

PHASE 5: FINAL RECOMMENDATIONS

SUCF PROJECT NO. 31824





















5 Final Recommendations

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OFFICE OF THE PRESIDENT

I am pleased to endorse the findings of the SUNY College at Old Westbury Facilities Master Plan 2013-2023.

I would like to thank all those who participated on and off the campus. I especially would like to extend my appreciation for the fine work of the consultants from Goody Clancy and the State University Construction Fund as well as the campus Facilities Master Plan Executive and Advisory Committees.

The outcomes are representative of the thorough and collaborative work performed by all.

President

Executive Summary

SUNY College at Old Westbury is an undergraduate and graduate degree granting institution located on Long Island, approximately 20 miles from central Manhattan, on approximately 600 acres of land within the villages of Brookville and Old Westbury, New York. The College serves approximately 4,300 students from across the greater New York City area and beyond.

This report represents the final recommendations of the SUNY College at Old Westbury Facilities Master Plan. The Facilities Master Plan is a framework for future campus development that will guide site and facility investments from 2013 to 2023 - a period encompassing two capital cycles - and beyond.

Development of the Facilities Master Plan was part of a State University of New York (SUNY) system-wide planning initiative undertaken by the State University Construction Fund (SUCF). The planning process began in August of 2010 and concluded in December of 2011.

This Master Plan represents a broadly embraced vision for how the campus will evolve in response to current and projected needs - including an up to 30% increase in the number of students the College will serve.1 It is a framework for decision-making about site and facilities investments, large and small.

The Master Plan is grounded in the outcomes of a space needs analysis that considered each department and unit within the College, as well as a site, system and facility assessment that documented existing conditions and identified needed investments. The initiatives identified within the Master Plan are linked to the College's mission as well as to College and SUNY strategic and academic plans.

The Master Plan was also shaped by the broad array of campus stakeholders who took part in the master planning process through the executive committee, the advisory committee, or participation in master plan events.

From a full year of analysis, assessment, review of alternative directions, and broad campus feedback has emerged a framework for how the campus will grow and change over time.

Framework for Capital Investments

The framework for future campus investments at SUNY College at Old Westbury is guided by three key elements:

- 1. Renewal of Older Buildings to modernize outdated teaching, learning, and co-curricular spaces in support of current pedagogy, as well as to upgrade aging systems
- 2. Provision of Additional Space to meet current and projected shortfalls, with a particular focus on meeting needs for academic, dining, and recreation/athletics space

Between Fall 2010 and Fall 2023, the College expects enrollment to grow from 4,350 students headcount (3,800 FTE) to 5,700 students headcount (4,800 FTE). This represents a 26% increase in FTEs and a 31% increase in headcount.

Creation of a More Cohesive Campus Environment that focuses new building initiatives and open space improvements around a central campus green

Through a coordinated approach to facilities renewal, facilities expansion and purposeful upgrade of landscapes, the campus will evolve to better support the College as a community of learning.

New and Expanded Facilities Shape a Central Campus Green

Three major building additions and a future academic facility - addressing academic, dining, and recreation/athletics space needs - will be sited to define and reinforce an active green space at the emerging heart of the campus, near the New Academic Building now under construction.

Until recently, the SUNY College at Old Westbury campus has been relatively dispersed, with primary facilities (e.g., the Academic Village, the Woodland Residence Halls, the Campus Center) located in relatively isolated, inwardly-focused building clusters, loosely linked by paths through the landscape. This dispersed organization has fostered a student experience that is physically fragmented; it has complicated College efforts to provide the strong sense of community and identity that is often the hallmark of small college campus environments.

The New Academic Building now under construction beside the Campus Center represents a new commitment to consolidating non-residential campus destinations, and placing members of the campus community within easy reach of each other.

The Facilities Master Plan leverages significant current investments in this part of campus - the New Academic Building, the re-cladding of the Campus Center, recent consolidation of student services around the Campus Center Atrium - by siting needed new academic and campus life space that will strengthen this area as a hub, a true "center of gravity" for the SUNY College at Old Westbury Campus.

Additions to the Natural Science Building, the Campus Center, and Clark Athletic Center will be sited to shape a Proposed Campus Green at the center of this hub. The Proposed Campus Green will be a bustling and imageable open space that links key campus destinations both existing and proposed, including: STEM, fine art, and general-purpose academic facilities; administrative and student service facilities such the Admissions Office; and student-oriented destinations such as dining and fitness facilities.

Campus destinations - and with them faculty, staff and students - will now be clustered near the center of the campus core, supporting synergies and interaction among faculty, staff, and students. Through the Facilities Master Plan, both the identity and experience of the campus will be transformed.

Facilities Investments Strengthen OW as a Community of Learning

New construction and renovation will provide for a physical environment supportive of the College's mission and strategic plan.

Un-renovated teaching, learning and co-curricular spaces in spaces in the Natural Science Building, the Campus Center, and Clark Athletic Center will be modernized to meet current practices and pedagogy; aging building systems will be upgraded for improved operational and energy performance.

Building additions will equip this institution with new space when and where it is needed most, addressing the College's significant current space deficits in dining and athletics - spaces that bring together members of this diverse student body - along with modest and growing deficits in academic space, particularly within the sciences.

Should steady enrollment growth continue as the College projects, to approximately 5,700 students (headcount) by 2023, a future academic building will provide additional academic, administrative, and campus life space.

Full List of Capital Initiatives

BUILDING INITIATIVES

The College's highest priority major buildings initiatives for the 2013 – 2023 timeframe are as follows:

- Renovation & STEM Addition at the Natural Science Building: This initiative will include upgrade of the College's aging Natural Science Building to reflect current pedagogy and address outdated building systems; the addition of new space to address growing deficits in the Sciences and in general-purpose classrooms; and relocation of the Math & Computer Science Department and the IT group for a consolidated Science, Technology, Engineering and Mathematics (STEM) facility. These relocations will also free up space for needed expansion of other academic departments within the New Academic Building and in Campus Center G Wing. The addition will be sited between the current building and the proposed Campus Green, providing an active new façade that engages and helps to define this important central open space.
- Dining Expansion / "Student Commons" at the Campus Center: Through this initiative, the College will provide a new, attractive, centrally located "student commons" that brings together both residential and commuter students, upgrades the College's outdated and undersized dining hall, and provides strong connections between the Campus Center Atrium and the Proposed Campus Green. The addition will be sited along the Proposed Campus Green, providing an active new façade that engages and helps to define this important central open space.
- Renovation & Addition at Clark Athletic Center: A renovated and expanded Clark Center will address condition, suitability and building systems issues within the existing facility, as well as significant and growing space deficits. This initiative will provide a more competitive, efficient, and sufficiently sized athletics and recreation facility that enhances the student experience at the College, bringing together residential and commuter students. The addition will be sited along the Proposed Campus Green, providing an active new façade that engages and helps to define this important central open space.

Other major building initiatives include:

New Daycare Center: Construction of a new, free-standing daycare center along C Gate Road. Relocation of the daycare center from Campus Center E Wing will enable the College to recapture this space for student services offices and lounge space.

• Future Academic Building: Should enrollment reach 5,700 students (headcount) as the College projects, an additional academic building will be needed. This building would be located at the southern edge of the Proposed Campus Green, on the site of the current soccer field.

In addition, the College will pursue a series of smaller renovation initiatives targeting the Campus Center Wings E, F, G, H and L - portions of this complex that have not been touched by recent renovation initiatives, along with a modest backfill renovation in the Student Union.

- Library Renovation, Phase 2: Phase 2 construction of Library renovation and upgrade initiative (SUCF Project No. 31229). Both Phase 1 and Phase 2 have been designed; Phase 1 construction will begin early 2012 and finish in Fall 2012.
- Campus Center F Wing Renovation, Phase 1 & 2: Renovation of Campus Center F Wing to provide for upgrade (Phase 1) and expansion (Phase 2) of Visual Arts facilities.
- Campus Center G Wing Renovation: Renovation of Campus Center G Wing for consolidated Student Media center (including the TV studio, radio broadcast studio and newspaper offices) and student meeting, office and lounge space.
- <u>Campus Center E Wing Renovation:</u> Renovation of current Daycare Center (Campus Center E Wing) for Student Service Offices and Student Lounge/Study/Meeting Space
- Student Union Backfill Renovation: Renovation of radio broadcast studio and student newspaper office for student office, activity, lounge and/or study space following consolidation of student media functions in G Wing.

Other building-related initiatives are as follows:

- Renovation of Heating Plant for Facilities Operations Center: Renovation of the Heating Plant building to provide a right-sized Facilities Maintenance & Operations Center close to the campus core, once the co-gen plant is decommissioned.
- <u>Demolition of Academic Village Buildings B, C and D</u>: Demolition of outmoded Academic Village Buildings B, C, and D following relocation of academic functions to the New Academic Building.
- Stabilization & Expansion of Horse Facilities: Seal building envelopes and prevent further deterioration of 1920's-era stable facilities dating from the Clark Estate. As is defined within the College's Stewardship Plan, in order to support a viable equestrian operation, construct along B Gate Road: a new Enclosed Riding Ring (covered, indoor structure); new Summer Stalls; and a paved parking lot.2

The College will also pursue a series of site initiatives focused on landscape, transportation and circulation improvements.

² The College does not currently offer an equestrian program.

LANDSCAPE INITIATIVES

Landscape initiatives are aimed at establishing and reinforcing a Proposed Campus Green, around which major new building initiatives will be oriented; upgrading the College's existing athletic field facilities; and enhancing outdoor recreational amenities. Landscape initiatives are as follows:

- <u>Proposed Campus Green:</u> Creation of an active new open space at the heart of the Old Westbury campus, shaped by existing buildings and proposed facilities expansions
- Softball Field Upgrade: Upgrade of softball field to provide for synthetic turf, lighting, and seating, as well as to align with NCAA standards for field size and layout
- Soccer Practice Field Upgrade: Upgrade of field, including provision of synthetic turf, lighting and bleacher seating
- New Basketball Courts at Woodland Residence Halls: Addition of two new basketball courts proximate to the Woodland Residence Halls
- Relocation/Upgrade of Existing Soccer Competition Field: Relocation of field in advance of Future Academic Building; upgrade of field, including provision of synthetic turf, lighting, and, potentially, a surrounding jogging track
- Woodland Trail Improvements: Upgrade of existing trail network
- Re-orientation of Baseball Field: Reorientation of baseball field to comply with NCAA recommendations for east-northeast alignment.

CIRCULATION INITIATIVES

Campus circulation initiatives are aimed at improving connectivity, enhancing circulation for a range of modes, and addressing future parking needs. Circulation initiatives are as follows:

- New Parking Lot at Woodland Residence Halls (150 spaces): Provision of parking at the Woodland Residence Halls, which will free up spaces at the Campus Center Parking Lot for use by the broader campus community
- <u>Campus Center Parking Lot Upgrade</u>: Upgrade of Lot through repaving, replacement of site lighting, improvements to the drop-off area / "arrival plaza", and potential enhancement of visual and physical access between the Campus Center and the parking lot
- New North-South Connector Road: New road connection linking the Academic Village and Student Union Parking Lots to the Clark Athletic Center Parking Lot
- New Parking Lot along Connector Road (150 spaces): Construction of a New Parking Lot along the proposed North-South Connector Road
- New Multi-Purpose Path along the Ring Road and A Gate Road: Provision of new path to better support on-campus walking, jogging, and cycling

Facilities Master Plan Development Framework - Campus Core: Addressing Facilities Needs + Defining a New Central Green Improve Campus Center Parking Lot & Approach to Campus Core Provide Multi-purpose Path Along Ring Road Academic Village Buildings B, C, & D removed; Building A renovated for surge space; Future of AV Residence Halls Evaluated Through DASNY Study Repave Campus Center parking lot and improve site lighting; seek to improve views and pedestrian access to the Campus Center; consider providing 2-way vehicular access in front of the Campus Center All buildings may continue to be used in the near- to Renovate Campus Center E, F, G & L Wings mid-term Pursue phased renovation of Campus Center E. F, and G Wings to upgrade academic facilities and Expand Dining at the Campus Center accommodate growth of the Visual Arts Department NEW (F Wing); repurpose E Wing for student services and HOUSING Reinforce the Campus Center as a true student "hub" activity space; and to consolidate student media -NEWon the new Campus Green and address current and facilities (newspaper, radio and TV studio) in G Wing. PARKING projected dining space deficits by transforming the Complete Library renovation in L Wing. undersized, outdated dining hall into a major student dining center 44,000 GSF renovation, E, F, & G Wings; 37,000 GSF renovation, L Wing 25,000 GSF addition I 1-2 stories with possible basement 10,000 GSF renovation 7 NEW Create a Central Campus Green NEW New Connector Road and Parking Lot PARKING HOUSING Define a new central open space that provides an active new green "center" for the campus Link the Academic Village Parking Lot to the Clark Athletic Center Parking Lot, improving north-south connections through the campus. Create new parking lot. Add Academic & Admin Space within the Campus Core Create Expanded "STEM" Facility at the Build a Future Academic Building to accommodate Natural Science Building space need associated with anticipated growth to 5,700 students by 2023 GREEN Expand and renovate the Natural Science Building to house Computer Science and Math, along with the 75,500 GSF | 1-3 stories natural sciences NEW 50,000 GSF addition | 1-2 stories: HOUSING Enhance Outdoor Athletic Facilities; 69,500 GSF renovation Create Outdoor Athletics Zone Upgrade softball and soccer fields; relocate Upgrade and Expand Indoor Athletic Facilities competition soccer field to enable construction of Future Academic Building & consider adding track Build an addition to Clark Athletic Center to address (potential configuration shown at right) current and projected shortages of athletics, recreation and student activity space; renovate un-renovated portions of existing building and repurpose the squash/ racquetball courts. ATHLETIC ZONE 60,000 GSF addition I 1-2 stories 36,500 GSF renovation prove Path Network Through Wooded Areas Better connect the college community to the campus' natural and cultural resources RENOVATION NEW BUILDING OR ADDITION

Facilities Master Plan Development Framework - Outside the Campus Core: Leveraging Cultural & Historic Assets, Improving Campus Operations CEDAR SWAMPRD 107 A Gate **Heating Plant Site** Repurpose building as centrally located Facilities Operations Center when co-gen plant is decommissioned. Existing Service Area Zone DAYCARE Construct new Daycare Center and playground proximate to Building No. 29. HOUSING Accommodate potential future graduate and/or faculty FACILITIES SUPPORT Decommission Service Building A once the Heating Plant Building has been repurposed as Facilities Operations Center. Continue to use Service Building B for storage. Campus Core See previous diagram for details. Stables Zone STABLES Reinforce as stable operation—repair existing buildings and add summer stalls, an enclosed riding ring and a parking lot (as described in College's Stewardship Plan). TRAINOR HOUSE Continued use of Trainor House for Empire State College and/or conference center. **B** Gate

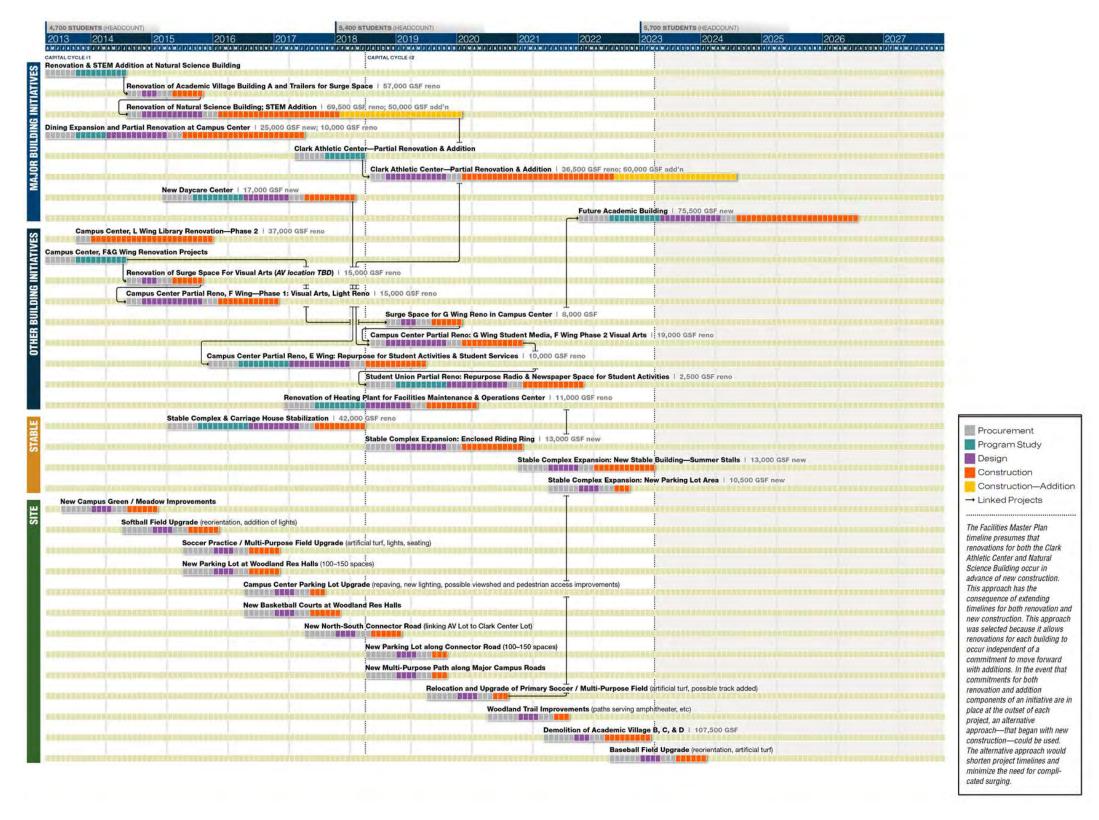






Facilities Master Plan Capital Initiatives & Phasing Plan

Phasing for the Facilities Master Plan initiatives reflects College priorities and a desire to minimize campus disruption by pursuing major construction projects sequentially rather than simultaneously.



Part 1: College & Context

A. ABOUT OLD WESTBURY

Founded in 1965, SUNY College at Old Westbury occupies 607 acres within the villages of Brookville and Old Westbury, New York. The College is situated in a wooded, park-like setting approximately 20 miles outside of New York City. SUNY College at Old Westbury serves approximately 4,300 students from across the greater New York City area and beyond.3





SUNY College at Old Westbury offers 45 undergraduate majors, 11 graduate options⁴, and 16 minors in liberal arts and professional fields. The College prides itself on a curricular social justice focus, a commitment to diversity, and service to both traditional and non-traditional students.

SUNY College at Old Westbury plays an important and distinctive higher education role within the state and region. Of particular importance is Old Westbury's long-standing service to students from under-represented demographic groups. The following characteristics set the College apart from its SUNY peers:

³ SUNY College at Old Westbury. Campus History. Retrieved Oct. 26, 2010, from SUNY College at Old Westbury website: http://www.oldwestbury.edu/about/history.cfm

⁴ As of Fall 2010, the College enrolled students in 11 graduate programs; 2 more graduate programs were approved and about to be launched.

- Racial & Ethnic Diversity: SUNY College at Old Westbury prides itself on serving one of the most diverse student populations in the northeast. As of Fall 2010, 33% of students identified as African American, 18% as Hispanic, and 9% as Asian. Just over 40% of student identify as White.5
- Older Demographic: The College serves a significant population of adult learners. In Fall 2009, the most recent date for which information was available, over 20% of Old Westbury undergraduates were age 25 or older. Fewer than 60% of students were under age 23.6

Figure A.2: Enrollment by Age of Students

	3 0
Age	% of Undergraduate Population
17 - 19	19.2%
20 - 22	39.7%
23 - 24	14.9%
25 - 29	12.6%
30 - 34	5.1%
45 - 59	2.9%
60 - 79	.2%

DelGiudice, Tom. (DelgiudiceT@oldwestbury.edu). "17th and enrollment ages." E-mail message to Amy Kohn et al. 11 November, 2010.

- Transfer students: SUNY College at Old Westbury serves many students transferring from other institutions (e.g., students who have completed work at community colleges and are seeking to obtain a bachelors degree). In Fall 2009, the last date for which information was available, transfer students comprised 20% of the College's total headcount, while first-time college students comprised 11%.7
- Part-time students: The College continues to serve a relatively high but decreasing percentage of parttime students. In 1997, part-time students comprised 24% of the College's enrollment. By 2009, that percentage had fallen to 16%.8

⁵ State University of New York College at Old Westbury, Office of Institutional Research & Assessment. "Student Profiles, Fall 2010 & Enrollment Trends Fall 2006 to Fall 2010."

⁶ DelGiudice, Tom. (DelgiudiceT@oldwestbury.edu). "17th and enrollment ages." E-mail message to Amy Kohn et al. 11 November, 2010.

⁷ Data from "Enrollment trends 1997 to 2008 Aug25-09.xlsx," provided by Tom DelGiudice

⁸ Data from Rickes Associates and "Enrollment trends 1997 to 2008 Aug25-09.xlsx," provided by Tom DelGiudice

B. PLANNING CONTEXT

Recent successes and challenges provided a foundation for identifying future facilities needs and for shaping a vision of the campus' future. The College's recent history has been one of many successes. Since 2000, SUNY College at Old Westbury has significantly grown its enrollment, raised the profile of incoming students, added graduate programs, and improved the quality of the campus' physical environment. Benchmarks include:

New and improved facilities: New and renovated facilities have made SUNY College at Old Westbury a more attractive campus with more amenities for students. Other initiatives now anticipated or underway will further enhance the College's appeal.

Recent projects include the Student Union, constructed 2003; the 850 bed Woodland Residence Halls, constructed 2003; and the Campus Center student services renovations, constructed 2010. The New Academic Building now under construction will replace academic and administrative portions of the outmoded, inflexible Academic Village in 2012.

Anticipated initiatives now in planning or design include additional renovations in Campus Center H, I, and K Wings; re-cladding of the Campus Center's envelope; and renovation of the Library.

- Over 30% enrollment growth (headcount): Campus improvements together with programmatic efforts and broader economic factors have led to significant increases in student enrollment. Between Fall 2005 and Fall 2010, SUNY College at Old Westbury grew by nearly 30% - over 950 students (headcount) - to a 2010 enrollment of 4,350 students (headcount). Between 2008 and 2010 alone, enrollment (headcount) grew by 17%.
- Growth in graduate offerings: SUNY College at Old Westbury is now a graduate degree granting institution, enrolling students in 11 graduate degree and certificate programs across its three schools: the School of Arts and Sciences, the School of Business, and the School of Education. An additional 18 programs are in various stages of development.

Past and current challenges facing the College include:

- Past period of disinvestment and decline, followed by a decade of growth: Emerging from a "history of negative perceptions" and the lingering consequences of "underfunding, declining enrollments, [and] deteriorating facilities," the College experienced a troubled decade through the 1990s but has seen tremendous improvements since.9
- Scarcity of resources: Scarcity of resources has been an ongoing challenge for the College. Availability of funds has limited the College's ability to hire personnel and to maintain physical assets at the level desired. Financial management has improved over the past decade but pressures have grown along with enrollments. 10

⁹ State University College at Old Westbury and the State University of New York. Mission Review (MRII) Memorandum of Understanding. Nov., 2006, p. 19. 10 State University College at Old Westbury and the State University of New York. Mission Review (MRII) Memorandum of Understanding. November, 2006, p.19

C. MISSION, GOALS, STRATEGIC PLANS & **ENROLLMENT TARGETS**

SUNY College at Old Westbury's mission, vision and strategic goals provided a foundation for development of Facilities Master Plan, and are intended to guide the institution through 2015. Through the facilities master planning process, College leadership identified additional goals related to the institution's evolution through 2023. All are described within this section.

Consistent with the 2006 Mission Review II (MRII) Memorandum of Understanding between SUNY and the College, SUNY College at Old Westbury remains committed to "continued growth, improvements in student success, and the building of a reputation for quality." 11

Mission Statement¹²

SUNY College at Old Westbury is a dynamic and diverse public liberal arts college that fosters academic excellence through close interaction among students, faculty and staff. Old Westbury weaves the values of integrity, community engagement, and global citizenship into the fabric of its academic programs and campus life. In an environment that cultivates critical thinking, empathy, creativity and intercultural understanding, we endeavor to stimulate a passion for learning and a commitment to building a more just and sustainable world. The College is a community of students, teachers, staff, and alumni bound together in mutual support, respect, and dedication to the Mission.

