



# Updated Mid-Decade Comprehensive Campus Plan Physical Planning Proposals - 2015



**October 9, 2015**



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## Executive Summary

In 2009, STV Architects, in association with Paulien & Associates, Inc., was asked to provide West Chester University of Pennsylvania with physical planning services in support of their Comprehensive Campus Plan (CCP) process. At that time, the University determined that the CCP process would be driven heavily by the student academic and academic support mission of the University; therefore, Paulien & Associates initiated the process with a planning analysis that identified academic space needs and deficits. The results of this comprehensive study can be found in a separately bound document entitled *West Chester University of Pennsylvania: Space Needs Analysis for the Comprehensive Campus Plan*, dated December 2010, and an addendum to this document, dated February 2011, which further develops individual college space needs by individual departments. These documents serve as a critical informative addendum to this comprehensive campus plan. The results of those analyses served as a framework for the University to implement specific project scenarios for 1-5 years to 2015, 5-10 years to 2020, and 10+ years to 2020+. Projects were proposed that would enable the University to meet the space needs identified by Paulien & Associates and do it in a way that would improve the physical campus environment, which in turn would support the University mission – to sustain student, faculty, staff and Community success and well being.

Overarching issues that drove the Physical Planning process in 2010 were as follows:

- Accommodating Plan Horizon 2020 academic space needs identified by the Paulien & Associates study, as well as other space needs identified by the President’s Cabinet and the University staff.
- Making the best use of existing facilities and considering renovation or repurposing buildings before recommending new construction. This includes special consideration for best use of the historic structures on the campus that define the character of the academic core. Where non-historic structures are deemed to be past their useful life, however, demolition and reconstruction should be considered.
- Looking for opportunities to promote interaction between disciplines, departments, and the community.
- Coordinating project recommendations with the current University capital programs
- Including site-related projects that create a pedestrian-oriented campus with:
  - (1) vehicular circulation and parking placement around the perimeter of the North Campus
  - (2) a network of paths that link key destinations and provide memorable outdoor spaces and
  - (3) green spaces that provide opportunities for social interaction, recreation, and University and Community events.
- Looking for opportunities to enhance key campus gateways, nodes and landmarks.

In 2015, STV Architects was asked to provide a Mid-Decade Update to the 2010 Comprehensive Campus Plan for West Chester University. This plan is driven by a need to document the progress of the projects implemented in the first five years of the plan, 2010-2015, and to reconsider those proposed for the next five years 2015-2020 and to 10+ years 2020+. While many of the overarching issues that drove the 2010 Physical Planning process remain consistent, there are several issues that now serve to direct the plan moving forward. These issues include:

- Making the best use of facilities and considering renovations or repurposing buildings before recommending new construction.
- Reduction in the number of projects implemented and proposed based on fiscal responsibilities and strategic necessities which reflect an achievable goal for the growth of West Chester University.
- Validation that after five years the space needs deficits identified by the Paulien and Associates study will be met and are still legitimate based upon updated projected student headcounts through 2020.
- Consideration of possible approval issues with West Goshen Township due to anticipated exacerbation of current traffic issues on campus.

### Campus Context Considerations

The North Campus has historically been the hub of the West Chester University campus. The existing physical conditions of this area of the campus and how it functions are more complex than other campus areas because it has a longer history, it is more densely populated, program functions are more diverse, and it is more intricately connected to the surrounding community.

For this reason, many of the projects completed in the first five years (2010-2015) of the plan, as well as those proposed for five – ten years (2015-2020), are located on North Campus where the bulk of academic, academic support, and student services facilities reside.

2010-2015 saw the completion of several large projects on the campus of West Chester University. The construction of the **Business and Public Affairs Center (BPAC)**, with a planned occupancy of 2016, will have a positive impact on the space deficits identified in the 2010 plan by adding 50,953 ASF under Academic Spaces. Additional Academic Space needs were addressed with the completion of several smaller additions/renovations, including the **E.O. Bull expansion**, Phases I & II of the **Mitchell Hall renovations**, as well as the use of new space made available in **Wayne Hall**. A tally of the current and future space guidelines, inventories, and deficits due to enrollment and space inventory increases since 2010, has been summarized in 7.0 Appendix *PASSHE Space Guidelines 2014-2020*, which indicates substantial current and future progress on eliminating deficits for all space categories. It should be noted that the program for the new “Commons” building closely aligns with the need to eliminate space deficits in the categories of Classroom, Teaching/Open Lab, and Office space.

The completion of the 620-bed Commonwealth Hall on North Campus and the five South Campus Village Units addressed residential needs on both campuses, while the completion of Parking Garage F at West Nields Street serves to help ease traffic in the heart of North Campus by providing perimeter campus parking.

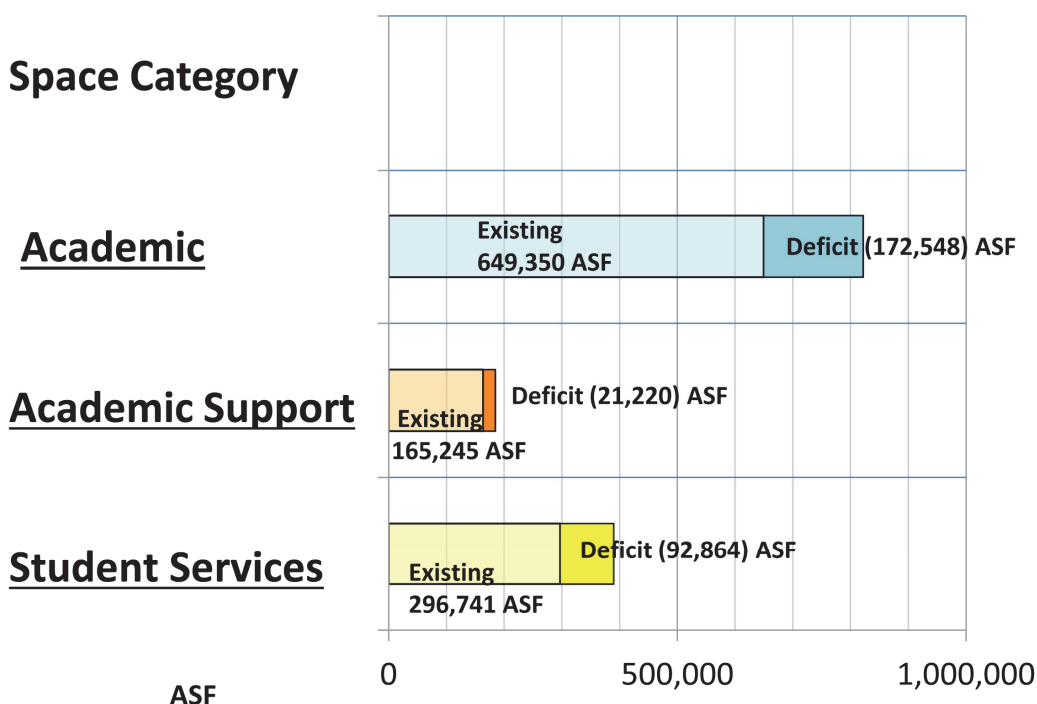
Additionally, renovations to the Quad have allowed the full potential of this North Campus exterior space to complement the historic structures that form its north and west edges.

### **Plan Horizon 2020 Space Needs and Deficits**

The Paulien & Associates space analysis was based on a Fall 2009 enrollment of 14,211 and a Plan Horizon 2020 enrollment projection of 16,605. Updated projected headcounts appear to max out in the Fall of 2019 at 16,769 (See 7.0 Appendix *Estimated Head Count*). These updated headcounts indicate that while the 2020 Plan Horizon was met earlier than anticipated, it is only slightly higher than those indicated in the 2020 Plan Horizon. Space needs were determined using PASSHE guidelines and benchmarking data. The 2010 STV physical planning proposals categorize space utilization as Academic, Academic Support, and Student Service Space as follows; this updated plan maintains these categories:

- (1) **Academic Spaces**– This includes all Education and General (E & G) classrooms, teaching labs, open laboratory spaces, research laboratories, academic offices, and in this case some of the spaces categorized in the Paulien & Associates Space Needs analysis as academic support spaces such as the Library, the Assembly and Exhibition Spaces, and the Other Administrative Department Spaces, such as departmental libraries, building or departmental student lounges, media production rooms, clinics, demonstration rooms, meeting rooms, central computer or telecommunications space, and field buildings, animal quarters, and greenhouses that support instruction.
- (2) **Academic Support Spaces**– This includes Administrative Offices and Services, Physical Plant support facilities that provide centralized space for support systems and services, and field buildings and greenhouses in support of the physical plant and campus grounds. These were areas included in the Paulien & Associates Space Needs analysis as a part of the Other Administrative Department Spaces.
- (3) **Student Services Spaces**– This includes Residence Halls, Recreation/Athletics, and Auxiliary Service spaces such as food service and dining, bookstore, student meeting rooms, offices for student government and clubs, and student lounges and student health and wellness centers as well as affiliated functions such as Alumni and Foundation organization functions.

**The Paulien Campus space analysis** identified the 2020 Plan Horizon campus needs for the three space categories. Based upon new data reflecting the space inventory adjustments and projects completed in the first five years (2010 – 2015) of the campus plan, the following graph depicts the deficits – assignable square footage required to meet the 2020 Plan Horizon needs in the remaining five years of the Comprehensive Plan (2015 – 2020).



Project proposals for the North and East Campuses that address the overarching issues that drove the updated Physical Plan are included in the following list.

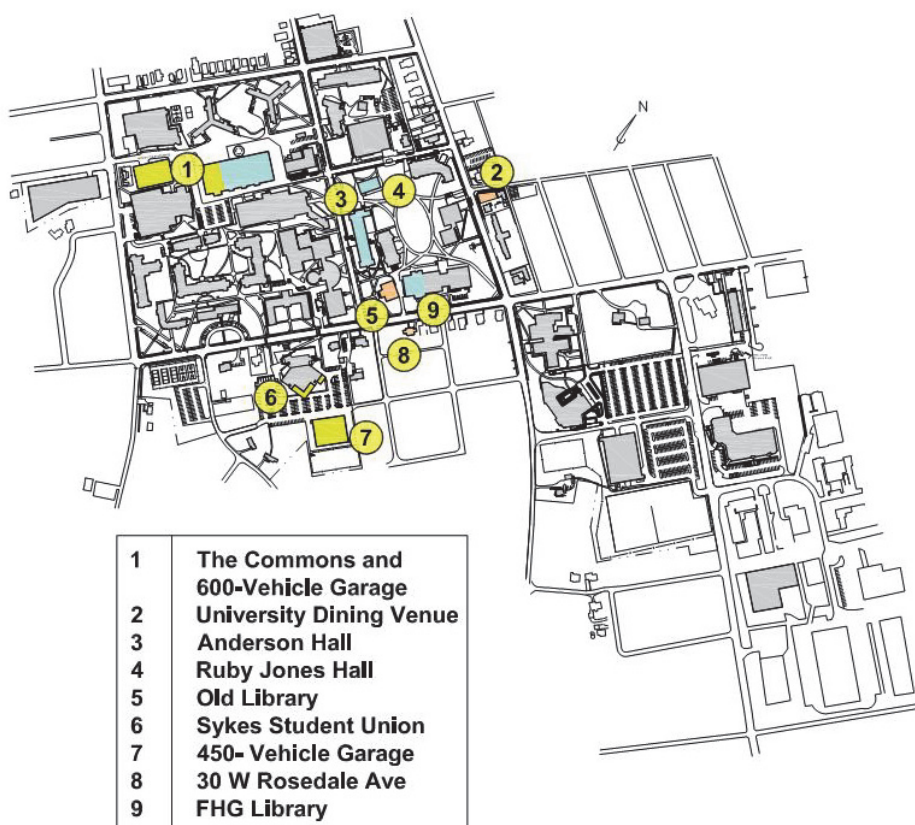
In years 5-10, 2015-2020, there is one new project identified in the northwest quadrant of the North Campus and that is **The Commons and 600-Vehicle Parking Garage**. Located in the area currently occupied by the Speakman Building, Boiler Plant and parking lot, this 177,000-GSF building will serve as a pivotal campus connector to the Academic Quad and provide a strong visual connection to the Peoples Building, Mitchell Hall and the BPAC. It will also serve to bridge the newer and older residential areas and act as a connector of campus life. When complete, the building will house the College of Health Sciences (three departments- Nutrition, Health and Nursing) and the College of Arts and Sciences (one department- Psychology), which will have positive impact on academic space deficits with an additional 40,062 ASF. Additional advanced conference rooms for large gatherings will contribute 10,000 ASF to assembly and exhibit space in the same category. The addition of a 1,000-seat residential dining facility with associated kitchen, market and retail space will contribute 65,000 ASF to the Student Services deficits. A 600-vehicle parking garage will also be constructed adjacent to the facility to support the land development requirements of the project and offset the lost parking count due to the placement of the new building in an existing surface parking lot. The funding for this building is a mix of local reserves, with supplemental E&G and Dining Auxiliary bonds. An additional 8,500 GSF will be included in the Student Services category when the new **University Dining Venue** is completed at 701 S. High Street, paid for by Dining Auxiliary reserves.

The northeast side of North Campus will see the largest amount of projects in the 5-10-year period of the campus plan. All of the proposed projects are renovations to existing buildings. Proposed interior renovations include **Anderson Hall**, where spaces vacated by Business Departments will be completed

for use by the Anthropology and Sociology and Communication Studies Departments, both from the College of Arts and Sciences, which had large space needs. Additionally, historic **Ruby Jones Hall** will be renovated for single faculty offices, a Strategic Plan goal, for the use of a relocated Philosophy Department from Anderson Hall.

A partial interior space reconfiguration of the **F.H.G. Library** will include the relocation of existing bulky library stacks to new compressed shelving in the basement of the **Old Library** and new storage space at the former **Dynamic Bookstore**. This 4,000-ASF space in F.H.G Library will then be renovated into much needed student lounges and study spaces. Upon completion of the above mentioned renovation to Anderson Hall, the Old Library will be renovated, using local reserves, in support of a new Visitor/Admissions Office.

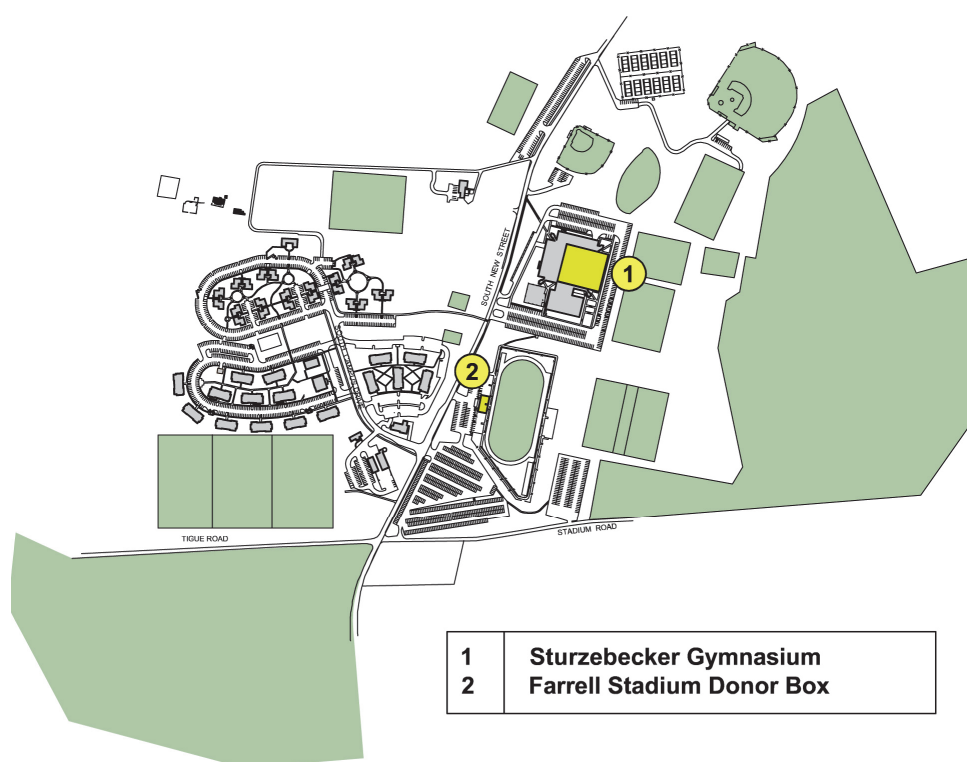
Three additional proposed projects on North Campus, south of West Rosedale Avenue, include an expansion to the **Sykes Student Union**, an associated **450-Vehicle Garage**, and a new 10,000 GSF academic support services building at **30 West Rosedale Ave**. The Plan Horizon identifies deficiencies in student union functions that are nearly as large as the facility itself. The Sykes Student Union expansion, funded by student fees, is planned to be 60,000-GSF and will provide meeting space and expanded food service on the south side of North Campus and provide commuting students with space that will become their home away from home. In support of the Sykes Student Union, the 450-Vehicle Garage is proposed to the south of Sykes. The new academic support services building will help to reduce the office deficit, and combine the operations of the Advancement Division (Sponsored Research, Social Equity, Public Relations, Marketing, Cultural and Community Affairs, and Conference Services) into a single professionally detailed building, which will help immensely in supporting our academic mission and the projection of *Building on Excellence*, our campus motto.



Two project proposals for the South Campus include:

An anticipated Department of General Services (DGS) renovation and addition to **Sturzebecker Gymnasium** will include a 20,000-GSF expansion to accommodate a dedicated Athletic Facility to include a 200-meter indoor track. With the completion of **The Commons**, three of the five non-athletic related departments of the College of Health Sciences will move to the north campus, allowing for a Phase II renovation to Sturzebecker as described in the 10+ year, 2020+.

The existing Press Box at Farrell Stadium will undergo a renovation and addition in support of expanded student athlete, coaching, press and President's donor activities for a total of 12,000 GSF of Support Space. This project is identified in the 5-10 year implementation plan as the **Farrell Stadium Donor Box**, and is funded by private donations.



In years 10+, 2020+, there are three projects identified in the Implementation, Section 5. They are the **Phase II Sturzebecker Renovation, Schmucker Science Center Additions, and First Floor Renovations at Lawrence Hall.**

Renovations at Sturzebecker Health Science Center would include the balance of the building to update aged infrastructure (currently 45 years old) and to accommodate a Future Comprehensive Clinical Services Building. If future space deficiencies are identified in Schmucker and Merion Science Centers, The Peoples Building, which will be vacated when the Psychology Department moves to "The Commons," could be renovated for a Science Center expansion. Lastly, 40,000 GSF of Lawrence Hall, which will be vacant after the completion of "The Commons," could be renovated for a possible

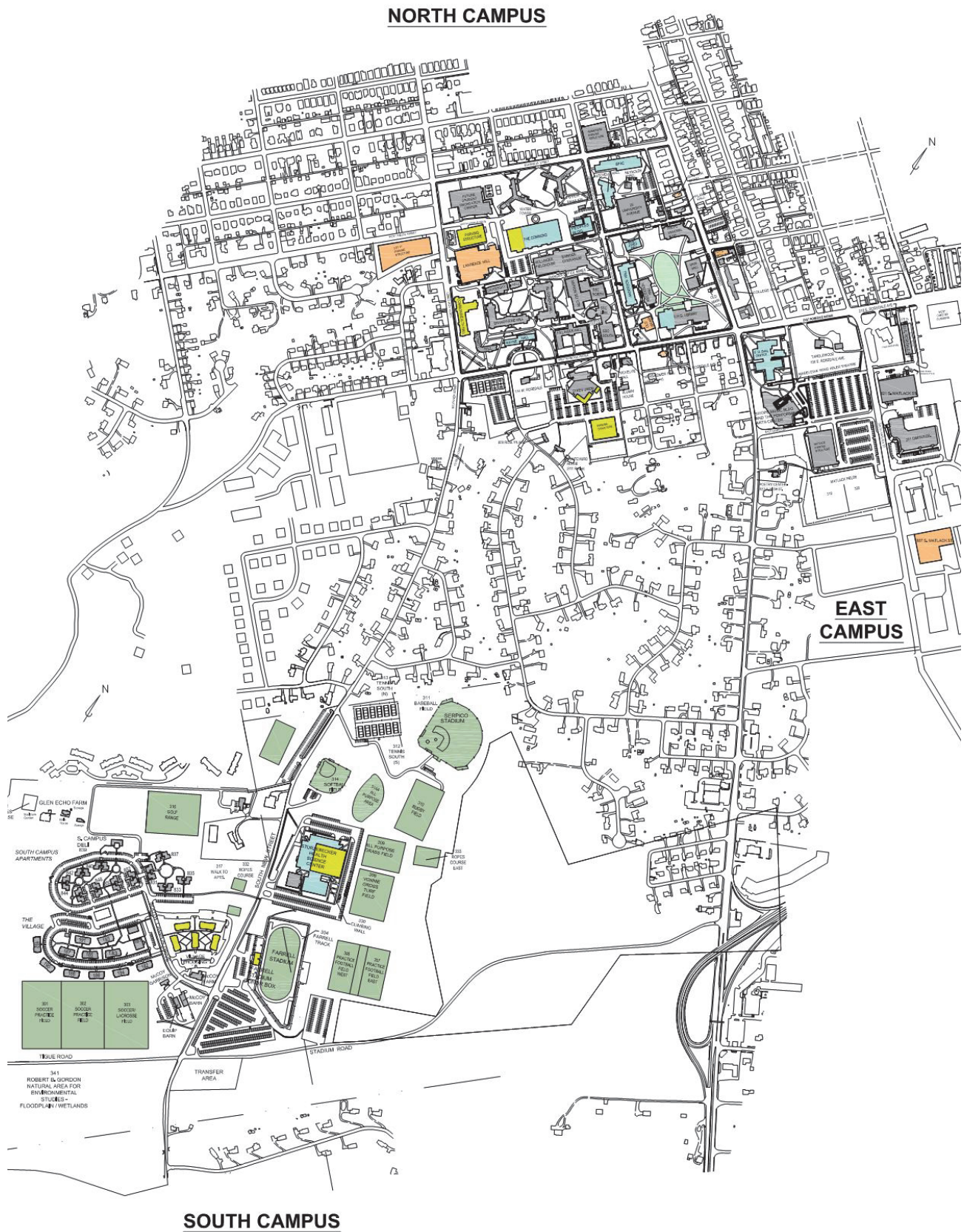
Bookstore, Public Safety Expansion, and future Engineering Department academic/lab space. Remaining Teaching/ Open Lab deficits can be handled in the future with the use of this building.

### **Implementation**

Section 5 of this document presents the updated project list identifying projects complete in the first five years of the plan 2010 – 2015 and strategies for implementing the Physical Planning Proposals outlined in Section 4 for 5-10 years to 2020, and 10+ years to 2020+. Each period has an associated timeline with a project list, project description, time of expected occupancy, and approximate costs.

The sequence and choice of projects represents one possible strategy that is implementable, but not inflexible. It is intended only as a guideline. It is understood that the University will need to reprioritize, adjust, and reorganize based on financial and operational considerations. Section 6 provides order-of-magnitude costing information that can assist the University in the decision making process.

# 1.0 Physical Planning Introduction



## 1.0 Physical Planning Introduction

In 2015, STV Architects was asked to provide a Mid-Decade Update to the Comprehensive Campus Plan for West Chester University. The original 2010 plan, final edited version dated May 7, 2012, was compiled by Paulien & Associates and STV Architects.

### Space Needs Analysis for the Comprehensive Campus Plan

The Space Needs Analysis for the Mid-Decade Comprehensive Campus Plan began with an update of assignable square footages for Academic Services, academic support services, and Student Services based upon projects completed in the last five years of the plan 2010 – 2015. As year 5 – 10 (2015 – 2020) soon to be completed projects were identified by Facilities Design and Construction, such as the Business and Public Affairs Center, the assignable square footages were included in the analysis.



*A Look at North Campus WCU from 3,500' –College-Level Planning*

### Facilities Audit

In the Fall of 2009, STV Architects, Inc. conducted a campus field audit of the existing facilities on campus with assessments of building and system conditions, code and accessibility compliances, and life cycle maintenance upgrade needs and costs for 44 of the approximately 65 buildings on the campus. These field audits continue to support our deferred maintenance and designated infrastructure project planning for the decade 2010 - 2020.



### *A Look at Individual Buildings - Facilities Audit*

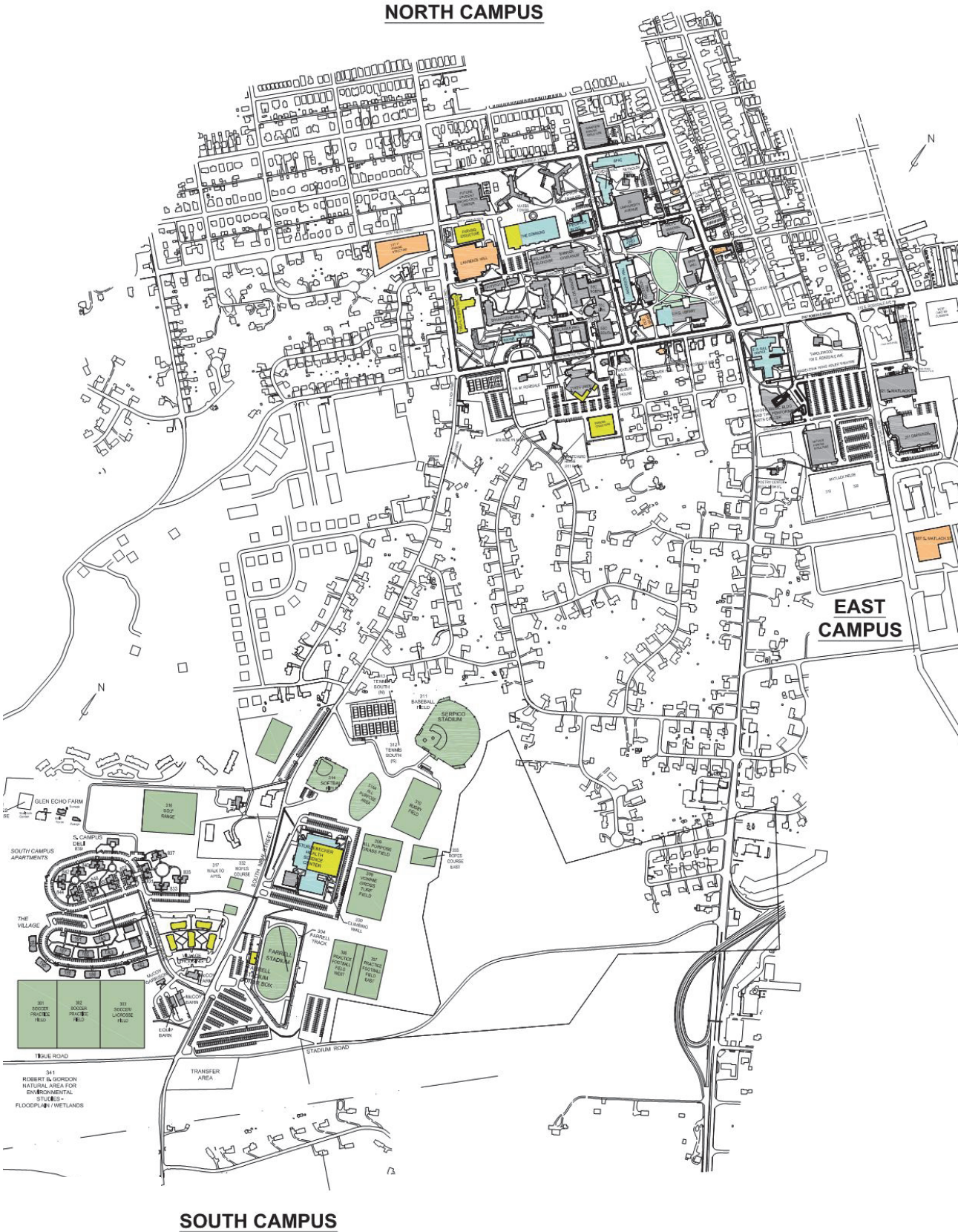
#### **Physical Planning**

The Physical Planning guidelines incorporated into this Comprehensive Campus Plan are designed to guide the University through 2020 and beyond, providing a framework for the implementation of specific projects over the short and long term. Long term solutions and options are suggested that will allow enough flexibility to accommodate the short term decisions that must be made. This document takes a holistic approach accounting for the strategic planning concepts that have been in place since the *2010 Comprehensive Campus Plan* was released. On-campus discussions with Facilities Design & Construction and the University further highlighted issues for consideration during the physical planning process.

