



HARFORD COMMUNITY COLLEGE

Facilities Master Plan Five-Year Update 2014

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Table of Contents

- **Introduction**
- **Strategic Plan Update**
- **Building and Facilities Identifications**
- **Existing Conditions and Planning Assumptions**
- **Campus Infrastructure**
- **Existing Land and Capacity for Development**
- **Assessment of Environmental Compliance**
- **Enrollment Projections**
- **Enhanced Campus Sustainability**
- **Campus Zoning**
- **Assessment of Buildings**

Introduction

The intent of this document is to provide a five-year update to the Facilities Master Plan completed in 2008. These updates should be used in conjunction with the original Facilities Master Plan to obtain a comprehensive understanding of progress and changes that have taken place since the completion of the original document. This document follows the original Master Plan format incorporating important updates and changes to each of the sections identified in that plan.

The most significant accomplishments since developing the 2008 ten-year Facilities Master Plan have been completion of Aberdeen Hall, the College's STEM building, and Susquehanna Center- APG Federal Credit Union Arena. Construction of Darlington Hall, the new Nursing and Allied Health building, and construction of the new Towson building on the West Campus are well underway with completion planned for the Fall 2014 semester.

Major improvements to both pedestrian and vehicular circulation have taken place on the campus through construction of a roundabout, new parking lots, road improvements, walkways and directional signage. As identified in the 2008 Facilities Master Plan, the College will continue to look to the West Campus for future expansion. Additional property has been acquired to support this goal. In addition to the Towson building, a new Apprenticeship building is in the early phases of program development.

Strategic Plan Update

In spring 2012, Harford Community College President Dr. Dennis Golladay approved the creation of a 25-member, broadly representative Strategic Planning Committee to develop a strategic plan for 2013 – 2017. The plan is intended to focus and guide the entire College, its units, and its resources toward the achievement of well-articulated goals. The plan will have a major impact on the College's effectiveness and fulfillment of its mission.

- Our mission describes our purpose and what we do.
- Our vision states what HCC aspires to become and describes what we will provide to our students.
- Our values reflect core beliefs that drive our actions.
- Our goals define the broad areas on which the College will focus over the next five years, and
- Our strategies identify the ways we plan to achieve our goals.

The plan is an evolving, dynamic document that will also allow the College to react to additional opportunities as they arise.

The assessment of the College's progress in meeting its goals and implementing its strategies will be primarily the responsibility of Institutional Research, Planning and Effectiveness (IRPE). The Director of IRPE will collaborate with knowledgeable campus employees to establish means of assessing the implementation of each strategy. A complete reporting of the Strategic Plan Assessment will be published by July 30 each year. Quarterly updates will be provided in October, January, and April.

The College's Mission, Vision and Goals can be found on the College website, www.harford.edu.

Building and Facility Identification-Update

In keeping with the tradition of naming College buildings after geographic locations in Harford County, the following buildings and facilities have undergone name changes:

<u>Old Name</u>	<u>New Name</u>
Plant Services Building	Conowingo Center
Nursing and Allied Health Building	Darlington Hall
Day Care Center	Forest Hill Center
Science Annex	Belcamp Center
Plant Services Annex	Hickory Center
Higher Education Center	University Center
Thomas Run Park	Harford Sports Complex

Existing Conditions and Planning Assumptions

Site Physical Characteristics

Total acreage at the College has increased to its present size of 360 acres. This is broken down into the East Campus at 211 acres and the West Campus at 149 acres.

Access

A major improvement in vehicular traffic at the College was realized with the construction of a roundabout on Thomas Run Road located at entrance three. Entrance three is the main entry point into the campus receiving 75 percent of its daily traffic flow. The roundabout was a joint project between Harford Community College and Harford County; the project was completed in 2012.

To further improve traffic flow into and out of the campus, three major road projects are in different levels of planning and construction. These all consist of right turn lanes, the first on Shucks road at RTE-22, the second on Thomas Run Road at entrance two into the campus, and the third on RTE-22 at the intersection of Thomas Run Road.

Two new entrances to the campus were created with the completion of the renovation and expansion of the Susquehanna Center in 2013. These new entrances improved access to the parking areas and building during large events.

