need of renovation. The intent is not to change the historic character of this iconic landscape, but to bring it into better use as a visual and functional amenity; and set the stage for the next 100 years in the history of the Quad. This renovation could be scheduled in conjunction with the Blackburn University Center plans.

The key concepts for the renovation include:

- Removal of the service road in front of Blackburn University Center. The renovation and expansion project for Blackburn University Center will allow for a new service entrance to the building and eliminate the need for the service road on the historic Yard;
- Selection of a consistent palette of high quality, durable materials for paving and curbing;
- Creation of permanent seating areas;
- Reconciliation of the path system and elimination of redundant paths;
- Incorporation of a shade arbor on the northeast corner of the Yard in front of Blackburn to create a shaded gathering space;
- Incorporation of an underground infiltration bed for stormwater management purposes and direct roof runoff from the surrounding buildings to this new underground structure;
- Incorporation of a cistern component to the infiltration system so that stormwater can be captured and reused for irrigation purposes;
- Planting of native deciduous canopy trees like Oaks, Ash and Beech trees that are adapted to local conditions. Concentrate the tree plantings around the perimeter of the Yard to avoid conflict with commencement activities; and
- Involvement of students in tree planting activities.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Photo 6-1: Example of a campus setting designed with rain gardens and outdoor seating areas.

THE LOWER QUAD RENOVATION

The Lower Quad is located south of the Yard and is surrounded by the back doors of Founders and the Undergraduate Library with entrances to Physics, Chemistry, Biology and the Pharmacy Buildings on the lower portion of the quad.

The renovation of this quad should exploit the opportunities created by the topography, while recognizing the importance of the connections it provides.

This quad would benefit from the removal of non-essential turf and installing a series of rain gardens to improve campus drainage and create a distinct and beautiful character for this under utilized campus space.

The renovated space would be an ideal location for an outdoor classroom with the incorporation of seating and meeting areas to create a more vibrant setting for interaction at this key location. Renovations would include new paving materials and an appropriate palette of trees, shrubs, perennials and grasses.

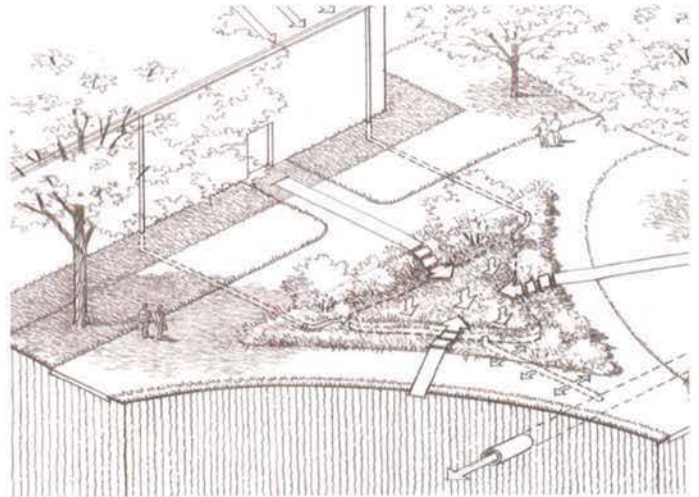


Figure 6-25: Illustration of a typical rain garden designed to capture runoff from adjacent buildings and paved areas.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Figure 6-26: Perspective drawing of the proposed new gateway at Howard Place and Georgia Avenue

HOWARD PLACE GATEWAY

The intersection of Howard Place and Georgia Avenue will mark the ceremonial front door to the University. This new gateway will reinforce the University's presence on Georgia Avenue and provide a safe waiting area for public transportation users. The improvements to this intersection of Howard Place will lead the visitor directly to the Main Quad and the heart of the Campus.

An improved cross walk will extend across the Georgia Avenue in this location to an improved connection to Banneker Park on the opposite side of the street.

The planned development of the large surface parking lots on Sherman Avenue into new housing will make this an important pedestrian connection in the future. An improved walkway is planned that extends from the west side of Georgia Avenue west to Sherman Avenue. This project will be planned in collaboration with D.C. Department of Parks and Recreation and will include an appropriate design to address: security, accessibility, and operational and maintenance needs.