Projects already in planning or recent construction such as the E. O. Bull Center, The Business and Public Affairs Center (BPAC), and The Student Recreation Center were all considered and integrated into the physical planning strategy. Space accommodations for residence life facilities were not included in the Paulien & Associates, Inc. study. Residence hall strategies for the Physical Plan were based on information provided by Facilities Design & Construction. The Planning document was also prepared without benefit of a current parking or traffic study so that parking structures were placed to identify appropriate locations without indicating the number of parking spaces.

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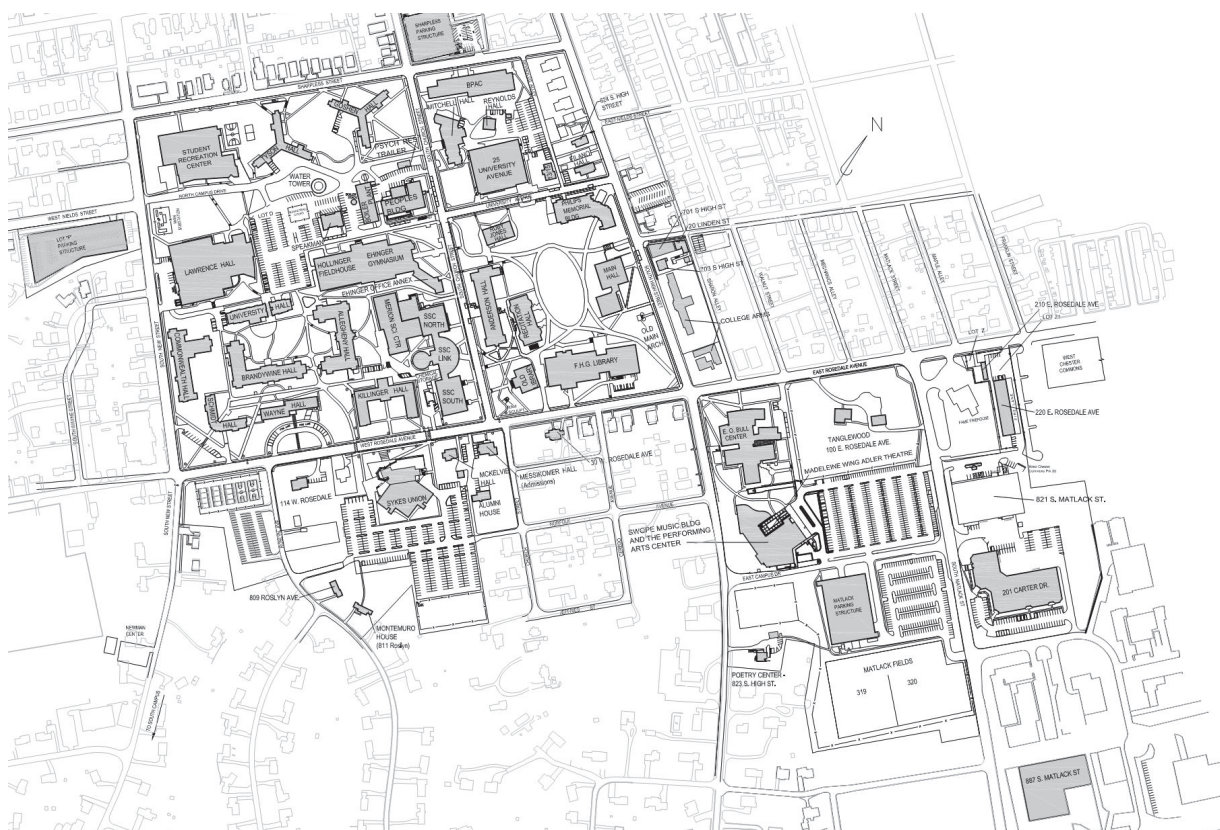
# 2.0 Planning Context



## 2.0 Planning Context - Overview

The West Chester University of Pennsylvania includes three campuses— North Campus, East Campus and South Campus, together encompassing approximately 402 acres in Chester County, Pennsylvania. Each campus area has a distinct character. The North and East Campuses are contiguous, joined at the intersection of East Rosedale Avenue and South High Streets at the southern edge of the Borough of West Chester. The North Campus is surrounded by small town, suburban residential neighborhoods and the East Campus is on the edge of a light industrial park. The South Campus, located approximately one mile to the south, is a more rural, farmland setting with some natural woodland.

The North Campus is bounded by Sharpless Street on the north, South New and South High Streets on the east and west, and a southern edge that runs along West Rosedale Avenue with property extending south of the avenue with no bounding edge that clearly defines the University Property.



The East Campus is bordered by East Rosedale Avenue on its northern side and South High Street to the west. South Matlack Street runs through the center with University properties on Carter Drive within the Industrial Park. The southern and eastern boundaries—the areas that are part of the light industrial park—do not have clearly defined edges that allow anyone to identify this as being part of the University campus, aside from some street signage. Further expansion within the Industrial Park is currently hampered by West Goshen Township Zoning restrictions against Education Use in this area.

The South Campus, which lies beyond the residential areas, is surrounded by farmland and a nature preserve and is linked to the North Campus by South New Street. South New Street serves as the main axis and runs through the South Campus dividing it into two halves. The southern boundary is defined by Tigie Road and the Nature Preserve. The campus is approximately a 25 minute walk to the academic core on the North campus. Further development on the South Campus is anticipated to be onerous, due to existing heavy traffic conditions on the Rosedale Avenue corridor, which leads to South Campus. Academic development would almost certainly increase student and faculty traffic through this corridor, most likely involving a long and costly land development application for any proposed expansion of academic facilities in this area. As such, development on the North Campus has been strategically prioritized.



## Campus Space Utilization

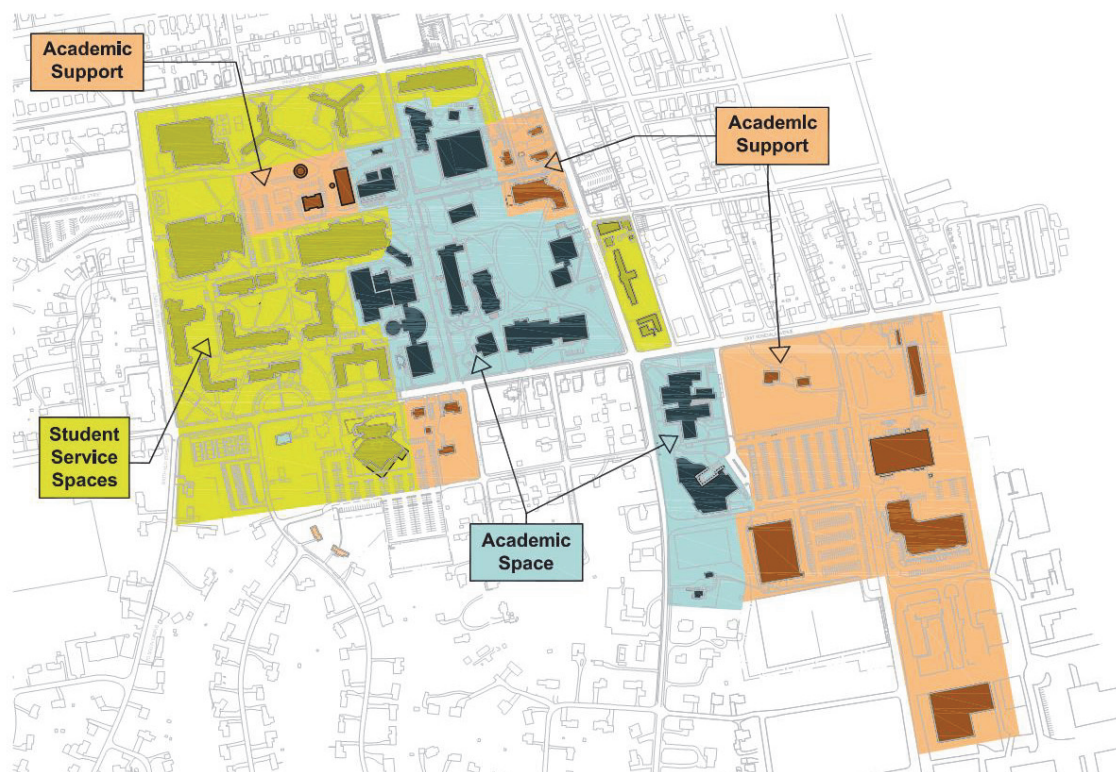
Since the program function or space utilization is a major focus of this comprehensive campus facilities plan, an analysis of the three Campus areas can begin by categorizing and describing areas of use. If the Paulien & Associates Space Needs analysis is distilled into its most basic form, West Chester University and other campus space programs for that matter, can be viewed as being comprised of three different use categories:

- (1) Academic Spaces— This category includes all Education and General (E & G) classrooms, teaching labs, open laboratory spaces, research laboratories, and academic offices. Also included are academic support spaces such as the Library, the Assembly and Exhibition Spaces, and the Other Administrative Department Spaces such as departmental libraries, building or departmental student lounges, media production rooms, clinics, demonstration rooms, meeting rooms, central computer or telecommunications space, and field buildings; animal quarters, and greenhouses that support instruction, and are integrally connected to the academic spaces.
- (2) Student Services Spaces— This includes Residence Halls, Recreation/Athletics, and Auxiliary Service spaces such as food service and dining, bookstore, student meeting rooms, offices for student government and clubs, and student lounges and student health and wellness centers, as well as affiliated functions such as Alumni and Foundation organization functions.
- (3) Academic Support Spaces- This includes Administrative Offices and Services, Physical Plant support facilities that provide centralized space for support systems and services, and field buildings and greenhouses in support of the physical plant and campus grounds. These were areas included in the Paulien & Associates Space Needs analysis as a part of the Other Administrative Department Spaces.

The diagrams on the following pages identify locations for each of these utilization groups for the North, East, and South campuses.

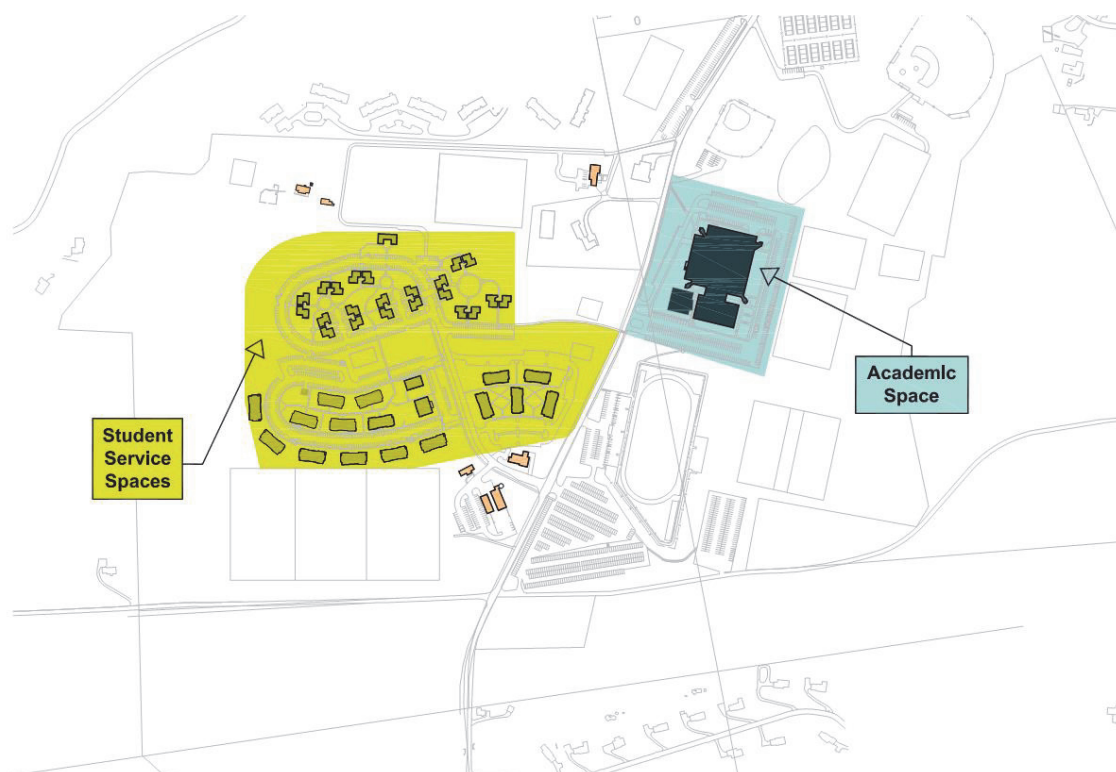
## Campus Space Utilization

## North Campus



## Campus Space Utilization

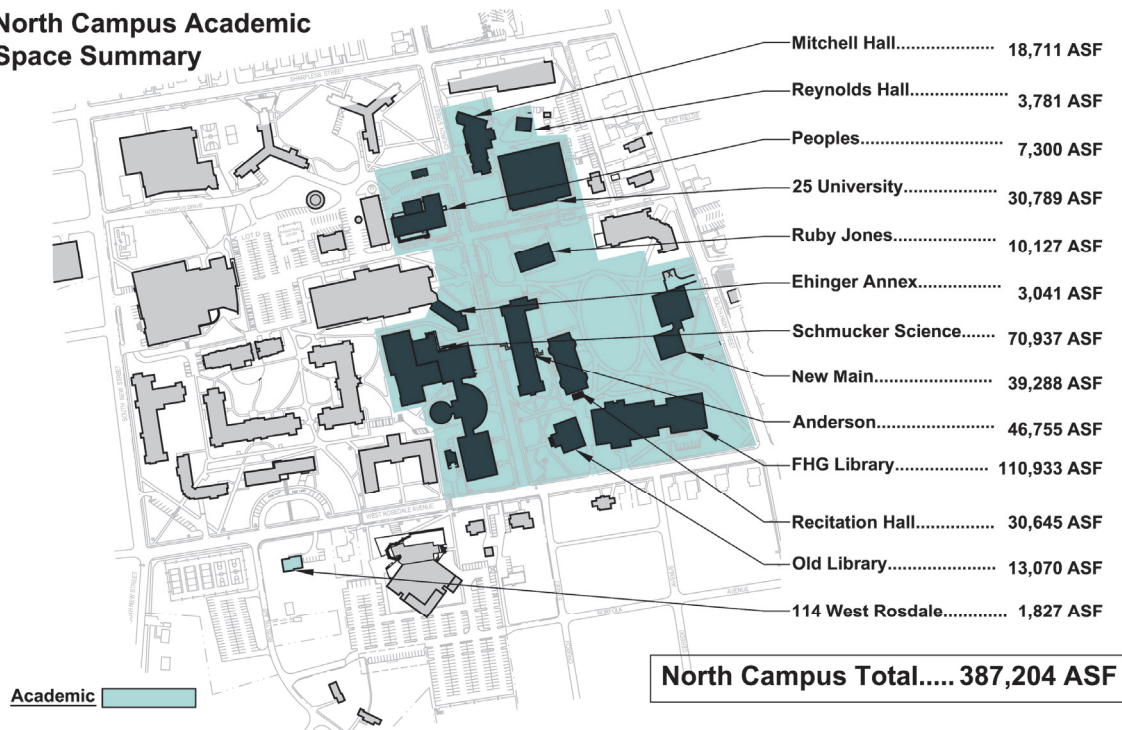
## South Campus



## North Campus Space Utilization

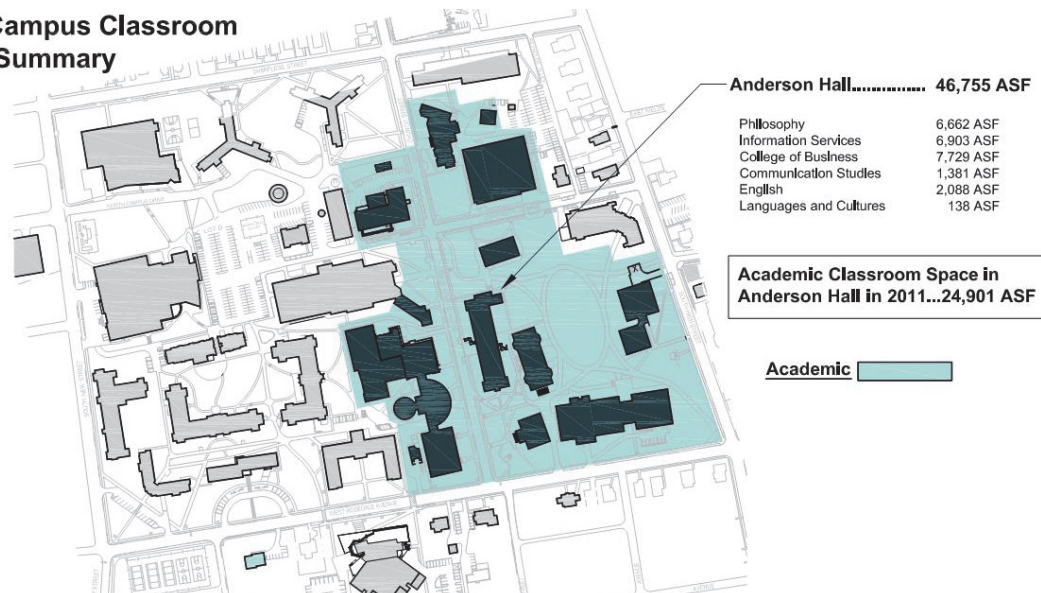
The North Campus has historically been the hub of the West Chester University campus. An analysis of the existing physical conditions of this area of the campus and how it functions is more complex than other campus areas because it has a longer history, it is more densely populated, program functions are more diverse, and it is more intricately connected to the surrounding community.

### North Campus Academic Space Summary



The North Campus contains 66% of the 578,522 ASF of academic space on the campus. Approximately 387,204 ASF of academic space is contained within buildings in the southeast corner, which represents less than 40% of the North Campus area. Of the five University Colleges, only the College of Health

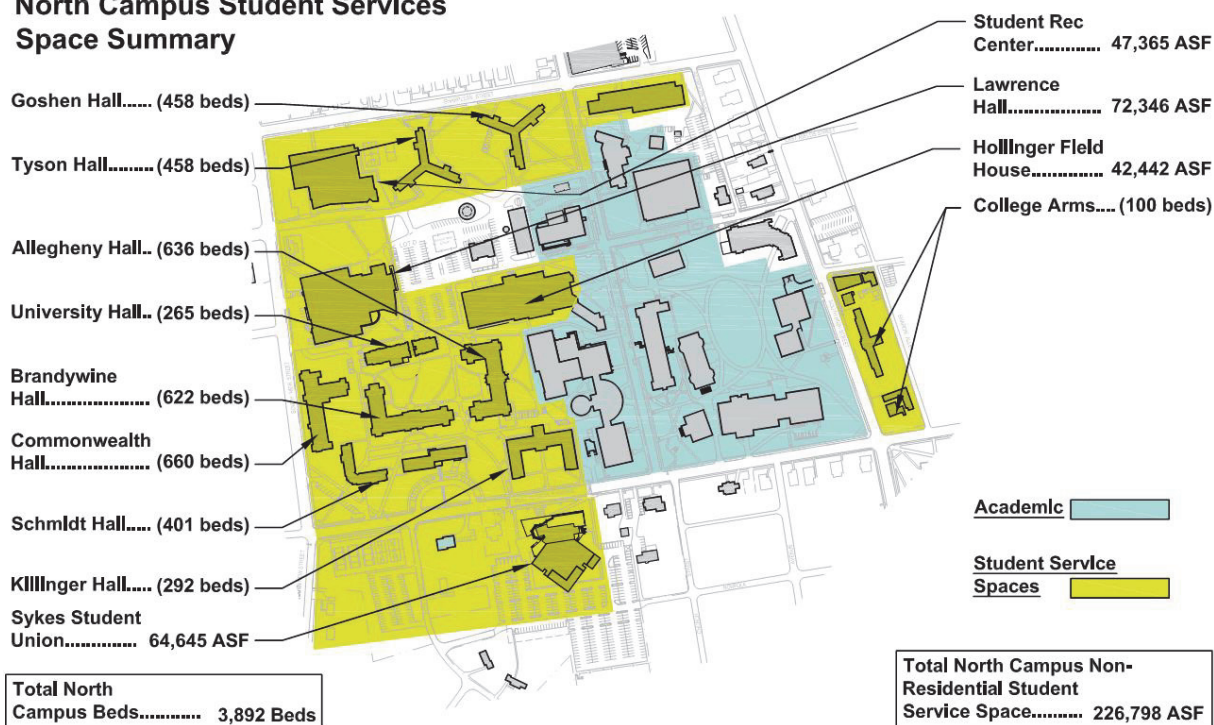
### North Campus Classroom Space Summary



Sciences is not represented within this academic grouping. Anderson Hall contains the most classroom space and has been the most adaptable of the five historic structures on the North Campus. Upon completion of the BPAC project in process, space will become available in Anderson to fill other academic deficits.

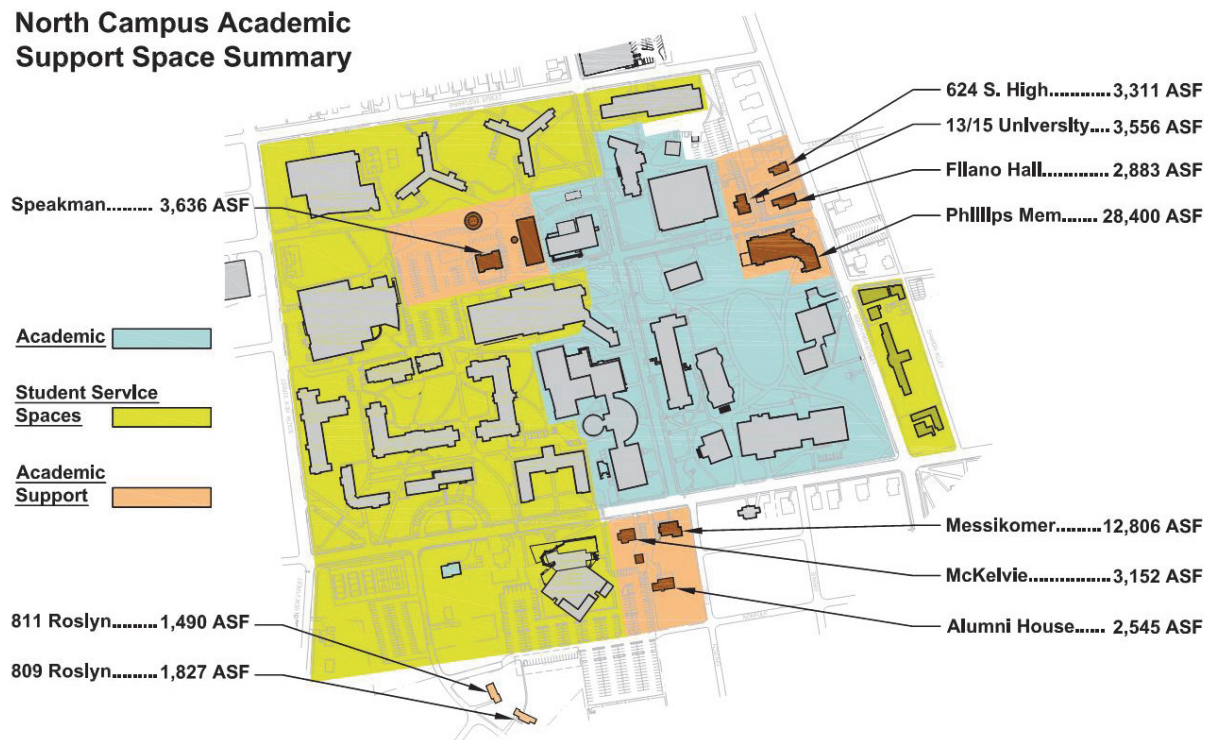
North Campus Student Service functions, not including residence halls, are accommodated in approximately 226,798 ASF, primarily in four buildings: Lawrence Hall, which houses the main dining venue and student services has 72,346 ASF, Sykes Student Union Building with an assortment of student service spaces has 64,645 ASF, the Student Recreation Center, recently completed, has 47,365 ASF, and Hollinger Field House has 42,442 ASF. Also included in the Student Service space is the Student Health Care auxiliary space area currently located on the first floor of the recently completed Commonwealth Hall. The total of 226,798 ASF of North Student Service Space represents approximately 76% of the campus's 296,741 ASF of Student Service space. Residence halls for the North Campus currently show 3,892 beds, which is 81% of the total 4,775 bed count need for the campus as identified in 2010. Including south campus apartments (both private and public), a total of 5,172 beds exceeds the total bed count need identified in 2010. Due to enrollment future growth planned for on-line and off-campus locations, no additional on-campus student housing is planned at this time.

### North Campus Student Services Space Summary



**Academic Support** functions (see definition on Page 4 of this section) for the North Campus total 69,461 ASF, which represents approximately 61% of the total 113,326 ASF as listed in the Paulien & Associates Space Needs analysis. Adding 50,847 ASF from East Campus (201 Carter Drive and 887 S. Matlack Street), the academic support areas on north/east campus total 110,817 ASF.