With the completion of the new Towson Building on the West Campus, new road improvements at its entrance on Thomas Run Road will also be implemented. These consist of road widening, turn lanes, and new road striping.

Parking

The total number of parking spaces on the campus has increased as identified in the chart below. These increases were associated with the expansion of A-lot and the renovation and expansion of the Susquehanna Center. Design is currently underway to increase the number of spaces in T-Lot by 81, with work planned for late 2014.

Over the past several years many of the campus's aging parking lots and pedestrian walkways were resurfaced. This work included milling and overlay of C-Lot, entrance two road, entrance three road, entrance to T-Lot, and walkway areas throughout the Quad.

Area ID	Location	Existing Parking	Proposed Expansions	Handicapped parking
A Lot	North of Aberdeen Hall	623		4
B Lot	East of Bel Air Hall	118		2
C Lot	West of Chesapeake	140		7
E Lot	North of Edgewood Hall	105		6
F Lot	North of Fallston Hall	230		5
J Lot	North and West of Joppa Hall	297		7
L Lot	North of Library	99		13
S Lot	West of Susquehanna Center	433		14
T Lot	West of Harford Sports Complex	217	81	6
W Lot	Out near Entrance six	88		4
Misc. Lots	Behind Student Center; East of Chesapeake Center; Forest Hill Center; Conowingo Building; Hays-Heighe House	118		17
Totals		2468	81	85

Parking Lot Count

The following chart provides a current inventory for buildings by name, size, and efficiency. Not included are the buildings in progress, Darlington Hall and the Hickory Center.

Space Inventory - Summary by Building				
As of 01/22/14				
Building		NASF	GSF	Efficiency
Aberdeen Hall	A	25,319	43,023	0.59
Bel Air Hall	B	18,359	30,665	0.60
Chesapeake Center	C	19,475	32,266	0.60
Forest Hill	N	11,063	13,913	0.80
Edgewood Hall	E	20,270	33,845	0.60
Fallston Hall	F	15,309	24,728	0.62
Havre de Grace Hall	H	10,871	18,156	0.60
Hays-Heighe House	HH	3,465	6,000	0.58
Joppa Hall	J	52,109	81,385	0.64
Joppa Annex	JA	2,952	3,068	0.96
Joppa Utility Bldgs	JU	1,074	1,074	1.00
Library	L	36,556	49,346	0.74
Maryland Hall	M	6,147	10,303	0.60
Observatory	O	3,039	4,143	0.73
Plant Services Building	P	13,241	16,189	0.82
Pump House	PH	-	852	0.00
Belcamp Center	SA	1,604	2,337	0.69
Student Center	SC	29,743	50,294	0.59
Susquehanna Center	S	52,060	101,560	0.51
Sportsplex Building	SB	1,449	2,475	0.59
Permanent On Campus:		324,105	525,622	0.62
Amass Center	AC	20,934	22,637	0.92
HEAT Center East	HE	5,683	10,000	0.57
HEAT Center West	HW	11,919	19,080	0.62
Other Non-Reportable:		38,536	51,717	0.75
Total All Space:		362,641	577,339	0.63

Space Inventory

Campus's Infrastructure Improvements.

Telecommunications

The campus main telephone system (Rolm 9750) was replaced in 2009. The new system, a Mitel 3300, was installed due to an aging system that was failing and lacked the ability to support the continued growth of the College.

Water Supply and Distribution

As identified in the Facilities Master Plan, the entire campus obtains its domestic water from several wells drilled on its property. The Maryland Department of the Environment issues a withdrawal permit that limits the amount of water the College can use each day.

As a result of the Susquehanna Renovation, the domestic well associated with this building was relocated to an open field on the West side of the Hays-Heighe House. New County codes required the relocation. As part of the new Hickory building construction planned for summer of 2014 the domestic well located on North side of Joppa Hall will also be relocated to an area free of impervious surfaces, also as a result of County code.

In order to support continued growth at the College, it is imperative that the campus pursue connection to the County water supply system. These efforts have been ongoing with County officials and local engineers with little progress. The County water supply is located within one mile of the College property. Efforts will continue to be made towards connecting to this system.