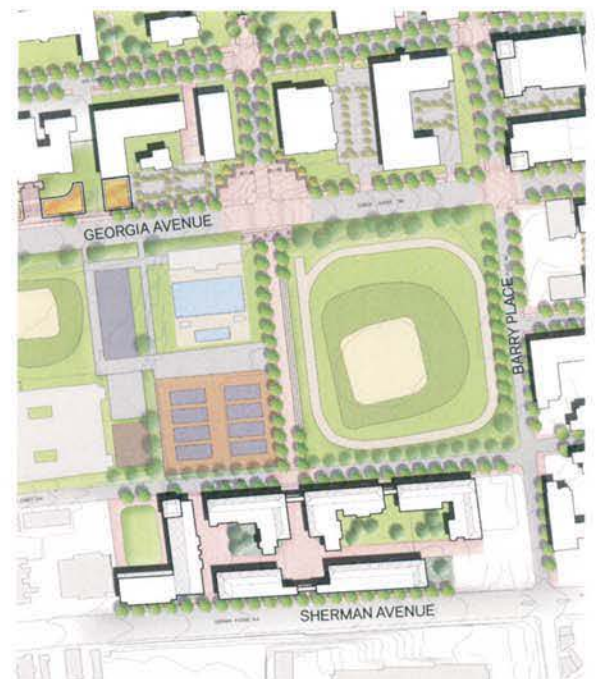


Figure 6-27: Plan view of proposed Gateway at Howard Place and Georgia Avenue

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

CAMPUS STREETSCAPES

As the development plans proceed, the University will widen the sidewalks, define crosswalks and ramps with a consistent palette of materials and plant a variety of native shade trees that will thrive in the District.

Internal Campus streets and new entries will be designed as extensions of the open space system, with a consistent vocabulary and treatment of sidewalks, curbs and street trees. The University will incorporate these upgrades as new facilities and renovations take place, including streetscape and signage improvements.

As part of the open space system, wherever possible, the sidewalks will be widened to 20' to allow space for both pedestrians, street trees and other uses, such as sidewalk cafes.

"For a planting cost of \$250-600 (includes first 3 years of maintenance) a single street tree returns over \$90,000 of direct benefits (not including aesthetic, social and natural) in the lifetime of the tree. Street trees (generally planted from 4 feet to 8 feet from curbs) provide many benefits to those streets they occupy." (Source: 22 Benefits of Urban Street Trees, May, 2006)

Trees absorb the first 30% of most precipitation through their leaf system, allowing evaporation back into the atmosphere. Another percentage (up to 30%) of precipitation is absorbed back into the ground and taken



Photo 6-2: Example of a streetscape with adequate soil volume for trees.

in and held onto by the root structure, then absorbed and then transpired back to the air. Some of this water also naturally percolates into the ground water and aquifer. Storm water runoff and flooding potential to urban properties is therefore reduced.

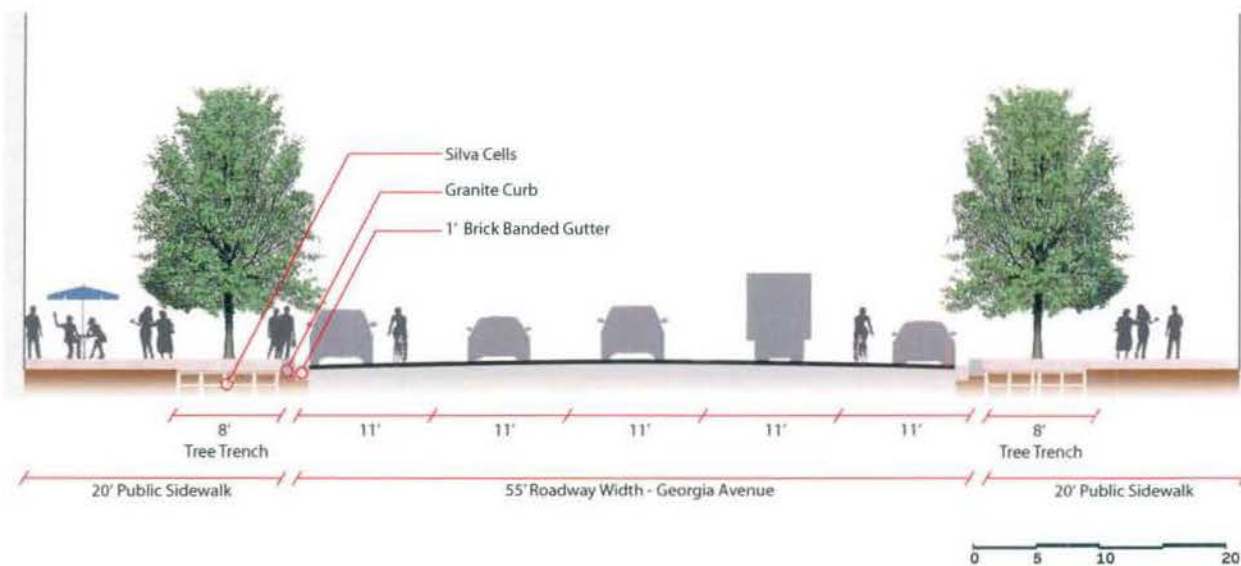


Figure 6-28: Typical Cross Section of Georgia Avenue at Howard University

CAMPUS DEVELOPMENT PLAN

(CONTINUED)

Other benefits include:

- Businesses on treescaped streets show 20% higher income streams;
- Temperature differentials of 5-15 degrees are felt when walking under tree canopies; and
- Trees in street proximity absorb 9 times more pollutants than more distant trees, converting harmful gasses back into oxygen and other useful and natural gasses.