Vision¹³

To become a competitive, comprehensive college offering quality undergraduate and graduate degrees in the arts and sciences and professional areas to 4500 students on an attractive campus conducive to the needs of a growing residential and commuter student body.

Strategic Plan, 2010 – 2015¹⁴

Goals and Objectives identified within the Strategic Plan are as follows. Strategies with likely facilities implications are also noted.

Academic Goal: Expand academic programs and support

Objectives

Add resources to improve the overall academic experience for students

Add new academic initiatives

¹¹ State University College at Old Westbury and the State University of New York. Mission Review (MRII) Memorandum of Understanding. November,

¹² SUNY College at Old Westbury. About Old Westbury - College Mission. Retrieved November 1, 2010 from SUNY College at Old Westbury website: http://www.oldwestbury.edu/about/mission.cfm

¹³ SUNY College at Old Westbury. About Old Westbury – College Mission. Retrieved November 1, 2010 from SUNY College at Old Westbury website: http://www.oldwestbury.edu/about/mission.cfm

14 SUNY College at Old Westbury and Booz – Allen – Hamilton. SUNY College at Old Westbury Strategic Plan 2010 – 2015. Feb. 18, 2010.

- Improve academic support services
- Strengthen lower division advising services to promote early declaration of majors and consistent progress to degree completion
- Improve course sequencing and scheduling to ensure that courses are offered in a manner that ensures reasonable and timely progress to degree completion

Enrollment Goal: Grow enrollment to 4500*

Objectives

- Expand freshman class to a minimum of 600 (from the 2010 total of 400)¹⁵
- Increase residential students to a minimum of 1,200 (from the 2010 total of 1,050 on-campus Old Westbury students)16
- Increase geographical and ethnic diversity of students
- Facilitate the transfer process

*Note revised enrollment target of 5,000 students (headcount) by 2015 and 5,700 students (headcount) by 2023.

Retention Goal: By 2015, increase the overall 6 year graduation rate to 44% (from the 2004 cohort 6 year graduation rate of 39.4% ¹⁷)

Objectives

- Create customer-friendly services for constituent ease-of-use
- Increase the quality and number of student engagement activities
- Expand student support services

Brand Goal: Enhance image and outreach

Objectives

Strengthen identity of Old Westbury as a college of quality

Improve and expand relations with partners

¹⁵ Data from 9/20/10 census count of 403 first-time-to-college students; "Reg Numbers 201109 2011-09-22," provided by Tom DelGiuidice ¹⁶ Student Affairs, Student Activities, and Residential Life. Interview by Amy Kohn, et al, Oct 21, 2010.

DelGiudice, Tom. (DelgiudiceT@oldwestbury.edu). "additional info for master plan." E-mail message to Amy Kohn et al. 7 December, 2010; State University College at Old Westbury and the State University of New York. Mission Review (MRII) Memorandum of Understanding, November

Finance Goal: By 2015, achieve financial stability by pursuing a sustainable resource base through expanded and diversified funding partnerships and increased efficiency of operations

Objectives

- Modify and expand efforts to supplement the operating budget in order to: 1) minimize reduction in services and 2) increase transparency in resource planning
- Fund priority strategic plan initiatives from sources other than operating budget
- Increase receipts from gifts, fundraising activities and alumni

2015 – 2023: Strategic Initiatives Identified through the FMP Process

College leadership cited the following as important considerations for the Facilities Master Plan effort: 18

- Grow enrollment up to approximately 5,000 (headcount) students by 2015, and up to approximately 5,700 students (headcount) by 2023
- Grow academic programs at the undergraduate and graduate level; support the 11 graduate programs now in the pipeline, and continued evolution of undergraduate programs
- House up to 50% of full-time undergraduates approximately 2,000 students on campus by 2023; consider providing graduate and/or faculty housing as well

Enrollment Projections

SUNY College at Old Westbury anticipates significant enrollment growth at both the undergraduate and graduate levels between 2010 and 2023, with headcount expected to increase from 4,355 students in Fall 2010 to as many as 5,690 students by Fall 2023 - an increase of 30.7%. The number of full-time equivalent students (FTE) is projected to increase from 3,815 FTEs in Fall 2010 to as much as 4,824 in Fall 2023, a 26.4% rate of growth.

The College has experienced robust enrollment growth in recent years, with overall enrollment (headcount) rising from approximately 3,400 students in Fall 2005 to over 4,300 students in Fall 2010 - an increase of nearly 1,000 students. Between 2008 and 2010 alone, enrollment (headcount) grew by 17%.

Projected enrollment growth will be supported by College initiatives, including:

 Growth in graduate offerings: In accordance with the College's Strategic Plan, the College will continue growing existing graduate programs and expanding graduate offerings. As of Fall 2010, the College enrolled students in 11 new graduate degree/certificate programs across its three schools, with 18 more programs in various stages of development.

¹⁸ Facilities Master Plan Executive Committee Meeting, October 20, 2010.

Improved recruitment and retention: A First-Year Experience program, an Honors College program, and new facilities provide a foundation for growing enrollment through both recruitment and retention.

Figure C.1: Projected Enrollment Growth - Headcount

HEADCOUNT	ACTUAL	PROJECTED			2010-2023			
	Fall 2010	Fall 2013	Fall 2018	Fall 2023	% Change	# Change		
Undergraduate								
Full-time	3,512	3,649	3,913	4,117	+17.2%	+605		
Part-time	682	644	691	727	+6.6%	+45		
Total Undergraduate	4,194	4,293	4,604	4,844	+15.5%	+650		
Graduate								
Full-time	103	204	333	338	+228.2%	+235		
Part-time	58	204	500	508	+775.9%	+450		
Total Graduate	161	408	833	846	+425.5%	+685		
Total Headcount	4,355	4,701	5,437	5,690	+30.7%	+1,335		

Figure C.2 - Projected Enrollment Growth - FTE

HEADCOUNT	ACTUAL	PROJECTED			2010-20	23	FTE Conversion Factor*		
	Fall 2010	Fall 2013	Fall 2018	Fall 2023	% Change	# Change			
Undergraduate									
Full-time	3,400	3,532.63	3788.21	3985.70	17.2%	585.70	0.9681		
Part-time	293	276.67	296.86	312.33	6.6%	19.33	0.4296		
Total Undergraduate	3,693	3809.30	4085.07	4298.03	16%	605.03			
Graduate	Graduate								
Full-time	99	196.07	320.06	324.87	228.2%	225.87	0.9611		
Part-time	23	80.89	198.26	201.44	775.9%	178.44	0.3965		
Total Graduate	122	276.96	518.32	526.31	331.40	404.31			
Total Calculated FTE	3,815	4,086	4,603	4,824	26.4%	1,009			

^{*}For space planning purposes, this report uses Fall-only data. Actual enrollment data from Fall 2010 were used to calculate a conversion rate of headcount to FTE for use in converting projected headcount to projected FTE.

CAMPUS ENVIRONMENT

The SUNY College at Old Westbury campus features a rolling wooded environment that lends the institution a rural, park-like feel, despite its location near major commercial corridors and within a short drive to the heart of New York City.

The core of the campus is set back from surrounding roadways and is accessed via long driveways - A, B, and C Gate Roads - that each extend approximately 1 mile into the campus before meeting the Ring Road. The Ring Road circles the campus core, College athletic fields, and undeveloped wooded land. SUNY College at Old Westbury's primary entrance is on Route 106/107 - a major arterial - and routes visitors along a 4-lane, divided A Gate Road.

In accordance with legislative mandates, 279 of the College's 607 acres are available for campus-related development - much of it thickly wooded. The remaining 328 acres are designated "forever wild" as open space and buffer land.

Neighboring the property are large-lot single-family homes, golf courses, and strip-style retail development. Adjacent uses limit opportunities for expansion of campus boundaries. However, the College's 279 acres of developable land are sufficient to meet foreseeable facilities needs.

The age and character of structures reflects the history of the campus:

- Stable structures and several large single-family homes constructed in the first decades of the 20th century speak to the land's pre-campus use as the estate of noted equestrian F. Ambrose Clark
- Brutalist style, poured concrete buildings date from the origins of the College in the early 1970s.
- Newer brick and glass residential and Student Union facilities reflect a period of residential growth at the institution in the early 21st Century.
- The New Academic Building now under construction, which will replace the College's original academic complex, is evidence of a new era for Old Westbury - an era of robust enrollment growth and renewed commitments to modern, well-maintained learning environments.

Key campus areas include: the campus core, home to the College's academic, residential and athletic facilities; a stable zone, which features buildings and landscapes dating from the campus's legacy as an estate; and a service zone where the College's primary maintenance and storage functions are located.

Campus Core

The Campus Core is composed of several residential and academic building clusters, loosely connected by paths. Residence halls are located at the eastern and western edges of the campus core, with academic, administrative and campus life facilities in between. Primary building clusters within the Campus Core are:

ACADEMIC VILLAGE AREA

The SUNY College at Old Westbury campus was initially designed in the early 1970s as an "Academic Village" -A single complex of four interconnected academic buildings, layered into hillsides and wrapped on three sides by nine residential buildings. Skyways and plazas connect the many-leveled Brutalist buildings, which are

constructed of exposed poured-in-place concrete. The Academic Village anticipated current "live-learn" trends in campus development, and reflected the innovative higher education experience that Old Westbury sought to provide. ¹⁹ However, by the late 1990s, suitability, condition, and accessibility concerns – and the very high cost of rehabbing the academic facilities, estimated at over \$52 million – prompted a determination that "the existing Academic Village could no longer meet the programmatic requirements of the evolving academic program of the College." ²⁰ The College will soon relocate academic and student service functions within the Academic Village to the New Academic Building, now under construction near the center of the campus core. There are no plans in place to decommission the residential buildings within the Academic Village, although condition of these facilities is also a concern. Today, roughly 75% of the 800 beds within these residence halls are occupied by students from nearby NYIT and Briarcliff, in accordance with lease agreements. Remaining beds house SUNY College at Old Westbury students.

MEADOW AREA

Between 1976 and 1985, a second cluster of buildings was developed: the Campus Center, the Clark Athletic Center, and the Natural Science Building. All are poured-in-place concrete frame structures built in the style of Functional Modernism, loosely located around a lawn, called "the meadow," which terraces down to athletic fields and provides views of the surrounding wooded landscape.

The first portions of the Campus Center, E, F, G, and H Wings, were constructed in the mid-1970s; I, J, K, and L Wings followed in the early 1980s. Covered "bridges" connect the Campus Center to a large parking area, and are for many, the primary and iconic point of arrival into the campus core. As with the Academic Village, the Campus Center was designed to provide an internally-focused environment. A major central atrium provides strong interior connections between a variety of uses. The Campus Center now houses the College's library, theater venues and primary dining hall, along with College administration, student services, and several academic facilities (e.g., Visual Arts studios). Recent renovations have clustered Admissions, Financial Aid, and the Registrar along the Atrium.

Clark Athletic Center, named for Ambrose Clark, was constructed in 1980 as the College's indoor athletics and recreation facility. The Natural Science Building followed in 1985, and continues to serve as the College's Biology, Chemistry, Physics, and science research facility.²¹

The Student Union was constructed in 2003 to provide additional student dining, event, and club/organization space, as well as to support growth in the College's residential population. The Student Union is located on the periphery of the Meadow Area, between the Academic Village and the Campus Center.

The College's New Academic Building, currently under construction just west of the Campus Center, will reinforce the Meadow as a potential focal point for the campus. As noted above, the New Academic Building will replace the academic facilities within Academic Village.

WOODLAND RESIDENCE HALLS AREA

A cluster of five residential buildings known as the Woodland Residence Halls were constructed northeast of

^{19 &}quot;BCIEXTER," provided by Tom DelGiudice and SUCF; Program Study for New Academic Building, provided by Tom DelGiudice; Draft April 27, 2010 – Middle States Periodic Performance Review, Standard III: Institutional Resources. Provide by Tom DelGiudice.
20 "New Academic Building at SUNY College at Old Westbury: Program Study," provided by Tom DelGiudice;

^{21 &}quot;BCIEXTER," provided by Tom DelGiudice and SUCF; Wikipedia. "F. Ambrose Clark." http://en.wikipedia.org/wiki/F._Ambrose_Clark.

the Campus Center in 2003. Today, approximately half of the College's 1,650 bed residential capacity is within Woodland Residence Halls.

Stable Zone

Along B Gate Road, remnants of the former Clark Estate remain. Several buildings dating from the estate are still in active use: Clark's daughter's former home now serves as the President's House; the Trainor House houses Empire State College; stables and paddock are leased for equestrian use in the summer. A historic gatehouse marks the entry the campus from B Gate. Some structures - including the Stable Quadrangle and Carriage House - are in very poor condition. With its winding tree-lined lane and low-fenced pastures, this portion of the campus provides a glimpse into Long Island's past.

Service Zone

C Gate Road is a service zone, home to Service Building A (the College's facilities operations center) and Service Building B (the College's central storage and receiving facility). Service Buildings A and B were constructed as temporary facilities in 1971 and are still in use. Some improvements (e.g., roof and window repairs) have been made since that time. The location of Service Building A, relatively remote from the campus core, creates operational inefficiencies for facilities staff.

A third service building, the Heating Plant, is located off the Ring Road, just south of the campus core. The Heating Plant will ultimately be decommissioned, and the College has begun a shift to satellite boilers.



Figure D.2: Images of SUNY College at Old Westbury



Campus Center with entry bridges; view from Campus Center Parking Lot



Campus Center Atrium in H-Wing; with Dining Hall at top right



Academic Village; the New Academic Building now under construction will replace the academic facilities within this complex; the residence halls will continue to operate at this location following academic functions have been relocated. The long-term future of the residence halls will be determined through a separate process involving the College and DASNY.



The New Academic Building, which will be the College's largest academic facility, is expected to open in Fall of 2012.



The Natural Science Building would benefit from renovation and modernization.



Clark Athletic Center contains a mix of large, heavily used spaces that are in reasonably good condition (e.g., gym and pool), highly utilized and undersized spaces (e.g., weight and fitness rooms), and some smaller heavily underutilized spaces that should be repurposed (e.g., racquetball courts).



The Student Union was constructed in 2003 to better support College-related activity beyond the classroom. Additional, well-located campus life spaces are needed to help bridge the current divide between residential and commuter students.



Woodland Residence Halls offer picnic tables and benches, but would benefit from additional recreation facilities (e.g., basketball courts)



The campus is situated within a wooded, park-like setting.



Remnants of the Clark Estate along B Gate Road provide attractive landscapes, and a glimpse into the history of Long Island.

Figure D.3: Campus Structures

Figure D.3: Campus Structures									
Building Name	Year Built	Gross Square Feet (GSF)	Net Square Feet (NSF)	Assignable Square Feet (ASF)	Primary Use				
ACADEMIC & CAMPUS LIFE BUILDINGS									
Academic Village, Building A	1972	56,279	50,982	32,481	Academic				
Academic Village, Building B	1972	42,562	38,707	22,054	Academic				
Academic Village, Building C	1972	20,316	18,555	11,783	Academic				
Academic Village, Building D	1972	44,810	37,924	25,625	Academic				
Campus Center, I, J, K and L Wings	1982	136,014	130,343	97,917	Academic / Administrative				
Campus Center, E, F, G, and H Wings	1976	173,668	136,899	76,694	Academic / Administrative				
Clark Athletic Center	1980	66,120	61,799	48,590	Educational				
Natural Science Building	1985	69,386	61,773	40,471	Educational				
Student Union	2003	72,170	61,228	39,812	Campus Life				
RESIDENCE HALLS									
Woodland Res Hall Building 1	2003	60,614			Residential				
Woodland Res Hall Building 2	2003	60,614			Residential				
Woodland Res Hall Building 3	2003	60,614			Residential				
Woodland Res Hall Building 4	2003	60,614			Residential				
Woodland Res Hall Building 5	2003	60,614			Residential				
Academic Village Res Hall Building 4	1971	17,933			Residential				
Academic Village Res Hall Building 5	1971	22,048			Residential				
Academic Village Res Hall Building 6	1971	21,025			Residential				

Figure D.3: Campus Structures, Cont'd

Building Name	Year Built	Gross Square Feet (GSF)	Net Square Feet (NSF)	Assignable Square Feet (ASF)	Primary Use
Academic Village Res Hall Building 7	1971	20,515			Residential
Academic Village Res Hall Building 8	1972	20,635			Residential
Academic Village Res Hall Building 9	1972	20,402			Residential
Academic Village Res Hall Building 10	1972	18,288			Residential
Academic Village Res Hall Building 11	1972	21,607			Residential
Academic Village, Res Hall Building 12	1972	21,968			Residential
SUPPORT FACILITIES					
Academic Village Dining Hall	1972	3,336			Campus Life
Academic Village Health Center	1972	3,905			Campus Life
President's House	1933	6,000	5,874	5,874	Residential
President's Garage	1933	520			Operations
Trainor House	1931	15,000	13,072	11,352	Academic (non-College)
Service Building A	1971	19,870	17,337	15,074	Operations
Service Building B	1971	14,950	12,138	11,651	Operations
Heating Plant	1971	11,200	9,439	679	Operations
Dining #9 State XIV	1972	6,759	6,478	4,689	Campus Life

Figure D. 3: Campus Structures, Cont'd.

rigure D.S. Campus	Figure D.3: Campus Structures, Cont'd							
		Gross Square Feet	Net Square Feet	Assignable Square				
Building Name	Built	(GSF)	(NSF)	Feet (ASF)	Primary Use			
OTHER SERVICE & SUPPORT FACILITIES								
Boces Storage Shed	1985	55			Operations			
Field Office (Architect)	1969	1,478			Operations			
Garage	1921	200			Operations			
Salt & Sand Storage	1988	1,243			Operations			
Security Post - C Gate	1974	156			Operations			
Sub-Station 5	1969	267	258	0	Operations			
Switch Gear	1969	256			Operations			
Telephone Equip. Bldg.	1999	240			Operations			
Univ. Police Booth - A Gate	1998	96			Operations			
OTHER HISTORIC STRUCTURES								
Gate House	1912	1,200			Other			
Gazebo	1915	1,260			Other			
Green House	1916	3,296			DEMOLISHED			
House No. 5	1912	4,840			Other			
House No. 29	1904	4,070			Other			
Old Service Shops Garage	1912	10,360	8,720	8,720	Other			
Stable	1936	1,617			Other			
Stable	1936	2,272			Other			
Stable	1920	2,229			Other			
Stable Quadrangle	1912	25,760	23,354	23,294	Other			

Year built and gross square feet data from "BCIEXTER". Net square feet and assignable square feet data from BCAS.

E. FACILITIES MASTER PLAN GOALS

The following Master Plan Goals, developed through discussion with the College's Facilities Master Plan Executive and Advisory Committees, guided development of the Plan:

- Accommodate Enrollment Growth: Accommodate an enrollment of up to 5,000 (headcount) students by 2015, and up to 5,700 students (headcount) by 2023.
- Support the College's Academic Enterprise & Support Needs: Provide quality learning environments for students. Support growth in academic programs at the undergraduate and graduate level. Provide facilities that embrace technology; provide for support facilities, such as the daycare center
- Accommodate Additional Housing: Identify optimal site for student housing expansion, enabling the College to house up to 50% of full-time undergraduates on campus - approximately 2,000 students - by 2023; identify optimal sites for potential graduate and/or faculty housing as well
- Reinforce Character & Identity: Preserve Old Westbury's tradition as a small-college learning environment in a park-like setting with a Social Justice focus that supports pedagogical experimentation. Balance campus growth with preservation of open space.
- Leverage the Landscape: Provide for attractive and inviting landscapes across the campus' 607 acres - both to serve the campus community and to honor commitments to the broader community. The space that will be shaped by the New Academic Building, the Student Union, and the Campus Center is a particularly important opportunity for defining a new network of outdoor campus gathering spaces
- Strengthen Community: Provide spaces that support interaction among faculty, staff, and students, and that help to build community; provide more spaces that bring together residential and commuter students.
- Grow Sustainably & Efficiently: Provide for "green" facilities that are mindful of maintenance and operations requirements and can be efficiently maintained; provide a coordinated "systems planning" approach to future facilities investments.

Part 2: Summary Findings

The SUNY College at Old Westbury Facilities Master Plan included a full space needs analysis. This analysis identified current space deficits at the College, and provided projections of future space deficits. The Facilities Master Plan also involved a physical condition assessment, which focused on College buildings and building systems, campus landscapes, circulation and parking, and site utilities. Both efforts were grounded in the College's goals and strategic plans, described above.

Together, the space needs analysis and the physical condition assessment involved dozens of interviews with College affiliates; on-the-ground assessment of campus facility and site conditions; review of existing reports, plans, and studies; review of course scheduling data, the College's physical space inventory, and current and projected enrollment and staffing counts.

Findings from these two phases provide an integrated picture of what capital investments the College will need in the decade to come. A summary of those findings - of the issues, opportunities and challenges confronting the College today - are described below. For detailed information on findings, please see the Facilities Master Plan Phase 2 Report: Assessment of Conditions and the Facilities Master Plan Phase 3 Report: Analysis of Space Needs, both available under separate cover.

F. SUMMARY OF PHYSICAL CONDITIONS

Renewal of Core Facilities

CAMPUS CENTER CLARK ATHLETIC CENTER NATURAL SCIENCE BUILDING

The Campus Center, the Natural Science Building, and the Clark Athletic Center - core facilities that play an important, ongoing role in the life of the College - have both condition and suitability issues. These facilities should be the focus of renovation efforts over the next two capital cycles.

Recent and anticipated renovation projects have targeted portions of the Campus Center (e.g., H, I, K Renovations, Library Renovation, Phase 1), the Natural Science Building (e.g., light upgrade of finishes in lecture hall and classrooms) and the Clark Center (e.g., pool renovation, team locker rooms, ongoing gymnasium maintenance). These projects have provided for some freshly painted technology-equipped classrooms, some upgraded athletic facilities, and co-location of most student services off the Campus Center Atrium (e.g., Admissions, Financial Aid, the Registrar, Student Accounts). However, additional investment will be needed.

In all three buildings, many components of building systems are original, have exceeded their useful life, and should be upgraded and replaced. Outdated finishes and equipment cause

much of these facilities to appear worn and tired, and present a barrier to campus efforts to provide a quality learning environment both within and outside of classrooms. Condition and suitability concerns specific to each building include:

Campus Center, E, F, G, & H Wings:

- The cafeteria, the College's main dining venue, is a facility from another era. It serves only residential students, although well-located spaces that draw commuter and residential students together outside of classrooms are very much needed. The small, outdated facility stands in stark contrast to newer and more recently renovated college dining facilities, which typically feature a range of "stations" and emphasize choice - in seating, in menu, and in food format (e.g., made-to-order vs. pre-prepared vs. make-your-own options).
- Poor acoustics, solar glare and water damage are evident in classrooms and studios

Clark Athletic Center:

- The racquetball and squash court wing, with its tiny doorways and second-story viewing mezzanine, sees very little use by the College community and almost no use by students for its intended purpose. Spaces within this wing are very difficult to reuse in their current configuration.
- The weight room and fitness room are small, stark spaces adapted from other functions (e.g., storage rooms) that see more use than they are able to accommodate.
- An open mezzanine space in the lobby is not ADA accessible, cannot be secured, and is difficult to use flexibly in the service of the Athletic Department's needs (e.g., space for meetings with recruits, space for teams to view video, space for additional coach's offices).
- Both in quantity and quality, there is a significant gap between the kinds of fitness and recreation facilities that have been a focus of investment for colleges and universities across the country, and the current offerings at Old Westbury. Recent investments in the natatorium, the gymnasium and in team locker rooms are important first steps.

Natural Science Building:

- The large, multi-disciplinary laboratory offers both advantages (including fostering collaboration) and disadvantages (particularly as the number and size of sections has grown, and several classes run simultaneously within this undivided space).
- A large, central Atrium is home to living specimens, but lacks soft seating and an inviting atmosphere, and is largely underutilized.
- Back-up power issues are a challenge, and sometimes interfere with experiments.

As the College seeks to grow its graduate offerings in the sciences, to improve retention among undergraduates, and to offer a competitive, high quality learning environment, existing science facilities may be a barrier.