Wastewater Treatment Plant

For the past five years, the College has been working with the Maryland Department of the Environment, Harford County Health Department, and engineering firms to obtain approval for a centralized wastewater treatment facility. In 2013 this system was finally completed and placed into operation. Its purpose is to collect wastewater from all campus buildings and send it to a centralized treatment facility located on the campus. At this facility wastewater is treated to meet the most current standards established by the MDE and County. After placing the plant online, all of the original individual septic systems were removed, some of which dated back to the 1960s.

As with the domestic water supply system, the long term goal of the College is connection to the County wastewater disposal system. As the College continues to grow, demands on its water and wastewater systems will continue to increase. The plant is currently processing a daily average flow of approximately 16,000 gallons with a permit limit of 25,500 gallons. Physical connection to the County system would most likely be through the West Campus requiring multiple pumping stations and new piping.

Roads and Sidewalks

New sidewalks have been added to several areas of the campus to improve pedestrian circulation. The majority of this work was completed during the renovation and expansion of the Susquehanna Center. Inter-connecting sidewalks, ramps and crosswalks were installed around the entire building perimeter making for a highly accessible facility. In addition, a new sidewalk was added to the West side of the Chesapeake Center, along the North side of the main road at entrance three and around the perimeter of Aberdeen Hall. Additional sidewalks were added as part of the A-Lot expansion project. Whenever these types of improvements are made, the areas are brought up to current ADA specifications.

Existing Land and Capacity for Development

The campus has grown over the past several years to its present size of 360 acres. All increases in land have taken place on the West Campus, which is currently at 149 acres. The size of the East Campus has remained unchanged at 211 acres. The major obstacle in continued growth at the College is not land but its ability to provide water and sewer to its buildings and grounds. The long term solution is connection to the Harford County water and sewer systems.

Assessment of Environmental Compliance

The College continues to place a high priority in protecting the environment. The multi-million dollar completion of a new wastewater treatment facility was a major accomplishment in this area. This project will greatly reduce the amount of Nitrogen being allowed to enter the groundwater by treating it at the new plant. The new MDE issued discharge permit places limits on this pollutant at 10mg/l.

Drainage and Storm Water Management/Bio-Retention

In 2010 the Maryland Department of the Environment implemented new standards for controlling storm water runoff. These new requirements have placed a greater emphasis on controlling the source of runoff closer to its origin. Prior design allowed for construction of large ponds to act as treatment devices.

Several new storm water management facilities have been constructed at the College over the past several years bringing the total count to sixteen. Three were associated with the expansion of A-Lot, three with the renovation of the Susquehanna Center, and one was associated with the expansion of J-Lot. The new Nursing and Allied Health building (Darlington Hall) will add two additional facilities.

Water Conservation

Continued efforts in minimizing the use of drinking water at the College have met with great success. With the completion of the 2010 Renovation to Aberdeen Hall, four 1,000 gallon rain collection tanks were installed for restroom and greenhouse use. With the 2013 renovation of the Susquehanna Center, new water saving technology in the form of “Micro-Flush” urinals and timed faucets were installed. The newly renovated pool included a closed system that greatly reduces the accidental release of pool water into the drain system. This year a second artificial turf field was installed on the varsity baseball field, also greatly reducing water usage.

Enrollment Projections

In June 2011, the Maryland Higher Education Commission (MHEC) published Enrollment Projections for all Maryland Public Colleges and Universities through the year 2020. The report predicted that full-time equivalent enrollment at Harford Community College would grow from 4,789 in 2012-2013 to 5,653 in 2019-2020.

Enhancing Campus Sustainability

The original Facilities Master Plan made a commitment in purchasing at least 15% of its electricity from renewable sources. In 2013 this goal came to fruition with the installation of over 3,700 photovoltaic panels on the roofs of four buildings. Now in full production, the College is obtaining 15% of its electrical needs from these panels. Installed through the process known as a power purchase agreement, Harford Community College was able to complete this work without using College, State or County funds.

An additional 45-panel system was installed on the roof of Aberdeen Hall that also provides green power to the building. A small display system in the main lobby can be used by students to observe the system’s performance. This system was funded through a donation from a local business.

Campus Zoning

The original Facility Master Plan established four principle use zones that have remained unchanged. They include an (1) Academic Core, (2) Recreation Zone, (3) College and Community Use Zone and (4) Conservation Zone.