### North Campus Academic Support Space Summary

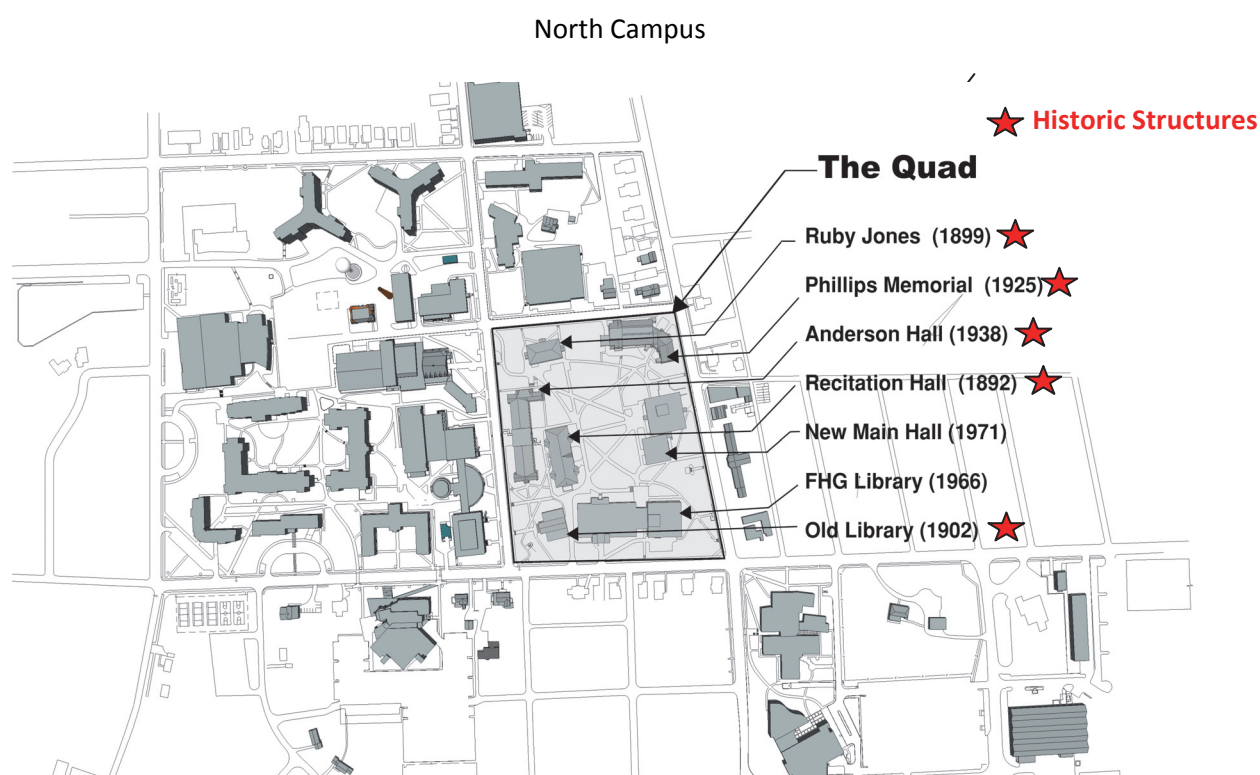


The functional relationships among buildings on the North Campus are organized by building groups with similar functions that generally relate well to the adjacent buildings. The academic core buildings are grouped together around the historic Quad and as the core has grown the expansion has proceeded to the north and west. Student services and residence halls are grouped together to the west where potential noise and other conflicts are avoided. However, they are still within walking distance so that a close pedestrian connection can be maintained.

The density of the existing built environment on the north campus provides limited opportunity for building expansion to meet 2020 space utilization needs without moving functions to one of the other two campuses or renovating, demolishing and re-configuring existing buildings to provide more square footage. The CCP Physical Plan explores the benefits of both these options. The recent decommissioning of the Boiler Plant, due to the campus-wide geothermal project, adds valuable development space in the desirable center of North Campus.

## The North Campus Buildings and Facilities

The North Campus is the historic and academic core of the University. The Quad, which is in the southeast corner of the North Campus, is bordered by buildings that were part of the West Chester State Normal School dating to a period around the turn of the 19<sup>th</sup> century and includes Recitation Hall – 1892, Ruby Jones – 1899, the Old Library – 1902, and Phillips Memorial Hall – 1925. After the School became the West Chester State Teachers College in 1927, Anderson Hall was built along the western side of the Quad. Main Hall, the first campus building located on the east side of the Quad, was built in 1871 when the original West Chester Academy became the West Chester State Normal School, but it was razed 100 years later. The replacement building—New Main— was built in 1971. New Main and the Library, which was built in 1966, form the east and south sides of the Quad.



The predominant architectural theme is Collegiate-Gothic, the major exceptions being the F.H. Green Library and New Main. These buildings, built between 1966 and 1976, do not have the same characteristics as the other buildings. The materials, style, profiles, and massing are distinctly different. The library tends to act as a backdrop holding the southern border of the Quad, but New Main stands at the highest and most prominent point of the Quad. This building detracts from the collegiate atmosphere present elsewhere in this area. New Main also turns its back toward High Street and thereby projects an image not in keeping with the University's wish to engage the town and adjacent neighborhoods. The library façade facing Rosedale also appears to turn its back on the street. Recent studies to upgrade New Main's façade with a nineteenth century façade (with faux Serpentine façade

and a stately mansard) are an economic solution to upgrading this structure (whose internal working parts are in recently renovated shape), without the undue cost of replacing the structure in total.

In the 1960s, Schmucker Science Center, the Peoples Building, Ehinger Office Annex, and what is now 25 University Avenue extended the academic Quad. Mitchell Hall was added in the late 1970s. An addition was added to Schmucker Science Center in the early 2000s.

Campuses with historic facilities have been challenged to justify renovating or re-purposing when newer buildings might be more energy efficient or more suitable for current teaching and research needs. The response is based on how design thinking affects overall learning. Historic facilities provide clear identities to campuses and their spaces and enhance learning by becoming focal points for face-to-face communications. They also demonstrate how sustainability was achieved in the centuries before sophisticated technologies. The historic buildings on the West Chester Campus have been adapted, preserved and renovated to effectively support campus functional needs. The facility audit identified remaining challenges, such as accessibility in the Old Library, but the Comprehensive Campus Plan explores opportunities to suitably utilize the five historic structures on the Quad, as well as Ehinger Gymnasium which is not on the Quad.

### North Campus Site Issues



Many of the site issues revolve around making the North Campus a premiere pedestrian environment for students. Accomplishing this will require the continuing effort to: move parking to the perimeter; limit vehicular circulation within the area bounded by Sharpless Street, South High Street, Rosedale Avenue and South New Street; incorporate large and small outdoor active and passive green spaces within this area; and provide appropriate walkway connections within a newly created pedestrian-oriented campus.

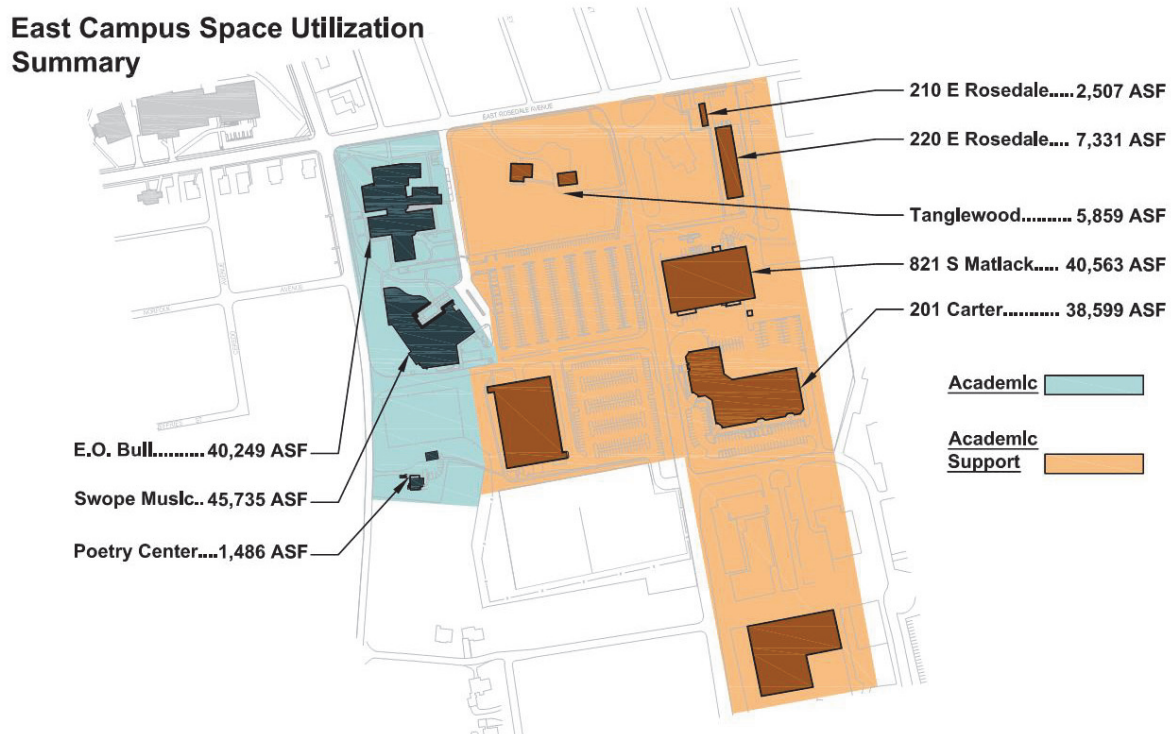
- ① The parking area east of Lawrence Hall is a prime example of a misplaced function. Although it serves as a convenient place to park for some, it is an obstruction in a prime location that should be part of the pedestrian path network at the key intersection where University Avenue crosses the path connecting the new Student Recreation Center and the Sykes Student Union Building. Moving this parking function to the West Nields Street location moves it to the perimeter of the campus out of the super block. Also, an additional parking structure currently planned to face South New Street opposite the West Nields Street parking Structure to support the new Commons Building (see item #2 below), will further relocate the parking from the center of campus.
- ② Speakman Hall and the Boiler Plant adjacent to Lawrence Hall parking lot occupy a considerable amount of real estate in this central location, dividing the Tyson Hall and Goshen Hall residence hall zone from the residence hall zone to the south. The Boiler Plant function was recently taken off-line in 2013 as the geo-thermal systems became more fully deployed. The Speakman Hall building is planned for demolition, as its Custodial Support function has been relocated to Ehinger Office Annex (the academic tenants there relocate to Wayne Hall). Removal of both buildings provides space for the newly planned Commons Building (housing a Dining Center replacement from Lawrence Center and also badly needed academic spaces).
- ③ The University's desire to receive ownership from the Borough of West Chester of South Church Street, between Sharpless Street and West Rosedale Avenue and also University Avenue between High Street and South Street, would be an important step in limiting vehicular access and creating a pedestrian walkway system in the super block. The South Church Street area, beginning at University Avenue and extending one block south towards East Rosedale Avenue, may convey the most powerful street image with the London Plane Tree canopy and Ruby Jones, Anderson Hall and the Old Library lining the eastern side of the street, and Ehinger Gym, Ehinger Office Annex and the Schmucker Science Center lining the western side of the street. The street is narrow and usually tightly packed with parked cars and vending trucks making it a dangerous crossing for pedestrians. Due to the presence of eighty (80) metered parking spaces owned and operated by the Borough of West Chester, the loss of sizeable parking meter income for the Borough of West Chester may make this campus desire a challenge.
- ④ Recent Quad renovations have furthered its ability to meet its full potential to complement the historic structures that form its northern and western edges. The abstract and deteriorated crisscross sidewalks were replaced in 2014 with a magnificent central turf oval and surrounding historically detailed sidewalk and site lighting fixtures. The center of the campus now reflects the aesthetic of any New England Ivy League school. An outdoor classroom and gathering areas were created, serving students in what is the academic heart of the campus. Landscaped and hardscaped nodes now connect

important campus gateways –the northeast Phillips Memorial passageway, the northwest University Avenue/Church Street intersection, the southwest corner Rosedale Avenue/Church Street intersection, and the southeast connection to the President’s Walk and the East Campus. Existing site stairs have been removed. Further enhancements to the Quad entry from East Campus are required, as is the replacement of the 1980s vintage campus sign at Rosedale Ave and South High St.

- 5 The existing Main Hall and FHG Library do not provide the curb appeal appropriate to South High Street and East Rosedale Street.
- 6 A primary pedestrian path must connect the new Student Recreation Center and the Sykes Student Union building. This is also a connection between the northern and southern residence hall zones.
- 7 A pedestrian connection should be established between the southern residence area and the academic Quad—a path around the Schmucker Science Center rather than through it.

### East Campus Space Utilization, Buildings & Facilities and Site Issues

The eastern portion of the East Campus is the location for academic support and maintenance functions, the majority of which are in the 201 Carter Drive, 821 and 887 South Matlack Street buildings. All three buildings are part of what was a light industrial park that forms the eastern, undefined edge of the campus. The 201 Carter building includes a small amount of academic and administrative space. The eastern zone also includes Tanglewood, the President’s residence, and a large parking area that can be seen as an area suitable for future expansion, if required, in future decades.



The College of Visual & Performing Arts represents the relatively recent University academic expansion into the Eastern Campus. Theater and Dance departments have combined with the Art department into the E.O. Bull Center after the completion of an addition and renovation, and the Swope Music and Performing Arts Building, completed in 2007, houses the rest of the College of Visual and Performing Art functions.

East Campus site issues include the difficult Rosedale/High Street crossing at the pedestrian/vehicular gateway to the North Campus. Traffic controls and street reconfigurations are presently being discussed with West Goshen Township and West Chester Borough for mutually beneficial solutions to the traffic density along Rosedale Avenue. The University can only develop strategies and CCP physical plan proposals for the four sites at the intersection that contribute toward making this an appropriate gateway pedestrian entrance to the North Campus.

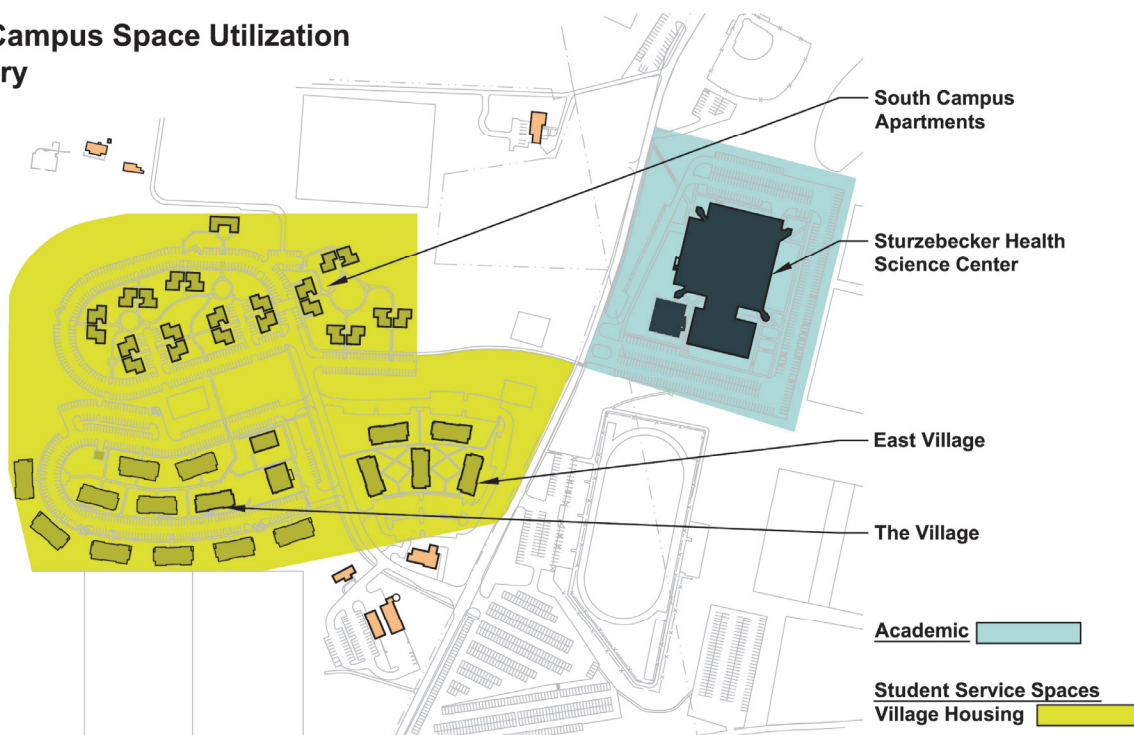
The undefined edge which characterizes the campus could become better defined if more development occurs east of South High Street. If a College of Visual & Performing Arts expansion is called for or any student service auxiliary space is deemed necessary, site positioning and building designs should complement the E.O. Bull and Swope buildings, which have begun to define the character of the East Campus. Due to the particular onerous pedestrian crossing at South High St. and Rosedale Ave, further academic development in this area, which would increase pedestrian traffic to East Campus, has generally been avoided. In addition, expansion within the Matlack Industrial Park, near 201 Carter Drive, has been unavailable due to Township zoning exclusion for educational use in this area.

### **South Campus Space Utilization, Buildings & Facilities, and Site Issues**

South Campus utilization includes athletic fields, three residential areas known as the Village, East Village, and South Campus Apartments, the College of Health Sciences, and athletic academic space in Sturzebecker and the natural woodlands surrounding these areas that serve as outdoor environmental classrooms. The South Campus is a stark contrast to the North Campus, which is closely tied to the adjacent West Chester community. It also contrasts with the light industrial park environment of the East Campus. The South Campus is bordered on the eastern side by the Robert B. Gordon Nature Area where students can benefit from nature trails. The area will be preserved and continue to be a place for environmental education. The preserve also acts as a buffer between the Campus and Route 202.

The South Campus area is connected to the North by only one street—South New Street. It is served by regularly scheduled shuttle buses, but the 20 to 25-minute walking distance to the North Campus and the lack of safe and convenient bicycle routes, due to steep grades, have made it difficult for students who have classes in both locations, even though a sidewalk to South Campus is available. Although plans for a building addition to Sturzebecker Health Science Center have been anticipated for several years, the reality of aggressive Township resistance to any further development on south campus, which accompanied an increase in student or faculty traffic along the Rosedale Avenue corridor, made a strategic decision to abandon large scale future development in this area. The academic spaces within the new Commons Building will meet the needs of the expansion of the College of Health Sciences, as identified in the Paulien Study, on a more convenient location on north campus. Many of the programs

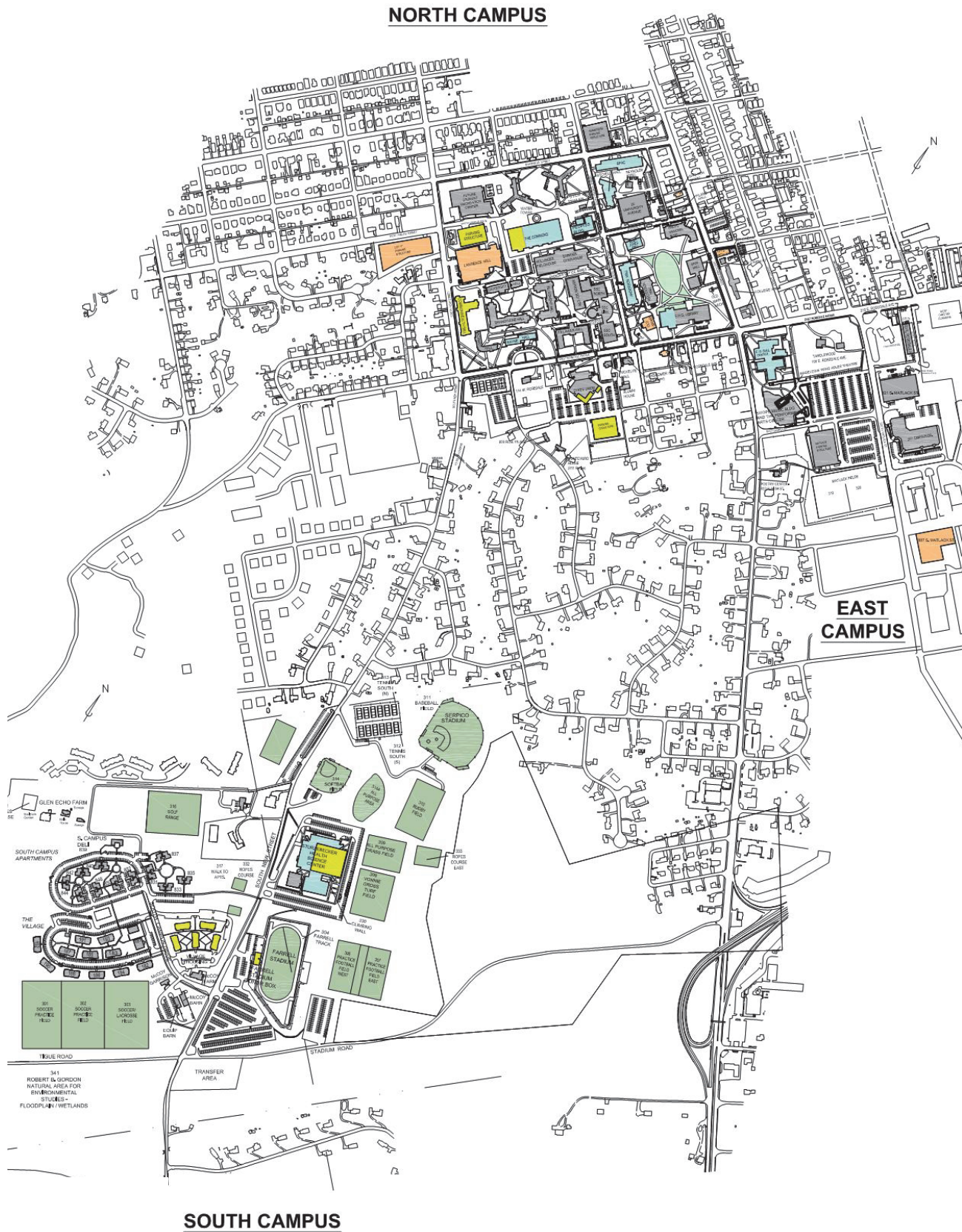
## South Campus Space Utilization Summary



in the College of Health Sciences are laboratory intensive and would benefit from a crossover with the lab and computer instructional spaces currently found on the North Campus. Space vacancies created by this relocation of departments will allow a less onerous Athletic area to be created within the gymnasiums of Sturzebecker Health Science Building, with a smaller non-academic addition, which would offer minimal additional traffic to the area.

The Village Residence Hall areas on the west side of South New Street, with apartment-style living and buildings arranged in suburban patterns that create common green spaces, has proved to be successful.

### 3.0 Space Needs to be Addressed in the Physical Plan



### Space Needs to be Addressed in the Physical Plan

The December 2010 Space Analysis identified existing campus wide space needs, grouping them into four general categories - **Academic Space, Academic Support Space, PE/Recreation/Athletics, and Auxiliary Space**. At that time, there was an Academic Space deficit of 101,520 ASF campus wide for the Plan Horizon year 2020 as defined in the Paulien & Associates, Inc. study: 27,300 ASF classroom space, 19,500 ASF office space, and 46,000 ASF teaching, open lab and research space. The library was estimated to have a Plan Horizon deficit of 54,800 ASF and was included in the Academic Support Space category.

Also identified was a Plan Horizon deficit of 29,190 ASF for Assembly and Exhibit space and a deficit of 8,699 ASF for the other Administrative Department Space. When the Library, Assembly & Exhibit and other Administrative Space deficits were included in the Academic Space category, there was a total 185,489 ASF deficit.

There was also a need for an additional 65,700 ASF at the Plan Horizon for student services and food services, Auxiliary Spaces. In the PE/Recreation Athletics category there is a plan horizon deficit of 75,642 ASF.

Due to space inventory increases between 2010 and 2015, the new inventory and space guideline deficits are tabulated below.

It should be noted that the deficits indicated at the 2020 Plan Horizon were based on a Student Headcount of 16,605. At this Mid-Decade 2015 Update, the projected Student Headcount for Fall 2016 is 16,622 with a projected Student Headcount of 16,769 for the Fall of 2019. These numbers indicate that the Plan Horizon will be exceeded in the Fall of 2016 by 17 students indicating a slight discrepancy with the Plan Horizon. The headcount appears to max out in Fall of 2019 at 16,769. The conclusion drawn from this information is that while the Plan Horizon was met earlier than anticipated it is only slightly higher than the 2020 Plan Horizon Headcount of 16,605.

Summaries of the Need and Deficits for the three space categories are as follows:

<b>Academic SPACE CATEGORY</b>	<b>2015 Existing ASF</b>	<b>2020 ASF Need</b>	<b>Surplus/ (Deficit) ASF</b>
Classrooms	128,306	145,363	(17,057)
Teaching/Open Labs	113,799	155,880	(42,081)
Research Labs	37,446	43,750	(6,304)
Academic Offices	164,942	184,445	(19,503)
Other Academic Dept Space	39,455	48,182	(8,727)
Library	112,027	166,806	(54,779)
Assembly & Exhibit	53,375	77,472	(24,097)
<b>Totals</b>	<b>649,350</b>	<b>821,898</b>	<b>(172,548)</b>

<b>Academic Support</b> SPACE CATEGORY	<b>2015 Existing ASF</b>	<b>2020 ASF Need</b>	<b>Surplus/ (Deficit) ASF</b>
Admin Offices & Service	84,051	88,415	(4,364)
Physical Plant	63,297	76,793	(13,496)
Other Admin Dept Space	17,897	21,257	(3,360)
<b>Totals</b>	<b>165,245</b>	<b>186,465</b>	<b>(21,220)</b>

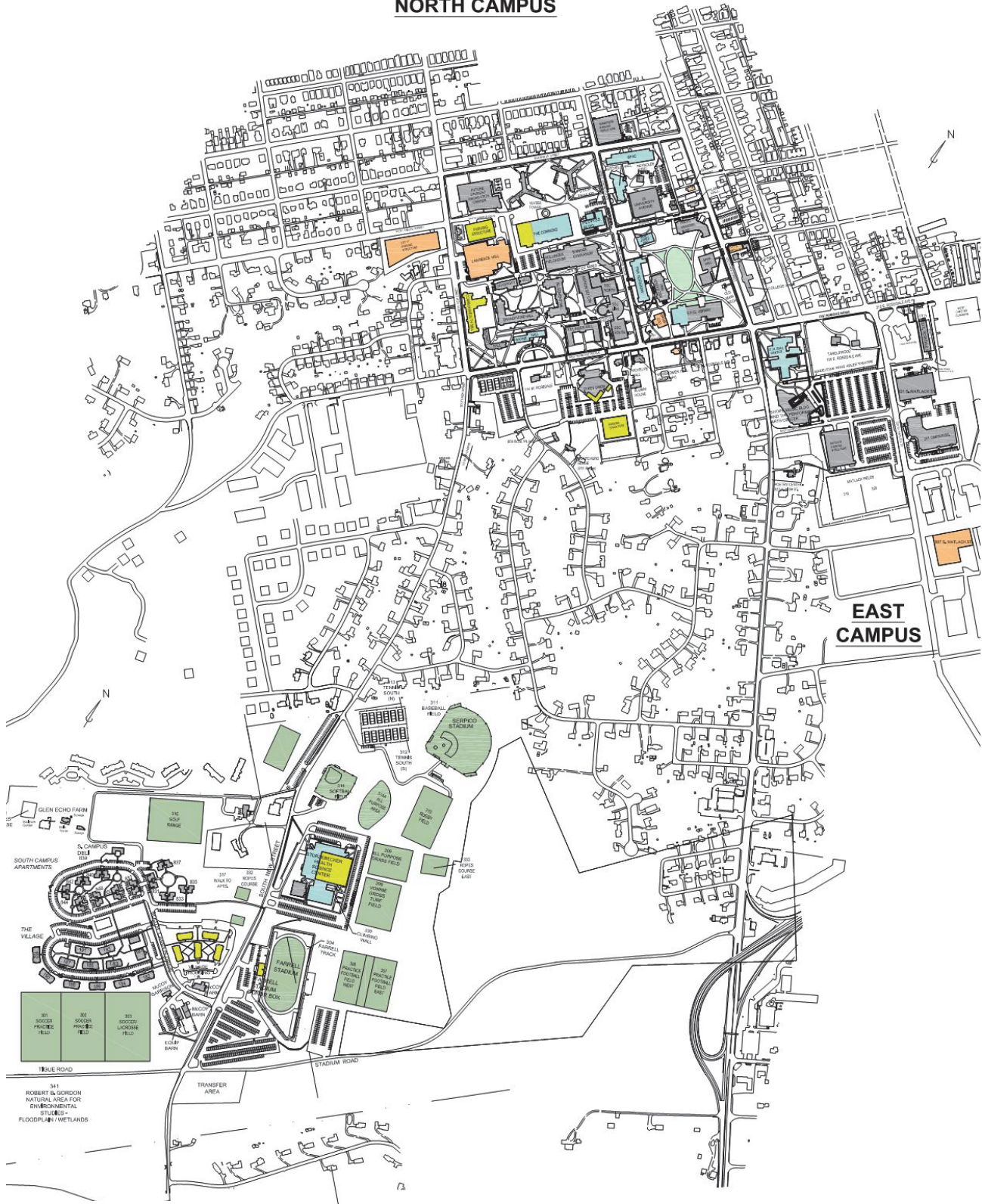
<b>Student Services</b> SPACE CATEGORY	<b>2015 Existing ASF</b>	<b>2020 ASF Need</b>	<b>Surplus/ (Deficit) ASF</b>
<b>PE/Recreation/Athletics</b>			
Recreation	58,749	85,850	(27,101)
Athletics/PE	98,927	176,881	(77,954)
<b>Auxiliary Space</b>			
Student Union	56,938	121,523	(64,585)
Student Health Care	9,781	5,351	4,430
Lawrence Hall - Dining Services*	47,150	65,000	(17,850)
LARC/Career Center	25,196		25,196
<b>Totals</b>	<b>296,741</b>	<b>454,605</b>	<b>(157,864)</b>

- \* Dining Services will eliminate 47,150 ASF in Lawrence Center, but gain approximately 65,000 ASF in The Commons in 2019, for a net gain of approximately 17,850 ASF.