The Outmoded Academic Village

The Academic Village is an inflexible facility in poor condition with a range of suitability and accessibility issues - all of which prompted construction of the New Academic Building. When the College's academic programs relocate to the New Academic Building, the Academic Village will be relatively remote from the academic and co-curricular heart of the campus. Long-term use of the Academic Village for core academic functions is not recommended.

The Clark Estate

Many buildings dating from the Clark Estate - most notably the Stable Quadrant and Carriage House - are in poor condition, but are distinctive assets that reflect the history of the campus and Long Island. Where possible, these structures should be stabilized and actively used.

Circulation & Landscapes

The College's attractive outdoor environment, encompassing over 600 acres, is a tremendous asset that could be more fully utilized by the campus community. Landscape investments could help strengthen the campus outdoors as an easily navigable, welcoming, well-utilized place to be. Transportation improvements could help support safe and convenient travel to and through the campus for walkers, drivers, parkers, shuttle riders and cyclists - and provide an opportunity for a stronger arrival experience at the core campus.

For additional information on the condition of campus buildings and systems - including site utilities - please see Master Plan Framework (Part 3 of this document) or the Facilities Master Plan Phase 2: Assessment of Physical Conditions Report (under separate cover).

G. SUMMARY OF SPACE NEEDS

Given the rapid increase in enrollment SUNY College at Old Westbury has experienced in recent years - nearly 30% growth in headcount between 2005 and 2010 - the College is currently experiencing space deficits in a range of categories.

The opening of the New Academic Building in 2012 and the anticipated Library renovation will largely address some of these shortages (e.g., classroom space, open lab space, academic office space) - even with continued anticipated enrollment growth over the next two years and the presumed closure of academic facilities within the Academic Village. ²² In addition, the new and renovated facilities will both provide better space.

However, based on the analysis undertaken within the Facilities Master Plan process, ²³ even given these investments, SUNY College at Old Westbury faces current, near-term and longterm space deficits. During the coming capital cycles, the College will need to:

- Address current space needs: Athletics and fitness space, dining, student activities space, research space within Psychology and the Sciences
- Address near-term space needs (with growth to 4,701 headcount | 4,086 FTE, expected 2013): Modest amount of additional space for classrooms, instructional labs/studios, open labs, study areas
- Plan for mid-term space needs (with growth to 5,437 headcount | 4,603 FTE, expected 2018): General-purpose classrooms, administrative offices
- Plan for longer-term space needs (with growth to 5,690 headcount | 4,824 FTE, expected 2023): More academic space of all kinds, more campus life space of all kinds, additional space for central services

²² Given condition and suitability issues, the Academic Village is not regarded as a viable solution to the College's academic space deficits. Some portions of the facility, however, (e.g., Building A) could provide temporary surge space to enable renovation of core campus facilities. ²³The FMP analysis is based on national space planning guidelines from consultant team

members Rickes Associates and from the Council of Educational Facility Planners International (CEFPI). The SUNY system has a different set of planning quidelines used to quantify campus space needs. Different formulas result in different assessments of space needs at Old Westbury. The largest difference is in academic and research space. According to SUNY guidelines, the College is projected to have sufficient classroom space, instructional lab/studio space, study/library space and faculty research space in 2013, while the Rickes/CEFPI guidelines identify shortfalls in those categories. The FMP process will use the Rickes/CEFPI guidelines as a basis for responding to OW's space needs.

Figure G.1: Total Projected Space Deficits through 2023 (or 5,690 Headcount, 4,824 FTE) without New Facilities*

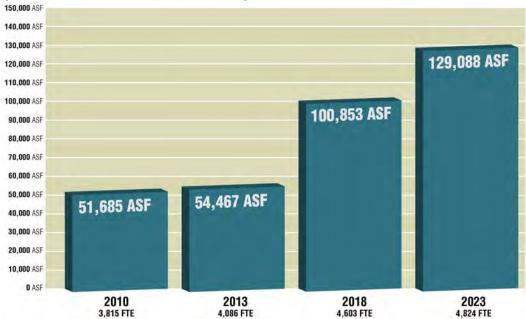
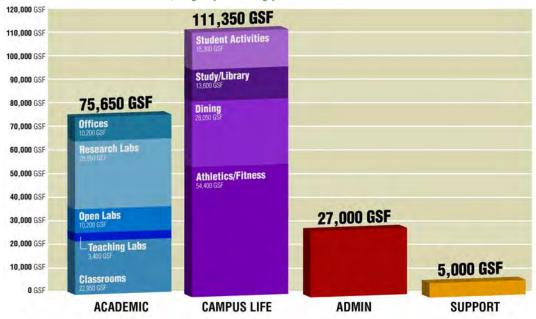


Figure G.1: Projected Space Deficits through 2023 (or 5,690 Headcount, 4,824 FTE) by Space Type without New Facilities*



*Assumes active use of New Academic Building and closure of Academic Village academic buildings, except for use as surge space. Numbers have been rounded. Numbers reflect College expectations that research space is required only for Psychology and Science departments, and that, due to the College's metropolitan location, operational practices, and significant current surplus of central services space, additional central services space will not be needed within the FMP timeframe. Data above is based on CEFPI planning guidelines; for many space categories (e.g., classroom space), SUNY space guidelines are more conservative. To convert numbers shown in Assignable Square Feet (ASF) to Gross Square Feet (GSF), multiply the ASF by 1.7. For more information, see the Phase 3 Report: Analysis of Space Needs.

H. MASTER PLAN PROGRAM

The findings described above provided a basis for the Facilities Master Plan Program - an integrated list of campus site, space and facility needs to be targeted through 2023.

Program elements recommended for the 2013 - 2023 timeframe are listed below:

PROVIDE FOR RENEWAL & REPURPOSING OF EXISTING FACILITIES

- Address condition and suitability issues in the Campus Center, Natural Science Building, and Clark Athletic Center. Upgrade outdated building systems, finishes/furnishings and equipment in unrenovated potions of these facilities
- Seek to stabilize and foster active use of stable, residential and other facilities dating from the Clark Estate – many of which are in poor condition, but which are unique resources
- Given the location of Student Union relative to future academic functions, and given the flexible configuration of the building, consider repurposing the Student Union building for academic and/or administrative uses

PROVIDE FOR SPACES THAT SERVE BOTH COMMUTER AND RESIDENTIAL STUDENTS

Add/reconfigure centrally located indoor and outdoor spaces in ways that help draw commuter and residential students together, and that strengthen the College as a campus community to address a core need emphasized by students, faculty and staff, and underscored by the shortage of dining and fitness space.

ENHANCE CAMPUS LANDSCAPES AND THE OUTDOOR ENVIRONMENT

Focus landscape investments on enhancing the campus arrival experience, providing welcoming outdoor gathering places including a potential central "quad", establishing a strengthened network of pedestrian paths linking campus destinations, enhancing outdoor athletic and recreation facilities, and supporting better utilization of open space acreage for recreation, outdoor education and more.

ACCOMMODATE TRANSPORTATION & CIRCULATION NEEDS AS THE CAMPUS GROWS:

Address needs across modes, providing for safe and welcoming driving, parking, biking, and walking facilities; address pedestrian-vehicle conflict areas; and support efficient shuttle service.

ADDRESS NEEDS BEYOND THE CAMPUS CORE, INCLUDING CAMPUS SUPPORT FUNCTIONS AND CLARK ESTATE STRUCTURES:

- Accommodate the planned, free-standing daycare facility to make needed space available in E Wing of the Campus Center, to enable growth in the number of children served, and to address College goals for a purpose-built sustainability-focused facility.
- Address space needs associated with facilities maintenance and operations; plan for adequate and appropriately located space.
- Identify potential options related to facilities dating from the Clark Estate.

LOCATE SITES FOR POTENTIAL EXPANSION OF RESIDENTIAL FACILITIES

•	Identify sites with capacity to accommodate up to 50% of the College's full-time undergraduates
	(projected at 2,000 students by 2023).

•	Identify	sites to a	accommod	ate pos	sible grad	duate or	facultv	housing.

Part 3: Master Plan Framework

The master plan framework described below provides an actionable vision for the future of the SUNY College at Old Westbury campus. The framework represents a coordinated approach to future capital investments that will maximize the positive impact of each change made and each dollar invested. This framework will guide investments through 2023 and beyond, as the College addresses its site and facility needs in the service of mission and strategic plans.

CAMPUS PLANNING: FRAMEWORK FOR FUTURE CAMPUS INVESTMENTS

The framework for future campus investments at SUNY College at Old Westbury is guided by three key elements:

- 4. Renewal of Older Buildings to modernize outdated teaching, learning, and co-curricular spaces in support of current pedagogy, as well as to upgrade aging systems
- Provision of Additional Space to meet current and projected shortfalls, with a particular focus on meeting needs for academic, dining, and recreation/athletics space
- 6. Creation of a More Cohesive Campus Environment that focuses new building initiatives and open space improvements around a central campus green

Through a coordinated approach to facilities renewal, facilities expansion and purposeful upgrade of landscapes, the campus will evolve to better support the College as a community of learning.

New and Expanded Facilities Shape a Central Campus Green

Three major building additions and a future academic facility - addressing academic, dining, and recreation/athletics space needs - will be sited to define and reinforce an active green space at the emerging heart of the campus, near the New Academic Building now under construction.

Until recently, the SUNY College at Old Westbury campus has been relatively dispersed, with primary facilities (e.g., the Academic Village, the Woodland Residence Halls, the Campus Center) located in relatively isolated, inwardly-focused building clusters, loosely linked by paths through the landscape. This dispersed organization has fostered a student experience that is physically fragmented; it has complicated College efforts to provide the strong sense of community and identity that is often the hallmark of small college campus environments.

The New Academic Building now under construction beside the Campus Center represents a new commitment to consolidating non-residential campus destinations, and placing members of the campus community within easy reach of each other.

The Facilities Master Plan leverages significant current investments in this part of campus - the New Academic Building, the re-cladding Campus Center, recent consolidation of student services around the Campus Center Atrium - by siting needed new academic and campus life space that will strengthen this area as a hub, a true "center of gravity" for the SUNY College at Old Westbury Campus.

Additions to the Natural Science Building, the Campus Center, and Clark Athletic Center will be sited to shape a Proposed Campus Green at the center of this hub. The Proposed Campus Green will be a bustling and imageable open space that links key campus destinations both existing and proposed, including: STEM, fine art, and general-purpose academic facilities; administrative and student service facilities such the Admissions Office; and student-oriented destinations such as dining and fitness facilities.

Campus destinations - and with them faculty, staff and students - will now be clustered near the center of the campus core, supporting synergies and interaction among faculty, staff, and students. Through the Facilities Master Plan, both the identity and experience of the campus will be transformed.

Facilities Investments Strengthen OW as a Community of Learning

New construction and renovation will provide for a physical environment supportive of the College's mission and strategic plan.

Un-renovated teaching, learning and co-curricular spaces in spaces in the Natural Science Building, the Campus Center, and Clark Athletic Center will be modernized to meet current practices and pedagogy; aging building systems will be upgraded for improved operational and energy performance.

Building additions will equip this institution with new space when and where it is needed most, addressing the College's significant current space deficits in dining and athletics - spaces that bring together members of this diverse student body - along with modest and growing deficits in academic space, particularly within the sciences.

Should steady enrollment growth continue as the College projects, to approximately 5,700 students (headcount) by 2023, a future academic building will provide additional academic, administrative, and campus life space.

Full List of Capital Initiatives

BUILDING INITIATIVES

The College's highest priority major buildings initiatives for the 2013 – 2023 timeframe are as follows:

Renovation & STEM Addition at the Natural Science Building: This initiative will include upgrade of the College's aging Natural Science Building to reflect current pedagogy and address outdated building systems; the addition of new space to address growing deficits in the Sciences and in general-purpose classrooms; and relocation of the Math & Computer Science Department and the IT group for a consolidated Science, Technology, Engineering and Mathematics (STEM) facility. These relocations will also free up space for needed expansion of other academic departments within the New Academic Building and in Campus Center G Wing. The addition will be sited between the existing building and the Proposed Campus Green, providing an active new façade that engages and helps to define this important central open space.

- <u>Dining Expansion / "Student Commons" at the Campus Center:</u> Through this initiative, the College will provide a new, attractive, centrally located "student commons" that brings together both residential and commuter students, upgrades the College's outdated and undersized dining hall, and provides strong connections between the Campus Center Atrium and the Proposed Campus Green. The addition will be sited along the Proposed Campus Green, providing an active new façade that engages and helps to define this important central open space.
- Renovation & Addition at Clark Athletic Center: A renovated and expanded Clark Center will address condition, suitability and building systems issues within the existing facility, as well as significant and growing space deficits. This initiative will provide a more competitive, efficient, and sufficiently sized athletics and recreation facility that enhances the student experience at the College, bringing together residential and commuter students. The addition will be sited along the Proposed Campus Green, providing an active new façade that engages and helps to define this important central open space.

Other major building initiatives include:

- New Daycare Center: Construction of a new, free-standing daycare center along C Gate Road. Relocation of the daycare center from Campus Center E Wing will enable the College to recapture this space for student services offices and lounge space.
- Future Academic Building: Should enrollment grow to 5,700 students (headcount) in accordance with College projections, an additional academic building will ultimately be needed. This building would be located at the southern edge of the Proposed Campus Green, on the site of the current soccer field.

In addition, the College will pursue a series of smaller renovation initiatives targeting the Campus Center Wings E, F, G, H and L - portions of this complex that have not been touched by recent renovation initiatives, along with a modest backfill renovation in the Student Union.

- Library Renovation, Phase 2: Phase 2 construction of Library renovation and upgrade initiative (SUCF Project No. 31229). Both Phase 1 and Phase 2 have been designed; Phase 1 construction will begin in early 2012 and finish Fall 2012.
- Campus Center F Wing Renovation, Phase 1 & 2: Renovation of Campus Center F Wing to provide for upgrade (Phase 1) and expansion (Phase 2) of Visual Arts facilities.
- <u>Campus Center G Wing Renovation:</u> Renovation of Campus Center G Wing for consolidated Student Media center (including the TV studio, radio broadcast studio and newspaper offices) and student meeting, office and lounge space.
- Campus Center E Wing Renovation: Renovation of current Daycare Center (Campus Center E Wing) for Student Service Offices and Student Lounge/Study/Meeting Space
- Student Union Backfill Renovation: Renovation of radio broadcast studio and student newspaper office for student office, activity, lounge and/or study space following consolidation of student media functions in G Wing.

Other building-related initiatives are as follows:

- Renovation of Heating Plant for Facilities Operations Center: Renovation of the Heating Plant building to provide a right-sized Facilities Maintenance & Operations Center close to the campus core, once the co-gen plant is decommissioned.
- <u>Demolition of Academic Village Buildings B, C and D</u>: Demolition of outmoded Academic Village Buildings B, C, and D following relocation of academic functions to the New Academic Building.
- Stabilization & Expansion of Horse Facilities: Seal building envelopes and prevent further deterioration of 1920's-era stable facilities dating from the Clark Estate. As is defined within the College's Stewardship Plan, in order to support a viable equestrian operation, construct along B Gate Road: a new Enclosed Riding Ring (covered, indoor structure); new Summer Stalls; and a paved parking lot.²⁴

The College will also pursue a series of site initiatives focused on landscape, transportation and circulation improvements.

LANDSCAPE INITIATIVES

Landscape initiatives are aimed at establishing and reinforcing a Proposed Campus Green, around which major new building initiatives will be oriented; upgrading the College's existing athletic field facilities; and enhancing outdoor recreational amenities. Landscape initiatives are as follows:

- Proposed Campus Green: Creation of an active new open space at the heart of the Old Westbury campus, shaped by existing buildings and proposed facilities expansions
- Softball Field Upgrade: Upgrade of softball field to provide for synthetic turf, lighting, and seating, as well as to align with NCAA standards for field size and layout
- Soccer Practice Field Upgrade: Upgrade of field, including provision of synthetic turf, lighting and bleacher seating
- New Basketball Courts at Woodland Residence Halls: Addition of two new basketball courts proximate to the Woodland Residence Halls
- Relocation/Upgrade of Existing Soccer Competition Field: Relocation of field in advance of Future Academic Building; upgrade of field, including provision of synthetic turf, lighting, and, potentially, a surrounding jogging track
- Woodland Trail Improvements: Upgrade of existing trail network
- Re-orientation of Baseball Field: Reorientation of baseball field to comply with NCAA recommendations for east-northeast alignment.

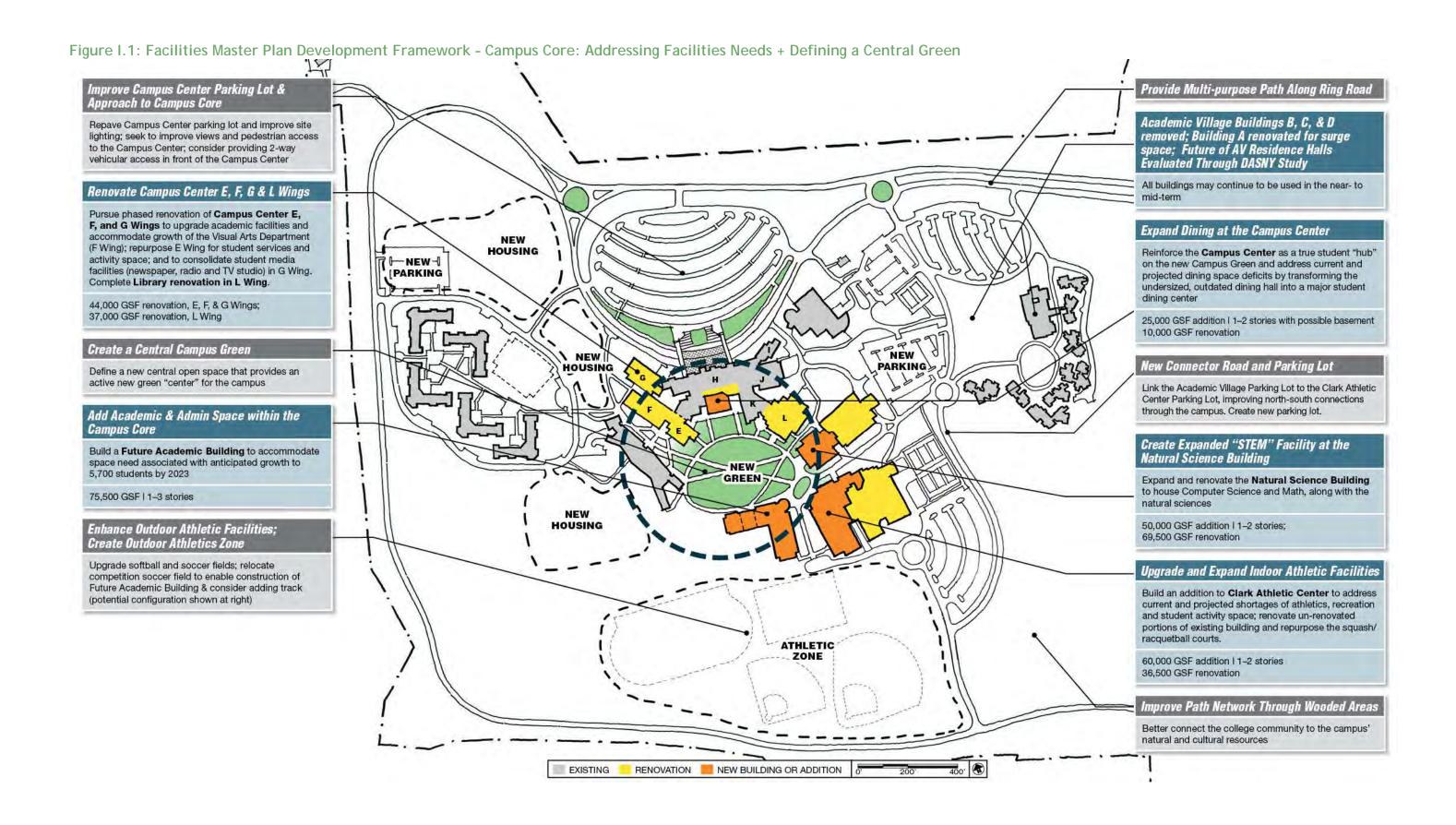
²⁴ The College does not currently offer an equestrian program.

CIRCULATION INITIATIVES

Campus circulation initiatives are aimed at improving connectivity, enhancing circulation for a range of modes, and addressing future parking needs. Circulation initiatives are as follows:

- New Parking Lot at Woodland Residence Halls (150 spaces): Provision of parking at the Woodland Residence Halls, which will free up spaces at the Campus Center Parking Lot for use by the broader campus community
- Campus Center Parking Lot Upgrade: Upgrade of Lot through repaving, replacement of site lighting, improvements to the drop-off area / "arrival plaza", and potential enhancement of visual and physical access between the Campus Center and the parking lot
- New North-South Connector Road: New road connection linking the Academic Village and Student Union Parking Lots to the Clark Athletic Center Parking Lot
- New Parking Lot along Connector Road (150 spaces): Construction of a New Parking Lot along the proposed North-South Connector Road
- New Multi-Purpose Path along the Ring Road and A Gate Road: Provision of new path to better support on-campus walking, jogging, and cycling

Additional information on each capital initiative is provided on the following pages.



CEDAR SWAMPRD 107 A Gate **Heating Plant Site** Repurpose building as centrally located Facilities Operations Center when co-gen plant is decommissioned. Existing Service Area Zone DAYCARE Construct new Daycare Center and playground proximate to Building No. 29. HOUSING Accommodate potential future graduate and/or faculty **FACILITIES SUPPORT** Decommission Service Building A once the Heating Plant Building has been repurposed as Facilities Operations Center. Continue to use Service Building B for storage. Campus Core See previous diagram for details. Stables Zone STABLES Reinforce as stable operation—repair existing buildings and add summer stalls, an enclosed riding ring and a parking lot (as described in College's Stewardship Plan). TRAINOR HOUSE Continued use of Trainor House for Empire State College and/or conference center. **B** Gate

Figure I.2: Facilities Master Plan Development Framework - Outside the Campus Core: Leveraging Cultural & Historic Assets, Improving Campus Operations







J. BUILDING INITIATIVES

Building initiatives are described in "project sheets" within the pages that follow. "Project sheets" include the following information for each building initiative:

- Description of the initiative
- Square footage to be renovated, added or demolished
- Link to mission, strategic plan and institutional goals
- Preliminary program
- Goals and rationale
- Development guidelines
- Phasing approach
- Surge space requirements
- Suggested systems upgrades

As each building initiative is implemented, studies will re-confirm program and space needs.

Additional information on changes in building use can be found at the end of this section.

Additional information on phasing, surge space and cost estimates for each initiative can be found within this report in Part 4: Implementation.

Phasing approaches described within the Facilities Master Plan reflect the current goals and priorities of College leadership. Phasing may be revised following completion of this report in response to availability of funding, speed with which enabling projects can be completed, changes in enrollment, etc. The College and the Fund will revisit phasing plans at the outset of each capital cycle.

Similarly, Facilities Master Plan findings regarding both surge space and costing reflect current "best estimates." These estimates may be revised in response to further study.

Renovation & STEM Addition at the Natural Science Building

DESCRIPTION: Transformation of the Natural Science Building into a modernized, consolidated STEM (Science, Technology, Engineering & Mathematics) facility through full renovation and a 2-story addition.

MEDIUM INTENSITY RENOVATION: 69,500 GSF

ADDITION: 50,000 GSF, 2 STORIES



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS:

- Strategic Plan Academic Goal: Expand academic programs and support
- Strategic Plan Brand Goal: Enhance image and outreach
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: Increase the overall 6 year graduation rate
- Academic Plans: Provide graduate offerings across the curriculum, including MS and MAT programs in **Biology and Chemistry**

PRELIMINARY PROGRAM

Renovation:

- 24,000 GSF = Biological Sciences Department
- 25,500 GSF = Chemistry & Physics Department
- 9,500 GSF = Classrooms/Lecture Halls
- 10,500 GSF = Public Services, Student Activities, Other

Addition:

- 16,500 GSF = Biological Science Department
- 1,500 GSF = Chemistry & Physics Department
- 19,000 GSF = Computer Science & Math Department
- 8,500 GSF = IT Group & Data Center
- 4,500 GSF = Classrooms

GOALS & RATIONALE

Upgrade the College's aging science facilities - including labs that are original to the building - to reflect current pedagogy.