The completion of the renovation and expansion to Aberdeen Hall in 2010 and the removal of the sand volleyball court in the Quad have been the only major projects associated with the Academic Core area.

The Recreation area now identified as “The Harford Sports Complex” has undergone substantial improvements within the past year. A new entrance was created that provides for a more direct path into the park. This entrance has a lighted marquee that now clearly identifies this area as The Harford Sports Complex. This is followed by a paved road leading to the sports complex building that was also renovated in 2011. This building was converted from a failing concessions stand to a much needed office area that includes an athletic trainer’s room.

The varsity baseball field received a major upgrade consisting of new dugouts, bull pens, fencing, lighting improvements and asphalt paving. Of most significance was the installation of an artificial turf field. This field will reduce maintenance cost and water consumption as well as greatly extend the playing season for varsity baseball. Stadium seating and a raised press box are planned for the summer of 2014.

An additional benefit of the Susquehanna Center Renovation project was the relocation of over 40,000 cubic yards of excavated earth from that project to the Sports Complex. Originally scheduled for hauling off-site, this material was used to level out three major practice fields that had considerable slopes. This action greatly reduced the cost to haul away material to a spoil site thus diverting hundreds of trucks from driving on County roads.

Maintaining the West Campus as the College and Community Use Zone has remained on course. The West campus has continued to grow in size with recent land purchases bringing the area up to 149 acres. Towson University began construction of their building on the property in the summer of 2013 with completion planned for the fall semester of 2014. This 58,000 square foot three-story building has been in the plans for several years with the goal of filling a need not offered in this area. This innovative 2+2 program allows students to study two years at Harford and then finish their coursework toward a bachelor's degree at TU in Northeastern Maryland located on our campus.

Planning for the Apprenticeship building has begun with submission of the Part I and Part II program documents planned for 2014. This building will house multiple apprenticeship and training programs and be located on the West campus.

Supporting the Conservation Zone and through the hard work of local volunteers, a walking trail was completed in the summer of 2012. Located on the West campus, the trail extends from the College Observatory to a Harford County Parks and Recreation facility on Prospect Mill Road. The trail is over one mile long and contains several foot bridge crossings, an overlook, and a historical stone marker.

Assessment of Buildings

This section will address buildings that have received some form of major improvement or change in their use since the original 2008 Facilities Master Plan was completed.

Aberdeen Hall

Aberdeen Hall underwent a comprehensive renovation and expansion that was completed in 2010. All mechanical, electrical, plumbing and life safety systems were replaced. A 20,000 square foot three-story addition was constructed on the east side of building that houses biology, microbiology, and chemistry labs. The addition also provided support space for each of the labs and offices for faculty and staff.

A new greenhouse was constructed on the building's roof that can be accessed from inside the building. Forty-five solar panels were added to provide renewable energy along with a ninety tube solar hot water heating system used to augment the building's hot water needs. A four thousand gallon rain collection system was installed to reduce the building's use of well water for restroom use and is also used to water plants in the greenhouse. All new roofs associated with the project received a LEED-approved white TPO system to reduce energy consumption.

Chesapeake Center

In 2011 this building's Heating Cooling and Ventilation system was upgraded and or replaced. The original system dated back as far as the 1960s and was in very bad condition. New energy efficient systems were installed to reduce energy consumption and improve occupant comfort.

A large solar hot water heating system was added to the roof to reduce energy consumption. The building's main front patio was replaced, a protective canopy was installed above the kitchen entry way, all exterior single pane windows were upgraded to energy efficient double glaze systems, and the entire roof was replaced in 2012 with a white TPO single membrane system. In 2013 the entire roof was covered with photovoltaic panels to reduce energy consumption.

Forest Hill Center

In 2012 the College took over operation of the preschool portion of this building, which is approximately 10,000 square feet in size. The senior care operation, which also resides in this building, remained unchanged. In 2012 the building's entire roof was replaced with a single membrane white TPO system. Minor interior improvements were completed when the change in operation took place.

Edgewood Hall

Edgewood Hall will begin the design phase for a complete renovation and expansion this year. Construction work is expected to begin in the summer of 2015. This project is being supported through the State's Capital Improvement Process.

Scope of work will include replacement of the building's roof, complete replacement of its MEP systems, and the construction of a 6,500 square foot addition. This will be a phased project and be completed in a partially occupied manner.