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## 4.0 Comprehensive Campus Plan Proposals

### NORTH CAMPUS



### SOUTH CAMPUS

## Overview of Updated 2020+ CCP Physical Planning Proposals

The updated physical planning proposals in this document represents amended strategies for meeting the needs and deficits identified by Paulien & Associates, Inc. in the December 2010 “Space Needs Analysis for the Comprehensive Campus Plan.” Specific projects implemented during the first 5 years of the campus plan (2010 – 2015) were identified and proposed projects were re-evaluated in the 5-10 year and 10+ year implementation plans based on fiscal realities and strategic necessities.

The overarching issues that continue to drive the Physical Planning process are accommodating the Plan Horizon 2020 Academic Space Needs identified by the Paulien & Associates study, making the best use of facilities and considering renovation or repurposing buildings before recommending new construction.

Additional considerations included the total number of projects identified in the May 2012 Comprehensive Campus Plan. While the plan took a holistic approach to the strategic plan, it identified forty-three potential projects: twenty projects at period 1-5 years, seventeen projects at 5-10 years and five projects at 10+ years. A significant number of these projects were identified as new construction, including additions to existing and new facilities, which may have posed approval issues with West Goshen Township due to an anticipated exacerbation of current traffic issues on campus. While re-evaluating completed and proposed projects the total number of projects was reduced to twenty-nine, sixteen of which have already been completed with ten projects planned in the 5-10 year period and three for the 10+ year period. This revised project list reflects a realistic goal for campus growth between 2015 – 2020.

## Physical Planning Project Summary

The Physical Planning Project Summary identifies the principle planning strategies by number. The numbers do not suggest a sequence of implementation. An updated implementation strategy for years 1-5 indicating projects completed within the first five years of the plan is included in Section 5.0 of this report. A revised implementation strategy for 5-10 years to 2020 and 10+ years to 2020+ is also included in Section 5.0 of this report.

1. Proposed projects on North Campus include the 177,500-GSF “Commons” which is currently in Schematic Design. This five-story facility will house Academic, Assembly and Auxiliary spaces and will connect residential areas of the campus with the FHG Library, Sykes Union and the Student Recreation Center. When completed, the facility will help close the Academic Space deficits by adding 40,062 ASF. Additionally, the “Commons” will also contribute to meeting the Plan Horizon with 10,000 ASF of Assembly Space and 65,000 ASF of Student Services Space.

A 600-vehicle parking garage will also be constructed adjacent to the facility to support the land development requirements of the project and offset the lost parking count due to the placement of the new building in an existing surface parking lot.

2. Along with the Academic ASF associated with the “Commons,” the completion of the 6-story Business and Public Affairs Center, or BPAC, in 2016 will help bridge the space deficit of Academic Space with the addition of 50,953 ASF.
3. These two significant projects along with the already completed spaces in Mitchell and Wayne Halls and the proposed renovations to Ruby Jones Hall and Anderson Hall, as well as several smaller projects, help to significantly close the Academic needs for E&G classrooms, teaching labs, laboratory space and academic offices, with all but teaching labs inventory meeting their required space guidelines. It should be noted that the deficit of 32,444 ASF in Academic Space is associated with the library, which was estimated to have a 54,779-ASF deficit in the 2010 Space Needs Analysis. While a portion of this deficit is made up with space associated with the “Commons” and the renovations to the stack areas in the FHG Library, it is having a negative effect on the outcome of the Academic Space Needs and Deficits Chart, included in this section, which remains at a 23,441-ASF deficit. Some of the re-use of Lawrence Center (40,000 GSF, 25,000 ASF) for academic purposes will help close this gap.
4. The planned construction of a 10,000-GSF academic support services facility for offices of the Vice President of Advancement, Cultural and Community Affairs, Conference Services, Public Relations, Social Equity, and Sponsored Research at 30 West Rosedale includes 5,789 ASF of space identified in the Academic Support Space Needs and Deficits Chart, included in this section.
5. Additionally, the Old Library project indicates 2,667 ASF of space for a new Visitor/Admissions office in the Academic Support Space Needs and Deficits Chart. An additional 3,369-ASF space is included in the Academic Space Needs and Deficits Chart, which includes library study and storage space and 3,452 ASF under Assembly and Exhibit.
6. The Paulien 2010 Space Needs Analysis showed a total deficit of 157,864 ASF in the Student Services Category at the 2020 Plan Horizon. Proposed multi-story additions to the Sykes Student Union will help close this deficit along with the 65,000 ASF of dining space in the “Commons” and the 13,400 ASF associated with the 20,000-GSF additions to Sturzebecker. Additionally, the renovation to an 8,500-GSF structure at the corner of Linden and High streets for a new University Dining Venue will add another 6,500 ASF to the Student Services Category.
7. While the Student Services Space Needs and Deficit Chart, included in this section, appears to show a surplus of 3,566 ASF, the chart does not include the (40,000) GSF vacated in Lawrence Center when the food service component moves to the “Commons,” which will be programmable space when Lawrence Hall is renovated in year 2020+. A true deficit of 36,434 ASF should be attributed to the category for PE/Recreation/Athletics.
8. Located away from the center of campus, a new 450-Vehicle Parking Structure at Sykes Union will take vehicular traffic away from the center of the campus to enhance health, safety and aesthetics.

### Meeting the CCP 2020+ Needs and Deficits

There are several factors contributing to the inability to meet the space deficits in all categories of the Space Needs and Deficits by the end of the 5-10 Year Implementation phase. However, the deficits in the Academic and Academic support space categories can be addressed with the 10+ Year strategies described in the Implementation Strategy. It is only in the Student Services Category that a deficit of 50,233 ASF remains in the PE/Recreation/Athletics. Proposed renovations to the Sturzebecker Health Science Center, for future use by the Athletics Department, will help reduce this existing deficit.

In the Academic space category, the deficit of 23,441 ASF is associated with the library, which was estimated to have a 54,779-ASF deficit in the 2010 Space Needs Analysis. While a portion of this deficit is made up with space associated with “The Commons” and the renovations to the stack areas in the FHG Library, it is having a negative effect on the outcome of the Academic Space Needs and Deficits Chart. Other future deficiencies in the Academic space required for the Science Center could be addressed with the renovation of People’s Building included in the 10+ Years Implementation Plan.

<b>Academic Needs &amp; Deficits</b>	<b>2015 Existing ASF</b>	<b>2020 ASF Need</b>	<b>Surplus/ (Deficit) ASF</b>
<b>Totals</b>	<b>649,350</b>	<b>821,898</b>	<b>(172,548)</b>

<b>Academic Proposed Space</b>	<b>Available Existing ASF</b>	<b>New Building ASF</b>	<b>Building Replaced ASF</b>	<b>New Available 2020 ASF</b>	<b>+/-</b>
Mitchell Hall	18,700			18,700	
Anderson Hall	14,391			14,391	
Ruby Jones	6,636			6,636	
BPAC		50,953		50,953	
Wayne	10,000			10,000	
The Commons		40,062		40,062	
Dynamic Bookstore	3,361			3,361	
Old Library	3,369		(10,086)	(6,119)	
FHG Library	4,000		(4,000)	-	
Speakman			(2,329)	(2,329)	
Assembly & Exhibit	3,452	10,000		13,452	
<b>Totals</b>	<b>63,909</b>	<b>101,015</b>	<b>(16,415)</b>	<b>149,107</b>	<b>(23,441)</b>

<b>Academic Support Needs &amp; Deficits</b>	<b>2015 Existing ASF</b>	<b>2020 ASF Need</b>	<b>Surplus/ (Deficit) ASF</b>
<b>Totals</b>	<b>165,245</b>	<b>186,465</b>	<b>(21,220)</b>

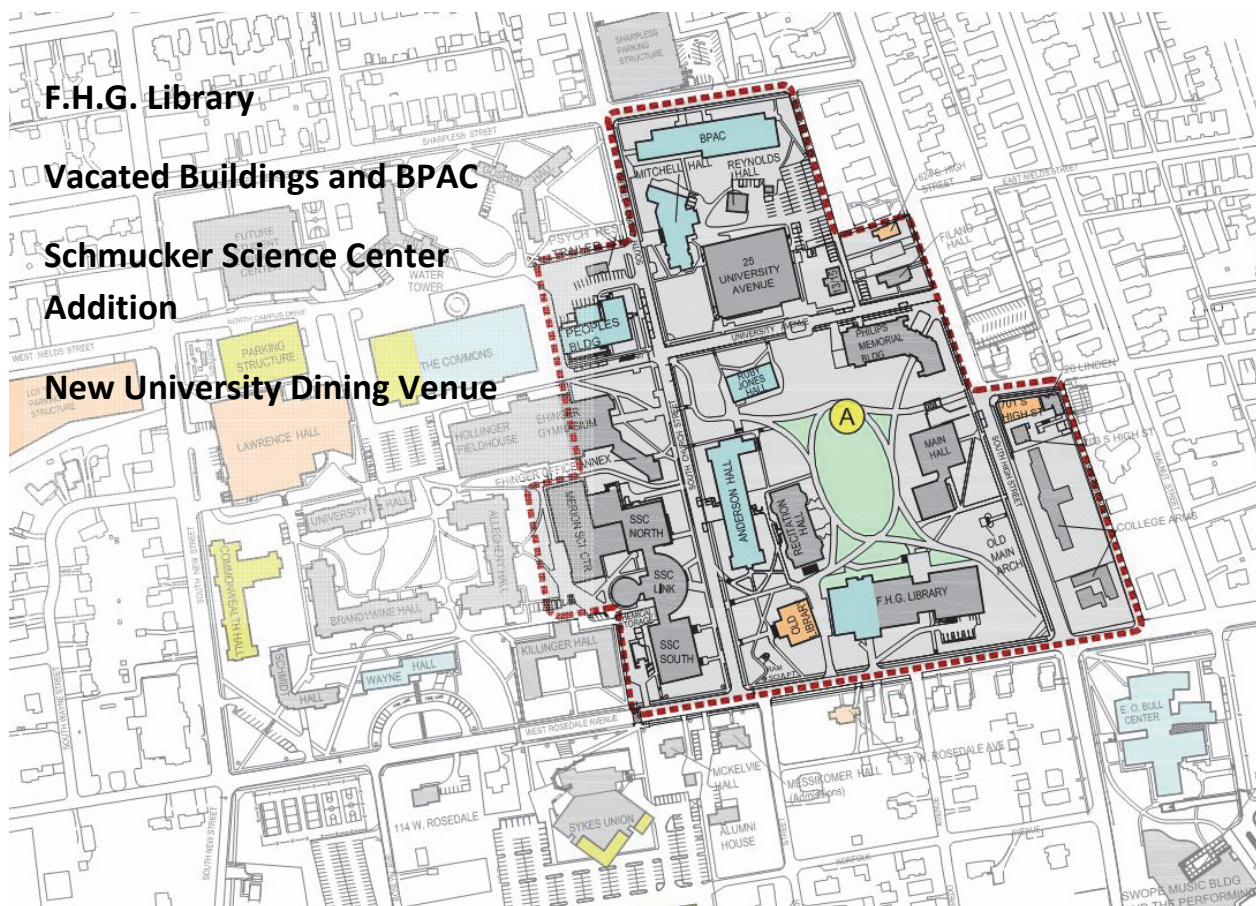
<b>Academic Support Proposed Space</b>	<b>Available Existing ASF</b>	<b>New Building ASF</b>	<b>Building Replaced ASF</b>	<b>New Available 2020 ASF</b>	<b>+/-</b>
30 W Rosedale	5,789			5,789	
Old Library	2,667			2,667	
<b>Totals</b>	<b>8,456</b>	<b>0</b>	<b>-</b>	<b>8,456</b>	<b>(12,764)</b>

<b>Student Services Needs &amp; Deficits</b>	<b>2015 Existing ASF</b>	<b>2020 ASF Need</b>	<b>Surplus/ (Deficit) ASF</b>
<b>Totals</b>	<b>296,741</b>	<b>454,605</b>	<b>(157,864)</b>

<b>Student Services Proposed Space</b>	<b>Available Existing ASF</b>	<b>New Building ASF</b>	<b>Building Replaced ASF</b>	<b>New Available 2020 ASF</b>	<b>+/-</b>
<b>PE/Recreation/Athletics</b>					
Sturzebecker Gymnasium		13,400		13,400	
Farrel Stadium Donor & Press Box		5,360	(2,010)	3,350	
<b>Subtotal</b>		<b>18,760</b>	<b>(2,010)</b>	<b>16,750</b>	
<b>Auxiliary Space</b>					
Student Union- Sykes Add		60,000		60,000	
The Commons		65,000		65,000	
High Street Dining Venue	6,500			6,500	
Lawrence Hall			(47,150)	(47,150)	
LARC/Career Center	25,196			25,196	
<b>Subtotal</b>	<b>31,696</b>	<b>125,000</b>	<b>(47,150)</b>	<b>109,546</b>	
<b>Totals</b>	<b>31,696</b>	<b>143,760</b>	<b>(49,160)</b>	<b>126,296</b>	<b>(31,568)</b>

## Comprehensive Campus Plan 2020+ Project Proposals

### 4.1 Area A Projects



#### 4.1.1 F.H.G. Library

Located on the North Campus, the F.H.G. Library was built in 1966. The library was estimated to have a 2020 Plan Horizon deficit of 54,000 ASF in the Academic Support space category as defined in the Paulien study in 2010. Interviews with the Library Staff in 2010 indicated a need for a variety of student and group study spaces. In support of this need, almost 10,000 SF of library stacks in the F.H.G. Library will be relocated to compressed shelving areas in the basement of the Old Library and the former Dynamic Bookstore. These spaces in the library will then be renovated to student lounge and study areas.

#### 4.1.2 Anderson Hall

Anderson Hall is an historic building located off the Academic Quad – one of the crown jewels of the campus. The five-story building, constructed in 1938, is the University's largest classroom facility. Renovations have been ongoing and the building has been successfully modified to accommodate various needs. When the BPAC is completed in 2016, approximately 7,729 ASF of

additional space will be available for renovation into single faculty offices (a WCU Strategic Plan goal) when the Department of Business moves out.

The renovated space can then be used by the Anthropology and Sociology Department, which will allow the vacating of the Old Library for its own future renovation into a Visitor/Welcome Center and Admissions office. A relocated Communications Study department will also share Anderson Hall, allowing Main Hall's remaining departments to meet their 2020 Plan Horizon goals (see item 4.1.6)

#### **4.1.2 Ruby Jones Hall**



Ruby Jones Hall, built in 1899, is one of the historic structures on the Quad that will be maintained and upgraded for use as an academic building. It is one of the essential structures that forms and maintains a part of the character and identity for the campus. Ruby Jones Hall is included in the Quadrangle Historic District, and has been entered in the National Register of Historic Places.

Some departments of The College of Business and Public Affairs have been scheduled to move from Ruby Jones Hall upon completion of BPAC in 2016, at which time there can be an upgrade and renovation of Ruby Jones Hall to permit single faculty offices for the Philosophy Department, which must vacate Anderson Hall in order to allow the future tenants to fit during their relocation from Old Library and Main Hall. (Anthropology and Sociology and Communication Studies.)

#### **4.1.3 The Old Library**



The Old Library is another fine example of the historic structures on the Quad. The Old Library sits on the prominent corner of South Church Street and West Rosedale Avenue, marking the southwest corner of the Quad. Following the old tradition of the other historic buildings in this area of campus, this 1902 building is constructed from serpentine rubble stone and topped with a slate roof. The Old Library is included in the Quadrangle Historic District. It has been entered in the National Register of Historic Places.

After the Anthropology/Sociology Department moves to Anderson Hall, the Old Library will be repurposed for a new Visitor's Center/Admission Offices/Library storage.

#### **4.1.4 Schmucker Science Center Addition (renovated Peoples Building)**

The Paulien analysis in 2010 revealed that most of the space deficits for teaching labs and research labs were in the College of Health Sciences and the Department of Psychology. There were no deficits quantified for the Schmucker or Merion Science Centers and over the Plan Horizon both buildings appear to be able to meet the needs at the projected head counts. However, as the College of Health Sciences expands on north campus, it is logical that the needs for science labs and classrooms, to support these CHS curriculums, should also increase. Should future 2020+ needs suggest a science center space deficit, The Peoples Building, which will be vacated when the Psychology Department moves to “The Commons,” could be renovated for an expanded Science Center.

#### **4.1.5 New University Dining Venue**

Adjacent to the Dynamic Bookstore on the corner of Linden Street and High Street is an existing 8,500-GSF structure; previously leased retail commercial spaces that will be renovated to serve as an east-campus West Chester University dining venue.

#### **4.1.6 Main Hall Reconfiguration**

The College of Arts and Sciences faculty, who were overcrowded in 3 or 4 person offices in the Main Hall, enjoyed internal expansion space possibilities with the recent relocation of the History Department to the 4<sup>th</sup> floor of Wayne Hall (a building recently transferred from Res Hall Auxiliary to the E&G program), and the relocation of the Foreign Languages



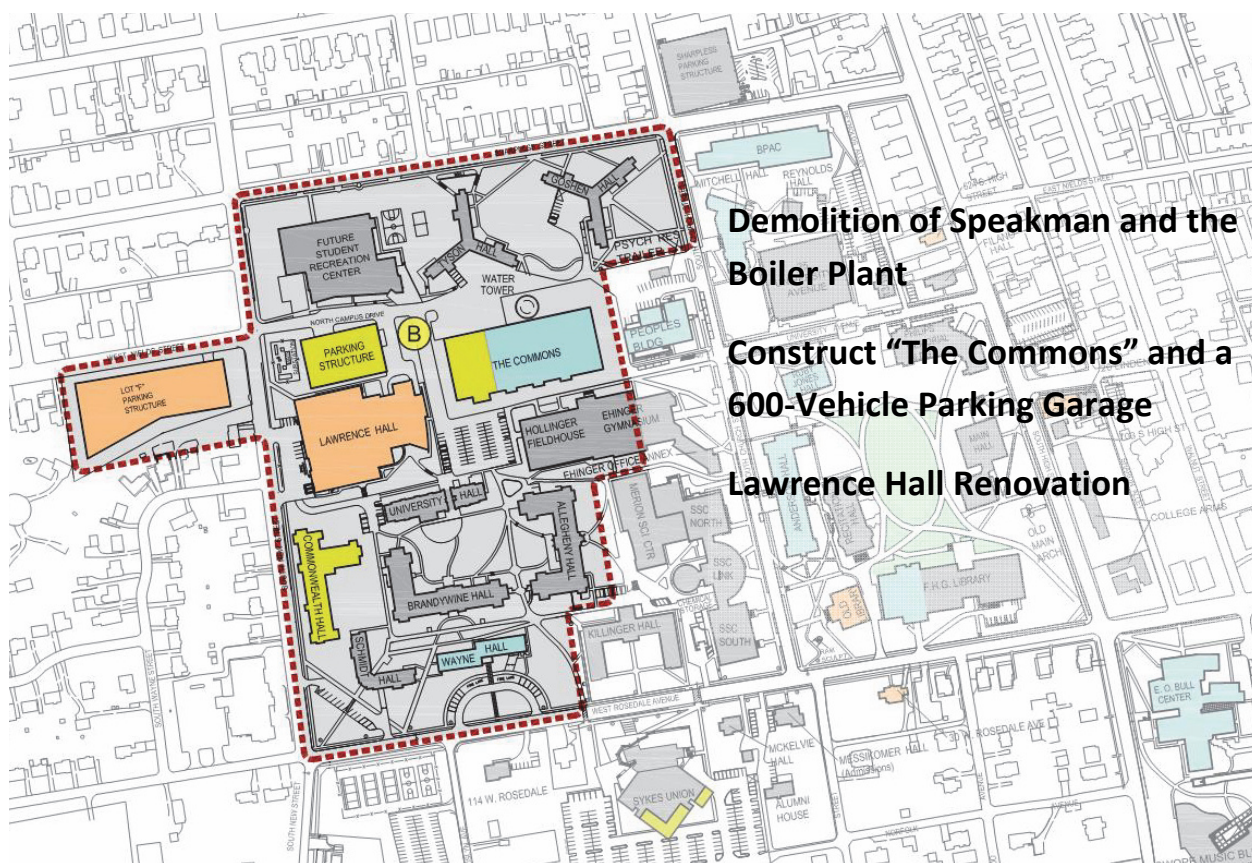
*Rendering of the newly proposed Main Hall façade.*

and Cultures Department to a recently renovated Mitchell Hall. Further expansion by the relocation of the Communication Studies Department into vacancies in Anderson Hall will allow the English and Inter-Disciplinary Studies departments their 2020 ASF required spaces in a building dedicated specifically to their use. A previous capital plan to demolish this building and replace the square footage with an addition has been rethought, due to its immense expense.

<b>Main Hall</b>	<b>Existing ASF</b>	<b>2020 ASF Needs</b>	<b>Proposed 2020 ASF</b>
<b>English</b>	<b>13,791</b>	<b>28,794</b>	
<b>Inter-Disciplinary Studies</b>	<b>1,020</b>	<b>1,140</b>	
<b>Political Science</b>	<b>1,500</b>	<b>2,500</b>	
<b>Totals</b>	<b>16,311</b>	<b>32,434</b>	<b>36,146</b>

The building's internal working parts (mechanical and electrical) are in fine working order, having been upgraded within the last decade, along with more recent corridor and classroom upgrades. A façade upgrade, which would mimic the nineteenth century look of its surrounding buildings on the Quad, would cost about ¼ of a total replacement and appears to be a more strategic plan for its upgrade with a more definitive timeline.

## 4.2 Area B Projects



**Demolition of Speakman and the Boiler Plant**

**Construct “The Commons” and a 600-Vehicle Parking Garage**

**Lawrence Hall Renovation**

### **4.2.1 Demolition of Speakman and the Boiler Plant ; Construct “The Commons” and a 600-Vehicle Parking Garage**

Speakman Hall and the Boiler Plant, both adjacent to the Lawrence Hall parking lot, occupy a considerable amount of real estate adjacent to the residential area of the campus. Speakman is a small, one-story structure maintenance support facility whose Custodial Office functions have been relocated to Ehinger Office Annex and its footprint area could be utilized for more appropriate uses. The Boiler Plant, which was decommissioned in 2013, due to advances in the campus-wide geothermal system, is an unsightly building which also occupies strategic central ground.

With the demolition of both of these buildings, a 177,000-GSF Commons will be built providing academic space for the Psychology Department and the College of Health Sciences including the Health, Nutrition and Nursing departments, which maintain dramatic space needs. The Nursing Department is currently in leased space several miles off-campus, in order to provide for its academic space requirements. This new academic space will meet all of the 2020 Plan Horizon requirements, as outlined in the Paulien Study, for both the Psychology Department ( need of 23,402 ASF) , and the College of Health Sciences (need of 49,0455 ASF), and will replace the planning to build an academic addition to Sturzebecker Health Science Center.

Auxiliary space will include residential dining with seating for 1,000 along with back-of-house kitchen, storage and retail components (an increase of 250 seats—33%—over the existing Lawrence Center dining facility). Assembly space will include an advanced conference room and rooms large enough for gatherings of 80 – 300 people.

A 600-vehicle parking garage will also be constructed adjacent to the facility to support the land development requirements of the project and offset the lost parking count due to the placement of the new building in an existing surface parking lot.

As referenced in the document *Space Guidelines 2020* in Appendix 5.0, the overall E&G component of the building was sized to meet the exact targets of the PASSHE Space Guidelines for classroom and faculty office spaces. The Teaching/Open Lab shortages (99,131 ASF), while somewhat addressed within the Commons program by adding 10,580 ASF to this space category, will need to be a focus of the Lawrence Center Renovations in 2020.



*Rendering of newly proposed “The Commons” and a 600-Vehicle Parking Garage.*

#### **4.2.2 Lawrence Hall Renovation**

Lawrence Hall currently houses a 40,000-GSF dining venue on the first floor with the majority of the Learning and Resource Center (LARC)’s functions, along with the Career Center, on the second floor. When “The Commons” is complete, dining services will move out of the building, providing an opportunity for expanded LARC functions and/or possible Bookstore, Public Safety expansion, or future Engineering Department Academic/Lab Space, no sooner than 2020. The remaining deficit in Teaching/Open Lab space (99,131 ASF- Appendix 5.0 *Space Guidelines*) may be addressed with this resource.