- Add new space to address growing deficits in science facilities and classrooms, as well projected space deficits for the Math & Computer Science Department and the IT group.
- Modernize building systems including upgrade of the back-up power system, which is currently insufficient to preserve experiments during outages
- Improve efficiency of space use through potential division of the building's large, multi-purpose lab and partial reprogramming of the large, underutilized central atrium.
- Consolidate science and technology-related departments into a true STEM facility at the Natural Science Building, through relocation of the Mathematics and Computer Science Department (from the New Academic Building) as well as the College's IT group and Data Center (now in Campus Center G Wing). This would free up needed space in the New Academic Building for expansion of humanities and social science departments; free up needed space in Campus Center G Wing for a consolidated student media center; and places the IT group in the same building as the computer labs they staff and maintain.
- Provide sufficient, high-quality instructional space in support of growing academic programs (e.g., MAT and MS programs in Biology, Chemistry, and Math; additional space for the Biology Department, which as of Fall 2011, lacked space to add any additional sections)

DEVELOPMENT GUIDELINES

Location of Building Addition

The addition should optimally be located between the existing Natural Science Building and the Campus Green, in order to better define this important open space and to increase the presence of the campus's science facility within it.

Building Entries & Orientation to Open Space

- Design of addition should provide a major new "front door" on the Proposed Campus Green
- Landscape improvements should extend the Proposed Campus Green to the eastern edge of the Natural Science Building/STEM Addition
- · Strong visual and physical connections should be provided between the interior of the building and the Proposed Campus Green.

Height and Massing

Height should be limited to 2 - 3 stories along the Proposed Campus Green.

Design, Aesthetics & Materials

- Building materials and style should complement the re-clad Campus Center and the New Academic Building, contributing to a cohesive but not monolithic built environment along the Campus Green.
- Modulation and articulation of building façade, use of glass, etc. should be employed to break down massing and establish building edges that engage the Campus Green
- Design of addition should continue theme of transparency into major lab spaces now visible along the northern edge of the building.

Service Access

Service access for the building should continue to be provided from the rear of the existing building.

PHASING APPROACH

Renovation & STEM Addition at the Natural Science Building is the College's highest priority major initiative for the 2013 - 2023 capital cycles. Given the importance of this initiative and the long duration to completion, the project should be initiated as early as possible in the first capital cycle.

Due to funding uncertainties, the proposed phasing for this initiative begins with renovation of existing space and follows with construction of the addition. This approach allows much needed renovation work to be completed even if funds are ultimately unavailable for the addition. If feasible, however, the sequence should be reversed as beginning with construction of new space could eliminate the need for surge space, provide for cost savings, and enable a more rapid completion of this initiative.

Aside from the potential need for surge space, there are no enabling projects for implementation of this initiative.

SURGE SPACE NEEDS

To address potential surge space needs associated with this initiative, the Facilities Master Plan assumes provision of temporary wet labs in trailers and temporary reuse of existing offices and classrooms in Academic Village Building A.

- Renovation of Academic Village Building A for Science Surge Space: light renovation of existing offices and classrooms (approx. 10,000 GSF)
- Provision of Wet Lab Trailers for Science Surge Space (approx. 10,000 GSF)

SUGGESTED SYSTEMS UPGRADES

	RENOVATION
HVAC	 Modify existing HVAC air handling units and BMS controls. Replace existing exhaust hood systems, make-up air systems and existing general exhaust systems.
Plumbing	Modify existing plumbing system.
Fire Protection	Provide standpipe risers and sprinkler heads with piping distribution system.
Electrical	 Provide new lighting, lighting control and receptacles. Provide fire alarm devices. Replace existing electrical panels. Retain emergency generator, which will have additional capacity once recommended new emergency generator for Clark Athletic Center is on-line (see recommendations for Clark Athletic Center); Study additional back-up power requirements in conjunction with building programming.
	ADDITION
HVAC	 Provide new HVAC system, chilled water plant, hood exhaust systems, general and toilet exhaust system, and BMS control.
Plumbing	 Provide new gas service or upgrade existing gas service system, new gas fired hot water heater system, new plumbing fixtures, floor drains and roof drains piping distribution system. New sewage ejector pumps/sump pumps and piping system may be required to supplement sewage ejector system in existing building. Upgrade existing water service or provide new water service for fire protection system.
Fire Protection	Provide standpipe risers and sprinkler heads with piping distribution system.
Electrical	 Provide electrical service addition for new space – lighting, receptacles, laboratories, HVAC loads - and new emergency generator. Provide new lighting, lighting control and receptacles. Provide fire alarm devices. Replace existing electrical panels.

Dining Expansion & Renovation / "Student Commons" at the Campus Center

DESCRIPTION: Expansion and renovation of dining facilities at the Campus Center to create a centrally located "Student Commons" that serves both residential and commuter students.

MEDIUM INTENSITY RENOVATION: 10,000 GSF ADDITION: 25,000 GSF; 2 STORIES + BASEMENT



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS:

- Strategic Plan Brand Goal: Enhance image and outreach
- Strategic Plan Retention Goal: Increase the overall 6 year graduation rate
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up to 5,700 students

PRELIMINARY PROGRAM

35,000 GSF = Improved and expanded campus dining center; to include seating areas, preparation space, kitchen space, servery, and storage areas

GOALS & RATIONALE

- Address significant current space deficits for dining, including both seating capacity and back-of-thehouse space; address projected deficits associated with enrollment growth.
- Update the College's undersized and outdated existing Dining Hall, which lags significantly behind peer institutions and current practices - in terms of finishes, format, and choices.
- Most importantly, provide much-needed additional "student commons" space an inviting, comfortable, centrally located place that draws residential and commuter students together. Space should be configured to allow students to linger beyond formal dining hours, and to enable off-hours use of the space for student events and activities.

DEVELOPMENT GUIDELINES

Location of Addition

Locate the addition between the existing H-Wing Atrium and the Campus Green while continuing to provide direct physical and visual access between the Atrium and the Green.

Building Entries & Orientation to Open Space

- Design of addition should leverage opportunities for outdoor dining (e.g., extension of seating onto the Campus Green in warmer months).
- Design of addition should introduce the H Wing Atrium as a major point of entry from the Campus
- Landscape improvements should extend the Campus Green to the southern wall of the Campus Center.
- Design of the addition should provide strong visual and physical connections between the interior Atrium space and the Campus Green.

Height and Massing

Height along the Campus Green should be limited to 2 stories.

Design, Aesthetics & Materials

- Addition should preserve and enhance views out to the Proposed Campus Green, and the athletic fields beyond.
- Modulation and articulation of building facade, use of glass, etc. should be employed to break down massing and establish building edges that engage the Campus Green.
- Building materials and style should complement façade improvements associated with the Campus Center envelope repair project.

Service Access

Service access for this area should continue to be provided at the east end of the Campus Center,

PHASING APPROACH

Dining Expansion / "Student Commons" at the Campus Center is among the College's highest priority initiatives for the 2013 - 2023 capital cycles. Given significant current dining deficits (approximately 15,500 GSF) and the capacity of this initiative to powerfully transform the student environment at the College, this initiative should begin as early as possible in the first capital cycle.

Other than provisions for surge space, there are no enabling projects required for this initiative.

SURGE SPACE NEEDS

The Facilities Master Plan assumes more intensive use of other existing dining facilities (e.g., Campus Center snack bar, dining venues in the Student Union) during construction of this initiative. Phasing construction may enable the College to keep the existing Campus Center Dining Hall operational until the addition has been completed.

SUGGESTED SYSTEMS UPGRADES

	RENOVATION
HVAC	 Provide new HVAC systems including kitchen make up Provide new kitchen exhaust system. Upgrade existing building management control system.
Plumbing	Modify existing plumbing system
Fire Protection	Add new sprinkler system/Ansul system.
Electrical	 Provide new lighting, lighting control and receptacles. Provide fire alarm devices. Replace existing electrical panels.
	ADDITION
HVAC	 Provide new HVAC and exhaust systems. Modify existing automatic temperature controls.
Plumbing	 Provide new gas-fired equipment and piping. Gas service to the building may require upgrade. New plumbing water supply and drainage system and fixtures. Existing water service may require upgrade for both domestic water service and fire protection system.
Fire Protection	 Upgrade existing water service to provide additional standpipe system and fire hose cabinets.
Electrical	 Provide new lighting, lighting control and receptacles. Provide new fire alarm devices. Replace existing electrical panels.

Partial Renovation & Addition at Clark Athletic Center

DESCRIPTION: Upgrade and expansion of indoor athletic and recreation facilities through targeted renovation and a major addition.

MEDIUM INTENSITY RENOVATION: 36,500 GSF

ADDITION: 60,000 GSF; 1 - 2 STORIES



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS:

- Strategic Plan Brand Goal: Enhance image and outreach
- Strategic Plan Retention Goal: Increase the overall 6 year graduation rate
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up to 5,700 students

PRELIMINARY PROGRAM

- 36,500 GSF = Renovation of existing athletics/recreation facilities; excludes gymnasium, pool, and recently renovated team locker rooms
- 54,500 GSF = Additional athletics/recreation space (e.g., multipurpose dance/martial arts/yoga space, expanded weight and cardio facilities, flexible field house space, coaches offices)
- 5.500 GSF = Additional student activities & event space

GOALS & RATIONALE

- Address significant current space deficits for recreation/athletics; address projected deficits associated with anticipated enrollment growth. Provide for spaces such as a multipurpose dance/martial arts/fitness class room, expanded weight and cardio facilities, flexible field house space, and additional offices.
- Update worn and significantly outdated athletics/recreation facilities to provide a welcoming environment on par with peer institutions.
- Repurpose highly underutilized spaces like the racquetball courts and the mezzanines to meet current needs.

- Provide an environment that draws residential and commuter students, and enables flexible of use of spaces, where possible, for informal gathering as well as for student events and activities.
- Upgrade aging building systems, including provision of new back-up power system; current system is located in the Natural Science Building, and is insufficient to serve both facilities.

DEVELOPMENT GUIDELINES

Location of Addition

The addition should optimally be located between the existing building and the Campus Green in order to better define this important open space and to increase the presence of the Clark Center within it.

Building Entries & Orientation to Open Space

- Design of addition should provide a major new "front door" on the Proposed Campus Green.
- Landscape improvements should extend the Campus Green to the southern wall of the Campus
- Strong visual and physical connections should be provided between the interior of the addition and the Proposed Campus Green.

Height and Massing

Height should be limited to 2 - 3 stories along the Campus Green; given that the building program will likely demands double-story spaces, 1 - 2 levels are recommended for double-story spaces along the Green.

Design, Aesthetics & Materials

- Building materials and design should complement the New Academic Building, the Natural Science Building Addition, and Campus Center addition.
- Modulation and articulation of building façade, use of glass, etc. should be employed to break down massing and establish building edges that engage the Proposed Campus Green.

Service Access

The building should continue to be serviced from the Clark Athletic Center's existing loading area.

PHASING APPROACH

Renovation & Addition at Clark Athletic Center is among the College's highest priority initiatives for the 2013 -2023 capital cycles. Given significant current athletics/recreation deficits (25,000 GSF) and the capacity of this initiative to significantly enhance the student environment at the College, construction of this initiative should begin as early as possible in the second capital cycle.

Due to funding uncertainties, the proposed phasing for this initiative begins with renovation of existing space and follows with construction of the addition. This approach allows much needed renovation work to be completed even if funds are ultimately unavailable for the addition. If feasible, however, the sequence should be reversed as beginning with construction of new space could provide for cost savings, and enable a more rapid completion of this initiative.

There are no enabling projects for implementation of this initiative.

SURGE SPACE NEEDS

Surge space could be provided through provision of temporary trailers, and/or by moving more easily relocated functions (e.g., cardio room) to temporary locations in the Academic Village or the Campus Center (e.g., the Gallery space off the H Wing Atrium). Surging strategies evaluated at the building study level should consider potential challenges associated with staffing dispersed fitness/athletics facilities. Phasing renovations within Clark Athletic Center, if feasible, could help mitigate disruption.

SUGGESTED SYSTEMS UPGRADES

	RENOVATION
HVAC	 Replace HVAC system. Replace existing general/exhaust fans with new fitness spaces and courts.
Plumbing	Modify existing plumbing system.
Fire Protection	 Provide new sprinkler system. Provide new water service for fire protection system.
Electrical	 Provide new lighting, lighting control and receptacles. Provide fire alarm devices. Replace existing electrical panels.
	ADDITION
HVAC	 Provide new chiller plant. Expand existing gas fired boilers or provide new. Provide new HVAC air handling units with exhaust/return fans and duct distribution system. Provide new general/toilet exhaust fan systems. Provide new building management control system (BMS).
Plumbing	 Provide new domestic water service or upgrade existing domestic water service. Provide new fire protection water service for fire protection system. Provide new gas fired hot water heaters and piping distribution system. Provide new toilet fixtures and roof drains piping distribution system. Provide new sewage/sump pumps system.
Fire Protection	 New fire pump system may be needed. New sprinkler heads, standpipe risers and piping distribution system.
Electrical	 Provide new transformer. Provide new emergency generator. Provide new feeders, power panels and panels. Provide new lighting, lighting control and receptacles. Provide new fire alarm system.

New Daycare Center

DESCRIPTION: Construction of a new, free-standing daycare center on C Gate Road. 25

NEW CONSTRUCTION: 17,000 GSF



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

Strategic Plan Brand Goal: Enhance image and outreach

PRELIMINARY PROGRAM

17,000 GSF = daycare center

GOALS & RATIONALE

Relocation of the daycare center from Campus Center E Wing will provide purpose-built space for the childcare program in a setting that is removed from the College's academic hub. This initiative will also enable the College to recapture E Wing for student service offices and lounge space.

DEVELOPMENT GUIDELINES

Design of the new facility should support College goals of offering a sustainability-oriented pre-school program within a natural, wooded environment.

PHASING APPROACH

The long-anticipated construction of a free-standing daycare center is targeted to occur within the first capital cycle (2013 - 2018).

This initiative has no enabling projects but enables renovation of Campus Center E Wing for needed space more closely linked with the College's core mission.

SURGE SPACE NEEDS

No surge space is needed for completion of this initiative.

²⁵ Consistent with prior planning efforts, the Facilities Master Plan sites the New Daycare Center along C Gate Road. An alternate location within the campus core - for instance, proximate to the Academic Village - could also be considered when this initiative is launched.

Future Academic Building

DESCRIPTION: Future academic facility, to be constructed if enrollment growth continues at current pace - consistent with College projections. Future Academic Building is sited along the southern edge of the Proposed Campus Green.

NEW CONSTRUCTION: 75,500 GSF



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Academic Goal: Expand academic programs and support
- Strategic Plan Brand Goal: Enhance image and outreach
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: Increase the overall 6 year graduation rate
- Academic Plans: Provide graduate offerings across the curriculum

PRELIMINARY PROGRAM

- 61,000 GSF = classrooms and offices
- 3,500 GSF = small dining area (e.g., grab-and-go or coffee shop)
- 11,000 GSF = student lounges, meeting rooms, student club offices, etc.

GOALS & RATIONALE

Should the College continue to grow at or near its current pace, consistent with College enrollment projections, an additional academic building will be needed to provide additional classroom, office and support space.

DEVELOPMENT GUIDELINES

Location of New Building

Building should define a southern edge to the Proposed Campus Green while, where possible, preserving visual and physical links to the athletic fields and meadowland beyond.

Building Entries & Orientation to Open Space

Design of addition should provide a major new "front door" on the Campus Green.

Strong visual and physical connections should be provided between the interior of the new building and the Campus Green.

Height and Massing

Height should be limited to 3 stories along the Campus Green.

Design, Aesthetics & Materials

- Building materials and design should complement recent construction and façade improvements along the Campus Green, including the New Academic Building, the Campus Center and Campus Center Dining Addition, the Natural Science Building STEM Addition, and the Clark Athletic Center Addition.
- Modulation and articulation of building façade, use of glass, etc. should be employed to break down massing and establish building edges that engage the Campus Green

Service Access

Service access should be optimally be provided along the eastern edge of the building.

PHASING APPROACH

To avoid the disruption of constructing of two major facilities at once - the Clark Athletic Center Addition and the Future Academic Building - construction of the Future Academic Building is pushed beyond the timeframe of the next two capital cycles to the 2023 - 2028 capital period. If feasible, and if justified by enrollment growth, this project could be advanced to begin within the 2018 - 2023 capital cycle.

Relocation of the current competition soccer field is an enabling project for this initiative.

SURGE SPACE NEEDS

No surge space is required for this initiative.

Library Renovation, Phase 2

DESCRIPTION: Phase 2 construction of Library renovation and upgrade initiative (SUCF Project No. 31229). Both Phase 1 and Phase 2 have been designed.²⁶

MEDIUM INTENSITY RENOVATION: 37,085 GSF



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Academic Goal: Expand academic programs and support
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: By 2015, increase the overall 6 year graduation rate to 44%
- Strategic Plan Brand Goal: Enhance image and outreach

PRELIMINARY PROGRAM

- Renovation of top floor for multimedia classrooms, a computer lab for instruction, and additional group and individual study spaces
- Renovation of the ground floor for additional group and individual study rooms and for an improved curriculum materials room
- Installation of a new roof, solar voltaic cells, and rain water capture for irrigation

Phase 1 will provide for compact shelving on the ground level; full renovation of the main floor (circulation and reference spaces, new writing and math learning centers, 3 Powertrack Math computer labs with approximately 120 stations, and about 80 public workstations; and partial renovation of the top floor (provision of two multimedia classrooms, several group study rooms and a media lab).

GOALS & RATIONALE

The 2010 study "Renovation of Library / Academic Space: SUCF Project No. 31229" has guided the Library renovation effort now underway and documented the need to:

²⁶ Project scoped and designed through previous. planning initiative; Phase 1 construction will begin in early 2012 and finish Fall 2012.

- Upgrade the Library's physical environment "to foster collaboration and learning" as well as to provide additional seating within a broader range of environments
- Accommodate academic support programs, including math and writing services
- Upgrade building systems
- Improve utilization of space
- Reduce accessibility barriers within the Library

DEVELOPMENT GUIDELINES

Where feasible, renovation should seek to improve visual and physical connections - and avoid blank exterior walls - between the Library and the Proposed Campus Green.

PHASING APPROACH

Completion of the Library renovation project is a College priority. Construction of Phase 1 is projected to begin in 2012. Construction of Phase 2 should begin as early as is feasible in the 2013 - 2018 capital cycle.

SURGE SPACE NEEDS

As with Phase 1, surge space for Phase 2 of the Library renovation will be provided within the Library.

SYSTEMS UPGRADES

Systems upgrades anticipated within Phase 2 of the Library Renovation include:

- New air handler and ducts
- Upgrade of electrical and teledata systems

Campus Center F Wing Renovation

DESCRIPTION: Renovation of Campus Center F Wing to provide for upgrade (Phase 1) and expansion (Phase 2) of Visual Arts facilities.

MEDIUM INTENSITY RENOVATION: 19,000 GSF



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Academic Goal: Expand academic programs and support
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: By 2015, increase the overall 6 year graduation rate to 44%
- Strategic Plan Brand Goal: Enhance image and outreach

PRELIMINARY PROGRAM

- Phase 1: 15,000 GSF = renovation of existing art studios and offices
- Phase 2: 4,000 GSF = renovation of existing classrooms and offices for Visual Arts expansion

GOALS & RATIONALE

Phase 1:

- Upgrade aging art studios and office spaces, including lighting, floors and ceilings; repair/replace finishes showing water damage (e.g., along windows)
- Upgrade aging building systems

Phase 2:

Address anticipated space deficits for the Visual Arts Department

DEVELOPMENT GUIDELINES

Where feasible, in conjunction with the Campus Center Envelope Project, renovation should seek to improve visual and physical connections - and avoid blank exterior walls - between F Wing and the Proposed Campus Green.

PHASING APPROACH

Near-term renovation of the existing Visual Arts space within F Wing (Phase 1) is a high priority, and is targeted for the 2013 - 2018 capital cycle. Phase 2 of this initiative, renovation of existing classrooms and offices for use by the Visual Arts Department, responds to anticipated enrollment growth and is targeted for the 2018 -2023 capital cycle.

It is recommended that programming and design for both phases of the F Wing Renovation as well as for the G Wing Renovation proceed as a single, coordinated effort in order to leverage potential synergies.

Enabling projects are as follows:

- Provision of surge space (likely needed for Phase 1)
- Construction of the STEM Addition at the Natural Science Building (likely needed for Phase 2, to replace classroom space in F Wing that will be repurposed for use by the Visual Arts Department.)

SURGE SPACE NEEDS

Surge space will likely be needed for Phase 1 of this initiative. The Facilities Master Plan identifies Academic Village Building A as a temporary home for Visual Arts Department spaces displaced during renovation of F Wing.

Renovation of Academic Village Building A for Visual Arts Surge Space (15,000 GSF)

SUGGESTED SYSTEMS UPGRADES

3000E3TED 3T3TEMS OF GRADES					
	RENOVATION, PHASE 1				
HVAC	Replace AHUs and ductwork.Provide new exhaust system.				
	Provide new automatic temperature controls.				
Plumbing	Modify existing plumbing system.				
Fire Protection	 Provide sprinkler system. Upgrade water service to support sprinklers. 				
Electrical	 Provide new lighting, lighting control and receptacles. Provide new fire alarm devices. Replace existing electrical panels. 				
	RENOVATION, PHASE 2				
HVAC	 Replace AHUs and ductwork. Provide new exhaust system. Provide new automatic temperature controls. 				
Plumbing	Modify existing plumbing system.				
Fire Protection	Provide sprinkler system.				
Electrical	 Provide new lighting, lighting control and receptacles. Provide new fire alarm devices. Replace existing electrical panels. 				

Campus Center G Wing Renovation

DESCRIPTION: Renovation of Campus Center G Wing for consolidated Student Media center (including the TV studio, radio broadcast studio and newspaper offices) and student meeting, office and lounge space.

MEDIUM INTENSITY RENOVATION: 15,000 GSF



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Academic Goal: Expand academic programs and support
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: By 2015, increase the overall 6 year graduation rate to 44%
- Strategic Plan Brand Goal: Enhance image and outreach

PRELIMINARY PROGRAM

- 8,000 GSF = academic space: TV studio, small classrooms, offices
- 7,000 GSF = campus life space: radio station, newspaper office, and student meeting, office, and lounge space

GOALS & RATIONALE

- Establish a consolidated Student Media center that co-locates student media outlets now dispersed between the Student Union (newspaper office, radio broadcast studio) and the Campus Center (television studio)
- Address condition and suitability issues within G Wing; replace aging floors, ceilings, and lighting; upgrade aging building systems
- Provide additional campus life space (e.g., student activity, meeting, office, and lounge space) in response to current needs and projected enrollment growth
- Enable expansion of student media facilities in response to enrollment growth
- Provide for backfill of IT space in G Wing, which will be vacated when IT functions are relocated to the STEM Addition at the Natural Science Building

DEVELOPMENT GUIDELINES

Renovation should support improved connectivity between G Wing and other areas within the Campus Center. Today, G Wing feels somewhat isolated, and remote from the Atrium at the heart of the building.

PHASING APPROACH

Renovation of G Wing is targeted for the 2018 - 2023 capital cycle but it is recommended that programming and design for this initiative as well as for both phases of the F Wing Renovation proceed as a single, coordinated effort in order to leverage potential synergies. Programming and design are targeted to begin at the outset of the 2013 - 2018 capital cycle.

Enabling projects are as follows:

- Construction of the STEM Addition at the Natural Science Building the future home of IT functions now located in G Wing
- Possible provision of surge space for up to 8,000 GSF of classroom, office and TV studio space now located in G Wing

SURGE SPACE NEEDS

Surge space will likely be needed to enable renovation of G Wing. The Facilities Master Plan suggests that spaces within the Campus Center (e.g., the Art Gallery space located off the Atrium) receive modest renovation to serve as a temporary home for functions displaced by renovation construction in G Wing.

Renovation of space in Campus Center (e.g., current Art Gallery) to provide temporary home for TV studio, offices, and classrooms while G Wing is under renovation (8,000 GSF)

SUGGESTED SYSTEMS UPGRADES

RENOVATION				
HVAC	 Replace HVAC and ductwork Replace exhaust system. Replace automatic temperature controls. 			
Plumbing	Existing plumbing system will be modified.			
Fire Protection	Provide new sprinkler system.			
Electrical	 Provide Electrical Service Addition. Provide new lighting, lighting control and receptacles. Provide new fire alarm devices. Replace existing electrical panels. 			