Hays-Heighe House

This building underwent a comprehensive phased restoration that was completed in 2010. The building received a new roof, elevator, heating and cooling systems, and a complete upgrade of its MEP systems. The entire structure's perimeter foundation was exposed to install a waterproof membrane to reduce water infiltration through its hand laid stone foundation.

The restoration was completed in consideration of its historical importance to the College and community. A broad based committee was formed to oversee the work as this building is registered as an Historic structure.

Joppa Annex

This portable structure will be removed as part of the construction of the Hickory Center in 2014.

Joppa Hall

The entire roof of Joppa Hall was replaced in 2010. The original roof dated back to the late 1980s and was in very poor condition. In 2013 a solar photovoltaic system was installed to reduce the building's energy consumption. A small addition to the outside ceramics lab was completed to improve efficiency and classroom instruction. This work entailed separating the kiln and welding activities providing each with its own area.

In the space previously occupied by the Building Preservation and Restoration program, a Black Box was created to support small scale theatrical programs. This area provides space for a small stage and seating for approximately fifty.

Library

As identified in the original Facilities Master Plan, a new entry canopy was constructed at the building's main entrance. This building feature, which was completed in 2010, was needed to help identify this area as the main entrance to the Library. The canopy also provides a secondary benefit where students can gather during inclement weather while waiting for the building to open. Minor interior maintenance work has taken place throughout the building as it begins to show normal wear due to age and use.

The Library houses the campus's main telecommunication system "The Data Center," which in 2010 received a new FM-200 fire suppression system and in 2013 a new backup cooling system, both of which were installed to protect the operation and contents of this room.

Observatory

In 2011 a classroom and Laboratory were added to the East side of the Observatory. The primary use of these rooms is by the HVAC and Astronomical programs. Plans are in process to improve access to

the facility through paving the existing stone road and parking lot. Improvements in lighting for the parking lot and road will also take place when this project is completed.

Student Center

The building's original boiler was replaced with a high energy efficient Viessmann condensing boiler in 2011. This project was implemented due to aging equipment and routine failures. The project was chiefly funded through a private grant.

In 2012 the building's entire roof was replaced with a white single ply TPO membrane. In 2013 a large solar photovoltaic system was installed on the roof to reduce its energy consumption.

All of the building's exterior single glazed windows were replaced in 2010 with energy efficient double glazed systems.

Susquehanna Center

Between 2011 and 2013 the Susquehanna Center underwent a comprehensive renovation and expansion. This project was completed through the State's CIP process. Scope of work included a 50,000 square foot addition identified as the APG Federal Credit Union Arena. This facility can hold over 3,300 spectators for a wide variety of athletic and special events. Harford Community College held its first graduation in the Arena in 2013. Five local high schools also held their graduations in the new facility; this is expected to increase due to its success.

Other components of this project included a new 400 space parking lot, construction of eight tennis courts, and the comprehensive renovation of the 52,000 square foot existing building. New roads were installed to better access the building, and a formal loading dock was constructed to allow large events using the Arena to unload equipment.

In 2013 the roof of the Arena was covered with over 1,070 solar photovoltaic panels that will greatly reduce energy consumption. The roof of the original building was not replaced as part of the renovation project. It was determined through a roofing audit that it could last several years beyond that project. Plans are currently underway to replace the roof in the late summer of 2014.

Harford Sports Complex

Renamed the Harford Sports Complex, this building underwent a comprehensive renovation and expansion in 2011. The former failing concessions stand was converted into athletic office space, storage, and a formal athletic trainer's facility.

In 2013 the varsity baseball field received a major upgrade. A new artificial turf field was installed along with new fencing, dugouts, bullpens, and lighting enhancements. Plans are in process to add approximately 300 stadium style seats with a raised press box.

In addition to the field and building improvements, much of the facility's stonedust roads were replaced with asphalt. This greatly improved accessibility to the facility and safety for visitors and also reduced the amount of maintenance required to constantly repair pot holes.

A new entrance was constructed in 2013 connecting the Sports Complex main parking lot directly to the heart of the facility. A new lighted asphalt road was installed and a new asphalt pedestrian walkway went in that provides ADA compliant accessibility to the stadium field and Sports Complex.