### **4.2.3 Wayne Hall - Reuse as Academic E&G Space**

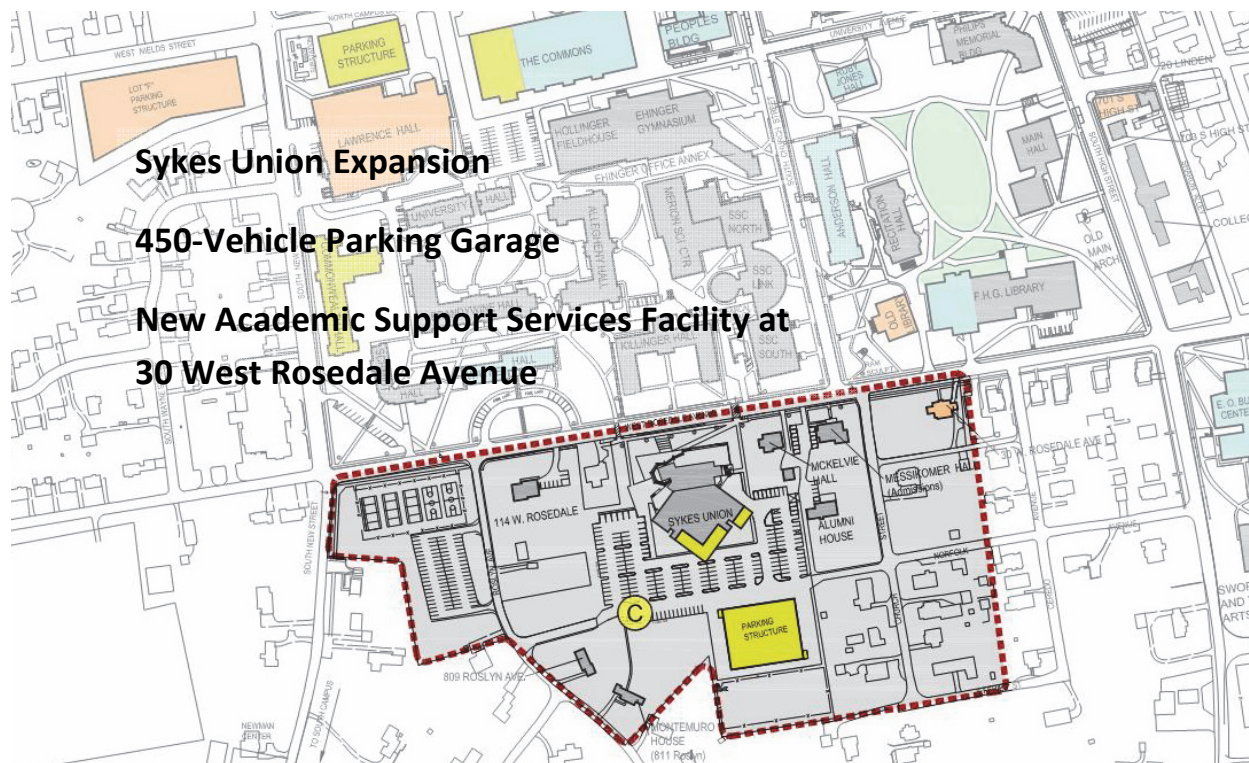
Under an agreement with University Student Housing, the occupation of the newly constructed private student residence, Commonwealth Hall, required the offline status of Wayne Hall, for a balance of bed counts between the private and public Residence Hall inventory. As such, Wayne Hall was reprogrammed for E&G use. After a quick renovation, former student rooms were utilized for new faculty offices, allowing both the History and Professional Education Department to move into single faculty offices. These relocations aided the required 2020 Plan Horizon needs of the College of Arts and Sciences, along with reducing the College of Education needs by approximately 4,500 ASF.

### **Department of Education Needs and Deficits**

<b>SPACE CATEGORY</b>	<b>Fall 2009</b>			<b>Plan Horizon</b>		
	<b>Existing ASF</b>	<b>Guideline ASF</b>	<b>Surplus/ (Deficit)</b>	<b>Existing ASF</b>	<b>Guideline ASF</b>	<b>Surplus/ (Deficit)</b>
<b>Academic Space</b>						
Teaching Laboratories & Service	1,585	3,013	(1,428)	1,585	3,238	(1,653)
Academic Offices & Service	13,704	19,445	(5,741)	13,704	20,685	(6,981)
Other Academic Department Space	6,141	7,908	(1,767)	6,141	7,948	(1,807)
<b>TOTAL</b>	<b>21,430</b>	<b>30,366</b>	<b>(8,936)</b>	<b>21,430</b>	<b>31,871</b>	<b>(10,441)</b>

ASF = Assignable Square Feet

### 4.3 Area C Projects



#### 4.3.1 Sykes Union Expansion

The Paulien space analysis showed a total need at the 2020 Plan Horizon for 127,386 ASF and a deficit of 64,585 ASF in the Student Affairs Auxiliary Space category. The deficit is an area slightly larger than the Sykes Union Building. Although there is currently a limited amount of space available for a Sykes Union Building expansion, at least to the west, multi-story additions to the building on the south and the east sides can be accommodated to meet the deficit. A building expansion to the east, with the demolition of McKelvie Hall and the use of its site (the current tenants would then occupy a vacated Messikomer Hall, once Admissions moves to Old Library - see item 4.3.3), would also help reduce the number of crosswalks on Rosedale Avenue, helping the traffic congestion on this corridor, a current township sore-spot. New spaces that might be appropriate include meeting rooms, especially larger meeting rooms for events and a larger ballroom that could be used for conferences, including an expanded food service for this end of the North Campus. The building could also benefit from large and small lounge spaces, especially important in this building which is considered the commuter's home away from home.

### **4.3.2 450-Vehicle Parking Garage**

Parking density will be brought to the exterior edge of the campus, pulling vehicular traffic away from the core. The parking will support the expansion of Sykes Student Union, as a township land-development requirement, especially if the Sykes expansion includes potential use for conferences.

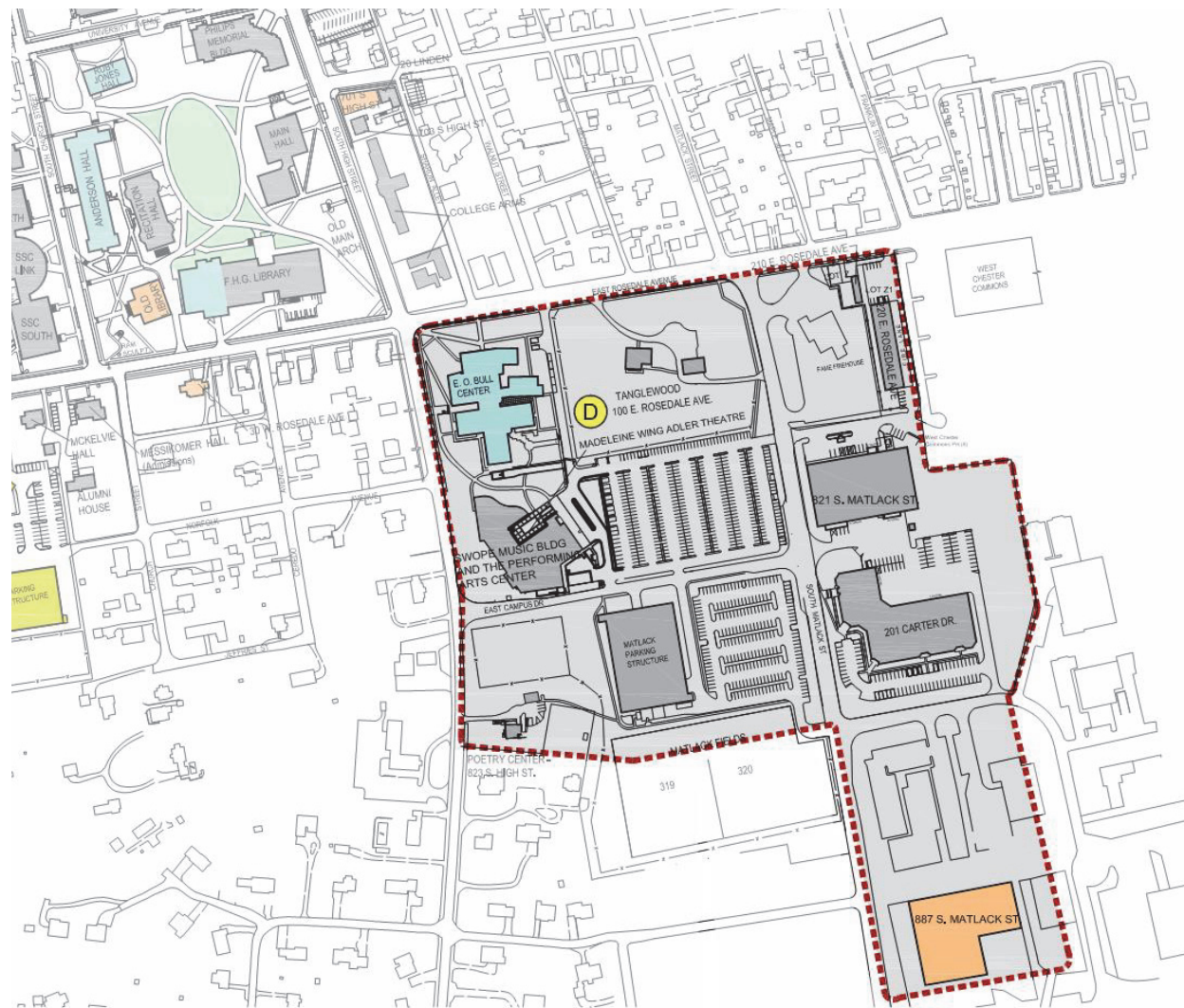
### **4.3.3 Repurpose Messikomer/McKelvie Halls**

Messikomer and McKelvie Halls, constructed at the turn of the 20<sup>th</sup> century, were once private homes and currently provide office space and serve the Admissions process. Upon completion of renovation to Old Library, and the relocation of the Admissions Department to this newly renovated building, Messikomer Hall may be occupied by an expanded Graduate Admissions Department from McKelvie Hall, allowing its possible demolition (see 4.3.1)

### **4.3.4 New Academic Support Services Facility: 30 West Rosedale Avenue**

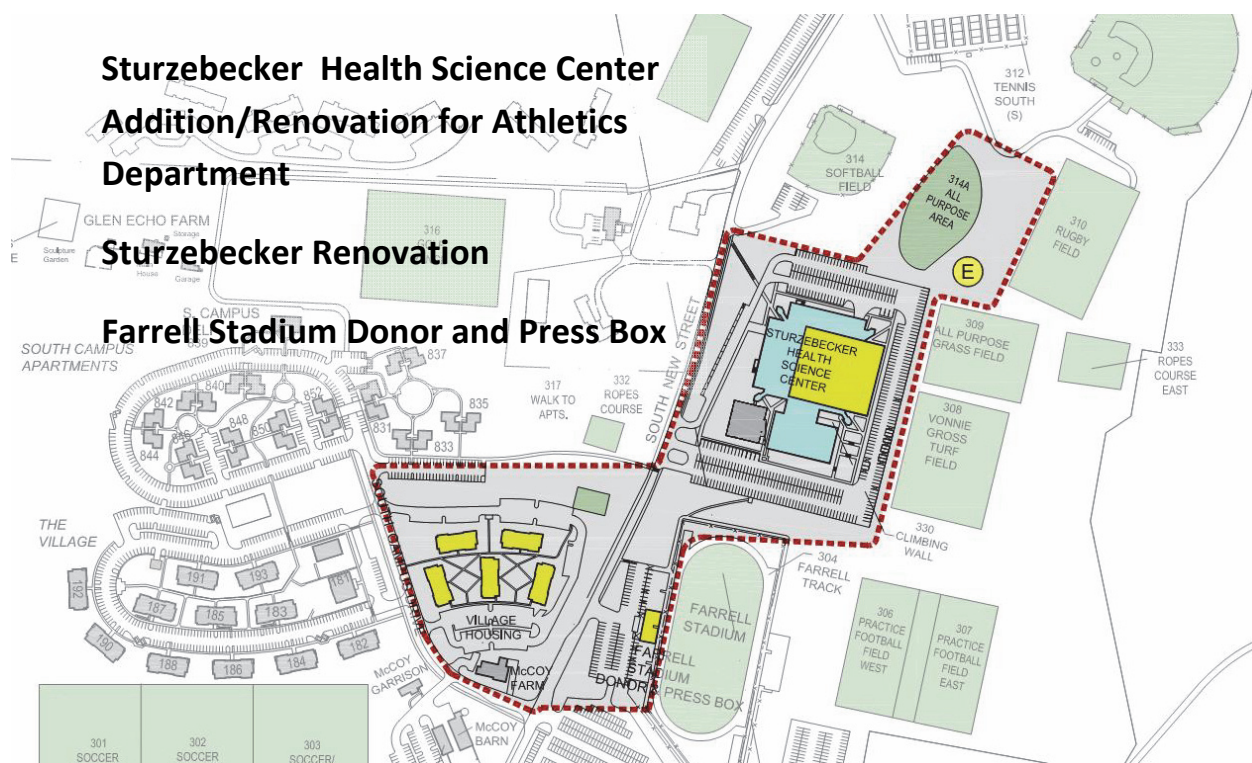
The Advancement Division suffers fragmentation from being located in several disparate buildings across campus, as well as presenting a non-professional image in its current location at Filano Hall, an aged historical building without ADA access to its upper floors. The consolidation of this division into a single, attractive and professionally detailed building is of the utmost importance to the future ability of this division to provide current services to the campus for academic support (Sponsored Research and Social Equity departments), as well as providing a professional backdrop for campus visitors (Public Relations, Community and Cultural Affairs, Marketing, and Conference Services). A modest 10,000-GSF building is planned to meet the current needs of this division at 30 West Rosedale Avenue. The division's current space at 13/15 University Avenue would be demolished, due to its age and archaic configuration, while Filano Hall would be reprogrammed for additional administration usage as a support space for functions in the overcrowded Philips Memorial Hall.

#### 4.4 Area D Projects



**4.4.1 There are no projects identified for Area D in the Updated Mid-Decade Comprehensive Campus Plan**

## 4.5 Area E Projects



#### 4.5.1 Phase I Sturzebecker Health Science Center – Renovation for Athletics Department

The College of Health Sciences (CHS) occupies 45,963 ASF of existing space in Sturzebecker Health Science Center at 201 Carter Drive. At the Plan Horizon, Paulien & Associates, Inc. identified a deficit of 49,055 ASF; however, for three departments – Nursing, Health and Nutrition, and the CHS administration, the deficit is 25,858 ASF. With the construction of “The Commons,” the College of Health Sciences including Administration, Nursing, Health and Nutrition will move to the North Campus, satisfying the Plan Horizon deficit for required academic space. The Sturzebecker HSC Gymnasiums, recreated as Athletic Space with a 20,000-GSF addition to include a 200-meter indoor track, will also allow approximately 55,000 ASF additional Student Services for Athletics, deferring their 2020 Plan Horizon need of 51,575 ASF.

#### 4.5.2 Phase II Renovation to Sturzebecker

After the relocation of the CHS to “The Commons,” the remaining portions of Sturzebecker will be renovated in support of the remaining departments in the College of Health Sciences, including Kinesiology, Sports Medicine, and possibly Communicative Disorders. These three remaining departments can easily satisfy their combined future space needs of 20,340 ASF in the vacancies created by the relocation of the other CHS departments to north campus.

College of Health Sciences	Existing ASF	2020 ASF Need	Surplus/ (Deficit)
Communicative Disorders	4,352	10,573	(6,221)
Department of Health	12,622	19,864	(7,242)
Kinesiology	7,276	16,470	(9,194)
Nursing	6,055	13,837	(7,782)
Sports Medicine	6,104	11,029	(4,925)
College of Health Sciences	9,554	23,245	(13,691)
Totals	45,963	95,018	(49,055)

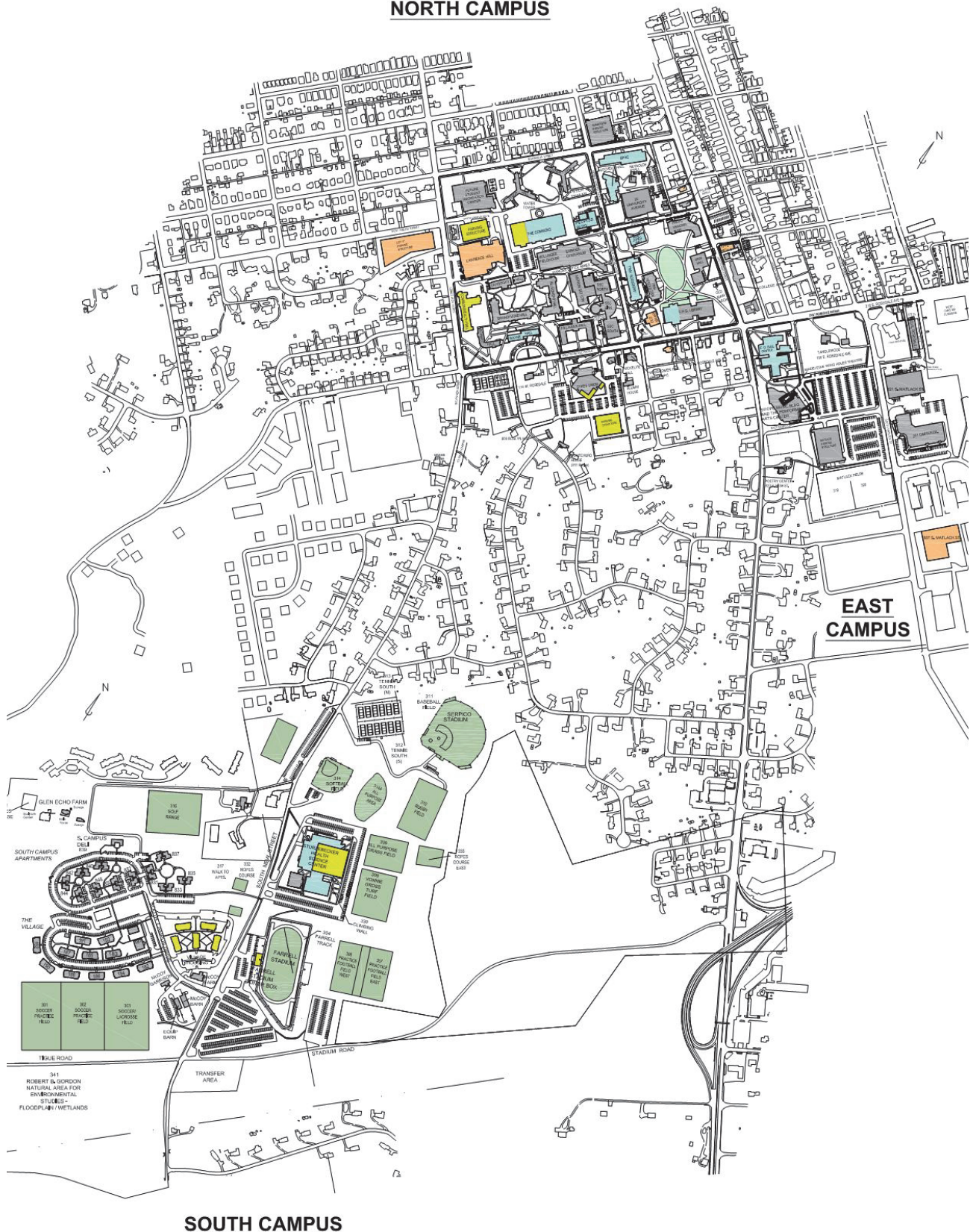
#### **4.5.3 Farrell Stadium Donor Box**

The existing 3,000-GSF Press Box at Farrell Stadium does not support a desired program where the President's donor activities can be supported in a modern facility, with ample amenities and code compliance. A renovation and 12,000-GSF four-story addition will add the required square footage required to support the desired program. Private funding is anticipated for this building addition.

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## 5.0 Implementation Strategy

## NORTH CAMPUS



## SOUTH CAMPUS

## 5.0 Implementation Strategy

### Overview

This section of the document presents strategies for implementing the Physical Planning Proposals outlined in Section 4. The strategy is divided into three periods, 1-5 years to 2015, 5-10 years to 2020, and 10+ years to 2020+. Each period has an associated timeline; with a project list, project description, time of expected occupancy, and approximate costs.

The initial push for the 1-5 year time period has completed eleven of the thirteen proposed projects, with the remaining two projects anticipated to be completed within two years. In addition, three of the 5-10 year timeline projects have also been completed, including a new Veteran's Center at 624 S. High Street and the completion of two phases of the Quad modifications. Following construction of the new **BPAC** building (May 2016), a period of spatial reorganizing will occur, for which planning has already begun. The College of Business & Public Affairs will move out of Anderson Hall and Ruby Jones Hall, wherein the satisfaction of the space needs for the College of Arts and Sciences can quickly occur within a few short years by reutilizing the vacated spaces of the College of Business and Public Affairs left in Anderson and Ruby Jones Halls.

The subsequent list of proposed projects and the timeline for completing the projects has been coordinated with this current active project list. The sequence and choice of projects represents one possible strategy that is implementable, but not inflexible. It is intended only as a guideline. It is understood that the University will need to reprioritize, adjust, and reorganize based on financial and operational considerations.

However, the advantage to this mid-decade update is to present a completely feasible and affordable plan for the balance of the 2010-2020 Plan Horizon to clearly guide short-term projects for these remaining five years of the plan, setting a stage for a new Comprehensive Plan to commence for the period of 2020-2030. The original 2010 Comprehensive Facilities Plan suggested an exhaustive list of \$319.9M in 10-year projects – a target which was clearly unattainable. This new project list, which totals \$231.7M (E&G), is a more realistic target for completing desired projects, given the University's Capital Request expectations from the Commonwealth and also the relative strength of fiscal reserves and the capacity to use debt service.

During this last decade, a very generous amount of enrollment growth (13.8% - 3,273 students) within the last five years (2010-2015) has spurred a tremendous need for a generous capital plan for space improvements and expansions. As it appears that the University has met its 2020 Plan Horizon enrollment target approximately five years early, the implementation of the balance of this decade's capital improvements will simply ease the overcrowding that the campus is now experiencing, since these additional students are already on campus. The next Comprehensive Facilities plan, unless additional large student enrollment is again anticipated, may focus on program improvements and modernization of existing spaces, versus the need for the construction of additional usable space. Appendix 7.0 *PA Public High School Graduation by County* indicated a possible plateau for future enrollment due to anticipated declining high school populations.

Implementation Strategy

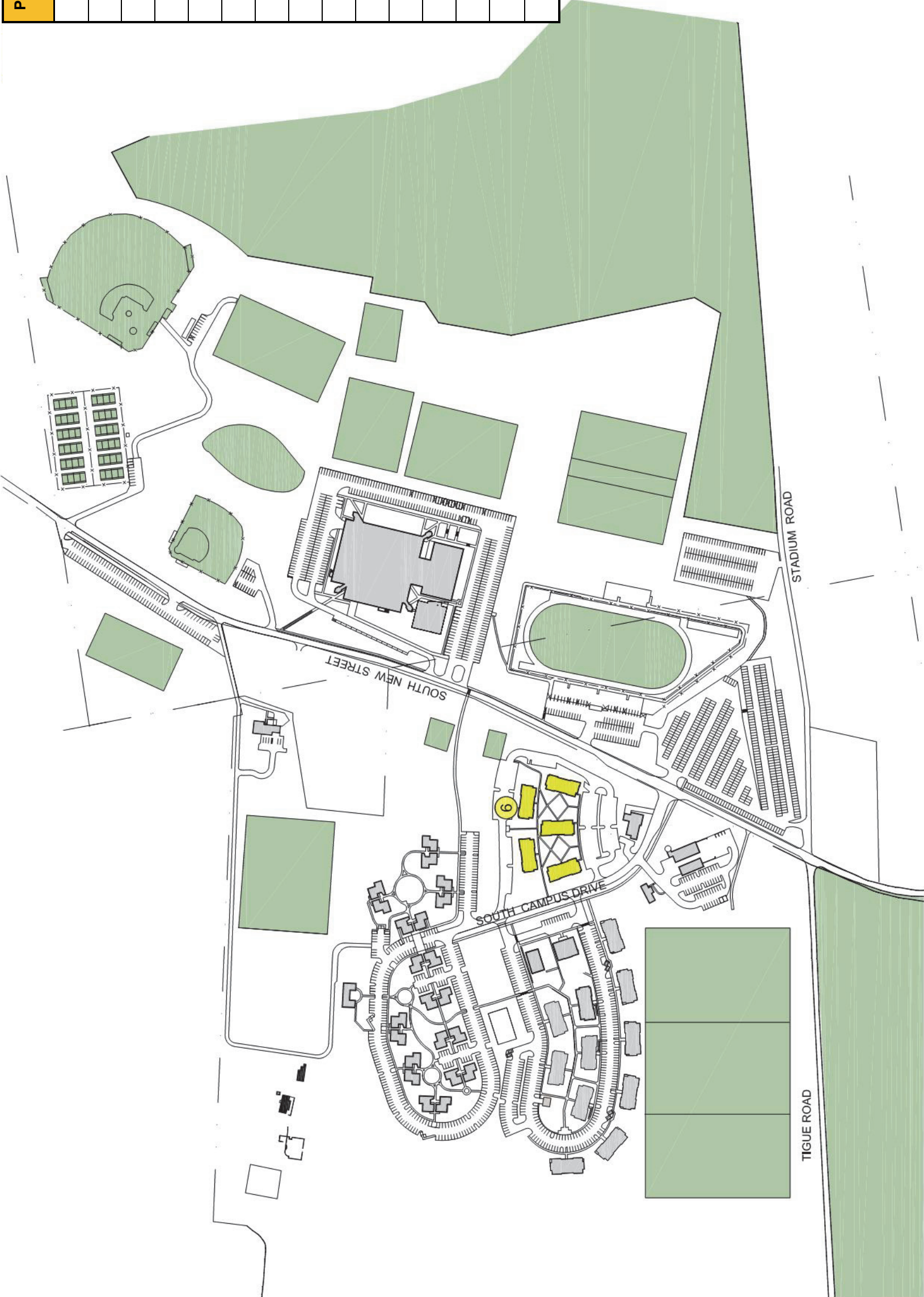
North Campus 1-5 Years

Project No.	Project Title
1	Move Art and Theater to E.O. Bull
2	Anderson Renovation
3	Mitchell Hall (Phase I)
4	Mitchell Hall (Phase II)
5	Phase I of Quad Upgrade
6	East Village Units (on South Campus)
7	Campus Geothermal
8	Demolition of McCarthy Hall
9	Construct Lot F Garage
10	Construction of Commonwealth Hall
11	Renovate 887 S. Matlack St.
12	Construct BPAC
13	Wayne Hall Renovation to E & G
14	624 S High Street as a Veteran's Center
15	Phase II Quad Renovations



Implementation Strategy

South Campus 1-5 Years



Project No.	Project Title
1	Move Art and Theater to E.O. Bull
2	Anderson Renovation
3	Mitchell Hall (Phase I)
4	Mitchell Hall (Phase II)
5	Phase I of Quad Upgrade
6	East Village Units
7	Campus Geothermal
8	Demolition of McCarthy Hall
9	Construct Lot F Garage
10	Construction of Commonwealth Hall
11	Renovate 887 S. Matlack St.
12	Construct BPAC
13	Wayne Hall Renovation to E & G
14	624 S High Street as a Veteran's Center
15	Phase II Quad Renovations