Student Union Backfill Renovation

DESCRIPTION: Renovation of radio broadcast studio and student newspaper office for student office, activity, lounge and/or study space following consolidation of student media functions in G Wing.

LOW INTENSITY RENOVATION: 2,500 GSF

LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: By 2015, increase the overall 6 year graduation rate to 44%
- Strategic Plan Brand Goal: Enhance image and outreach

PRELIMINARY PROGRAM

• 2,500 GSF = student office, activity, lounge and/or study space

GOALS & RATIONALE

- Repurpose current newspaper and radio station suites for other campus life uses through modest renovation following consolidation of student media functions in G Wing.
- Provide additional campus life space (e.g., student activity, meeting, office, and lounge space) in response to current needs and projected enrollment growth

PHASING APPROACH

This initiative is targeted for the 2018 - 2023 capital cycle.

Enabling projects are as follows:

- Renovation of Campus Center G Wing for Student Media & Academic Space
- Renovation and STEM Addition at the Natural Science Building

SURGE SPACE NEEDS

No surge space is required for this initiative.

SUGGESTED SYSTEMS UPGRADES

No systems upgrades are recommended as part of this initiative.

Renovation of Campus Center E Wing

DESCRIPTION: Renovation of current Daycare Center (Campus Center E Wing) for Student Service Offices and Student Lounge/Study/Meeting Space



MEDIUM INTENSITY RENOVATION: 10,000 GSF

LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Academic Goal: Expand academic programs and support
- Strategic Plan Brand Goal: Enhance image and outreach
- Strategic Plan Enrollment Goal [amended during FMP Process]: Grow enrollment to up 5,700 students
- Strategic Plan Retention Goal: Increase the overall 6 year graduation rate

PRELIMINARY PROGRAM

- 5,000 GSF = student services offices (e.g., advising, EOP)
- 5,000 GSF = student lounge, meeting and study space

GOALS & RATIONALE

- Repurpose current daycare center space, E Wing, to meet student service and campus life needs
- Upgrade building systems

PHASING APPROACH

Renovation of Campus Center E Wing is targeted for the 2018 - 2023 capital cycle.

Enabling projects are as follows:

Construction of New, Free-Standing Daycare Center

SURGE SPACE NEEDS

No surge space is required for this initiative.

SUGGESTED SYSTEMS UPGRADES

	RENOVATION
HVAC	 Replace HVAC, ductwork and controls. Replace exhaust system.
Plumbing	Modify existing plumbing system.
Fire Protection	Provide new sprinkler system.
Electrical	 Provide new lighting, lighting control and receptacles. Provide fire alarm devices. Replace electrical panels.

Renovation of Heating Plant Buildings for Facilities Maintenance & Operations Center

DESCRIPTION: Renovation of the Heating Plant building to provide a right-sized Facilities Maintenance & Operations Center close to the campus core, once the co-gen plant is decommissioned.

HIGH INTENSITY / MODEST FINISHES RENOVATION: 11,000 GSF



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

Strategic Plan Finance Goal: Achieve financial stability by pursuing a sustainable resource base through expanded and diversified funding partnerships and increased efficiency of operations

PRELIMINARY PROGRAM

• 11,000 GSF = Facilities Maintenance & Operations Center (e.g., offices, shops, and support space)

GOALS & RATIONALE

- Relocate Facilities Maintenance & Operations headquarters to a location close to the campus core, proximate to the academic and residential buildings the facilities crew maintains
- Reuse the Heating Plant building for a new use following anticipated decommissioning of co-gen plant

PHASING APPROACH

This initiative is targeted for the 2018 - 2023 capital cycle.

There are no enabling projects required for this initiative.

SURGE SPACE NEEDS

No surge space is required for this initiative.

SUGGESTED SYSTEMS UPGRADES

Provides potential opportunity for a sustainable energy demonstration project through incorporation of passive solar heating, use of photovoltaics, and other "green" technologies.

Stabilization & Expansion of Horse Facilities

DESCRIPTION: Seal building envelopes (e.g., roofs and other parts of envelope such as window heads and sills where water or wildlife are entering buildings and causing damage) to prevent further deterioration of 1920's-era stable facilities from the Clark Estate. Consistent with the College's Stewardship Plan, in order to

support a viable equestrian operation, construct along B Gate Road: a new Enclosed Riding Ring (covered, indoor structure); new Summer Stalls; and a paved parking lot.

LOW INTENSITY RENOVATION: 42,238 GSF TOTAL **NEW CONSTRUCTION:**

- Horse facilities = 26,000 GSF
- Parking lot = 10,500 SF

LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Finance Goal: Achieve financial stability by pursuing a sustainable resource base through expanded and diversified funding partnerships and increased efficiency of operations
- Strategic Plan Brand Goal: Enhance image and outreach
- Open Space Stewardship Plan, Priorities for Implementation: Regenerate and develop the Clark Family Stables as funds become available through both public and private sources.

PRELIMINARY PROGRAM

Renovation

- 25,760 GSF = Stable Quadrangle
- 10,360 GSF = Carriage House / Garage
- 1,617 GSF = Stable (Building No. 12)
- 2,272 GSF = Stable (Building No. 13)
- 2,229 GSF = Stable (Building No. 14)

New Construction

- 13,000 GSF = New Enclosed Riding Ring
- 13,000 GSF = New Summer Stalls with capacity for up to 40 polo horses
- 10,500 SF = New 30 space parking lot

GOALS & RATIONALE

Stabilize, preserve, and enable continued use of early 20th century structures dating from the land's former use as the estate of noted equestrian F. Ambrose Clark

- Provide the additional facilities needed to support a viable commercial or non-profit equestrian operation
- Advance goals identified in the College's Open Space Stewardship Plan.

DEVELOPMENT GUIDELINES

Renovations should seek to retain the historic character of the stable and carriage house structures while enabling economically viable renovation and continued use. New structures should be compatible with the historic, pastoral character of the B Gate Road area, and with the design of existing structures.

PHASING APPROACH

Stabilization of the carriage house and stable structures is targeted for the 2013 - 2018 capital cycle. Construction of the New Enclosed Riding Ring, the New Summer Stalls, and the New Parking Lot is targeted for the 2018 – 2023 capital cycle.

SURGE SPACE NEEDS

No surge space is required for this initiative.

Demolition of Academic Village Buildings B, C and D

DESCRIPTION: Demolition of outmoded Academic Village Buildings B, C, and D following relocation of academic functions to the New Academic Building.

DEMOLITION: 107,668 GSF TOTAL



LINK TO MISSION, STRATEGIC PLAN & INSTITUTIONAL GOALS

- Strategic Plan Finance Goal: Achieve financial stability by pursuing a sustainable resource base through expanded and diversified funding partnerships and increased efficiency of operations
- Strategic Plan Brand Goal: Enhance image and outreach

PRELIMINARY PROGRAM

- 42,562 GSF = Demolition of Academic Village Building B
- 20,316 GSF = Demolition of Academic Village Building C
- 44,810 GSF = Demolition of Academic Village Building D

GOALS & RATIONALE

- Eliminate buildings which have reached the end of their useful life and cannot be cost effectively renovated to meet current needs or to address building systems issues; pursue demolition of these soon-to-be-vacant structures due to the significant condition, suitability and accessibility issues that are inherent to this complex, and which prompted construction of the New Academic Building as a replacement academic facility
- Retain Academic Village Building A for use as surge space
- Work with DASNY to determine whether AV residence halls will be renovated or demolished.

PHASING APPROACH

Demolition of Academic Village Buildings B, C, and D is targeted for the 2018 - 2023 capital cycle.

SURGE SPACE NEEDS

No surge space is required for this initiative.

Changes to Building Use

Proposed changes to building use associated with the Facilities Master Plan are identified in the chart below, and in the "project sheets" above describing each building initiative.

Changes to Building Use

Changes to Building Use BUILDING USE CHANGES					
BUILDING	RECOMMENDATION	PRIMARY CURRENT USE	PRIMARY PROPOSED USE		
Natural Science Building / STEM Addition	Through renovation and an addition, the Natural Science Building becomes a consolidated science, technology, and math facility	 Biology Department Chemistry/Physics Department 	 Biology Department Chemistry/Physics Department Computer Science & Math Department IT Group and Data Center General-purpose classrooms 		
New Academic Building – Comp Sci & Mathematics Space	After the Computer Science & Math Department relocates to the STEM Addition, the Department's former space in the New Academic Building is renovated to accommodate growth needs within humanities and social science departments	Computer Science & Math Department	General-purpose classrooms Offices and conference rooms for humanities and social science departments		
Campus Center F Wing – East Side	Renovation of classrooms and office on the east side of Campus Center F Wing for expansion of the Visual Arts Department, following the creation of new classrooms and offices through the STEM Addition at the Natural Science Building,	 General-purpose classrooms Capital Projects office 	Visual Arts Department offices and studios		
Campus Center G Wing	G Wing is renovated as a consolidated student media center and as student activity/meeting/lounge space following relocation of IT to the Natural Science Building / STEM Addition	 IT staff and Data Center TV studio Classrooms American Studies Department offices 	 TV studio Newspaper office Radio broadcasting studio Small classrooms, offices and meeting rooms associated with student media production Student meeting, lounge and activity space 		

BUILDING USE CHANGES, CONT'D					
BUILDING	RECOMMENDATION	PRIMARY CURRENT USE	PRIMARY PROPOSED USE		
Student Union – Student Media Suites	Offices suites currently occupied by the newspaper office and the radio broadcasting studio are renovated to accommodate other Student Union functions (e.g., student office, activity, study or lounge space)	 Newspaper office Radio broadcasting studio 	Student Union activity space (e.g., student office, study or lounge space)		
Campus Center E Wing	Space currently occupied by the Daycare Center is renovated for Student Service offices and student lounge / study / meeting space following construction of a new, free-standing Daycare Center	Daycare Center	Student Service Offices (e.g., Advising, EOP) Student lounge / study / meeting space		
Heating Plant Building	Building currently occupied by the co-gen plant is repurposed as a Facilities Maintenance and Operations Center	Co-gen plant	Facilities Maintenance and Operations Center		

K. CAMPUS CIRCULATION

FMP Initiatives

Priority circulation initiatives for the SUNY College at Old Westbury Facilities Master Plan are as follows:

- New Parking Lot at Woodland Residence Halls (150 spaces): The opening of the New Academic Building will place additional pressure on the Campus Center Parking Lot, where many students who live within the Woodland Residence Halls currently park. A new parking lot proximate to the Woodland Residence Halls will free up parking spaces at the Campus Center Parking Lot for use by the broader campus community.
- Campus Center Parking Lot Upgrade: The 792 space Campus Center Parking Lot was constructed in 1979, and has not yet been resurfaced. This initiative will include repaving of the lot, replacement of site lighting, and improvements to the drop-off area / "arrival plaza" between the parking lot and the bridges that provide access to the 2nd floor of the Campus Center. This initiative also provides an opportunity to improve the arrival experience at the campus core, in the area just north the Campus Center and Student Union, where, rather than welcoming visitors with clear views of buildings that could convey campus identity and assist visitors in orienting to their destination, visitors are greeted by large berms and trees. Along with the infrastructure upgrades described above, this initiative should consider opportunities to:
 - o Improve views of the Campus Center from both the Ring Road and the Campus Center Parking Lot.
 - Improve pedestrian access between the Campus Center and Campus Center Parking Lot. (Currently, no exterior path is provided between the Campus Center Parking lot and the 1st floor of the Campus Center, which is blocked from view by berms and bridges. To access the Campus Center from the lot, pedestrians must scale the berm or use the bridges to reach the 2nd floor.)
 - Improve pedestrian access between the Campus Center Parking Lot and the Student Union, which today requires using stairs down the berm without an accessible ramp.

Strategies for improving the arrival experience at the campus core through this initiative might include:

- o Reducing (or eliminating) landscaped berms along the north and south sides of the Campus Center Parking Lot.
- o Adding an ADA compliant path and potentially stairs as well to connect the first floor of the Campus Center to the Campus Center Parking Lot.
- o Installing improved crosswalks with ADA compliant ramps between the Student Union and the Campus Center Parking Lot.
- o Accommodating 2-way vehicular travel in front of the Campus Center. Today, the Campus Center is served by a one-way drop-off loop which requires visitors arriving via A Gate Road to travel all the way past the building complex and then loop back. Roundabouts could be

considered where the Ring Road meets the northern and southern turn-offs for the Campus Center Parking Lot. Roundabouts would also provide an opportunity to slow traffic close to campus destinations and to announce arrival at the campus core -e.g., through signage or art placed in the center. Properly designed modern roundabouts are ideal gateway and traffic calming elements, as long as they are not placed in areas of high pedestrian demand.

- New North-South Connector Road: A new north-south road connection linking the Academic Village and Student Union Parking Lots to the Clark Athletic Center Parking Lot would improve connectivity within the campus core and increase use of the underutilized Clark Athletic Center Parking Lot. A raised plaza intersection or other special treatment could be considered for intersections along this new road that are likely to see significant pedestrian traffic.
- New Parking Lot along Connector Road (150 spaces): Growth in enrollment and staffing will continue to increase demand for on-campus parking. If needed, construction of a New Parking Lot along the New North-South Connector Road would provide additional parking proximate to the Natural Science Building, the Student Union, and Clark Athletic Center.
- New Multi-Purpose Path along the Ring Road and A Gate Road: Today, walkers, joggers, and cyclists from the campus community and surrounding neighborhoods make active use of major campus roads and their shoulders, but they must share the road with faster-moving vehicles as no dedicated path is provided. A new multi-purpose path along the Ring Road and A Gate Road would better accommodate these activities. Consistent with the preliminary design developed for the Ring Road's partial re-paving, the multi-purpose path could be accommodated within the existing right-of-way by using existing shoulders and narrowing lane widths where needed. The multi-use path could be constructed in a variety of ways depending on available budget, and implemented in phases. Strategies could include: beginning with one road or road segment, and extending paths as resources become available; using paint to delineate usage (e.g., painted "sharrows" that alert motorists to the potential presence of cyclists), using curbs to separate vehicles with non-motorized traffic, or using a fully-separated multiuse path. In this way, multi-purpose paths could be added incrementally to the Ring Road and A Gate Road over time.27

²⁷ Because of low traffic volumes (B and C Gate Roads), narrow right-of-way within a historic setting (B Gate Road), and limited recreational use (C Gate Road), the addition of dedicated multi-purpose paths is not currently recommended for B and C Gate Roads. If desired, painted "sharrows" alerting motorists to the potential presence of cyclists could be added to the roads at little cost.

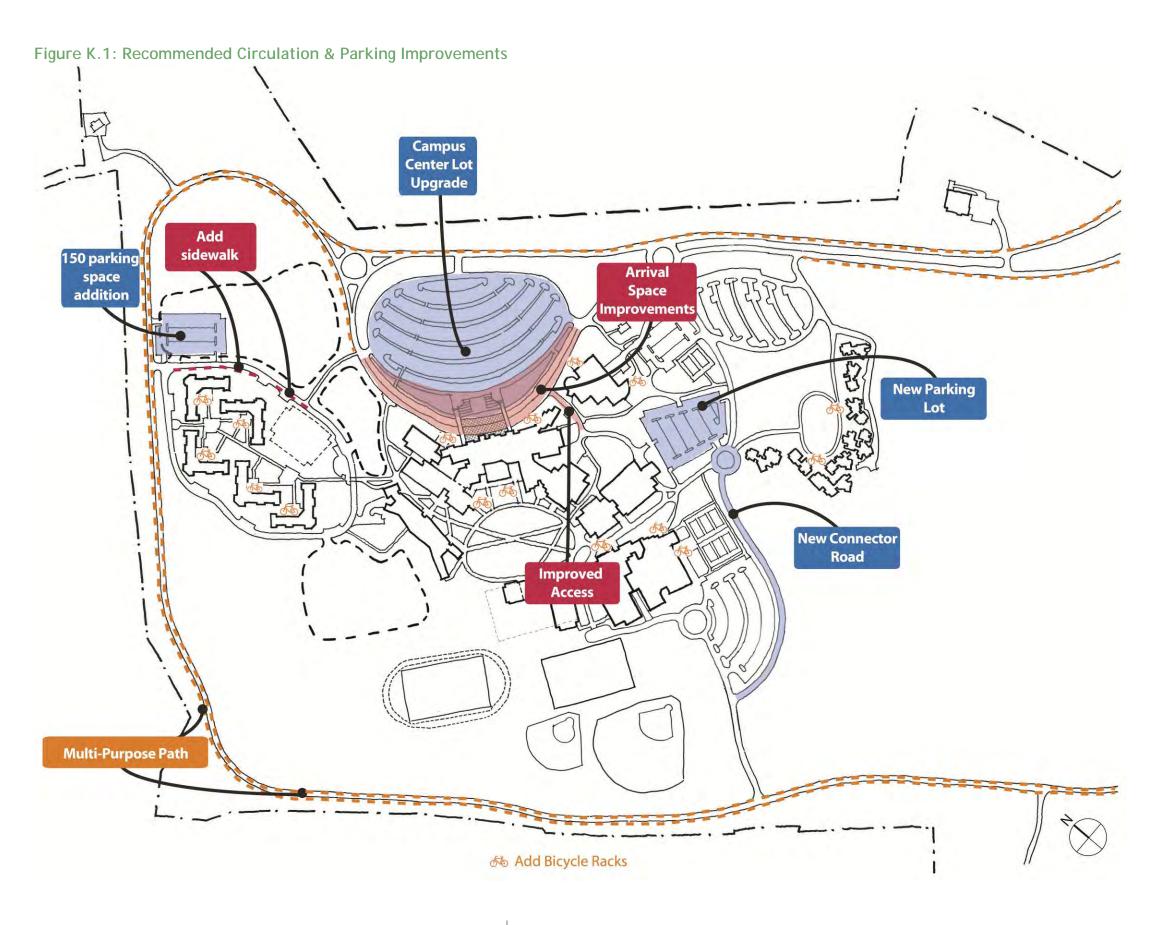
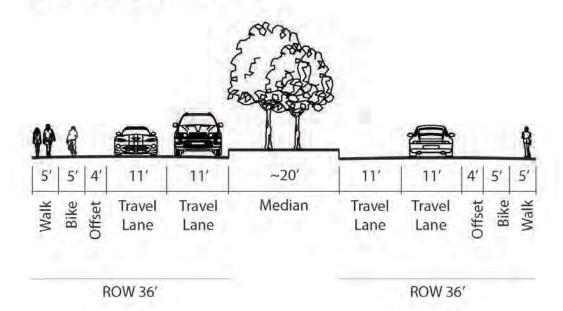


Figure K.2: Design Options for Multi-Purpose Path - A Gate Road

Existing A Gate Road ~20' 13' 13' 5' 13' 13' Shoulder Median Shoulder Shoulder Shoulder Travel Travel Travel Travel Lane Lane Lane Lane

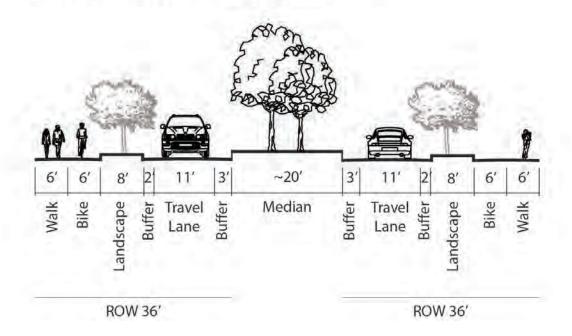
ROW 36'

Low-Cost Improvement



Moderate-Cost Option A Improvement

ROW 36'



Moderate-Cost Option B Improvement

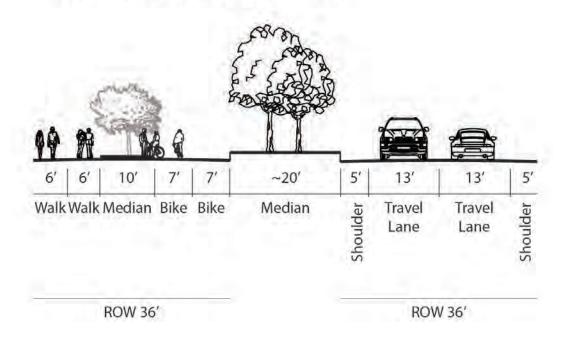
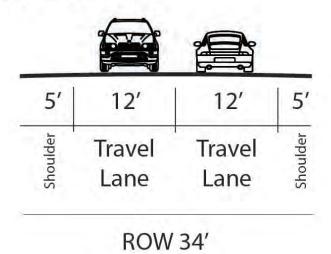
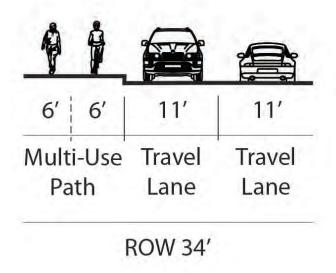


Figure K.3: Design Options for Multi-Purpose Path - Ring Road

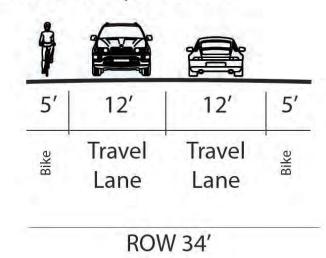
Existing Ring Road



Moderate-Cost Improvement



Low-Cost Improvement

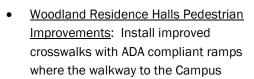


Other Potential Improvements

In some instances, modest-cost changes could improve circulation conditions. To further improve the transportation and circulation experience for College affiliates and visitors, SUNY College at Old Westbury might also consider the following:

Campus Center/Student Union Service Drive Improvement: Install a raised plaza or "shared street" on

the service drive between the Campus Center and Student Union to help enhance safety in this busy area that sees both pedestrian and service vehicle traffic.





Center Parking Lot crosses the Woodland Residence Hall circumferential road. Install the missing sidewalk between the northern Woodland Residence Halls and the walkway to the Campus Center Parking Lot.

Bicycle Rack Installations: Install APBP-compliant bicycle racks accommodating eight bicycles at each building entrance, with more installed where demand is higher. Provide indoor and/or covered bike racks where possible.

Policy strategies

Policy strategies can be effective tools for overall campus transportation planning and management. In addition to capital initiatives, the College could consider implementing the following strategies to manage parking demand and improve campus sustainability.

- Encourage Ridesharing. Provide incentives, including reduced parking permit rates, privileged carpool parking areas, and Guaranteed Ride Home taxi vouchers to encourage students, faculty, and staff to commute to and from campus together in a carpool. Consider providing vanpool vehicles for faculty and staff with common addresses.
- Develop a Phased Parking Management Strategy. A comprehensive strategy on how to manage and phase parking on campus is a necessary first step to making the best use of existing assets. Particularly with the New Academic Building re-orienting the center of campus, parking demand will shift, leaving some lots in higher demand than others. The College could consider:
 - o A Tiered Parking Permit Program. Revise existing permits to have tiered fees, with highest fees for parking in the most desirable lots or the closest spaces of the Campus Center Lot.
 - Parking Efficiency Improvements. Cost-efficient strategies to optimize the use of existing spaces, such as wayfinding to less-used or lower-priced lots, parking maps with walk-times to buildings made available before each semester starts, advertisement and signing of carpool spaces, real-time information about parking availability, etc.