If properly designed and built, the tree trenches on the campus streets can make a significant contribution to the stormwater management goals.

All proposed tree trenches will include Low Impact Development (LIDs) techniques to capture and infiltrate stormwater runoff. The most significant obstacle to reaching maturity that urban trees face is the scarce quantity of soil useable for root growth. A large volume of uncompacted soil, with adequate drainage, aeration and fertility, is the key to the healthy growth of large urban trees.

Research demonstrates that trees need 2 cubic feet of soil volume for every square foot of canopy area (Urban, 2008). Most urban trees have less than 1/10th the rooting volume they need to thrive. Using innovative techniques, such as suspended pavement, to extend rooting volume under HS-20 load bearing surfaces and create favorable tree growing conditions in urban areas, enables trees to grow to their mature size and provide the stormwater and ecological benefits commensurate with mature trees.

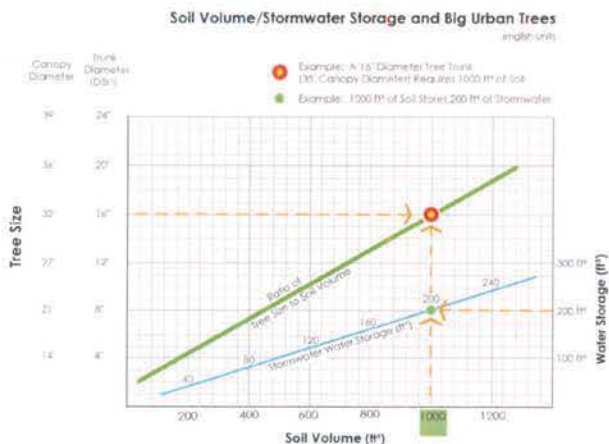


Figure 6-29: Graph showing the relationship of stormwater management and soil volume ratios

EAST-WEST PEDESTRIAN CONNECTIONS

Howard Place, running east to west through the heart of the Central Campus, is an ideal place for streetscape renovations and implementing changes that reflect the history and character of Howard University. Along with the proposed Gateway at Howard Place and Georgia Avenue, Howard Place will become a strong connection between the historic heart of the campus and the proposed graduate/workforce housing on Sherman Avenue.

A new streetscape design along Howard Place will tie the vehicular section of the roadway east of Georgia Avenue into the pedestrian/bike section proposed to the west. Through Banneker Park, the Howard Place becomes a pedestrian and bicycle thoroughway that connects students, faculty and staff to the recreational fields and to the proposed middle school and graduate workforce zone on Sherman Avenue. New paving materials and tree plantings will accompany this pedestrian corridor.



Figure 6-30: Plan view of Howard Place

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Photo 6-3: View of existing roof of Undergraduate Library

UNDERGRADUATE LIBRARY ROOFTOP

The rooftop of the Undergraduate Library is currently an empty brick paved space that the University might examine as a first demonstration project of green roof technology, with a new green roof garden, arbor and seating area.

The bricks can be recycled in the new design and incorporated into a palette of native plants that will thrive in this environment. The ASLA Headquarters roof is an excellent local example of a roof garden in the D.C. area, that shows how a relatively small space can be retrofitted to create a new open space area for the Campus.

The green roof has retained thousands of gallons of stormwater, reduced building energy costs by hundreds of dollars a month, and significantly lowered outdoor air temperature according to a report issued by the ASLA. The green roof lowered air temperature by as much as 32 degrees in the summer when compared to a neighboring tarred roof, helping mitigate the urban heat island effect.

The roof also reduced the building's energy costs—especially in the winter. Engineering analysis showed that the green roof's extra insulation lowered energy usage in the winter by 10 percent with a potential of two to three percent in the summer.” (Source: <http://www.asla.org/press/2007/release091907.html>)



Figure 6-31: Plan view of proposed roof renovation of Undergraduate Library on Howard Place



Photo 6-4: View of Green Roof at ASLA Headquarters in Washington, D.C.

CAMPUS DEVELOPMENT PLAN

(CONTINUED)



Figure 6-32: Perspective drawing of the proposed new Residential Quad located at Bryant Street and 8th Street

NEW RESIDENTIAL QUAD

The proposed new Residential Quad is located at Bryant Street and 8th Street on the western side of Georgia Avenue. The site is currently a large parking lot that serves the University, as well as, the Howard Tower buildings. This location is an amenity and open space resource for the new student residential buildings proposed on the western side of Georgia and the increased pedestrian circulation encouraged throughout the Lower Georgia Avenue zone.

The new Residential Quad terminates Bryant Street on the west, and creates a new pedestrian and bicycle link between the academic core and the western residential zone.

The addition of a green space adds better passive recreation area for students, faculty, staff and visitors. It creates a protected setting that is safe and provides a place for social gatherings, events and student activities. Proposed elements would include new pedestrian paved paths and an appropriate palette of trees and shrubs.



Figure 6-33: Plan view of proposed new Residential Quad located at Bryant Street and 8th Street