Implementation Strategies

1-5 Years

Project No.	Project Title	Description	Project Timeline	Approximate Costs	Status
1	Move Art and Theater to E.O. Bull	Complete construction of the E.O. Bull expansion for Art and Theater and move Art from Mitchell and Theater from Anderson	Occupancy 2011	\$0.5M	Completed
2	Anderson Renovation	Renovate Anderson spaces (6,662 ASF) vacated when Theater moves into E.O. Bull to temporarily accommodate Philosophy Department.	Occupancy 2011	\$0.2M	Completed
3	Mitchell Hall (Phase I)	Renovate the Gallery area in Mitchell to accommodate the Microsoft Center at least on a temporary basis and possibly on a long term basis.	Occupancy 2011	\$0.1M	Completed
4	Mitchell Hall (Phase II)	Full upgrade & renovation of the 18,700 ASF in Mitchell to accommodate the Languages and Cultures Department and the Center for International Programs.	Occupancy 2014	\$10.0M	Completed
5	Phase I of Quad Upgrade	Regrade and modify southern end of the Quad as Phase I of the Quad transformation.	2011	\$0.5M	Completed
6	East Village Units (on South Campus)	Construct 5 South Campus Village units to offset loss of McCarthy Hall 245-bed residence hall that will be demolished to make way for BPAC.	Occupancy 2013	Privatized Auxiliary Funding	Completed
7	Campus Geothermal	Continue development of geothermal well fields Phase II (2009- 11) E.O. Bull & SRC, Phase III (2012- 13) Anderson, Ruby Jones, Recitation Hall, Old Library, Mitchell Hall & Phase IV (2015 - 16) Lawrence Hall, Peoples and Main Hall.	2011 to 2018	\$5.0M	Ongoing
8	Demolition of McCarthy Hall	Demolish 244-bed McCarthy Hall to allow construction of BPAC	Project Start 2012	\$0.5M	Completed
9	Construct Lot F Garage	Construct a 450+ vehicle parking garage on Lot F along South New Street.	Occupancy 2013	Parking Fee Funded	Completed
10	Construction of Commonwealth Hall	Commonwealth Residence Hall with 620 beds will be constructed on the former site of Sanderson Hall.	Occupancy 2014	Privatized Auxiliary Funding	Completed
11	Renovate 887 S. Matlack St.	Renovate new office building at 887 S. Matlack St. to accommodate the Post Office currently housed on the second floor of Lawrence Hall, Institutional Research Department, and the Microsoft Center. Student Services will be expanded on the second floor of Lawrence Hall in the space vacated by the Post Office.	Occupancy 2013	\$0.6M	Completed
12	Construct BPAC	Construction of BPAC Business Center 6-story building including a 150-seat lecture hall. Business Departments move from Anderson and Ruby Jones Halls upon completion of BPAC.	Occupancy 2016	\$42.0M	Construction

Implementation Strategies

1-5 Years (continued)

Project No.	Project Title	Description	Project Timeline	Approximate Costs	Status
13	Wayne Hall Renovation to E & G	Utilize empty student rooms to allow temporary swing space for Psychology Department and faculty offices prior to their final build out location in “The Commons.” Counseling Center will relocate from Commonwealth Hall to the 6th Floor. Psychology Clinic will occupy the 7th Floor.	2015-2017	\$1.5M	Ongoing
14	624 S High Street as a Veteran's Center	Upgrade and renovate the existing 624 S. High Street as a Veteran's Center or other service function.	Project Start 2015	\$0.5M	Completed
15	Phase II Quad Renovations	Connecting sidewalks and reconfigured access to Academic Quad from South Church Street, removal of site steps, expansion of Main Hall patio, installation of outdoor classroom.	Project Start 2015	\$1.0M	Completed
			TOTAL	\$62.4.M	

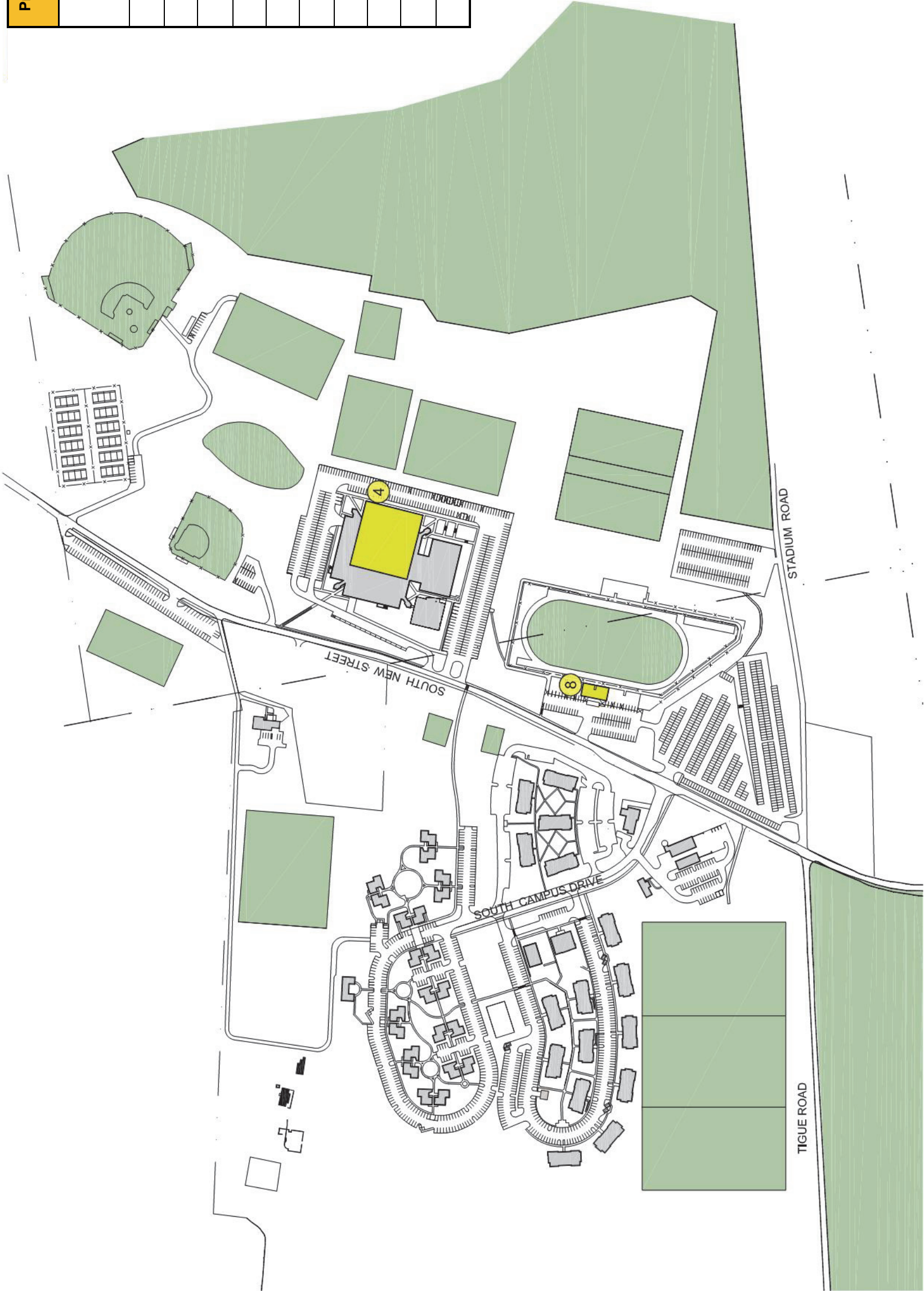
Implementation Strategy

North Campus 5-10 Years



Implementation Strategy

South Campus 5-10 Years



Project No.	Project Title
1	Demolish Existing Speakman Hall & Construct "The Commons" and a 400-Vehicle Parking Garage (Academic and Dining Space)
2	Construct 450 Vehicle Parking Garage
3	Expand Sykes Student Union
4	Renovate Sturzebecker Gymnasium
5	Renovate the FHG Library
6	Reprogram Library Stack Spaces
7	701 S. High Street New University Dining Venue
8	Farrell Stadium Donor Box
9	Renovate Ruby Jones Hall
10	Renovate Anderson Hall Spaces Vacated by Business Depts.
11	30 West Rosedale

Implementation Strategies

5-10 Years

Project No.	Project Title	Description	Project Timeline	Approximate Cost
1	Demolish Existing Speakman Hall & Construct "The Commons" and a 600-Vehicle Parking Garage (Academic and Dining Space)	Move Custodial offices to Ehinger Office Annex, Current COE faculty offices will relocate to Wayne Hall. Demolish the Speakman Building and Boiler Plant. Construct a 177,000 GSF academic and main dining services venue to house Psychology Department and College of Health and Sciences (CHS) Departments relocated from Sturzebecker, HSC. Adjacent to "The Commons" will be a 600-Vehicle Parking Garage.	Project Start 2016	\$69.4M – E&G \$40.6M – Auxiliary and Parking Fee Funding
2	Construct 450-Vehicle Parking Garage	Construct a parking garage with approximately 450 vehicle spaces south of Sykes and north of the retention basin.	Project Start 2020	Parking Fee Funding
3	Expand Sykes Student Union	Expand Sykes Student Union Building with multi-story additions to the 64,645 ASF building. Plan horizon deficiencies in student union type functions were nearly equal in area to the existing square footage so as much as 60,000 ASF would be allocated for expansion of food service, meeting rooms (50-60 person size), ballroom expansion, Health and Wellness Center, a Women's Center, and an International Student Center.	Project Start 2020	\$22.0M Auxiliary Funding
4	Renovate Sturzebecker Gymnasium	Renovate Sturzebecker Gymnasium to accommodate a dedicated Athletic Facility with a 20,000-GSF expansion. Most CHS Departments will relocate to a new "Commons" academic building on north campus, with some athletic-related academic departments remaining on South Campus..	Project Start 2016	\$21.0M
5	Program Library Stack Spaces	Relocate library stacks to compressed shelving in areas at basement of Old Library and former Dynamic Bookstore. Renovate former stack areas to student lounges and study areas. Create an expansion for Starbucks, Rosedale Avenue Area.	Project Start 2016 - 2020	\$1.0M
6	Renovate the Old Library	After Anthropology/Sociology moves out, renovate the Old Library for a new Visitor/Admissions Office/Library Storage.	Project Start 2018	\$8.0M
7	701 S. High Street New University Dining Venue	Renovate 8,500-GSF structure at corner of Linden St. and High St., adjacent to the Dynamic Bookstore for a new West Chester University Dining Venue.	Occupancy 2016	Auxiliary Funding
8	Farrell Stadium Donor Box	Renovate existing structure to include a Donor Box.	2016-2018	Privately Funded

Implementation Strategies

5-10 Years (continued)

Project No.	Project Title	Description	Project Timeline	Approximate Cost
9	Renovate Ruby Jones Hall	Upgrade and renovate Ruby Jones as common academic space used initially by psychology and later as a common academic classroom/teaching lab/office.	Project Start 2016	\$0.4M
10	Renovate Anderson Hall Spaces Vacated by Business Departments	Renovate the 7,729 ASF left in Anderson Hall after the College of Business & Public Affairs moves into BPAC. The renovated space can be used by the Anthropology and Sociology Department, which will allow the vacating of Old Library. Old Library will than undergo a renovation for a new Visitor Center and expanded Admissions Department. Messikomer Hall will then be occupied by an expanded Graduate Admissions Department from McKelvie. Communication Studies Department will move from Main Hall to Anderson Hall, allowing the English Department single occupancy faculty offices.	Project Start 2016	\$1.9M
11	30 West Rosedale	Construct a 10,000-GSF academic support services facility on the site of Swope House for offices for the Vice President of Advancement, Sponsored Research, Social Equity, Public Relations, Cultural and Community Affairs, and Conference Services.	Occupancy Feb 2017	\$5.0M
			TOTAL	\$169.3M

## North Campus 10+ Years

Project No.	Project Title
1	Sturzebecker Renovation (on South Campus)
2	Schmucker Science Center Additions
3	Lawrence Center First Floor Renovation



Implementation Strategy

South Campus 10+ Years

Project No.	Project Title
1	Sturzebecker Renovation
2	Schmucker Science Center Additions
3	Lawrence Center First Floor Renovation



Implementation Strategies

10+ Years

Project No.	Project Title	Description	Project Timeline	Approximate Cost
1	Sturzebecker Renovation	Phase II of Sturzebecker Renovation will include the renovation of the balance of the building to accommodate a future Comprehensive Clinic Services building.	2020-2022	\$19M
2	Schmucker Science Center Additions	If there are future space deficiencies in the Schmucker and Merion Science Center Buildings, The Peoples Building, which will be vacated when the Psychology Department moves to “The Commons,” could be renovated for a Science Center expansion.	Project Start 2020+	\$9.6M
3	Lawrence Center First Floor Renovation	Renovate 40,000 gsf of former dining space to possible Bookstore, Public Safety expansion and future Engineering Department academic/lab space.	2020-2022	\$20M
			TOTAL	\$48.6M

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## 6.0 Capital Improvement Program

### NORTH CAMPUS



### EAST CAMPUS

### SOUTH CAMPUS

Capital Improvement Project Summary

The accompanying table presents the order-of-magnitude estimated costs of projects at the Mid-Term Update for the remaining two time periods: 5-10 years 2015 to 2020, and 10+ years to 2020+. They are organized by type; Academic, Academic Support, and Student Services.

TIME IN YEARS	PROJECTS	FUNDING						
		WCU Reserves	Bond	Donor	Auxiliary Reserves	Auxiliary Bond	Commonwealth Funding	Parking Fee Bond
Academic								
	Demolish Existing Speakman Hall and Boiler Plant and Construct "The Commons" and 600-Vehicle Parking Structure	\$ 29,400,000	\$ 40,000,000					\$ 15,000,000
5-10 Years	Renovate Ruby Jones Hall	\$ 750,000						
5-10 Years	Anderson Hall Renovation vacated Business spaces	\$ 1,900,000						
10+ Years	Sturzebecker Renovation						\$ 19,000,000	
10+ Years	Schmucker Science Center Additions (Renovation of the People's Building)	\$ 9,600,000						
	Subtotal Academic	\$ 41,650,000	\$ 40,000,000	\$ -	\$ -	\$ -	\$ 19,000,000	\$ 15,000,000
Academic Support								
5-10 Years	30 W. Rosedale Ave	\$ 5,500,000						
5-10 Years	Old Library Renovation	\$ 8,000,000						
5-10 Years	Renovate the FHG Library	\$ 1,000,000						
	Subtotal Academic Support	\$ 14,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Student Services								
5-10 Years	Farrell Stadium Donor Box			\$ 12,000,000				
5-10 Years	Construct "The Commons" - Dining Venue and a 600-Vehicle Parking Garage				\$ 10,600,000	\$ 30,000,000		
5-10 Years	Expand Sykes Student Union					\$ 22,000,000		
5-10 Years	Construct 450 Vehicle Parking Garage (required for Sykes Student Union expansion)							\$ 11,250,000
5-10 Years	Renovate Sturzebecker Gymnasium	\$ 5,000,000					\$ 16,000,000	
10+ Years	Lawrence Center First Floor Renovation						\$ 20,000,000	
	Subtotal Student Services	\$ 5,000,000	\$ -	\$ 12,000,000	\$ 10,600,000	\$ 52,000,000	\$ 36,000,000	\$ 11,250,000
	Total All	\$ 61,150,000	\$ 40,000,000	\$ 12,000,000	\$ 10,600,000	\$ 52,000,000	\$ 55,000,000	\$ 26,250,000

## 7.0 Appendix

Space Guidelines 2020

PASSHE Space Guidelines 2014-2015  
Planned Construction 2015-2020

	2015-2016			2016								2017-2018					2018-2020			2020		
	Current Inventory	Space Guideline (target)	Over/ (under)	BPAC On Line (2016)	Wayne 1- OFE- 5th- Professional Education	Speakman Demo	Wayne 2- Psych Research	Goshen/ Tyson classrooms back to Aux	Alumni House as Admissions Offices	Dynamic Bookstore as Library Storage	Small Buildings Offline: 114 W. Rosedale Ave, McCoy Farmhouse	Adjusted Totals	Psych Clinic	Old Library- Renovation	Anthropology Trailer Demo'd	114 W. Rosedale Ave- Demo'd	30 W Rosedale - actual	S/T 2015	Old Library as Visitor Center- McKelvie Demo		Sykes Expansion	The Commons
110/115	128,306	164,353	(36,047)	27,018				(1,894)				(10,923)		(5,722)				(16,645)			16,645	0
210/215/220/225	113,799	223,703	(109,904)	2,098								(107,806)			(1,905)			(109,711)			10,580	(99,131)
250/ 255	37,446	32,560	4,886	0			2,500					7,386		(148)				7,238				7,238
300	242,965	272,703	(29,738)	19,829	7,500	(2,097)			934		(4,300)	(7,872)		(5,011)		(1,821)	5,789	(8,915)	1,078		7,837	0
400	109,659	164,125	(54,466)	0						3,361		(51,105)						(51,105)	Study	3,967	5,000	(42,138)
520	98,927	123,206	(24,279)	0								(24,279)						(24,279)	Athl or Phys Educ			(24,279)
525	36,519	80,206	(43,687)	0								(43,687)						(43,687)	Athl or Phys Educ Serv			(43,687)
540/545	2,088	5,480	(3,392)	0								(3,392)	3,372					(20)	Clinic			(20)
610/615	46,875	99,408	(52,533)	0								(52,533)						(52,533)	Assembly		10,000	(42,533)
620	6,500	14,818	(8,318)	0								(8,318)						(8,318)	Exhibition	3,452		(4,866)
630/635	51,024	136,908	(85,884)	0								(85,884)						(85,884)	Food Facility		65,000	(20,884)
650/655, 660/665	14,336	15,918	(1,582)	1,450		(232)				(3,361)		(3,725)						(3,725)	Lounge/ Merch /Service			(3,725)
670/675	58,749	96,019	(37,270)	0								(37,270)						(37,270)	Recreation			(37,270)
680/685	18,574	13,701	4,873	558								5,431						5,431	Meeting Room	1,589		7,020
980	56,938	136,990	(80,052)	0								(80,052)						(80,052)	Student Union		25,806	(54,246)
																	115,062					

Classroom  
Teaching / Open Lab  
Research/ Non class lab  
Office / Conf Rm  
Study  
Athl or Phys Educ  
Athl or Phys Educ Serv  
Clinic  
Assembly  
Exhibition  
Food Facility  
Lounge/ Merch/ Service  
Recreation  
Meeting Room  
Student Union

Estimated Headcount

Estimated Headcount and Student Credit Hours For Fall 2015

Cabinet Approved Targets 03/30/2015

<====Actuals Estimates =====>

		Fall 2014		Spring 2015		Fall 2015		Spring 2016		Fall 2016		Spring 2017	
		Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs
	UG	10,901	161,394.5	10,320	153,248.5	11,134	164,875.8	10,654	158,210.6	11,320	167,670.3	10,819	160,659.3
	UG	1,215	7,861.5	1,296	8,212.5	1,266	8,150.7	1,211	7,506.0	1,235	7,948.2	1,203	7,404.9
	UG	1,681	25,581.5	1,608	24,554.5	1,688	25,669.9	1,612	24,579.5	1,658	25,210.8	1,582	24,110.4
	UG	52	356.0	57	364.5	55	378.3	44	260.1	54	366.6	44	259.0
Total UG		13,849	195,193.5	13,281	186,380.0	14,143	199,074.7	13,521	190,556.2	14,267	201,195.9	13,648	192,433.6
	G	680	7,175.0	647	6,804.0	687	7,254.1	678	7,128.8	710	7,493.0	707	7,423.6
	G	1,289	5,994.5	1,393	6,620.0	1,388	6,461.0	1,375	6,544.2	1,362	6,353.9	1,364	6,507.8
	G	162	1,646.0	149	1,495.0	166	1,689.6	166	1,662.3	180	1,823.8	179	1,794.7
	G	111	552.0	106	530.0	111	557.1	91	457.8	103	515.6	87	439.9
Total G		2,242	15,367.5	2,295	15,449.0	2,353	15,961.8	2,310	15,793.1	2,355	16,186.3	2,337	16,166.1
Total Univ		16,091	210,561.0	15,576	201,829.0	16,496	215,036.5	15,830	206,349.3	* 16,622	217,382.2	15,985	208,599.7

<====Actuals Targets =====>

UG NEW FIRST-YEAR	2,351	33	2,350	20	2,350	20
UG NEW TRANSFER	1,331	591	1,325	565	1,325	565
UG NEW RE-ADMIT	107	69	108	54	109	53
UG NEW NONDEGR	71	90	103	122	85	137
UG NEW CERT/TCHGCERT	0	0	0	0	0	0
UG All Returning	9,989	12,498	10,257	12,760	10,398	12,873
Total UG	13,849	13,281	14,143	13,521	14,267	13,648
G NEW MSTRS (ALL)	629	293	630	280	657	310
G NEW PRF	4	3	4	2	3	2
G NEW CERT/TCHGCERT/LOC	67	62	61	49	55	46
G NEW NONDEGR	97	72	89	57	80	54
G All Returning	1,445	1,865	1,570	1,922	1,560	1,925
Total G	2,242	2,295	2,353	2,310	2,355	2,337
TOTAL UNIV	16,091	15,576	16,496	15,830	16,622	15,985
Growth over prior fall			405		126	

\* Actual TOTAL UNIV head count equals 16,611

Office of Institutional Research, WCU

March 30, 2015

Estimated Headcount and Student Credit Hours For Fall 2015

Cabinet Approved Targets 03/30/2015

			Fall 2017		Spring 2018		Fall 2018		Spring 2019		Fall 2019		Spring 2020	
			Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs	Headcount	CrHrs
In-State	Full-time	UG	11,421	169,183.4	10,906	161,930.1	11,472	169,941.6	10,948	162,543.3	11,499	170,332.7	10,968	162,844.1
In-State	Parttime	UG	1,228	7,930.7	1,203	7,402.0	1,222	7,929.8	1,206	7,414.1	1,230	7,975.6	1,213	7,447.9
Out of State	Full-time	UG	1,628	24,748.2	1,553	23,682.8	1,608	24,446.9	1,536	23,418.5	1,599	24,304.9	1,528	23,298.1
Out of State	Parttime	UG	53	358.0	44	258.0	51	347.7	44	256.0	51	345.2	44	254.7
Total UG			14,330	202,220.3	13,707	193,272.8	14,354	202,666.1	13,733	193,631.9	14,378	202,958.4	13,753	193,844.9
In-State	Full-time	G	735	7,756.4	732	7,684.4	761	8,030.3	756	7,943.0	780	8,232.3	775	8,136.4
In-State	Parttime	G	1,349	6,307.8	1,347	6,441.7	1,331	6,239.3	1,326	6,357.2	1,305	6,127.9	1,299	6,240.0
Out of State	Full-time	G	191	1,930.3	188	1,890.0	199	2,019.9	196	1,968.8	206	2,083.0	202	2,025.5
Out of State	Parttime	G	101	508.1	86	435.6	100	508.8	86	436.1	100	508.5	85	435.3
Total G			2,376	16,502.5	2,353	16,451.7	2,393	16,798.3	2,365	16,705.1	2,391	16,951.6	2,361	16,837.3
Total Univ			16,706	218,722.9	16,060	209,724.5	16,747	219,464.4	16,097	210,337.1	16,769	219,910.1	16,113	210,682.1

UG NEW FIRST-YEAR	2,350	20	2,350	20	2,350	20
UG NEW TRANSFER	1,325	565	1,325	565	1,325	565
UG NEW RE-ADMIT	111	52	112	51	113	50
UG NEW NONDEGR	67	143	50	149	50	155
UG NEW CERT/TCHGCERT	0	0	0	0	0	0
UG All Returning	10,477	12,927	10,517	12,948	10,477	12,963
Total UG	14,330	13,707	14,354	13,733	14,330	13,753
G NEW MSTRS (ALL)	684	320	719	329	739	339
G NEW PRF	3	2	3	2	2	2
G NEW CERT/TCHGCERT/LOC	49	44	44	41	38	39
G NEW NONDEGR	72	51	63	48	55	45
G All Returning	1,568	1,936	1,564	1,944	1,557	1,936
Total G	2,376	2,353	2,393	2,365	2,391	2,361
TOTAL UNIV	16,706	16,060	16,747	16,097	16,769	16,113
	84		41		22	

## Fall Freeze Headcount Enrollment by Career with Projections (Fall 15-19)

Term	GRAD	UGRD	Total
Fall 2007	2,110	11,113	13,223
Fall 2008	2,137	11,484	13,621
Fall 2009	2,291	11,920	14,211
Fall 2010	2,258	12,234	14,492
Fall 2011	2,266	12,834	15,100
Fall 2012	2,114	13,301	15,415
Fall 2013	2,134	13,713	15,847
Fall 2014	2,242	13,849	16,091
Fall 2015*	2,353	14,143	16,496
<b>F10-F15 % Chg</b>	<b>4.2%</b>	<b>15.6%</b>	<b>13.8%</b>
Fall 2016*	2,355	14,267	16,622
Fall 2017*	2,376	14,330	16,706
Fall 2018*	2,393	14,354	16,747
Fall 2019*	2,391	14,378	16,769

*\*Projected values based on Cabinet approved targets for fall 2015 and four years out.*

*Largest growth continues to be in UG headcounts*

*Because we tend to exceed term based targets, fall 16 through fall 19 projections will be low-ball to the extent that fall 15 and spring 16 targets are exceeded, for example.*

PA Public High School Graduates by County

System Research Office

PA State System of Higher Education  
Fact Book 2012-13

Table A.2  
Pennsylvania Public High School Graduates by County, Actual and Projected: 2011-2012 to 2021-2022

County	Actual	Projected										2011-12 to 2021-22	
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	# change	% change
Adams	1,071	1,034	982	1,030	1,061	1,069	1,089	1,123	1,111	1,082	1,170	99	9.3%
Allegheny	11,785	11,544	11,021	10,627	11,601	11,596	11,909	11,734	11,709	11,907	12,310	525	4.5%
Armstrong	754	776	805	857	796	744	778	795	767	819	832	78	10.4%
Beaver	3,415	3,014	2,898	2,928	3,585	4,015	4,345	4,381	4,574	4,763	5,273	1,858	54.4%
Bedford	563	538	472	477	529	517	524	503	542	531	563	[0]	0.0%
Berks	4,770	5,059	4,261	4,595	5,081	5,210	5,208	4,968	5,133	5,455	5,622	852	17.9%
Blair	1,276	1,279	1,146	1,168	1,165	1,253	1,262	1,255	1,197	1,290	1,255	[21]	-1.6%
Bradford	697	682	682	619	595	668	773	707	722	699	794	97	14.0%
Bucks	7,067	7,045	6,732	6,617	6,748	6,937	7,063	7,068	6,993	7,297	7,537	470	6.7%
Butler	1,987	1,900	1,619	1,531	1,800	2,180	1,999	1,891	1,869	1,955	2,026	39	2.0%
Cambria	1,389	1,330	1,226	1,085	1,210	1,236	1,309	1,233	1,165	1,154	1,188	[201]	-14.5%
Cameron	53	78	56	63	60	67	81	78	58	76	73	20	38.4%
Carbon	669	581	572	567	597	571	565	561	599	637	621	[48]	-7.2%
Centre	1,044	994	949	861	864	949	1,004	978	902	896	931	[113]	-10.8%
Chester	7,221	6,806	6,919	7,108	7,979	8,269	8,217	8,078	7,969	8,043	8,472	1,251	17.3%
Clarion	494	517	542	489	523	556	585	640	599	750	752	258	52.3%
Clearfield	942	1,044	1,138	1,081	1,245	1,256	1,295	1,217	1,409	1,499	1,653	711	75.4%
Clinton	369	440	509	456	468	455	497	539	560	650	687	318	86.2%
Columbia	867	811	743	720	976	1,044	1,158	1,250	1,471	1,594	1,584	717	82.7%
Crawford	754	647	568	572	554	535	515	457	422	406	399	[355]	-47.0%
Cumberland	2,159	2,030	1,983	1,842	1,874	1,906	1,976	1,817	1,710	1,816	1,926	[233]	-10.8%
Dauphin	2,949	2,922	2,674	2,365	2,661	2,242	2,046	1,907	1,728	1,644	1,510	[1,439]	-48.8%
Delaware	5,464	5,417	4,743	4,705	5,023	5,384	5,193	5,256	5,191	5,755	5,698	234	4.3%
Elk	315	296	252	239	322	303	268	287	363	305	286	[29]	-9.2%
Erie	3,010	2,899	2,537	2,447	2,714	2,857	2,950	2,883	2,817	2,842	2,865	[145]	-4.8%
Fayette	1,231	1,230	1,014	966	964	953	965	964	939	927	890	[341]	-27.7%
Forest	57	23	24	24	17	20	19	22	14	15	11	[46]	-79.9%
Franklin	1,279	1,248	1,105	981	1,007	1,022	950	989	1,041	998	962	[317]	-24.8%
Fulton	157	139	134	105	132	131	123	110	121	130	108	[49]	-31.4%
Greene	362	375	350	337	359	341	332	345	359	385	325	[37]	-10.2%
Huntingdon	456	445	414	417	451	498	500	535	544	543	485	29	6.4%
Indiana	729	733	726	695	709	713	757	734	787	771	795	66	9.0%
Jefferson	470	399	351	379	460	462	419	442	405	415	431	[39]	-8.4%
Juniata	238	224	211	208	225	249	230	210	253	233	235	[3]	-1.1%
Lackawanna	1,996	1,955	1,872	1,858	1,868	1,944	1,922	1,964	1,880	1,933	2,057	61	3.1%
Lancaster	5,418	5,017	4,805	4,631	5,139	5,252	5,392	5,236	5,129	5,260	5,571	153	2.8%
Lawrence	992	951	900	817	875	862	938	866	889	901	961	[31]	-3.1%
Lebanon	1,266	1,368	1,209	1,219	1,304	1,332	1,309	1,322	1,389	1,350	1,370	104	8.2%
Lehigh	3,674	3,412	3,156	2,990	3,272	3,325	3,333	3,179	3,173	3,142	3,169	[505]	-13.7%
Luzerne	3,227	3,129	2,901	2,929	3,007	2,933	2,913	3,008	3,000	3,131	3,214	[13]	-0.4%
Lycoming	1,202	1,088	1,062	1,069	975	1,023	1,150	1,081	1,115	1,098	1,126	[76]	-6.3%