- Shared Parking. Understanding where parking demand peaks during the mornings, afternoons, and evenings will help to best identify how students, staff, and faculty can best share spaces to maximize availability throughout the day and night. Accepted permits in different parking zones can vary over the day based on the results.
- <u>Transportation Demand Management (TDM).</u> Offering paid incentives in-lieu of a parking pass will encourage students, staff, and faculty to carpool, take transit, and walk or bike to campus, creating more parking availability. Investments in supporting non-auto infrastructure, real-time availability information, and educational/marketing campaigns will help create a successful TDM program.
- Addition of On-Street Parking. Areas in high demand would benefit from adding on-street parking to increase supply, while also slowing down traffic. This strategy adds a buffer between the sidewalk and moving vehicles, increasing safety and reducing noise for the pedestrian. Candidate locations include areas with wide shoulders or 2-lane one-way segments.
- Develop a Transit Promotion Program. To incentivize the use of transit and maximize the return on the school's investment, a number of linked strategies could be pursued, including:
 - Create a U-Pass Program. Offer students (and potentially faculty/staff) a free pass on the local transit (MTA bus service) that is subsidized by an annual payment from the school to the MTA. This would be made in exchange for reducing the school's bus operations costs by merging or consolidating the current overlapping MTA and SUNY services that connect campus with the train station.
 - Hicksville LIRR to Campus Improvements. Working collaboratively with the MTA, alter the Campus Express Run pick-up and drop-off times to better match the arrivals and departures of those taking the LIRR. Improve the waiting area for the campus shuttle at the Hicksville Station with signage, lighting, and other amenities (shelter, benches, bike racks, trash can). The Express Run should drop at the Campus Center first, not the residence halls.
 - Provide New Transit Information. Provide more information to attract riders, such as: install transit information panels at bus stops; post LIRR and MTA maps and schedules in multiple campus locations; and have real-time web-enabled transit vehicle tracking available on info panels and on mobile devices.
 - Improve MTA and Campus Shuttle Interoperability. Working collaboratively with the MTA potentially as part of a UPass arrangement - reduce the redundancy between the MTA bus service and the campus shuttle. Better coordinate drop-offs and pick-ups at Gate A.
 - Campus Shuttle Improvements. Have more reliable arrival times at bus stops, operate on a quarter-hour headways schedule, and/or better time the shuttle with the campus class schedule. Reduce headways in the evening and Saturdays.
 - Bike Sharing Program. Have shared bicycles supplied in multiple visible locations for oncampus use to provide an option for students, faculty, and staff to travel around campus.

L. CAMPUS LANDSCAPES

PROPOSED STRATEGIES FOR IMPROVING THE CAMPUS LANDSCAPE

The campus landscape at SUNY Old Westbury is an underutilized asset. The Facilities Master Plan recommends a landscape design strategy which supports establishing a more cohesive "sense of place" in the outdoor campus realm. This strategy is comprised of the following basic elements:

- The landscape should support a welcoming, low maintenance, sustainable environment which supports the College's mission and identity.
- The campus landscape should help strengthen pedestrian connections and define spaces which promote gathering and passive recreation, for the residential and non-residential community alike.
- The landscape should provide a clear hierarchy and organization of gathering spaces and passive and active recreation precincts that unify and activate outdoor campus life. Athletic fields should be upgraded to support the College's competitive and intra-mural program.
- The landscape design should maximize sight lines and view corridors to help bring out a more "natural" landscape character that leverages the historic campus legacy.
- The landscape design should improve safety and accessibility for pedestrians.

LANDSCAPE INITIATIVES

The goals of the landscape improvements described below are threefold: 1. to provide a new Campus Green, around which all major new building initiatives will be oriented; 2. to upgrade the College's existing athletic field facilities and 3. to upgrade the existing recreational amenities, including improving access to the campus's existing woodland trails and former estate relics. FMP landscape initiatives are as follows:

- Campus Green
- Softball field upgrade and re-orientation
- Soccer practice field upgrade
- New basketball courts at Woodland Residence Halls
- Relocate/upgrade existing soccer competition field
- Path improvements through wooded areas
- Re-orientation of baseball field
- Improve passive open space at the Academic Village Residences

CAMPUS GREEN

The campus enjoys a vast expanse of undisturbed woodlands and acres of open fields in the area around B Gate Road, which contains remnants of the old Ambrose Clark Estate. However, these perceived assets are underutilized by the general campus population. Within the campus core, there is a lack of meaningful landscape program, apart from the 11.5 acre complex of athletic fields which supports the College's organized team sports program. The open space within the campus core is comprised primarily of underutilized terraces, courtyards, enhanced entry plazas, roof plazas, and sports courts. Despite the generous campus size, there is little open green space suitable for gathering and informal recreation. With the exception of the quad at new Residential Complex, there are no quadrangle spaces on campus.

Constructing a new Campus Green is the highest priority initiative for improving the campus landscape. This Campus Green will create an active new open space at the the heart of the Old Westbury campus, defining a distinctive and imageable "center" for a campus that has long been dispersed across poorly linked buildings and building complexes. Design and development of this important space is a significant initiative that could be undertaken independent of any new construction. Each building project undertaken along the Campus Green, however, should seek to engage and further activate the space. Including a meaningful landscape component with each building project along the Campus Green is recommended to ensure that, as the campus evolves, the Campus Green continues to serve as a true "center" for the campus, linking primary destinations.

For the proposed Campus Green to be seen as the epicenter of campus life, it will be important for site design and selection of hardscape and softscape materials to be perceived as a whole cloth rather than as separate pieces. If implementation of the Proposed Campus Green is carried out in steps, it will be important for each step to be designed with consideration for how that design supports the whole design. Design of this important space should consider the following:

- Establish a Design Review Committee to ensure that Campus Green design projects support the following basic tenets of its master plan.
- Provide a three-tiered pathway system that is composed of: 1. a perimeter walk the primary organizing element which encircles the Campus Green and orients circulation and activity toward the center; 2. cross axes - three major spines which cut across the Campus Green to link with major pedestrian routes and cross campus destinations and 3. radial connectors, which connect building entrances to the perimeter walk while orienting circulation toward the central Campus Green.
 - Pathway alignments should transition smoothly with existing walks, in order to support greater organization and unity with the overall campus pathway system.
 - o Intersecting nodes should be located at points which collect multiple pathways.
 - Node design should celebrate the cross traffic experience while providing space in the center or on the edges for gathering, meeting and watching the activity.
- The lawn area will be the main feature of the Campus Green, providing a center for passive recreation and the unifying element within the campus core. As such, the health and maintenance of the central lawn should be a top priority. Design should include horticultural soils, underdrainage and irrigation which will ensure a healthy lawn.
- Establish a clear hierarchy of gathering plazas and terraces which are located at key destination points and sized proportionately to support the character and level of activity of each space. With building entrances oriented on the central Campus Green, formal gathering spaces should anchor the

four main axes of the green. To the north, the central gathering terrace should be located at the Campus Center expanded Dining Facility. This space should accommodate high levels of pedestrian traffic while providing flexible opportunities for large and small gathering. To the east, a major circulation plaza should be provided to connect additions at Natural Science, the Clark Center and the new Academic Building. To the south, an entrance plaza should accommodate circulation and gathering at the new Academic Building. The west side of the Campus Green should be anchored by the terrace of the Academic Building, which will open in 2012. Design of these gathering spaces should consider:

- Providing clearly defined spaces for circulation and gathering.
- Including a range of welcoming seating options that accommodate varying needs for social activity and quiet contemplation. Options should include seatwalls, benches, moveable tables and chairs and lively colored umbrellas, which provide shade, shelter and a sense of special welcome.
- Establish design guidelines for landscape treatments. These guidelines will help ensure that a unified landscape character and design standards will be upheld as the Campus Green and adjacent landscapes are implemented over time. These guidelines should establish a standard palette and hierarchy of uses for paving materials, site walls, lighting, furnishings, signage and plant material. Ideally, materials would build on the pastoral horse-farm character historically associated with and still found in Long Island's North Shore and the SUNY Old Westbury campus. Fieldstone walls, wood paddock fencing, crafted iron and steel details, bluestone paving, tree lined lanes, and lush wooded informal landscapes with broadleaf evergreen and deciduous ornamental understory are all defining characteristics of the campus and the region that are also unfortunately endangered and are best preserved and/or restored through carefully crafted design guidelines. Maintenance costs must also be considered in selection of landscape materials.
- Use high quality, durable materials and furnishings, which support an image of a well maintained campus; select the highest quality for the gathering spaces on the Proposed Campus Green, in support of its importance to the overall campus landscape. Given budget constraints which limit maintenance and replacement, it will be important for materials to be selected for their longevity and low maintenance.
- Development of the Campus Green could be broken down into the following phases. After Step 1, further development of the Campus Green will likely be driven by the facility expansion projects around the Green.
 - Step 1: Partial Construction of Campus Green Prior to Building Projects. Recognizing the importance of establishing a unifying open space on campus, the first phase of work assumes construction of a significant portion of the Proposed Campus Green and pathway system, in advance of constructing the expanded dining facility at the Campus Center. The great lawn and new pathways would be constructed to introduce new pedestrian connections to the existing Campus Center patio footprint and two pedestrian connections at the New Academic Building. These connections would engage the New Academic Building and the Campus Center and provide immediate opportunity to animate the Proposed Campus Green. To the southwest, the Proposed Campus Green would terminate at the top of slope, which overlooks the existing soccer competition field. To the eastern edge at the Natural Science Building,

temporary walks and lawn will need to be constructed in order to align new walks with existing pathways and building entries. (Refer to Figure L.1.)

- Possible Step 2: Extend Campus Green and Walks to Meet Science Building Addition. Construction of the expanded STEM facility at the Natural Science Building will enable completion of the eastern edge of the Proposed Campus Green. With this phase of work, site improvements will include a new building entrance plaza which fronts the Proposed Campus Green, as well as secondary walkway and gathering spaces to the north and south of the new STEM facility. The new Science Building Addition entry plaza will provide another major activity node on the campus green and serve as a transition from the academic core to the athletic precinct. (Refer to Figure L.2.)
- Possible Step 3: New Campus Center Terrace at Expanded Dining Center. This phase assumes construction of a new gathering terrace following the construction of the expanded dining facility, on the southwest side of the Campus Center. This new terrace should provide a significant upgrade to the existing conditions, which lack spatial definition for adequate programming and seating amenities. The goal for this new patio space is to become a significant campus hub, accommodating active circulation between the Campus Center and outlying buildings across the Proposed Campus Green, to the east, south and west. In addition, this space should also provide a central outdoor gathering space, which could accommodate large and small groups, while including perimeter spaces where students can read or enjoy a guiet moment between classes. (Refer to Figure L.3.)
- Possible Step 4: Pedestrian Corridor Supporting Expansion of the Clark Athletic Center. expansion of the Clark Athletic Center will enable construction of a new pedestrian corridor, which will link the Proposed Campus Green to athletic fields and the Clark Center parking lot. This corridor will terminate to the north with a new plaza, designed to collect the campus green pedestrian traffic and the major walkway between Natural Science and the Clark Center. To the south, the new pedestrian corridor will terminate at a plaza, which will serve as connection between the expanded Clark Center and future Academic Building to the west. Additionally, the new plaza will provide an overlook from which to watch soccer games or take in a long view of the campus woodlands, beyond. (Refer to Figure L.4.)
- Possible Step 5: Completion of Campus Green and Pathway System at Future Academic Building. The construction of a new academic building, on the site of the existing soccer competition field will enable completion of the campus green and its pathway system, on the southwest edge. Other landscape improvements which will be tied to the new academic building project, will include construction of new connecting walks between the existing (new) academic building and the Clark Center. These new paths will expand the campus pathway system between the east and west sides of campus. (Refer to Figure L.5.)

ATHLETIC AND RECREATION FACILITY IMPROVEMENTS

Upgrade of the softball and soccer fields is needed to expand functionality and usability of these facilities, and the campus is interested in the potential addition of track facilities to support the College's growing athletic intramural, and recreation programs. The College reports that competitive opportunities are hampered by poor grading/drainage, unreliable natural turf performance following rain events and by the lack of adequate seating and lighting amenities. In addition, none of the existing fields comply with standard field orientations,

which for soccer should be laid out on a northwest-southeast long-field orientation; baseball and softball should be oriented on an east-northeast alignment from homeplate to center field, for optimal solar aspect.

It is recommended that a dedicated athletic field precinct be clearly defined within the southwestern quadrant of the campus core. Creating such a precinct would support the image of the athletic program while enabling shared program elements such as pathways, emergency access, parking, water service and storage. Expanding the athletic field facilities will require disturbance of currently undeveloped land. As such, the Facilities Master Plan recommends further study to assess the cost/benefit of various field layout configurations. (Refer to Figures L.7-9.)

Specific field improvements should consider:

- correcting field orientation
- improving grading and drainage
- adding synthetic turf
- adding bleachers
- providing night lighting

These improvements would enable the College to accommodate added enrollment and an expanded sports program while maximizing field usage and expanding opportunities for hosting NCAA tournaments.

Specific recommendations for improvement are described below by sport:

- Softball Field Upgrade: Provide NCAA regulation sized, synthetic turf softball field with backstop fence, players benches, bleacher seating and lights for nighttime play. The seating capacity should be confirmed via further study. Upgrade of the softball field should include reorientation to comply with the standard layout on an east-northeast alignment from homeplate to center field.
- Soccer Practice Field Upgrade: Given poor drainage conditions on both the competition and practice soccer fields, upgrading at least one field is considered a priority for immediate implementation. Since construction of the proposed Future Academic Building will eventually require demolition of the existing competition field, the practice field is being designated for immediate improvement. These improvements should include: synthetic turf, lighting and bleacher seating. Seating capacity should be confirmed by further study.
- Basketball Courts at Woodland Residence Halls: The existing basketball courts have become underutilized partly because construction of the Woodland Residence Halls has shifted residential life activity from the east to the west side of campus. In addition, as noted by many students throughout the Facilities Master Plan process, there are few outdoor amenities proximate to the Woodland Residence Halls. The addition of two basketball courts is proposed for the undeveloped parcel at the Woodland Residential Halls. It is proposed that these courts be located at an appropriate distance from the residence halls, in order to minimize noise and light disturbance.

- Relocate/Upgrade Existing Soccer Competition Field: Construction of the Future Academic Building will require relocation of the existing soccer competition field. Potential options for re-locating this field are provided on Figures L.7-9. Optimal field orientation and the sense of an athletic field precinct should be factors in selecting from these layout alternatives. The elements for improvements should include: NCAA regulation sized, synthetic turf soccer field and, potentially, a surrounding track. Other amenities should include bleacher seating and lights for nighttime play. Seating capacity should be confirmed by further study.
- Improve Existing Trails in Wooded Areas: The existing equestrian trail network offers an opportunity for hiking and cross-country use. Additionally, old campus documents suggest the location of an amphitheater near historic estate structures. Trails should be assessed to identify optimal routes for supporting both campus athletic and passive recreational needs. Enhancements should include clearing obstacles in the path of travel, clearing the horizontal and vertical clearance envelope of limbs and branches that impede safe access, correcting safety hazards, such as ruts and potholes, which would be a tripping hazard and fixing any grading/drainage problems, which would hamper safe use of the paths. In addition, improvements should include clearly located entry points and appropriate security communications stations. Campus security should be consulted on the placement of communications stations and the extent of clearing required on the trail shoulders, in order to balance safety hazards with the desire to minimize disturbance of the natural setting. These enhancements would support both the open space preservation act and the College's Stewardship Plan. Given the extent of the trail system, it is recommended that improvements be phased. A logical first phase might be to improve a short segment between B Gate Road and the old amphitheater. Providing a trail entrance from the iconic country road setting on B Gate Road will provide an opportunity to draw the campus community into the historic district, which is a goal of the Facilities Master Plan, while providing a safer, more pleasant point of entry than might be provided on the Ring Road. Since this study did not include assessing the amphitheater, it is recommended that its conditions be studied further to determine any safety hazards associated with allowing access by the campus community. Pending assessment of the trail conditions, the College should consider developing a set of design guidelines for trail improvements. (Refer to Figure L.6.)
- Reorientation of Baseball Field: The current baseball field orientation does not meet NCAA recommendations, which recommend an east-northeast alignment from homeplate to center field. The current baseball field is oriented west-southwest. It is recommended that the orientation be evaluated in the proposed overall assessment of field layout options.

PASSIVE OPEN SPACE AT THE ACADEMIC VILLAGE RESIDENCES

The Facilities Master Plan assumes partial demolition of the Academic Village (AV) academic buildings but possible retention and renovation of the residences, pending further evaluation by DASNY. The landscape improvements, supporting this scenario, should provide a large green space which accommodates pedestrian linkages and offers AV residents a place for passive recreation and community gatherings. The existing Academic Village is devoid of useable green space. (Refer to Figure L.10.)

ATHLETIC FIELD LAYOUT OPTIONS

Some of the field configurations which might be considered in a separate study are illustrated on attached Figures L.7-9. The following is a summary of the differences and issues associated with the three field layout options:

- Option 1: This scheme shows the baseball field and soccer practice field in their existing orientations. In order to accommodate emergency access for the full building expansion, illustrated in Phase 5, the soccer practice field should be constructed to the minimum size allowable (65 yds x 110 yds.). Softball is reoriented on an east-northeast axis, in keeping with NCAA recommendations, roughly on the site of the existing field. The soccer competition field combined with track is oriented on a northwest/southeast axis, per industry standard. Pending further study, this configuration would require less earthwork than Options 2 and 3. The proximity to the Ring Road affords access to parallel parking but the walking distance to the campus core might be seen as too far. Poor drainage has been reported in the areas proposed for the competition field and softball field. These concerns can be managed through proper grading design, field construction and underdrainage. (Refer to Figure L.7.)
- Option 2: In this scenario, the soccer practice, baseball and softball fields are configured the same as Option 1. The soccer competition field with track is moved northeasterly, in order to align with the existing, non-standard orientation of the soccer practice field. This scenario would require more earthwork than Option 1 and 3, but would place the competition field somewhat closer to Campus Core and the soccer practice field location. The placement of the soccer competition field in this option may also constrain future building development. (Refer to Figure L.8.)
- Option 3: This scenario is the same as Option 2, except that both the baseball field and softball field are oriented on the east-northeast axis, in order to comply with NCAA standards. (Refer to Figure L.9.)

SUMMARY OF LANDSCAPE INITIATIVES

For a composite plan of all landscape initiatives, refer to Figure L.10.

Figure L.1: Proposed Campus Green - Step 1



Figure L.2: Proposed Campus Green - Possible Step 2



Figure L.3: Proposed Campus Green - Possible Step 3



Figure L.4: Proposed Campus Green - Possible Step 4

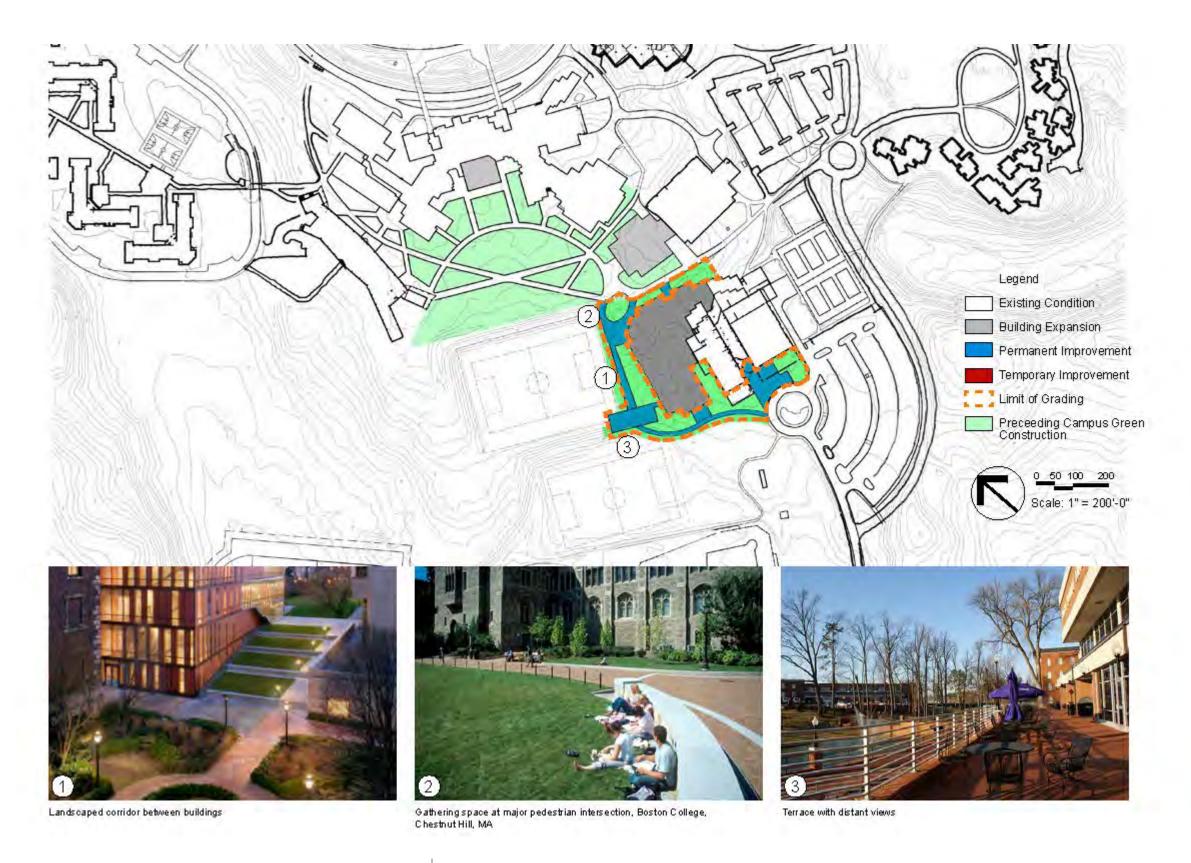


Figure L.5: Proposed Campus Green -Possible Step 5



Figure L.6: Path Improvements through Wooded Areas

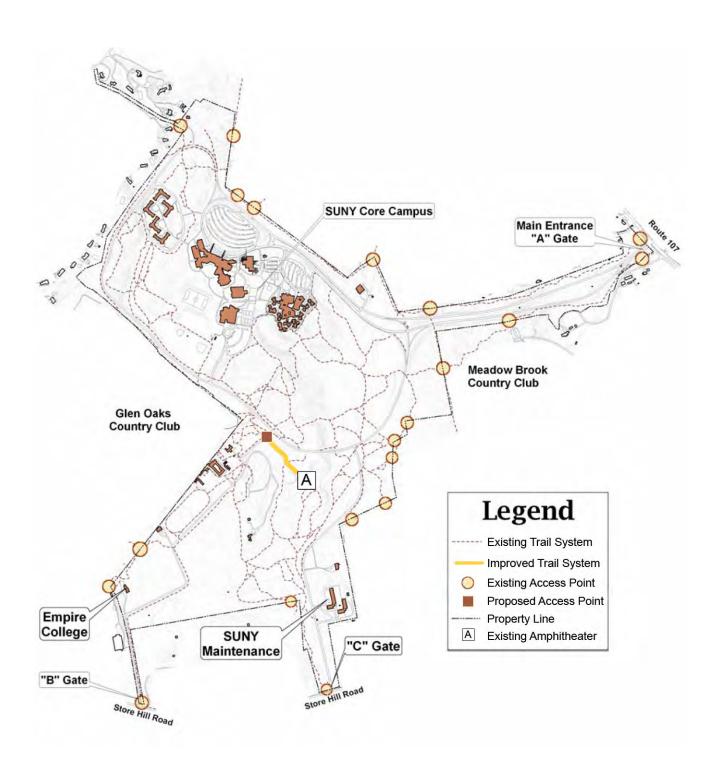
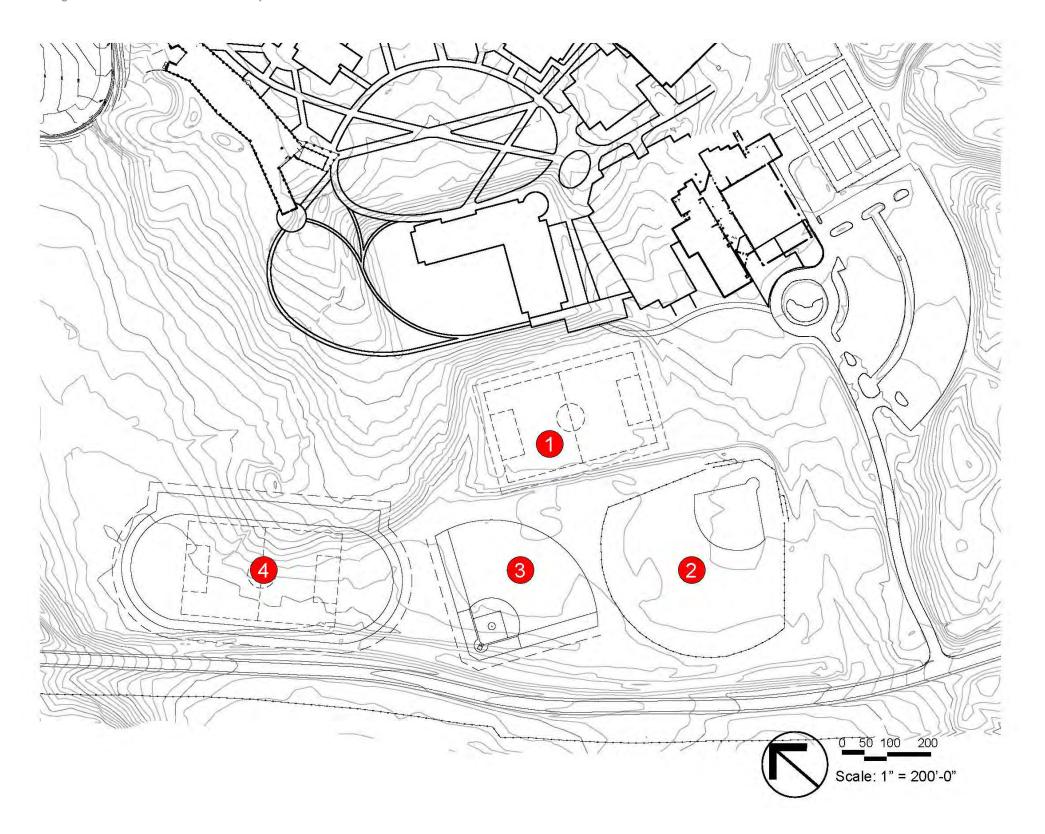