System Research Office

PA State System of Higher Education  
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Table A.2  
Pennsylvania Public High School Graduates by County, Actual and Projected: 2011-2012 to 2021-2022

County	Actual	Projected										2011-12 to 2021-22	
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	# change	% change
McKean	474	463	458	476	465	487	476	545	504	532	477	3	0.7%
Mercer	1,331	1,327	1,275	1,148	1,152	1,134	1,279	1,215	1,242	1,208	1,260	(71)	-5.3%
Mifflin	382	333	361	304	313	309	326	291	263	251	269	(113)	-29.5%
Monroe	2,416	2,585	2,498	2,519	2,624	2,926	3,176	3,186	2,889	3,030	3,227	811	33.6%
Montgomery	8,305	8,210	7,747	7,396	7,718	7,928	7,905	8,043	7,983	8,161	8,303	(2)	0.0%
Montour	188	156	166	168	147	163	169	176	156	141	139	(49)	-25.9%
Northampton	3,442	3,285	3,071	2,866	3,579	3,874	3,853	4,074	4,061	4,475	4,474	1,032	30.0%
Northumberland	881	838	757	688	711	696	711	808	996	958	936	55	6.2%
Perry	484	461	419	362	446	452	423	431	429	454	418	(66)	-13.7%
Philadelphia	12,427	11,108	9,345	8,387	10,113	10,238	9,964	9,955	9,858	10,178	9,998	(2,429)	-19.5%
Pike	755	455	405	381	367	344	334	366	397	399	390	(365)	-48.3%
Potter	179	167	168	160	189	175	182	186	179	199	184	5	2.5%
Schuylkill	1,388	1,352	1,271	1,186	1,279	1,260	1,304	1,288	1,290	1,281	1,332	(56)	-4.0%
Snyder	346	403	354	348	335	377	408	407	394	412	411	65	18.9%
Somerset	755	751	791	743	757	717	834	808	736	806	823	68	8.9%
Sullivan	56	62	54	44	48	58	53	74	51	85	62	6	11.4%
Susquehanna	529	478	491	487	467	467	491	475	446	507	509	(20)	-3.8%
Tioga	410	452	408	371	360	430	445	483	436	437	439	29	7.0%
Union	323	284	288	283	297	316	321	294	243	252	288	(35)	-10.9%
Venango	606	656	739	757	835	877	985	1,003	938	984	1,115	509	84.1%
Warren	368	365	359	366	378	363	384	388	372	362	357	(11)	-3.0%
Washington	2,111	2,167	2,031	1,959	2,040	2,036	2,118	2,096	2,099	2,186	2,134	23	1.1%
Wayne	423	490	447	423	402	425	401	373	368	342	340	(83)	-19.5%
Westmoreland	3,958	3,858	3,824	3,646	3,902	3,995	4,108	4,180	4,290	4,497	4,560	602	15.2%
Wyoming	319	327	300	311	336	357	338	317	326	331	344	25	7.7%
York	5,039	4,965	4,651	4,245	4,987	4,934	5,322	5,312	5,414	5,342	5,734	695	13.8%

Top 5 feeders      40,484      38,587      35,487      34,214      37,582      38,756      38,343      38,400      37,995      39,434      40,009

Note: The projections for the total number of high school graduates do not match the sum of individual counties because the total is projected separately. The smaller sizes of the counties mean that these projections are statistically more susceptible to imprecision than are projections for the total number of graduates, due to all factors influencing progression, plus any measurement error. For further information see WICHE, 2012.

Source: U.S. Department of Education, National Center for Education Statistics (NCES) Common Core Data (CCD) -- Enrollment by Grade 2003-10. Pennsylvania Department of Health "Pennsylvania Vital Statistics 1997-2010." Pennsylvania Department of Education Public High School Graduates 2003-2012. Methods based on Western Interstate Commission for Higher Education (WICHE) "Knocking at the College Door: Projections of High School Graduates." Issued December 2012. Updated by the System Research Office June 12, 2013.



# **West Chester University of Pennsylvania**

## **Space Needs Analysis for the Comprehensive Campus Plan**



**December 2010**

Document prepared by:

**PAULIEN & ASSOCIATES, INC.**

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# **Executive Summary**

## **EXECUTIVE SUMMARY**

### **Introduction**

Paulien & Associates, Inc., in association with STV Architects, was chosen to provide strategic planning services to West Chester University of Pennsylvania (WCU) in support of their Comprehensive Campus Plan (CCP) process. Following the previous CCP process, the University determined that this plan would be driven heavily by the academic and academic support mission of the University. The process, therefore, has been led by Paulien & Associates in providing strategic comparative analysis, field auditing of the existing facilities inventory, and peer and aspirant institution benchmarking, as well as strategic space planning. During this process, STV Architects has performed as-built facilities and campus documentation verification and compilation. With the information provided through the strategic space planning process, STV Architects can begin the physical planning for the CCP.

Paulien & Associates facilitated discussions and presented the preliminary outcomes of peer and aspirant benchmarking, facilities utilization, and space needs analysis to the President's cabinet on three occasions. These presentations occurred in January 2010, July 2010, and January 2011. Paulien & Associates also conducted on-campus work sessions in April 2010 and November 2010. They also provided an update to the West Chester University facilities inventory during this process.

Working closely with the President's cabinet and the Provost's office, estimates of on-campus enrollment at both the graduate and undergraduate levels by college were made at a plan horizon to drive the space needs analysis and physical plan. An identification of space needs was made in relation to existing facilities for the base year of Fall 2009 and for the projected future enrollment and staffing levels at a plan horizon of Fall 2020.

### **Process**

Paulien & Associates was provided with facilities, enrollment, course, and staffing data for Fall 2009. Working with West Chester University representatives, a walk-through of most buildings on the WCU campus was conducted. This process was to verify data fields in the University's facility inventory database to provide an updated snapshot in time of WCU campus-built resources.

Enrollment data consisted of Fall 2009 student headcount at the undergraduate and graduate levels, as well as by college and non-degree/undeclared classifications. The course data contained course number and description, enrollment, start and stop times, and meeting location for all courses taught on campus in Fall 2009. Staffing data contained headcount by major employee category on a departmental level. All of the data collected provided a snapshot of activities for the Fall 2009 semester, which was used for the master planning base year.

The consultant conducted extensive meetings with University representatives to validate information provided by the University. During the onsite work sessions, Paulien & Associates interviewed representatives from all colleges in order to gain insights into programs, space needs, and other issues of concern. Interviews were also conducted with University administration including the President, Vice Presidents, Deans, and other selected staff. Interviews with representatives of Student Affairs, Athletics, the University Library, and other academic support units on the WCU campus were also conducted.

## Planning Assumptions

Based on historical analysis, participation rates, and occupation growth of industry clusters, the consultant developed enrollment projections for the plan horizon of Fall 2020. The University is planning an overall on-campus undergraduate increase of 14.5% in student headcount and a 29.2% headcount increase at the graduate level. The on-campus student headcount at the plan horizon is projected at 16,605 students or an estimate of approximately 14,140 student full time equivalents (FTE).

### Enrollment Assumptions

Location	Fall 2009 Headcount (Actual)	Plan Horizon Total Enrollment (Fall 2020)
On-Campus	14,211	16,605
On-Line		1,500
Total Student Headcount	14,211	18,105

Using the student FTE to faculty FTE ratios to project faculty and staffing needs at the plan horizon, Paulien & Associates assumed the faculty growth will occur at a ratio of 20:1. Staff was projected to grow at half the rate of faculty growth. This will result in an increase of approximately 82 faculty FTE between the base year and the plan horizon. Staffing levels at the University are projected to grow at approximately 11% over that period.

From a facility perspective, it has been anticipated that the E. O. Bull Center and the Business and Public Affairs Center (BPAC) will both be operational by the plan horizon of 2020. It has also been assumed that the new Student Recreation Center, which is scheduled for completion in 2012-13 will also offset deficits in the space needs analysis at the plan horizon. Various other assumptions were made about future facilities based on discussions with academic administration and Facilities Design & Construction. These assumptions were used to project a new assumed on-campus facility inventory at the plan horizon.

Residence Life and Residence Life Dining were not included in the scope of work for this study. The University has been conducting studies of these facilities in an ongoing basis with the recent replacements of many housing units with new facilities.

## Key Findings

### *Existing Space*

As an integral component to the study, Paulien & Associates reviewed and updated the existing facilities inventory for West Chester University. The Post Secondary Education Facility Inventory and Classification Manual (FICM): 2006 Edition and the Pennsylvania System for Higher Education (PASSHE) adjustments to that manual were used to update the records in the University's inventory. WCU has an approximate total of 972,000 ASF, not including Residence Life and Residence Life Dining. This total also does not include the Child Care Center or outside organizations that may have space on campus. There is approximately 35,500 ASF of inactive/conversion space comprised primarily of space in the E. O. Bull Center presently under renovation. The total ASF includes the Graduate Business Center located approximately three miles from the main campus.

### *Benchmarking*

As part of a larger space study, Paulien & Associates, Inc. conducted an aspirant and peer comparative analysis using benchmarking techniques for West Chester University. During the July 2010 President's Cabinet Retreat, campus leadership selected 11 aspirant institutions and 13 peers institutions from a larger list. Comparison universities were selected based on similar mission, enrollment levels, student profile and other factors, as compared to WCU.

Student FTE and facilities data for each institution were secured from past studies completed by the consultant, published materials (fact books, master plans) or through direct contact with the institution. In some cases, institutions do not respond to requests for data. The analysis compared assignable square feet at the campus level for aspirant and peer institutions and by space category at the peer level. Student FTE enrollment were used to normalize the space data.

### Comparative Analysis Summary

Category	Number of Institutions	Average Student FTE Enrollment	Average Total ASF	ASF per Student FTE
Aspirants	11	16,109	2,764,528	172
Peers	13	11,749	1,435,901	123
West Chester University	1	12,252	1,027,510	84

ASF = Assignable Square Feet

In reviewing the table, the participating aspirant institutions averaged 16,109 student FTE with an average campus size of 2,764,528 ASF, for 172 ASF/FTE. The peer institutions averaged lower student FTE and total ASF, with 123 ASF per student FTE. While West Chester University had a higher FTE than peer institutions, total campus ASF was only 68% of the peer average. The results of the comparative analysis assisted in verifying the results of the application of space guidelines. The section titled *Benchmarking* of this report reviews the full comparative analysis by institution and space category.

## ***Classroom and Teaching Laboratory Utilization***

### **Classroom Utilization**

There are 17 buildings that contain the 116 classrooms used for instruction at West Chester University. The 116 classrooms are used an average of 42 hours per week at a 74% student station occupancy.

The PASSHE has utilization expectations for classrooms of 37.5 hours per week with a 67% student station occupancy expectation when classrooms are in use. WCU exceeds the hours per week by an average of 4.5 hours per room. The University also exceeds PASSHE station occupancy expectations by seven (7%) percent. The average square feet per station matches that of the PASSHE guideline.

### **Teaching Laboratory Utilization**

Campuswide, West Chester University's 68 teaching laboratories averaged 17 room hours of use per week, at 86% student station occupancy. Unlike the classrooms, the teaching laboratory weekly room hour average is less than the PASSHE guidelines but the student station occupancy exceeds the PASSHE guidelines.

When reviewing seat hours, PASSHE's utilization expectations calculate to 16.1 hours per station (23 weekly room hours times 70% student station occupancy). WCU averages 15.3 hours per student station, which is 95% of the PASSHE standard. The average space per student station at WCU is significantly less than what the PASSHE guideline suggests.

### ***Space Needs Analysis***

The consultants reviewed existing PASSHE guidelines and compared them to other guidelines typically applied by the consultants' in other studies of this nature. The guideline selected for each space category was the one deemed most appropriate for the University. Generally speaking the guidelines selected were within reasonable proximity of the PASSHE guidelines if not the PASSHE guideline. The most notable difference is that this analysis covers all space – E&G and auxiliary – instead of just E&G space which is what PASSHE solely addresses. The other major difference is that the teaching laboratory guideline used by PASSHE is not discipline specific whereas the guidelines used by the consultants are discipline specific.

This analysis assists in determining the magnitude of need for both the base year and plan horizon; however, it is not a substitute for detailed facility pre-design studies. For example, if one were to plan all the teaching laboratories needed at WCU, the amount of space required could be less or greater than the methodology employed in this analysis.

### **Classroom Utilization Summary**

	Campus Average	PASSHE Guidelines
Weekly Room Hours	42	37.5
Student Station Occupancy	74%	67%
ASF per Student Station	20	20
Section Size	30	n/a
Number of Rooms	116	n/a

ASF = Assignable Square Feet

### **Teaching Laboratory Utilization Summary**

	Campus Average	PASSHE Guidelines
Weekly Room Hours	17	23
Student Station Occupancy	86%	70%
ASF per Student Station	37	50
Section Size	20	n/a
Number of Rooms	68	n/a

ASF = Assignable Square Feet

## Campuswide Space Needs Analysis West Chester University of Pennsylvania

SPACE CATEGORY	<b>Fall 2009</b> Student Headcount = 14,211 Staffing FTE = 1,007				<b>Plan Horizon</b> Student Headcount = 16,605 Staffing FTE = 1,200			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	98,226	130,445	(32,219)	(33%)	118,077	145,363	(27,286)	(23%)
Teaching Laboratories & Service	85,188	107,082	(21,896)	(26%)	95,168	113,368	(18,200)	(19%)
Open Laboratories & Service	29,807	36,758	(6,951)	(23%)	29,555	42,512	(12,957)	(44%)
Research Laboratories & Service	28,903	38,440	(9,537)	(33%)	28,903	43,750	(14,847)	(51%)
Academic Offices & Service	150,562	168,675	(18,113)	(12%)	164,942	184,445	(19,503)	(12%)
Other Academic Department Space	35,735	41,858	(5,923)	(17%)	39,455	48,182	(8,727)	(22%)
<i>Academic Space Subtotal</i>	<i>428,419</i>	<i>523,058</i>	<i>(94,639)</i>	<i>(22%)</i>	<i>476,100</i>	<i>577,620</i>	<i>(101,520)</i>	<i>(21%)</i>
<b>Academic Support Space</b>								
Administrative Offices & Service	83,129	81,335	1,794	2%	84,051	88,415	(4,364)	(5%)
Library	112,027	146,757	(34,730)	(31%)	112,027	166,806	(54,779)	(49%)
Assembly & Exhibit	38,076	65,962	(27,886)	(73%)	48,282	77,472	(29,190)	(60%)
Physical Plant	62,747	65,162	(2,415)	(4%)	63,297	76,793	(13,496)	(21%)
Other Administrative Department Spa	17,697	18,378	(681)	(4%)	17,897	21,257	(3,360)	(19%)
<i>Academic Support Space Subtotal</i>	<i>313,676</i>	<i>377,594</i>	<i>(63,918)</i>	<i>(20%)</i>	<i>325,554</i>	<i>430,743</i>	<i>(105,189)</i>	<i>(32%)</i>
<b>PE / Recreation / Athletics</b>								
Recreation	14,599	76,261	(61,662)	(422%)	81,965	85,850	(23,885)	(39%)
Athletics/PE	125,124	159,619	(34,495)	(28%)	125,124	176,881	(51,757)	(41%)
<i>PE / Recreation / Athletics Subtotal</i>	<i>139,723</i>	<i>235,880</i>	<i>(96,157)</i>	<i>(69%)</i>	<i>187,089</i>	<i>262,731</i>	<i>(75,642)</i>	<i>(40%)</i>
<b>Auxiliary Space</b>								
Student Center	57,331	110,269	(52,938)	(92%)	62,945	127,530	(64,585)	(103%)
Student Health Care	4,244	4,776	(532)	(13%)	4,244	5,351	(1,107)	(26%)
Graduate Business Center	28,644	28,644	0	0%	28,644	28,644	0	0%
<i>Auxiliary Space Subtotal</i>	<i>90,219</i>	<i>143,689</i>	<i>(53,470)</i>	<i>(59%)</i>	<i>95,833</i>	<i>161,525</i>	<i>(65,692)</i>	<i>(69%)</i>
<b>CAMPUS TOTAL</b>	<b>972,037</b>	<b>1,280,221</b>	<b>(308,184)</b>	<b>(32%)</b>	<b>1,084,576</b>	<b>1,432,619</b>	<b>(348,043)</b>	<b>(32%)</b>
<i>Childcare Center</i>	<i>5,834</i>				<i>5,834</i>			
<i>Inactive/Conversion Space</i>	<i>35,511</i>				<i>30,461</i>			
<i>Outside Organizations</i>	<i>14,128</i>				<i>14,128</i>			

### Academic Space Needs

West Chester University has an Academic Space deficit (first six Space Categories in the table) of approximately 93,400 ASF for Fall 2009 which increases to approximately 98,700 ASF at the plan horizon. The space types with the greatest need are Research Laboratories, followed by Open Laboratories and Classrooms. Academic Offices & Service Space also shows a significant deficit at both the base year and plan horizon. The need in Open Laboratories is reflective of the lack of collaborative learning environments across the campus.

**Academic Support Space**

This space category composite shows an overall existing space deficit of 63,900 ASF increasing to 105,200 ASF at the plan horizon. Again, all space types in this group illustrate a need for space at the base year, except for Administrative Offices. Assembly & Exhibit shows a target year deficit of almost 29,200 ASF with Library showing a deficit of 54,800 ASF and Physical Plant showing a deficit of 13,500 ASF at the plan horizon. The Library, Physical Plant and Assembly & Exhibit deficits are relatively large when compared to existing facilities and, as specialized spaces, need to be addressed in the physical planning implementation strategies.

**Physical Education / Athletics / Student Recreation**

With the planned addition of the new Student Recreation Center, West Chester University will decrease its deficit in Recreation space but will not completely offset the need at the plan horizon. There will still show an approximately 24,000 ASF deficit of Recreation space on campus at the plan horizon. Athletics and Physical Education, which are primarily located on the South Campus show an existing base year space deficit of approximately 35,000 ASF, which is projected to grow to almost 51,800 ASF at the plan horizon enrollment levels.

**Auxiliary Space Needs**

The Student Center space category shows almost a 53,000 ASF space deficit for Fall 2009 which increases to approximately 64,600 ASF at the plan horizon. This is a 103% deficit over existing space representing the need for additional food service options, student organization meeting spaces, expanded bookstore operations, and student lounge spaces. As with the Library, Physical Plant, and Assembly & Exhibit spaces, the Student Center is typically a significant structure on any campus and needs to be addressed in the physical planning implementation strategies.

**Summary**

Overall, there is an approximate 308,200 ASF space deficit for Fall 2009 which increases to 348,000 ASF space deficits for the plan horizon, Fall 2020. The primary areas of need are in Classrooms, Academic Offices, Student Center, Library, Research Laboratories, Assembly & Exhibit, and Physical Plant space.

**Space Reallocation Approaches****Issues for Consideration**

The Key Findings including Utilization and Space Needs Analysis were developed which expanded on the empirical observations in the form of outcomes associated with the guideline application and detailed review of the existing facility inventory. On-campus discussions with Facilities Design & Construction and the University further highlighted issues for consideration during the physical planning for the Comprehensive Campus Plan. The following are issues for consideration from the viewpoint of the consultants to be addressed or incorporated within the physical planning dialogue.

- Using PASSHE Guidelines, Classroom & Classroom Support Space on campus at the plan horizon shows significant deficit. This deficit of over 27,000 ASF will occur even with the planned occupancy of the E. O. Bull Center and the substantial amount of classrooms planned in the Business and Public Affairs Center. A higher guideline would require less space in this category.
- Teaching Laboratories on the WCU campus are showing 19% space deficit at the plan horizon. Most units show slight deficits in Teaching Laboratory Space at the plan horizon. However, the College of Health Sciences and some units in the College of Arts & Sciences show the greatest deficits of space in this category.
- As new buildings are programmed and erected and as existing facilities are renovated, Open Laboratory Space such as collaborative learning spaces for problem-based group interaction need to be included.
- Research Laboratories exist across most of the campus; however, the College of Health Sciences clearly shows the greatest deficit in this space type category.
- Academic Office space on campus is in short supply, as well as service space to support office clusters.
- In the Academic Support Space category, the Library projects a significant deficit when the PASSHE guidelines are applied. The Music Library in the Swope Music Building is somewhat undersized relative to reader stations. The main Francis Hardy Green Library shows a significant deficit in all space categories, particularly those associated with group study and reader stations.
- The new Student Recreation Center has been added to the existing space category at the plan horizon; however, there remains a deficit in this space category as student headcount increases to the plan horizon estimates.
- Athletics and Physical Education also show a significant deficit, particularly in specialized indoor facilities for athletics.
- The Student Center Space located in the Lawrence Center and Sykes Student Union, and the space in the Sykes Student Union that will revert to student center space upon completion of the new Student Recreation Center will not be enough to satisfy the need for this type of space at the plan horizon. The overall space deficit approaches 65,000 ASF using PASSHE Guidelines and will need to be seriously discussed during the physical planning scenarios.
- The Graduate Business Center located approximately three miles from campus was included in the existing ASF. The guideline was generated to equal the existing space until such time as the Graduate Business Center needs to expand.

## Limitations of Analysis

The consultant analyzed campus data provided by West Chester University for staffing, scheduled courses, and initial facilities information. The data provides a "snapshot in time" of staff, course enrollments, and facilities at the University.

The Space Needs Analysis is a quantitative analysis only. All permanent existing space is counted regardless of its quality. Because several rooms in the facilities inventory have multiple functions (i.e., one room containing a reception space, clerical workstation, storage and filing), it is infeasible to accurately distribute the existing space among the appropriate room use and functional categories. Therefore, the relationship between existing space and proposed guideline space for individual categories should be considered as rough comparisons. The only true comparison is between a unit's total existing space and proposed guideline space.

Space needs analysis for the purpose of master planning is a process that estimates space amounts likely to be needed by various units of an institution at current and projected enrollment, staffing and activity levels. Reliability of the findings of any space needs study depends on several factors including the quality of the data, the appropriateness of the space standards used, and the validity of the projections. Data used in this study was updated and refined to a high level of accuracy and currency as possible.

The consultant, therefore, believes that the findings and recommendations of this study may be considered reliable and may be used with confidence by the University for its master planning effort. The scope of this study did not identify every individual department requirement and did not include detail normally developed in room-by-room program planning of specific facilities. This study is not intended to replace program level analysis. Further, this study only analyzed space needs and did not evaluate the quality of existing space or the suitability of the space. Unless otherwise noted, all findings are in assignable square feet (ASF). ASF is defined as the area measured within the interior walls of a room that can be assigned to a program. It does not include circulation, mechanical or building service spaces.





# Planning Assumptions



## PLANNING ASSUMPTIONS

### Enrollment Projections

West Chester University provided the consultant with Fall 2009 student headcount and full-time equivalent (FTE) enrollment data. Based on historical analysis, participation rates, and occupational growth of industry clusters, the consultant developed enrollment projections for the plan horizon of Fall 2020, as noted in the table. Enrollment projections are illustrated as on-campus and off-campus by college and level. The University is projecting an overall on-campus undergraduate increase of 14.5% in student headcount and a 29.2% headcount increase at graduate level. Each of the colleges will grow at different rates based on strategic objectives and expected demand for graduates in occupational fields. Using the current student FTE to headcount ratio, the projected student FTE is estimated at approximately 14,140.

#### Comprehensive Campus Plan Enrollment Assumptions

Location	Fall 2009 Headcount (Actual)	Plan Horizon Total Enrollment (Fall 2020)	Plan Horizon Online Enrollment Estimate	Plan Horizon On Campus Enrollment (Fall 2020)	On-Campus Percent Change (Fall 2009 to Fall 2020)
<b>Campuswide Student Headcount</b>					
On-Campus	14,211	16,605		16,605	
On-Line (Off Campus)		1,500	1,500		
Total Student Headcount	14,211	18,105			
<b>Undergraduate Headcount Enrollment by College</b>					
College of Arts and Sciences	3,637	4,025	80	3,945	8.5%
College of Business and Public Affairs	2,245	2,900	100	2,800	24.7%
College of Education	1,330	1,530	80	1,450	9.0%
College of Health Sciences	1,931	2,270	70	2,200	13.9%
College of Visual & Performing Arts	724	790	40	750	3.6%
Non-Degree/ Undeclared	2,053	2,830	130	2,500	21.8%
<b>Subtotal</b>	<b>11,920</b>	<b>14,145</b>	<b>500</b>	<b>13,645</b>	<b>14.5%</b>
<b>Graduate Headcount Enrollment by College</b>					
College of Arts and Sciences	560	710	150	560	0.0%
College of Business and Public Affairs	294	790	250	540	83.7%
College of Education	738	975	175	800	8.4%
College of Health Sciences	305	730	150	580	90.2%
College of Visual & Performing Arts	76	155	75	80	5.3%
Non-Degree/ Undeclared	318	800	200	400	25.8%
<b>Subtotal</b>	<b>2,291</b>	<b>3,960</b>	<b>1,000</b>	<b>2,960</b>	<b>29.2%</b>

Over the last ten years West Chester University has seen a 20% increase in student headcount overall. The main growth has been in the undergraduate programs. The student proposed enrollment assumptions alter this trend with the majority of growth proposed at the graduate level.