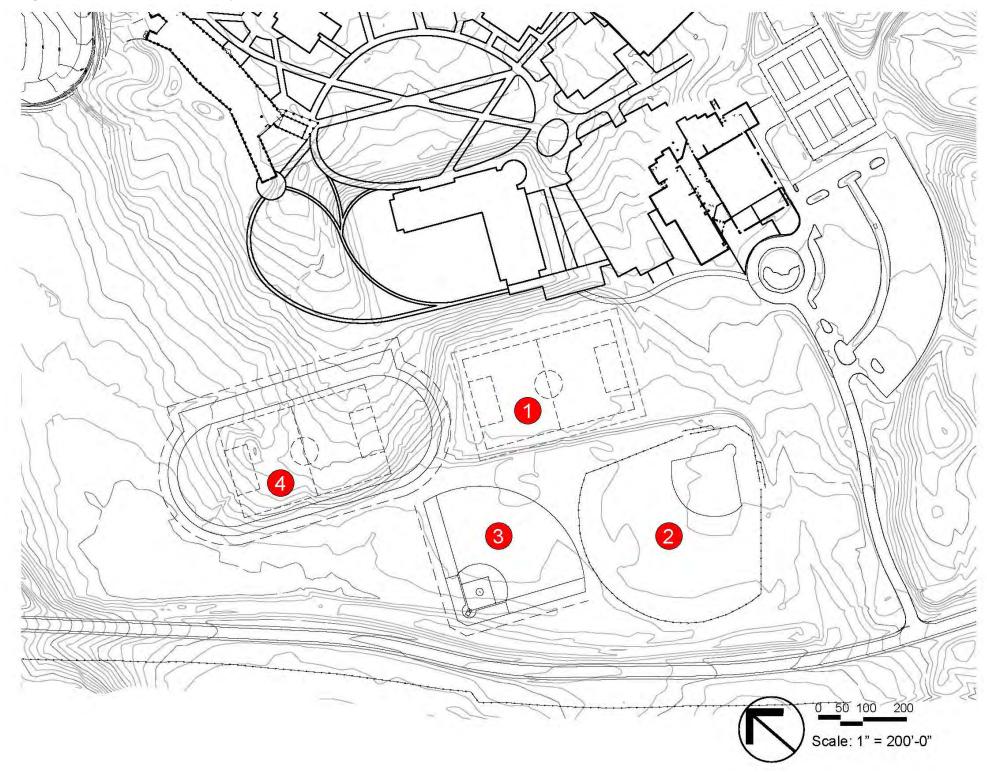
Figure L.7: Athletic Precinct Option 1



Legend

- Soccer Practice Field
- 2 Baseball Field
- 3 Softball Field
- 4 Soccer Competition Field with Track

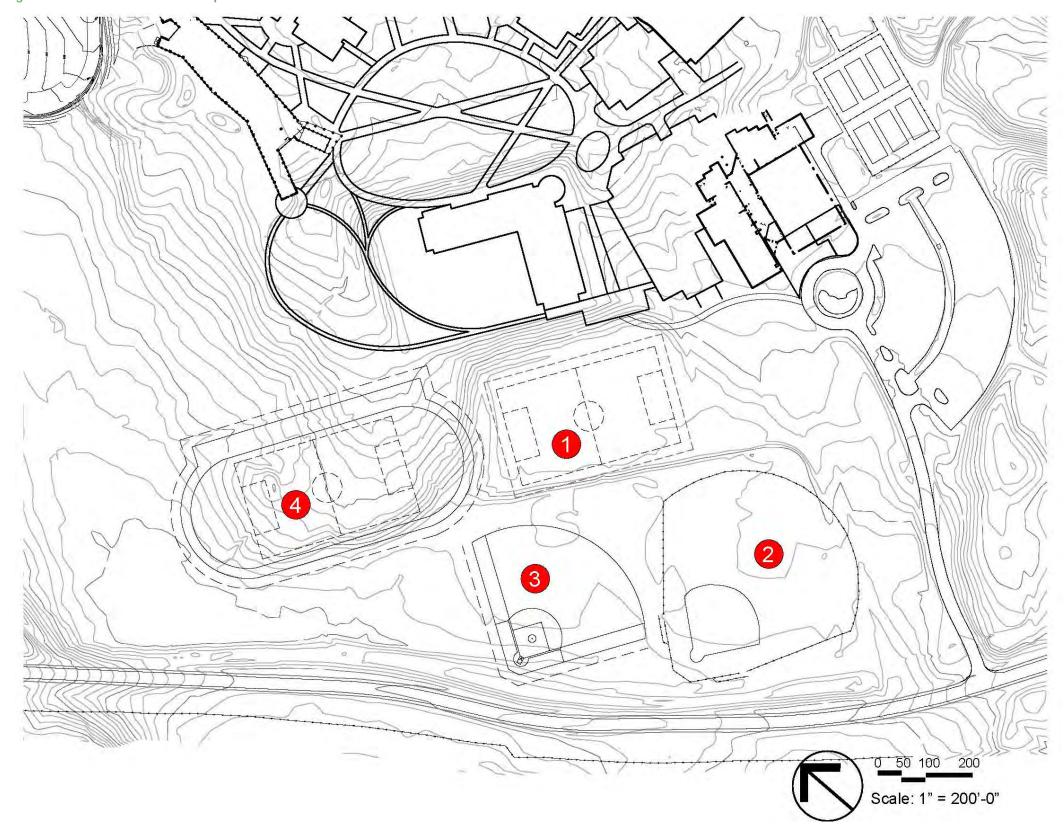
Figure L.8: Athletic Precinct Option 2



Legend

- 1 Soccer Practice Field
- 2 Baseball Field
- 3 Softball Field
- 4 Soccer Competition Field with Track

Figure L.9: Athletic Precinct Option 3



Legend

- 1 Soccer Practice Field
- 2 Baseball Field
- 3 Softball Field
- 4 Soccer Competition Field with Track

Figure L.10: Composite Summary of Proposed Landscape Initiatives



HOUSING М.

While planning for campus housing is under the auspices of the Dormitory Authority of the State of New York (DASNY), the Facilities Master Plan identifies preferred future directions for student housing based on College goals and both current and proposed campus land use.

Context & Goals

SUNY College at Old Westbury seeks to become a more residential institution, housing up to 50% of its traditional undergraduate students. By 2023, given enrollment projections, this would require a capacity of 2,000 students - approximately 350 more beds than the College's current capacity of 1,650 students. Provision of some housing to serve faculty and/or graduate students is also under consideration by the College.

Currently, 850 beds are provided within the Woodland Residence Halls (constructed in 2003) and 800 are located in the Academic Village Residence Halls. Condition of the Academic Village Residence Halls is visibly poor, with upkeep consuming a significant portion of the College's maintenance budget. With the relocation of academic functions to the New Academic Building, the AV Residence Halls will no longer enjoy adjacency to the College's primary academic facilities. Currently, 550 of the AV Residence Hall beds are leased to NYIT and Briarcliff students.

Facilities Master Plan Recommendations

- Work with DASNY to determine whether the Academic Village Residence Halls will be demolished or renovated for continued long-term use.
- Cluster future housing for undergraduate students on the west side of the campus core, proximate to the Woodland Residence Halls. Potential future housing zones identified within the framework plan include:
 - o The area north of the Woodland Residence Halls, proximate to the Ring Road and the proposed New Parking Lot at Woodland Residence Halls
 - o The area east of the Woodland Residence Halls, proximate to the New Academic Building. The Campus Center, the Campus Center Parking Lot
 - \circ The area south of the Woodland Residence Halls, proximate to the athletic fields and the New Academic Building.

Given that the Woodland Residence Halls offer only traditional dorm-style units, suite- and apartmentstyle units should be prioritized for future residence halls. In-building housing for residential life staff should be provided for appropriately as well.

Possible future housing for faculty and/or graduate students could be located proximate to the current site of Service Buildings A and B along C Gate Road, near the proposed New Daycare Center, or in one of the three zones identified for future undergraduate housing.

Part 4: Implementation

N. PHASING STRATEGY & CAMPUS OPERATIONS

Phasing approaches described within the Facilities Master Plan reflect the current goals and priorities of College leadership. Phasing may be revised following completion of this report in response to availability of funding, speed with which enabling projects can be completed, changes in enrollment, etc. The College and the Fund will revisit phasing plans at the outset of each capital cycle.

Preliminary phasing for each Facilities Master Plan capital initiative is described in the Facilities Master Plan Capital Initiatives & Phasing Plan diagram below. For additional information on suggested phasing, please see the descriptions of each initiative in Part 3: Master Plan Framework.

Efforts to improve campus operations and minimize disruption during implementation of initiatives include the following:

- Construction periods for major renovations and new facilities within the campus core (e.g., Renovation and STEM Addition at the Natural Science Building, Renovation and Addition at Clark Athletic Center, Future Academic Building, and to some extent, Dining Expansion at the Campus Center) are staggered.
- For initiatives at the both the Natural Science Building and Clark Athletic Center, if full funding is available, it is recommended that construction of new space precede renovations.
- Relocation of the Facilities Maintenance & Operations headquarters from C Gate Road to a repurposed Heating Plant building will provide a right-sized Facilities Maintenance & Operations Center proximate to the academic and residential buildings the facilities crew maintains. Consistent with departmental goals, placement of a dedicated facilities staff member within each major campus building is recommended to further improve efficiency of campus operations.

Construction periods for each Facilities Master Plan initiative are indicated within the Capital Initiatives Phasing Chart below.

Figure N.1 Facilities Master Plan Capital Initiatives & Phasing Plan - All Initiatives

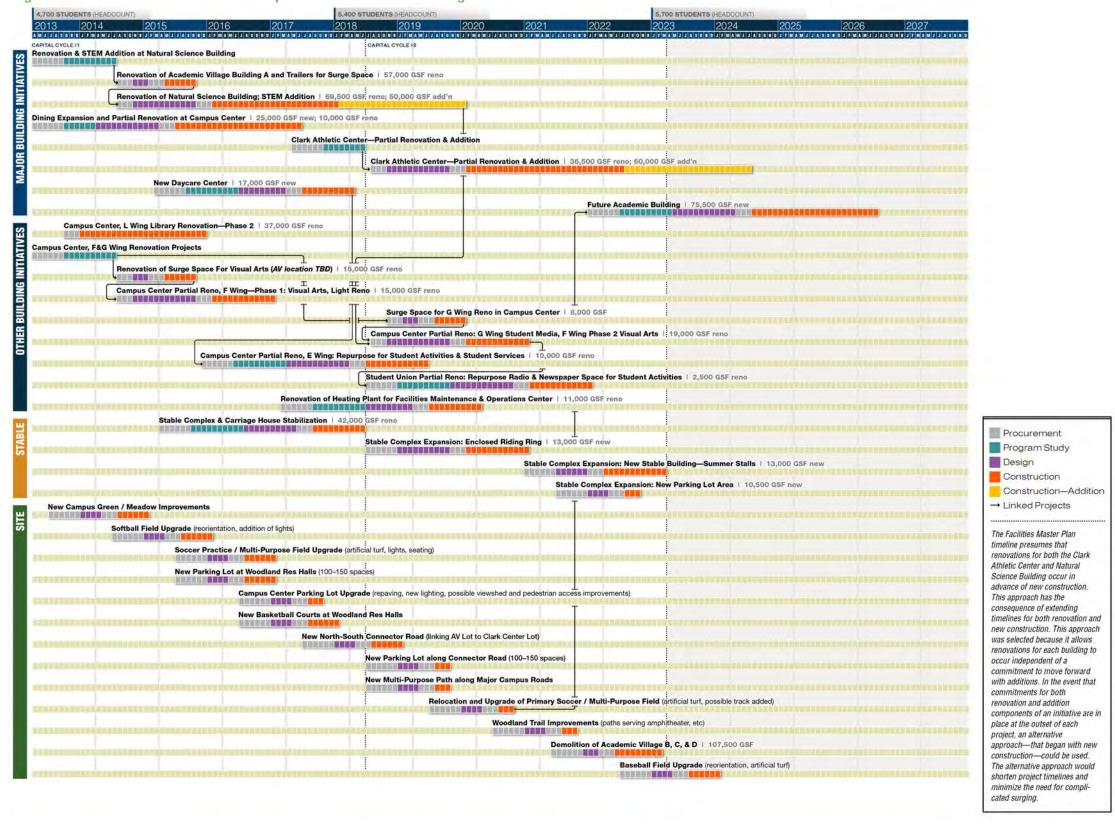
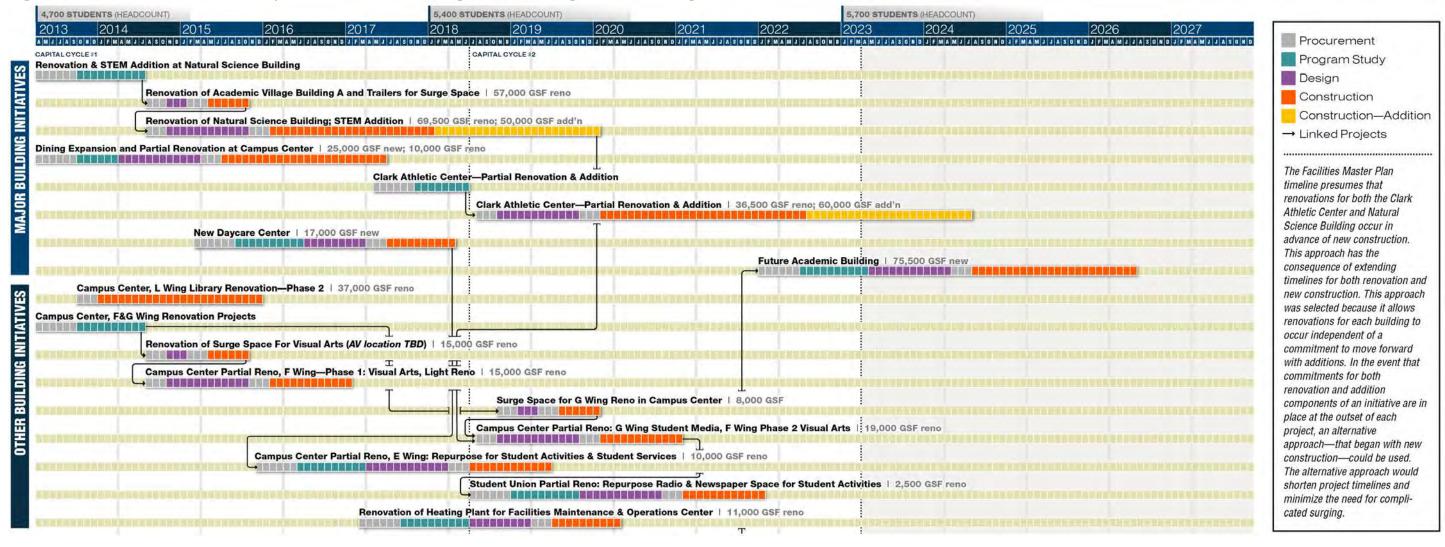


Figure N.2 Facilities Master Plan Capital Initiatives & Phasing Plan - Building Initiatives Only



4,700 STUDENTS (HEADCOUNT) 5,400 STUDENTS (HEADCOUNT) 5,700 STUDENTS (HEADCOUNT) 2014 2019 2022 2024 2026 Procurement MAMPICANOSAL CMAMPICANOSAL CMAMPICANOSAL CMAMPICANOSAL CMAMPICANOSAL CMAMPICANOSAL CMAMPICANOSAL CMAMPICANOSAL CMA A SOND J F MAM J J A SON D CAPITAL CYCLE #2 Program Study Stable Complex & Carriage House Stabilization | 42,000 GSF reno Design Stable Complex Expansion: Enclosed Riding Ring | 13,000 GSF new Construction Construction—Addition Stable Complex Expansion: New Stable Building—Summer Stalls | 13,000 GSF new → Linked Projects Stable Complex Expansion: New Parking Lot Area | 10,500 GSF new -----The Facilities Master Plan New Campus Green / Meadow Improvements timeline presumes that renovations for both the Clark Softball Field Upgrade (reorientation, addition of lights) Athletic Center and Natural Science Building occur in Soccer Practice / Multi-Purpose Field Upgrade (artificial turf, lights, seating) advance of new construction. This approach has the New Parking Lot at Woodland Res Halls (100-150 spaces) consequence of extending timelines for both renovation and Campus Center Parking Lot Upgrade (repaving, new lighting, possible viewshed and pedestrian access improvements) new construction. This approach was selected because it allows **New Basketball Courts at Woodland Res Halls** renovations for each building to occur independent of a New North-South Connector Road (linking AV Lot to Clark Center Lot) commitment to move forward with additions. In the event that New Parking Lot along Connector Road (100-150 spaces) commitments for both renovation and addition New Multi-Purpose Path along Major Campus Roads components of an initiative are in place at the outset of each Relocation and Upgrade of Primary Soccer / Multi-Purpose Field (artificial turf, possible track added) project, an alternative approach—that began with new Woodland Trail Improvements (paths serving amphitheater, etc) construction—could be used. The alternative approach would Demolition of Academic Village B, C, & D | 107,500 GSF shorten project timelines and minimize the need for compli-Baseball Field Upgrade (reorientation, artificial turf) cated surging.

O. SURGE SPACE

Suggested surge space approaches for Facilities Master Plan initiatives reflect current assumptions about project scopes and facilities that could be more intensively utilized. Surge space approaches may be revised through further investigation following completion of the master plan process (e.g., through program studies).

For initiatives requiring surge space, suggested approach is described in the chart below. For additional information on phasing, please see the descriptions of each initiative in Part 3: Master Plan Framework.

Figure O 1: Suggested Approach to Surge Space

Figure 0.	1: Suggested Approach to Surge Space
	SUGGESTED APPROACH TO SURGE SPACE
Renovation & STEM Addition at Natural Science Building	 Construct addition in advance of renovations OR Provide science surge space in Academic Village Building A through light renovation of existing offices and classrooms (approx. 10,000 GSF); and Surge wet labs in specialized trailers (approx. 10,000 GSF)
Dining Expansion & Partial Renovation at Campus Center	Make more intensive use of other existing campus dining facilities (e.g., Campus Center snack bar, dining venues in the Student Union and the New Academic Building)
Renovation & Addition at Clark Athletic Center	 Construct addition in advance of renovations OR Provide trailers Move more easily relocated functions (e.g., cardio room) to temporary locations in the Academic Village or the Campus Center (e.g., the Gallery space off the H Wing Atrium)
Library Renovation, Phase 2	As with Library Renovation - Phase 1, provide surge space within the Library
Campus Center F Wing Renovation, Phase 1	 Renovate portions of Academic Village Building A for temporary use by the Visual Arts Department (15,000 GSF)
Campus Center G Wing Renovation	 Provide modest renovation of space within the Campus Center (e.g., current Art Gallery) to provide temporary home for TV studio, offices, and classrooms while G Wing is under renovation (8,000 GSF)

P. ESTIMATED COSTS

Cost estimates have been prepared for each Facilities Master Plan initiative, including:

- **Building renovations**
- New construction
- Site improvements
- **Demolitions**

Where surge space is required, cost estimates have also been prepared for the surging approach identified.

Cost estimates were developed in compliance with SUCF specifications for consistency with other SUCF facilities master plans, and provide information on both construction and project costs. Cost estimates are provided for individual initiatives, for the 2013 - 2018 and 2018 -2023 capital cycles, and for implementation of all capital initiatives identified within the Facilities Master Plan.

A summary of cost estimates is provided in the figure that follows. To review back-up information for cost estimates, please see the spreadsheet provided as Appendix 5.A.

Figure P.1: Summary of FMP Cost Estimates

SUCF Facilities Master Plan
Project Phasing & Budget Funding Plan
Campus: SUNY College at Old Westbury
Date: 11/22/2011 (Incorporates SUCF Opinion 16 Nov 2011 AAV)

			T.	Project Budget Types		Capital Budget Plan					
	Area (GSF)	Linit	Cost / GSF	Reno Costs	New or Addition Costs	Site Costs	2013-2018	2018-2023	Beyond 2023		Total
struction Budget Costs							-9/20	41741034			1600
Program / Sciences											
3 Natural Science Building Renovation	69,500	5	264.41	18,376,402			18,376,402			\$	18,376
1 Partial Renovation of Academic Village Building A for Science Surge Space	20,000	s	26.68	537,680			537,660			S	537
2 Wet Lab Trailers for Science Surge Space	37,000	3.	365.71		13,568,085		13,568,085			5	13,568
4 Natural Science Building STEM Addition - Science Expansion	18,000	\$	492 20		8,859,645		8,859,645			5	8,859
Program / Visual Aris											
13 Renovation of Campus Center F Wing, Phase 1: Existing Visual Arts Space	15,000	\$	203.71	3,055,658			3,055,658			5	3,055
12 Renovation of Academic Village Building A for Visual Arts Surge Space	15,000	\$	36.02	540,270			540,270			5	540
26 Renovation of Campus Center F Wing, Phase 2: Visual Arts Expansion	4,000	\$	166.39	865,550				665,550		\$.66
Program / General Academic (Non-Arts & Sciences)	45	-9/-								17	
5 Natural Science Building STEM Addition - Comp Sci & Classroom	32,000	\$	459.32		14,698,215		14,898,215		1.07×1.000	5	14,69
40 Future Academic Building - Academic Space	40,500	\$	340.81		13.802.659				13,802,659		13,802
24 Renovation of Campus Center G Wing: Student Media & Academic Space	8,000	5	189,88	1,519,020				1,519,020		S	1,519
23 Surge Space for Campus Center, G Wing	8,000	\$	22.19	177,490				177,480		\$	177
General / Campus Life	ar non	8	hard on		7 200 42E		s ann are				n mae
7 Dining Expansion at the Campus Center 9 Dining Renovation at the Campus Center	10,000	5	375 58 210 24	2,102,355	9,389,475		9.389,475 2.102,355			5	9.380
9 Dining Renovation at the Campus Center 20 Clark Athletic Center Partial Renovation	36,500	3	168.93	6,166,115			2,102,000	6,166,115		4	6,16
21 Clark Athletic Center Addition	60,000	\$	360 12	0,100,110	21,607,277			21,607,277		5	21,60
42 Future Academic Building - Campus Life Space	14,500	S	379.93		5,509,041			21001211	5,509,041		5,509
11 Library Renovation, Phase 2	27,085	s	264.31	9,801,794	5,505,647		9.801,794		5,509,941	5	9.80
29 Renovation of Campus Center E Wing - Student Activities	5.000	5	167.04	835,200			4,300/1,300	835.200		8	835
		- 1	- 40.4	31,743-6						6	1,000
25 Renovation of Campus Center G Wing: Student Media & Activities Space	7.000	\$	189.88	1.329 143				1,329,143		s	1,329
27 Backfill Renovation in Student Union	2,500	\$	41.11	102.789				102,769		\$	102
Administration / Support Services			1000								
10 New Daycare Center	17,000	s	332 78		5,657 175		5,657,175			5	5,657
41 Future Academic Building - Administrative Space	20,500	8	342 76		7,026,660				7,026,660	\$	7,026
28 Renovation of Campus Center E Wing - Student Services	5,000	\$	167.04	835.200				835,200		5	835
30 Renovation of Heating Plant Building for Facilities Maintenance & Operations Center	11,000	\$	202.60	2,228,614				2,228,614		5	2,228
Site Improvement Projects										1	
14 New Campus Green	199,600	\$	14.71			2,935,545	2.935,545			s	2,935
10 10 10 10 10 10 10 10 10 10 10 10 10 1	129 000		20.23			2,609,348	2,609,348			S	2,609
15 Softball Field Upgrade	129,000	\$	20,23			2,009,346	2,009,340			9	2,00%
16 Soccer Practice/Multi-Purpose Field Upgrade	205,500	5	19.21			3,947,495	3,947,495			5	3,947
17 New Parking Lot at Woodland Residence Halls	59,500	\$	19.58			1,164,713	1,164,713			\$	1,164
18 Campus Center Parking Lot Upgrade	213,500	5	21 79			4.652,912	4.652,912			8	4,652
19 New Basketball Courts at Woodland Res Halls	30,000	5	12.30			368.989	368,989			s	368
35 New North-South Connector Road	34,000	s	11:55			392 675		392,675		s	392
	1000					1,000,000		392,073		C.	
6 Expansion of Campus Green at Science Bldg	32,200	\$	17.88			575,688	575,688			S	575
8 Expansion of Campus Green at Dining Addition	17.200	\$	31.43			540,635	540,635			\$	540
36 New Multi-Purpose Path along Major Compus Roads	831,000	\$	11 55			9,597,427		9,597,427		5	9,597
37 Relocation & Upgrade of Primary Soccer/Multi-Purpose Field.	271.500	5	21,55			5,851,457		5,851,457		S	5,85
38 Woodland Trail Improvements	20,000	5	14.20			284,055		284,055		5	284
22 Expansion of Campus Green at Clark Center Addition 44 Reschall Field Ungrade	89.900 300.000	5	16.66 12.81			1,498,049		1,498,049	2 042 225	S	1,498
44 Baseball Field Upgrade 43 Expansion of Campus Green at New Academic Building	251.500	\$	4.42			3,843,225			3,843,225		3,843
Other	1.000		4.42			1,111,208			1,117,208	1	1,113
31 Stable Complex & Carriage House Stabilization	42,238	8	80.91	\$3,417,477				3,417,477		s	3,417
32 Stable Complex Expansion Enclosed Riding Ring (covered riding ring for horses)	13,000	5	221.52		\$2,879,809			2,879,809		s	2,879
33 Stable Complex Expansion: New Stable Building - Summer Stalls	13,000	\$	263.98		\$3,431,824			3,431,824		5	3,431
34 Stable Complex Expansion: New Parking Area (10,500 sf)	10,500	\$	17.62		\$184,984			184,984		5	184
39 Demolition of Academic Village Buildings B, C and D	107,500	s	28.71			\$3.086,325		3.086,325		S	3,086
Sub-Total Construction Budget Costs				\$ 51,690,705	106 614.848	\$ 42,459,743 \$	103.382,057 \$	63,004,121 5	31,292,792	\$	200,765
er Project Budget Costs											
Professional Fees, Equipment Costs, Contingencies Budgeted @ 35%							36.183,720 S	22.051.442	10.952,477	s	69,18
Sub-Total Project Costs						3					266,866
											125,011
Escalation through Year 4 of Funding Cycle (Beginning 01/01/2011) @ Rate/Year (2013-3,75%						1	41,018,382 \$	47,248,365	36,744,936	5	120,011

Q. COMMUNITY ISSUES & PROPERTY **ACQUISITION**

FMP Investments & the Broader Community

SUNY College at Old Westbury maintains a positive working relationship with Brookville and Old Westbury, the villages in which it is located. Neighbors make frequent use of campus land on weekends for biking, walking and horseback riding. The campus' open space acreage is viewed as a regional asset, and is protected by a "Forever Wild" designation through an act of the New York State Assembly.

The Facilities Master Plan advances College and community interests through:

- Path and trail improvements (e.g., addition of the New Multi-Purpose Path along A Gate Road and the Ring Road, Woodland Path Improvements);
- Preservation and enhancement of open space (e.g., the Proposed Campus Green, athletic field improvements, ongoing stewardship of undeveloped land);
- Repair and expansion of stable facilities, for the enjoyment of the College community and the broader region; and
- Renovation and expansion of core academic and campus life facilities in support of improved educational outcomes and a well-prepared regional work-force.

Property Acquisition

The SUNY College at Old Westbury campus occupies over 600 acres of land, which provides adequate space to accommodate all projected needs. Land adjacent to the campus is actively used, and is primarily devoted to large-lot single family subdivisions and golf courses.

No property acquisitions are required, anticipated or recommended for implementation of the Facilities Master Plan.

R. DEMOLITION

Demolition is recommended for Academic Village Buildings B, C, and D following relocation of academic functions to the New Academic Building. The buildings have significant condition, suitability and accessibility issues, which have prompted construction of the New Academic Building as a replacement academic facility. All three buildings have reached the end of their useful life, have become maintenance/operations burdens, and cannot be cost effectively renovated to meet current needs or to address building systems issues.

S. SITE UTILITIES

Site utilities have been reviewed to determine whether improvements are needed to support initiatives identified in the Facilities Master Plan. Findings are as follows:

Water

Based on the data obtained during Phase 2, the campus is serviced by a 16" distribution water main that loops around the campus. The areas of future development are serviced by a 12" main that is tapped off of the 16" main. 28 Enrollment is expected to grow by approximately 1,335 students by 2023, bringing the total population to 5,690 Students. To evaluate the demand on the water distribution system, we evaluate the sanitary flow leaving the network and then increase the total by 10%. Using the same parameters to evaluate sanitary flow, they are: School = 5 GPD/Capita + Food; Cafeteria = 2.50 GPD/Capita, therefore a conservative combined flow rate of 7.5 GPD/Capita was used. The additional capacity being added to the water system is 10,013 GPD (1,335 Students x 7.5 GPD/Capita), then adding 10% yields a demand of 11,013 GPD. This has been verified with the Old Westbury Water District and has been deemed a negligible increase that can be accommodated by the current infrastructure.

Natural Gas

As per the recent gas distribution data provided by National Grid, there is a 6" LP main that runs though the campus to multiple facilities. The campus main is supplied natural gas from National Grid's Main along Route 107 and services the Campus Center, Natural Sciences Building and Student Union. As per discussions with Mr. Richard Petraglia at National Grid, the 6" line that currently services this area should be sufficient to handle the additional 1,335 students.

Sanitary

As outlined in Phase 2 of the FMP, it was established through the research and review of the existing plans and interviews with University staff, that available sewer flow into the Nassau County Cedar Creek Water Pollution Control Plant in Seaford, NY is approximately 70% greater than is currently being discharged into the system. The College reports that SUNY Old Westbury has an approved sanitary capacity that far exceeds the current flow and that is further verified in the Engineers Report prepared by Sidney B. Bowne & Sons, LLP with the statement that the 2001 combined CW Post and SUNY system was operating at less than 30% of its full capacity. According to the same report, the allowable capacity of the CW Post sewer branch is 1.6 Million Gallons per Day (MGD) and the SUNY sewer branch is 2.6 MGD, with a combined allowable capacity branch total of 4.2 MGD. These allowable capacities were then evaluated against the current and projected enrollments for SUNY Old Westbury. This evaluation may be analyzed by either calculating the total sewer contribution into the sanitary system based on current and proposed population or to evaluate the maximum population that can be accommodated based on the allowable flow, pipe size diameter and flow rate. The former option was selected based on anticipated population to be

²⁸ Drawing #13 of the "State University Construction Fund, Comprehensive Campus Plan, State University College at Nassau"

accommodated by the current network in 2023. If the network can handle the current and future population, then the infrastructure is sufficient.

The outlined analysis is based on published Nassau County Minimum Design Sewage Flow Rated For Sewers and is a combined factor based on the mix of uses currently and proposed on campus. The following rates were used to determine flow: School = 5 GPD/Capita + Food; Cafeteria = 2.50 GPD/Capita, therefore a conservative combined flow rate of 7.5 GPD/Capita was used. The total enrollment in 2010 was 4,355, with 3,815 FTE, and the projected 2023 enrollment is 5,690 students with 4,824 FTE, yielding a net increase 1,335 students. Based on the total project enrollment of 5,690 students, a required flow rate of 42,675 GPD was determined (5,960 Students x [5.0 GPD/Capita + 2.5 GPD/Capita] = 42,675 GPD. This flow rate is commonly known as an Average Daily Rate which is approximately 1/4 the Peak Flow, therefore multiply by four yields the Total Peak Flow (TPF) of 170,700 GPD. This number again is based on the proposed full population of the campus in 2023 of 5,690 students regardless of their location throughout the campus.

This required TPF needs to be evaluated against the allowable Maximum Allowable Flow (MAF) of the pipe networks. As previously determined, all sanitary waste is discharged into the Nassau County Sewer System and is treated at the Nassau County Cedar Creek Water Pollution Control Plant in Seaford, NY. Review of the plans provided by SUNY Old Westbury entitled "Long Island University, C.W. Post Center, Contract No. 2, Wastewater Force Main", prepared by Divrka and Bartilucci Consulting Engineers, dated 1985, provide the design plans for the force main from the C.W Post campus into the SUNY Old Westbury System. There is an 8" force main that carries effluent from a pumping station located adjacent to North Hempstead Turnpike (NY 25A). That force main then connects into an 8" pipe (Station 122+09). From this 8"pipe, the entire system is a gravity conveyance system to the outflow connection to the county system. The 8" pipe feeds into a 10" gravity pipe and then to a 12" pipe, which completes the CW Post system. That 12" pipe is then tied into the existing 15" and 21" Old Westbury owned sewer main, finally discharging into the municipal system.

The areas of the proposed future expansion would be tied into the sewer network by the 12" Vitrified Clay pipe (VCP). Due to the fact that this is the smallest pipe diameter flowing downstream, the maximum flow was based on this diameter pipe. The MAF of a pipe is determined by its slope, length of pipe, and pipe friction factor. Based on the provided utility plans, the length of the pipe is 275 feet with a slope of 0.0068. That yields a flow of +/- 1.7 cubic feet per second and then once converted yields 1,131,053 GPD MAF. It can therefore be determined by this MAF of 1.13 MGPD that a proposed TPF of 170,700 GPD can be accommodated.

Stormwater Disposal and Drainage

Long island is a Sole Source Aquifer (SSA) and stormwater is required to infiltrate into the ground to recharge the glacial aquifers that supply potable water. In line with this requirement, all stormwater must be managed and recharged onsite at a volume consistent with NYS DEC, County and Local Standards and Requirements. Traditionally this is handled with a system of recharge basins or subsurface drywells to hold the minimum volumetric capacity of the site-generated stormwater. This volume of water is then allowed to leach into the sandy soils of Long Island, migrating to the first aquifer, the Upper Glacial Aquifer, then downward to the Jameco Aquifer, the Magothy aquifer and then the Lloyd Aquifer.

The current stormwater management system includes a closed system that is made up of a series of interconnected catch basins and manholes. The system conveys stormwater from the individual collections structures to either leaching pools or directly into the storm drain system and into a recharge basin. This system is referred to as a municipal separate storm sewer system (MS4). By definition an MS4 is a conveyance or a system of conveyances that include roads with drainage systems, catch basins, curbs, gutters, ditches, man-made channels, pipes, tunnels, or storm drains that discharges into waters of the United States. An MS4 moves water away from an area to a local water body, that is owned and operated by a state, city, town, county or other public body. The Phase II stormwater regulations require that stormwater discharges from MS4's be permitted and address storm water quality and quantity. The SUNY Old Westbury Campus as an entity is its own MS4 and therefore regulates is own stormwater

State University campuses have not historically been subject to local Town and Village regulations. However, due to new stormwater regulations, any redevelopment including proposed stormwater design will be subject to the following regulations to provide stormwater quality and quantity treatment at the site:

- 1.) The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation).
- 2.) New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapter of the Soil and Water Conservation Society).

Redevelopment projects that are greater than one acre are subject to the State Pollutant Discharge Elimination System (SPDES) permit program, which regulates the discharge of pollutants from new or existing stormwater outfalls or point sources into the waters of the State. Under the Federal National Pollutant Discharge Elimination System (NPDES) regulations, as administrated by New York State, SUNY College at Old Westbury /SUCF are required to obtain a permit for the discharge of stormwater. Redevelopment of this site will require a Notice of Intent ("NOI") as required under the New York State Pollution Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activity - Permit No. GP-0-10-001.

The method of stormwater discharge has begun to include other greener, more sustainable solutions other than just subsurface structures. Stormwater management now incorporates low impact development measures combined with sustainable treatment and storage measures. For instance, Bio Retention basins are becoming more popular as a component to the stormwater discharge network. Bio Retention is the process in which contaminants and sedimentation are removed from stormwater by collecting the runoff into the treatment area which consists of a grass buffer strip, sand bed, ponding area, organic layer or mulch layer, planting soil, and plants. Runoff passes first over or through a sand bed, which slows the runoff's velocity, distributes it evenly along the length of the ponding area, which consists of a surface organic layer and/or groundcover and the underlying planting soil. The ponding area is graded, its center depressed. Water is ponded to a depth of 15 cm (5.9 in) and gradually

infiltrates the bioretention area or is evapotranspired. The bioretention area is graded to divert excess runoff away from itself. Stored water in the bioretention area planting soil exfiltrates over a period of days into the underlying soils.

Another sustainable method of handling stormwater runoff is Rain Gardens. A rain garden is a planted depression that allows rainwater runoff from impervious urban areas like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be absorbed. This reduces rain runoff by allowing stormwater to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, water pollution, flooding, and diminished groundwater). They can be designed for specific soils and climates. The purpose of a rain garden is to improve water quality in nearby bodies of water. Rain gardens can cut down on the amount of pollution reaching creeks and streams by up to 30%.

As described above, there are a range of "Green" strategies for addressing stormwater management for proposed buildings, roads and parking lots identified in the Facilities Master Plan - including use of subsurface detention basins, bio-retention basin (as currently shown in the area north of the proposed outdoor athletic zone), and rain gardens. Additional investigation of proposed grading, soil types, etc. in areas targeted for additional development will be needed to confirm the optimal approaches for addressing run-off impacts of the proposed initiatives. Design and selection of the most appropriate stormwater treatment methodology will be evaluated as projects are advanced and plans are developed in more detail.

Electrical Distribution

SUNY College at Old Westbury purchases electricity from the Long Island Power Authority (LIPA).²⁹ Two 13.2kv feeders deliver electricity to the campus at a single location via underground conduits. Both feeders are approximately 40 years old and have had some incidents of failure.

The campus's main electric switch gear was replaced in the 2008 - 2013 capital cycle through Project 31216. The switchgear is located north of the Woodland Residence Halls and Ring Road, along the College's northern border, in a 39'10" X 15'2" enclosure. The switchgear is 10'11" in height. It is an outdoor insulated power control complex Metal Clad Switchgear. The 13.2KV service is 15KV max, 1200 AMP 3 Phase, 3 wire, 60 HZ, 95KV BIL, 500MVA.

Feeders distribute electrical service to campus buildings with 4,760kv transformers. Some flooding has been reported in the electrical power manholes. More detailed information on building-specific electrical infrastructure (e.g., switches and transformers) for the Campus Center, the Natural Science Building and Clark Athletic Center is provided in the sections that follow. In general, equipment dates to the time of construction of the buildings it serves.

Peak electricity usage, inclusive of the anticipated load from the New Academic Building which will be online as of Fall 2012, is estimated at 3.4 megawatts. The College's co-gen

²⁹ Central Utilities Master Plan. Prepared by WM Group Engineers, December 2006.

system, supported by a 1,779kW GE Jenbacher reciprocating engine generator located in the Heating Plant, can produce up to 1.8 megawatts.

The co-gen uses a synchronous generator that runs in parallel to the utility supply. The governor system of the cogen regulates kW output according to the needs of the campus and available energy supply of the cogen itself. LIPA makes up the difference between this and the requirement of the facility. This occurs automatically.

Capacity of the electrical distribution system is deemed sufficient to support both current loads and facilities expansion.

Campus-Wide Heating & Cooling

With the exception of the Woodland Residence Hall complex, heating service has traditionally been provided throughout the campus through a High Temperature Hot Water (HTHW) distribution system linked to a centralized Heating Plant. A 1,779kW GE Jenbacher reciprocating engine generator in the Heating Plant supports a cogeneration system.

A 2006 evaluation of the College's central utility systems found that while the Heating Plant itself was in generally "excellent condition," the distribution system was in imminent danger of failure, with:

- Minimal insulating capacity in the lines
- Breaching of conduits by groundwater, with resulting corrosion that renders carrier pipe failure "inevitable"
- "Inoperable" isolation valves in the manholes, such that complete shutdown of the campus heating system would be required in order to remedy even small carrier pipe failures.
- Need for upgrade of HTHW exchangers

In anticipation of pipe failure, since 2008, the College has added satellite boiler plants in the Natural Science Building, Clark Athletic Center, and the Campus Center - replacing the high temperature hot water system with a satellite boiler for these facilities. The boiler in the Campus Center also serve the New Academic Building. A new boiler has also been installed in the Academic Village but is not yet operational as the facility is still served by HTHW system.

The College expects to decommission the HTHW plant, following carrier pipe failure, within the next ten years. Without the HTHW system, the waste heat produced by the co-generation system will no longer be utilized.

Four chiller plants - located in the Campus Center, the Student Union, the Natural Science Building, and the Academic Village - provide air conditioning. The Woodland Residence Halls are served by independent air-cooled chillers. A new chiller and cooling tower installed in the

Campus Center chiller plant in 2010 will serve both the Campus Center and the New Academic Building.30

It is expected that new facilities identified in the Facilities Master Plan would be equipped with satellite boiler/chiller plants.

³⁰ Central Utilities Master Plan: Analysis of Options for Heating, Cooling, and Cogeneration. WM Group. December, 2006; Design Manual Report: Heating and Cooling Upgrades. WM Group. April, 2008.

T. TECHNOLOGY

SUNY College at Old Westbury's IT system backbone can be described as follows:

- Fiber backbone runs at 20 gigabits per second, which is sufficient to meet campus needs; the fiber backbone has capacity to run at up to 100 gigabits per second
- System is organized in star configuration, with its center in the basement of the Campus Center
- Incoming tele/data service is provided via 2 connections:
 - A path running from Route 106/107 along the median of A Gate Road to the Campus Center
 - A path running from the Long Island Expressway service road along C Gate Road to the Natural Science Building; in-house paths then connect back to the Campus Center
- Standards for fiber are as follows:
 - Between buildings: single-mode, 50 micron
 - In buildings: single-mode and 50 micron multi-mode are pulled from data closets

No change to the existing standard is currently recommended.

With renovation of existing facilities and the addition of new academic and campus life facilities, technology infrastructure will be upgraded and expanded to serve the needs of the campus community. Recommendations related to technology infrastructure are as follows:

- Mapping of underground conduits and rationalization of system: Currently, the College lacks full and accurate information on the locations of underground conduits. To minimize damage and disruption during future construction projects, a mapping effort should be undertaken.
- Technology-Friendly Design: Future facilities should be designed to maximize flexibility for future technology retrofits and for responsiveness to emerging technology needs. Provision of sufficient cooling and electrical capacity will be important.
- Co-Location of IT Group, Data Center and Computer Labs: With the relocation of IT staff and the campus Data Center from Campus Center G Wing to the STEM Addition at the Natural Science Building, IT staff will be proximate to the Computer Science Department, and the cluster of computer labs IT maintains. This will enable IT to better staff and maintain these labs. Ideally, the new office space for the IT Group

will provide a layout that supports collaboration and interaction among staff members (e.g., clusters of small offices with a common space in the center)

U. GREENING

The State of New York has mandated "green and clean state buildings and vehicles" through Executive Orders 111 and 142, which require SUNY campuses to improve energy performance and advance state sustainability goals. This mandate is supported by goals identified in SUNY's Energy and Sustainability Policy, including design and rehab of buildings in a manner certifiable at the LEED Silver level or above.

Within the SUNY College at Old Westbury community and beyond, sustainable stewardship of the College's 600+ acres is regarded as critical. SUNY College at Old Westbury is the steward of the largest open space aquifer recharge area in Nassau County - a resource to be protected.

"Greening" efforts are therefore an important component of the Facilities Master Plan. Greening initiatives include:

Stormwater Management

Recommended use of Bioretention/Filtration areas (shown north of the Outdoor Athletics Zone), rain gardens, and subsurface detention basins to address run-off, as appropriate given proposed grading and soils.

"Green" Landscape Improvements

New open spaces that provide opportunities for "sustainable campus" demonstration projects, and which will promote increased use of the outdoor environment

Green Building Practices

- Building additions and renovations certifiable at the LEED Silver level or above
- With renovations, upgrade of old, inefficient building systems
- Efficient, intensive use of existing space to limit new construction

Sustainable Transportation

- Addition of multi-use path networks to encourage walking, biking and shuttle/bus ridership as an alternative to driving
- Improved pedestrian paths, crosswalks, and the addition of "missing" sidewalks to encourage walking over driving or shuttle/bus use
- Provision of additional of bike racks to encourage cycling as an alternative to driving or shuttle/bus use
- Suggested improvements to transit service, to encourage alternatives to driving to and around the campus.

V. TABULAR SUMMARY

The following chart documents projected enrollments, estimated space deficits, and anticipated gross square feet (GSF) of new construction expected to be complete by each benchmark year. To view cost estimates for FMP initiatives, please see Section P, Estimated Costs, or Appendix 5.A in the FMP Appendix Volume.

V.1 - Enrollment, Space Deficits & Anticipated Construction by Year

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PLAN YEAR	ENROLLMENT (FALL FTEs)	PROJECTED SPACE DEFICIT WITHOUT NEW CONSTRUCTION	NEW CONSTRUCTION COMPLETED	SPACE DEFICIT ADJUSTED FOR NEW CONSTRUCTION**	COMPLETED INITITATIVES
2013	4,086 FTE	92,500 GSF	140,500 GSF (New Academic Building)**	92,500 GSF**	New Construction: New Academic Building**
2018	4,603 FTE	171,500 GSF	37,000 GSF (Campus Center Dining Expansion, Daycare Center)	134,500 GSF	New Construction: Campus Center Dining Expansion, Daycare Center Renovation: Natural Science Building, Campus Center Dining, L Wing Phase 2, and F Wing Phase 1
2023	4,824 FTE	219,500 GSF	50,000 GSF (Natural Science Building STEM Addition)	132,500 GSF	New Construction: Natural Science Building STEM Addition Renovation: Clark Athletic Center Partial Reno, Campus Center E Wing, F Wing Phase 2, and G Wing, Student Union Partial Reno, Heating Plant
2028	TBD	219,500* GSF	135,500 (Clark Athletic Center Addition, Future Academic Building)	(3,000) GSF	New Construction: Clark Athletic Center Addition, Future Academic Building
TOTAL 2013 - 2028	738 additional FTEs	219,500 GSF of new space needed	222,500 GSF of new construction	3,000 GSF surplus***	5 new construction initiatives 10 renovation initiatives

General Note: Totals for renovations and new construction describe construction / renovation of permanent academic and academic support space. Totals therefore exclude surge space, site initiatives, and stable initiatives. GSF deficit numbers are based on Rickes/CEFPI space needs calculations developed in FMP Phase 3: Analysis of Space Needs and revised in FMP Phase 4: Concept Alternatives in response to the College's determination that no additional space was needed for: 1) faculty research space within non-Science/non-Psychology departments; 2) Support/Central Services. GSF calculations are rounded to the nearest 500 GSF.

^{*} Assumes space needs remain constant between 2013 and 2028.

^{**} The New Academic Building will replace the Academic Village, resulting in a 13,000 GSF decrease in the campus's space inventory. The New Academic Building is not included the GSF totals for the FMP timeframe as the project will be complete in advance of 2013.

^{***}Space needs calculations assume 6,500 GSF surplus of assembly & exhibition space in 2023. The Facilities Master Plan assumes that approximately half of that surplus - 3,000 GSF - can be reallocated through anticipated renovation