### Faculty and Staffing Projections

The consultants used the enrollment growth and student FTE to faculty FTE ratios to project faculty and staffing needs for the plan horizon. For Fall 2009, WCU had a student to faculty ratio of 17.4:1.

Under direction of University officials, it was assumed that faculty growth will occur at a ratio of 20:1. Staff was projected to grow at half the rate of the faculty growth. For key leadership positions (president,

#### Comprehensive Campus Plan Staffing Assumptions

Location	Fall 2009 FTE	Fall 2009 Total Faculty FTE	2009 Student FTE/Faculty Ratio	Fall 2020 Total Faculty FTE	Change (Fall 2009 - 2020)
<b>Analysis by College</b>					
College of Arts and Sciences	6,176	311.03	19.85	334	23
College of Business and Public Affairs	1,948	97.75	19.93	128	31
College of Education	1,447	110.67	13.08	117	6
College of Health Sciences	1,644	96.72	17.00	117	20
College of Visual & Performing Arts	952	82.70	11.52	84	2
<b>Total</b>	<b>12,167</b>	<b>698.87</b>	<b>17.41</b>	<b>780</b>	<b>82</b>

Total Faculty includes Permanent and Temporary Faculty

vice presidents, deans) no growth was assumed. For example, the College of Health Sciences is projected to grow approximately 24%. The faculty is projected to grow at 22% while the staff employed in this college is projected to grow at 11%. Faculty growth numbers for each of the colleges is noted in the *Staffing Assumptions* table.

Staffing growth for administrative units was tied to academic growth and to the results of the peer staffing comparative analysis. In some cases, certain position types were given higher growth percentages to account for understaffing and position vacancies.

## Space Assumptions

### *New Construction and Renovations*

#### **E. O. Bull Center**

The existing E. O. Bull Center was closed for renovation during the Fall 2009 semester and is listed as inactive space in the analysis at the base year. The renovations and additions to the new E. O. Bull Center, comprised of space for Visual Arts and Theatre Arts, were added to the facilities inventory and are included in the plan horizon analysis.

The Visual Arts and Theatre programs were temporarily housed in Mitchell Hall at the Fall 2009 base year. At the plan horizon, all classrooms, laboratories, and exhibition areas in Mitchell Hall were listed at space available for reuse.

Faculty offices in the Mitchell Hall that were vacated by Art faculty as well as Psychology, Communications, and Mathematics were unaltered at the plan horizon.

Four rooms in Anderson Hall (104, 111, 113, and 118) were being used as temporary spaces for the Theater program at the base year. These spaces will be reverted back to classrooms at the plan horizon.

#### **Business and Public Affairs Center (BPAC)**

The Business and Public Affairs Center was in the programming and design process at the base year. The facility, with 43,385 ASF of space, was included in the space needs analysis at the plan horizon. This facility includes classrooms, faculty offices, a large lecture hall, and several specialized laboratories and support spaces.

Existing faculty offices in the departments of Accounting, Management, Marketing, Economics and Finance, Geography, Criminal Justice, Political Sciences, and Social Work in Ruby Jones Hall were listed a space available for reuse.

Classroom and faculty office space in Anderson Hall that is to be vacated by the College of Business and Public Affairs was left unaltered at the plan horizon as new faculty are scheduled to occupy these offices over the plan horizon.

### **Recreation Center**

The new Recreation Center is not reflected in the base year as the facility was in the design process. The 72,500 gross square feet facility (52,980 ASF) is scheduled for completion in 2012-13. The facility was added to the analysis at the plan horizon.

### **High Street Property**

WCU recently acquired property at 624 S. High Street. While the occupants of this facility were not known at the time of this report, the space is included in the base year and plan horizon space needs analysis.

### ***Razed Facilities***

There are currently no WCU academic buildings that were scheduled for demolition during the course of this study. Therefore, no facilities were excluded from the study.

### ***Outside Organizations***

There are several facilities owned by WCU that are being leased to outside agencies. These include the Dynamic Bookstore at 20 Linden Street, the commercial food establishments (first floor) 701 S. High Street, and the Equine laboratory at 220 E. Rosedale. The space occupied by these facilities is listed as "Outside Organizations" in the base year and plan horizon space needs analysis.

### ***Ownership of Space and Scheduling***

Findings in this study are classified by space type and college so as to identify the occupants of spaces and to clarify their needs in terms of recognized categories. Even though the space needs are illustrated by school, it is important to understand that space at West Chester University is viewed as being University owned and controlled. Space is a universitywide resource. Under the direction of the University's administration, it is assumed that classrooms and selected teaching laboratories are to be viewed as being centrally scheduled and that greater utilization of these facilities will be achieved by doing so.





## **Existing Space Analysis**



## EXISTING SPACE ANALYSIS

### Inventory of Existing Space

The University provided a room-by-room inventory of academic and academic support space of major buildings documenting departmental assignment, space use classification, and assignable square feet (ASF) for campus-owned buildings with academic units. In March 2010, the consultant field verified all non-residential facilities on the campus. As part of the verification process, the consultants ran a series of reports that specifically looked for facility issues and discrepancies. These issues were addressed in subsequent trips to the campus.

One set of reports specifically identify classrooms and teaching laboratories with low or no scheduled usage. While on site, those rooms were reviewed during the field tours. In total, slightly more than 400 inventory records were adjusted. Either the space use code or departmental assignment was changed.

Space classification is as much an art form as a science. Often, a room can be coded as one of several space use classifications. Choosing the best space use code requires someone that understands the implications of classifying a room in one manner over another not only from the viewpoint of the system or governing board, but utilization expectations, research management, etc. Knowing the types of activities being conducted in the space, the primary users of the space, understanding space use classifications and their nuances, as well as observing the physical limitations and attributes of the space, helps provide a more accurate inventory.

The table on the following page shows the buildings that are included in the study along with the ASF allocated to each building. It should be noted that this study did not address residence halls or dining space dedicated to Residence Life (cafeteria in Lawrence Hall).

A review of ASF by Room Use Code for each building is located in Appendix A.

<b>Building Name</b>	<b>ASF</b>	<b>Building Name</b>	<b>ASF</b>
114 W Rosedale	1,827	Merion Hall (formerly Boucher)	41,029
13/15 University Ave	3,556	Messikomer Hall	12,806
201 Carter Dr	38,599	Mitchell Hall	18,711
210 E Rosedale	2,507	Montemuro House (811 Roslyn)	1,490
220 E Rosedale	7,331	Old Library	13,070
25 University Ave (Old Swope)	30,789	Peoples Building	9,632
624 S. High Street	3,311	Philips Memorial	28,400
701 S High St	7,120	Psychology Research Trailer	1,046
703 S High Garage	374	Recitation Hall	30,645
703 S High St (Bayle House)	2,154	Reynolds Garage	293
809 Roslyn Ave	1,445	Reynolds Hall	3,781
823 S High St	1,486	Ruby Jones Hall	10,127
850 S New St	3,425	Schmucker Science Center Link	10,105
Allegheny Hall	5,531	Schmucker Science Center North	26,134
Alumni House	2,088	Schmucker Science Center South	34,698
Anderson Hall	46,755	Speakman Building	3,636
Athletics Shed	200	Sturzebecker HSC	128,221
Boller Plant	247	Swope Music Bldg	45,735
Brandywine Hall	10,951	Sykes Student Union	64,645
Chem Stor Bldg	703	Tanglewood Garage	1,806
Dynamic Bookstore	3,361	Tyson Hall	850
E O Bull - Old	29,419	Warehouse	40,573
E O Bull Shed	188	Wayne Hall (Student Health)	5,620
Ehinger Gym	10,461		
Ehinger Office Annex	3,041		
Farrell Stadium	2,615		
FHG Library 1	44,327		
FHG Library 2	66,606		
Filano House	2,883		
Goshen Hall	1,900		
Graduate Business Center	28,644		
High St Garage	670		
Hollinger Field house	42,442		
Lawrence Hall	27,846		
Main Hall	39,288		
Maintenance Storage Shed	264		
McCarthy Hall	5,834		
McCoy Barn	4,336		
McCoy EQ Shed	3,346		
McCoy Garrison	838		
McCoy Main House	2,597		
McKelvie Hall (102 W. Rosedale)	3,152		
		<b>TOTAL = 1,027,510</b>	

**TOTAL = 1,027,510**

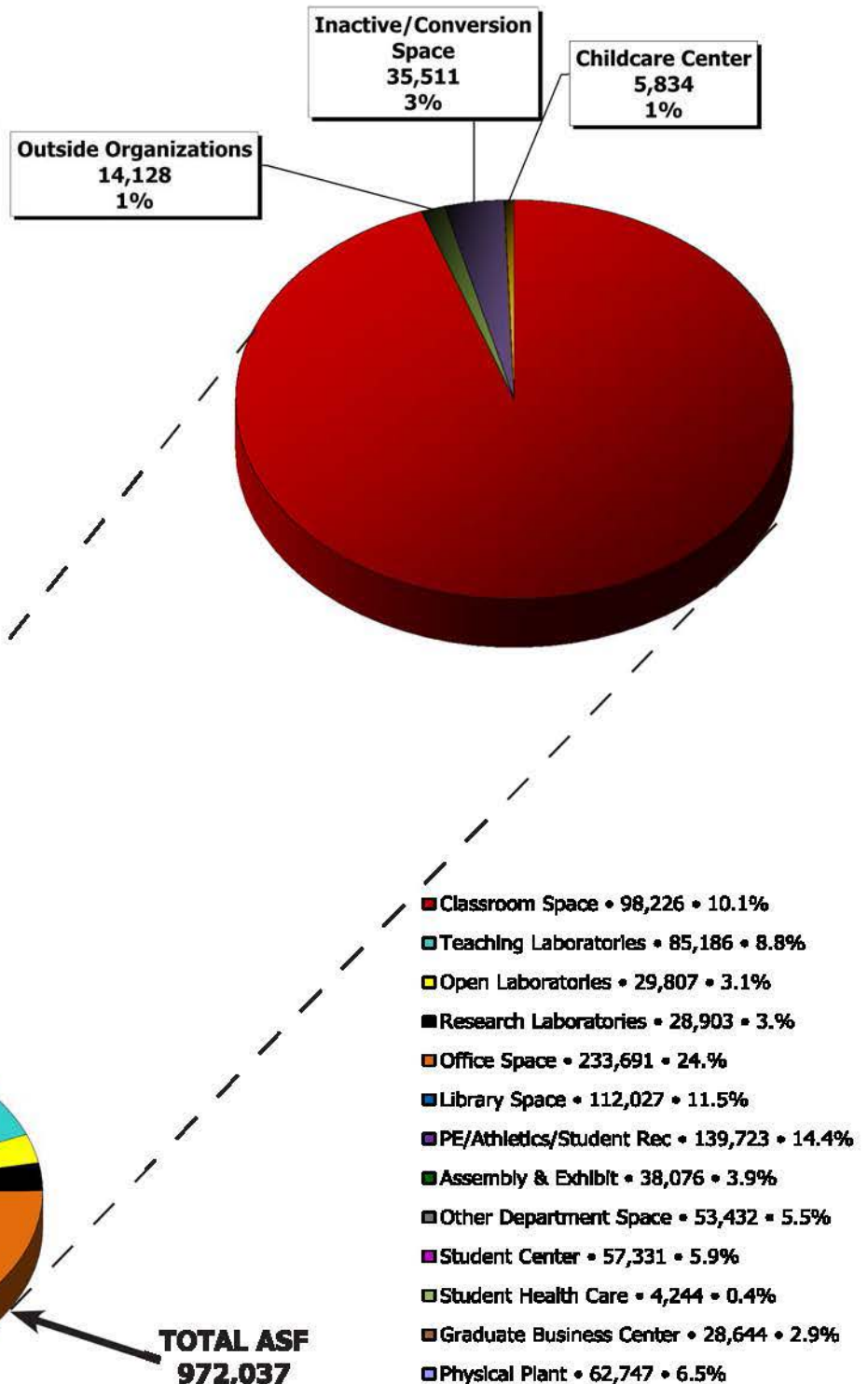
## Existing Space Allocation

The following chart illustrates West Chester University's ASF by Space Type Category as used in this analysis. West Chester has just under 1,027,000 assignable square feet (ASF) of owned spaced. Residential space was not studied in this analysis.

Outside Organizations and the Childcare Center occupy less than 1% each of WCU's total space. Inactive space, as noted in the last section, is approximately 3% of the total and is comprised mostly of space for the renovation of the E. O. Bull Center.

While Classroom and Teaching Laboratories space is often considered the most significant allocation of space on higher education campuses, it is only 19% of the total 1.03 million ASF at West Chester University.

The remaining space, which is the focus of this analysis, is slightly more than 972,000 ASF representing 95% of all space in this study. Of the net ASF, office space, with 233,691 ASF, comprises the largest single category. Physical Education, Athletic, and Student Recreation space is 14% of the net total. Classroom and laboratory space is a combined 22% of the total ASF.



## Space Classifications

Facility space is calculated according to major space classifications as outlined in the National Center for Education Statistics, Postsecondary Education Facilities Inventory and Classification Manual, 2006 Edition. Some additional points of clarification are noted:

- Classrooms are those rooms that are regularly scheduled by an academic department or centrally scheduled by the Registrar.
- Teaching Laboratories are laboratories that are regularly scheduled and contain specialized equipment.
- Open Laboratories are laboratories that are irregularly scheduled. This category includes open computer laboratories. They may be laboratories used as combination teaching laboratories and open access laboratories. The Open Laboratories category includes music practice rooms, art studios, and laboratories built for one individual or a small group. It also includes senior capstone space and collaborative learning areas.
- Research Laboratories are laboratories in which research is conducted. It also includes space that supports the main research laboratory.
- Office space includes offices, office supply and storage areas, workrooms, reception areas, conference rooms, and conference room service space.
- Library or study space is defined as space dedicated to the main and branch libraries, and not departmental study rooms that serve as an unofficial library.
- Assembly & Exhibit space is space that accommodates many persons for events such as dramatic and musical activities or space that is used for exhibitions of materials or art such as a museum or an art gallery. It includes planetariums and herbariums.
- Other Academic/Administrative Department space includes: departmental libraries; building or departmental student lounges, armories, media production rooms, clinics, demonstration rooms, meeting rooms, and central computer or telecommunications space. It also includes field buildings, animal quarters, and greenhouses that support instruction. Field buildings and greenhouses in support of physical plant and campus grounds are included as Physical Plant space.
- Physical Education / Recreation space is indoor space that is used mainly for physical education as an academic program and for student recreation. Such spaces can sometimes be shared with physical education courses on a time-of-day basis.
- Athletic space is indoor space that is used primarily for competitive sports programs and includes spaces such as gymnasiums, natatoriums, fitness and training rooms, spectator seating, and support spaces.
- Student Health Care includes space that is used to care for students. It may include a pharmacy or wellness center.
- Student Space (Student Union or Center) is space used for university life and student activities functions. It includes the bookstore, non-residential student dining, student lounges, student organization and government space, and ballroom space.
- Residence Life includes student housing and dining that is in support of residence life.
- Physical Plant support facilities provide centralized space for support systems and services to a campus.
- Nonassignable areas include central utility/boiler plants that primarily house central utility production and/or distribution to more than one building on campus.



# Benchmarking



## BENCHMARKING

### Objective

As part of the comprehensive master plan study, Paulien & Associates, Inc. conducted a peer and aspirant comparative analysis using benchmarking techniques. This benchmarking study was included as an integral part of the project. The focal point of this study is a broad comparison of physical space between 13 peer institutions and West Chester University. The objective of this study was to analyze differences in existing and target guideline space at the campus level compared to the average of the selected benchmark institutions. This analysis assisted in determining appropriate space guidelines for the major space categories.

### Benchmarking Defined

Benchmarking is a tool that has been used in industry for many years. More recently, extraordinary challenges and the need to develop new ways to demonstrate accountability have forced higher education institutions to begin using many of the same concepts. Definitions of benchmarking vary depending on the focus of the study. Jackson and Lund (2000) describe benchmarking as comparing organizational or industry practices, performance, and process in order to improve the focal organization or business. Schuler (1998) defined benchmarking as "a structured approach for looking outside an organization to study and adapt the best outside practices to complement internal operations with new, creative ideas" (p. 40). For purposes of this study, benchmarking is defined as making direct comparisons with other similar institutions in order to improve or adapt to best practices and to understand quantitatively existing conditions, as compared to other selected higher education institutions. These existing conditions include full-time faculty, research expenditures, student FTE, and physical space.

### Identification of Institutions

At the onset of this study, WCU identified several public institutions that were potential inclusions into the benchmark study. These institutions were identified using similarity of mission, enrollment, expenditures, and other comparable variables as noted in the table.

Information for comparison was obtained from the Integrated Postsecondary Education Data System (IPEDS). Institutions were identified as either peers (similar to West Chester University) or Aspirants, which were defined as functioning at a higher level than West Chester University. At a July 2010 retreat, college representatives' approved the final list before commencing with the study. The final list of institutions for each level is illustrated in the table *Comparative Analysis-Selected Peers*.

Peer and Aspirational Factors

Variable	Peer Ranges	Aspirational Ranges
Public - Comprehensive	ALL	Public ( Master's Plus)
Size and Mix	12,000 to 16,000 Headcount	15,000 to 20,000 Headcount
	60% to 90% Undergraduate	60% to 85% Undergraduate
Student Profile	Selective (1000 to 1200 SAT)	Selective (1100 to 1250 SAT)
Sponsored Programs	\$5 - \$10 Million R&D	\$10-\$25 Million R&D

### Comparative Analysis - Selected Peers

Institution Name	State	Fall 2009 Headcount Enrollment	Founded	Acres	Area	Number Full- Time Faculty	% Out of State Students	Housing Beds
California State University - San Bernadino	CA	17,728	1965	430	Suburban	453	10%	1400
Ferris State University	MI	13,865	1884	880	Suburban	903	5%	4333
Minnesota State University-Mankato	MN	14,951	1868	354	Rural	491	16%	3100
Montclair State	NJ	18,171	1908	275	Suburban	553	3%	3423
Northern Kentucky University	KY	15,443	1968	300	Suburban	542	23%	1140
St Cloud State University, Mn State System	MN	17,685	1869	922	Suburban	552	8%	3000
Stephen F Austin State University	TX	12,845	1923	406	Suburban	630	2%	4667
Buffalo State College	NY	28,881	1846	64	Urban	1554	14%	6947
University of Nebraska-Omaha	NE	14,591	1908	158	Suburban	482	7%	1212
University of North Florida	FL	16,000	1965	1300	Urban	405	5%	2445
University of Northern Iowa	IA	13,080	1876	910	Suburban	517	9%	4974
University of North Carolina - Wilmington	WI	11,166	1916	333	Urban	433	22%	3754
University of Wisconsin-Oshkosh, UW System	WI	13,127	1871	192	Urban	407	13%	3667
Valdosta University	GA	12,388	1906	178	Suburban	422	6%	2107
Western Washington University	WA	14,575	1893	195	Suburban	623	12%	4034
<b>Average</b>		<b>15,633</b>		<b>460</b>		<b>598</b>	<b>10%</b>	<b>3,347</b>

For the peers, the average headcount enrollment is slightly higher than the 14,211 students attending West Chester University during Fall 2009. Aspirant institutions had on average greater enrollments, number of faculty and larger campuses and residential life programs than peers. On average, aspirant enrollments were 38% higher than that of West Chester University.

### Comparative Analysis - Selected Aspirants

Institution Name	State	Student-to- faculty Ratio	Fall 2009 Headcount Enrollment	Founded	Acres	Area	Number Faculty	% Out of State Students	Housing Beds
Appalachian State University	NC	17	16,968	1899	1300	Rural	824	8%	5008
Ball State University	IN	18	21,401	1918	955	Suburban	806	9%	6400
Boise State University	ID	19	18,936	1932	170	Urban	513	11%	1200
Bowling Green State University	OH	20	21,000	1910	1230	Suburban	744	10%	6915
Georgia Southern University	GA	21	19,089	1906	675	Suburban	647	5%	3775
James Madison University	VA	18	18,971	1908	655	Suburban	758	30%	5568
Kennesaw State University, UG System	GA	20	22,500	1963	240	Suburban	665	9%	2131
Miami University	OH	17	22,226	1809	1921	Suburban	828	30%	7100
Towson University	MD	19	21,177	1866	328	Suburban	663	20%	3518
University of Delaware	DE	12	21,138	1743	968	Suburban	1167	38%	7260
University of Massachusetts at Lowell	MA	15	13,602	1895	100	Urban	405	7%	2536
<b>Average</b>		<b>17.8</b>	<b>19,728</b>	<b>1886</b>	<b>777</b>		<b>729</b>	<b>16%</b>	<b>4674</b>

Since the objective of the study was to analyze how WCU's existing space at the campuswide level compared to each of the selected benchmark institutions, the consultant developed a matrix based on major space categories. An electronic spreadsheet categorized space data in assignable square feet (ASF) at the campus level by space categories based on room use codes as outlined in the National Center for Education Statistics *Postsecondary Education Facilities Inventory and Classification Manual*.

The consultant also collected total campus ASF as well as library space. The consultant obtained from IPEDS the number of full-time faculty headcount and student full-time equivalent (FTE) data as well as research & development expenditures for the most current fiscal year. In some cases, this information was verified using on-line sources to reduce errors. Space data for each campus was based on past studies conducted by the consultant, published documents from the college or university (i.e., fact books, campus master plans, facilities data) or through direct contact with an institution. Upon contact, some institutions decided not to participate (Montclair State and Austin State University) or only provided limited information. These institutions are noted in the analysis.

## **Benchmarking Analysis Methodology and Assumptions**

Paulien & Associates compiled the benchmarking data by institution normalizing the information by calculating the assigned square feet per Student FTE. Totals may not add to the sum of their parts due to rounding.

Because there is a variance in the number of FTE generated by graduate students at different institutions, and because of the greater complexity of surveying differentiated graduate and undergraduate student FTE's, only the total Student FTE was used in this report. No differentiation between graduate, undergraduate and professional student credit hours to FTE formulas were made in this analysis. The consultant recognizes that in many cases full-time graduate students or professional students may represent fewer credit hours than FTE for undergraduate students.

Finally, the institutions were asked to report facilities, staffing, and Student FTE within the boundaries of the main campus. Campus boundaries were defined by each institution. Buildings such as medical office buildings, off-campus clinics, hospitals, and schools and colleges located at another campus site were not included in this study.

The following assumptions are noted:

- The information used for this benchmarking study was taken from data reported to the consultant. The different colleges and schools that recorded the data may have classified their space differently in their identification of space within the various space categories. Categories of space type or facilities room uses and square footages have been taken directly from the data provided to the consultant. In some instances, the consultant contacted benchmark institutions when data seemed [out-of-range] in a particular space category. Outcomes of these discussions are found in the comparative analysis section of this report.
- Similarly, full-time faculty headcounts and Student FTE were taken from the IPEDS data. In many cases, faculty and student information reported to IPEDS differs from published sources such as Fact Books or the Common Data Set. These discrepancies are mostly the result of differences in reporting dates and definitions. For this study, faculty was defined as full-time faculty that includes tenured, tenure track, and non-tenure track professors and instructors or lecturers who had full-time appointments. This category did not include part-time adjunct instructors or lecturers.

- For this study, all classroom space was included in the college level analysis. Departmental scheduled or managed classrooms were not analyzed separately. The space categories used in the tables that follow are departmentally assigned classrooms, teaching laboratories, open laboratories, research laboratories, offices, study space, and other. The "Other" category includes General Use and Special Use facilities on the campus. The analysis does not include residential space.

## Comparative Analysis

The comparative analysis results and findings presented in the remainder of this report are based on data from benchmark institutions. The results of this report are independent of findings of the space needs analysis finding, as noted elsewhere in this report. Since the space needs analysis was generated using PASSHE guidelines and other internal factors, the results are not directly comparable.

### *Aspirant Comparative Analysis*

The first task was to collect total ASF data before disaggregating institutional space data by space categories. While no two institutions had identical colleges and schools, there are similarities. In most cases, similarity of disciplines and fields of study within a college or school provided evidence for appropriate classification. In many cases, aspirant institutions contained engineering schools, medical or law schools that were not comparable to WCU. The following table outlines Aspirant institutions that provided data as compared to WCU.

#### Comparative Analysis- Aspirant ASF and Enrollment

Institution Name	State	FTE Student Enrollment	Total ASF	ASF per Student FTE
Appalachian State University	NC	15,749	2,517,457	160
Ball State University	IN	19,315	3,319,459	172
Boise State University	ID	14,608	2,002,471	137
Bowling Green State University	OH	15,074	3,168,659	210
Georgia Southern University	GA	17,448	3,842,121	220
James Madison University	VA	13,996	2,269,743	162
Kennesaw State University, UG System	GA	15,466	1,978,904	128
Miami University	OH	15,362	3,621,479	236
Towson University	MD	17,964	2,160,459	120
<b>Average ASF</b>		<b>16,109</b>	<b>2,764,528</b>	<b>172</b>
West Chester University	PA	12,252	1,027,510	84

ASF = Assignable Square Feet

In reviewing the table, Georgia Southern University reported the largest amount of space while Ball State University noted the largest student FTE. WCU, with 12,252 student FTE, had the lowest enrollment of the all aspirant institutions and the lowest amount of physical space at 84 ASF/FTE.

As WCU's 84 ASF/FTE was less than half of the aspirant average of 172 ASF/FTE, it was decided that aspirant institutions were not an appropriate match for WCU in terms of benchmarking of space guidelines. The focus shifted to the review of the peer institutions.

### Peer Comparative Analysis

Total ASF data was obtained for 13 of the 15 peer institutions as noted in the table below. While the University of Northern Iowa had the greatest amount of space (1,963,119 ASF), California State University – San Bernadino had the largest student enrollment at 15,021 FTE. WCU, with enrollment of 12,252 FTE, was approximately 5% higher than the average FTE of the peer institutions. However, when compared to all benchmark institutions, WCU's 84 ASF per Student FTE was ranked second lowest among peer institutions. On average, WCU had 32% less ASF/FTE than the 13 institutions that comprised the peer average of 123 ASF/FTE.

### Comparative Analysis - Peer ASF and Enrollment

Institution Name	State	FTE Student Enrollment	Total ASF Exc. Residential	ASF per Student FTE
California State University - San Bernadino	CA	15,021	1,153,666	77
Ferris State University	MI	11,666	1,742,705	149
Minnesota State University-Mankato	MN	11,487	984,160	86
Northern Kentucky University	KY	11,554	1,246,915	108
St Cloud State University, Mn State System	MN	12,786	1,508,891	118
Buffalo State College	NY	10,057	1,442,912	143
University of Nebraska-Omaha	NE	11,490	1,624,109	141
University of North Florida	FL	10,148	1,077,164	106
University of Northern Iowa	IA	11,571	1,963,119	170
University of North Carolina - Wilmington	NC	11,742	1,920,472	164
University of Wisconsin-Oshkosh, UW System	WI	10,585	1,161,045	110
Valdosta State University	GA	11,853	1,449,173	122
Western Washington University	WA	12,780	1,392,382	109
<b>Average</b>		<b>11,749</b>	<b>1,435,901</b>	<b>123</b>
West Chester University (Existing Space)	PA	12,252	1,027,510	84

ASF = Assignable Square Feet

### Assignable Square Feet per Student by Space Category

Since the peer results were a good fit for WCU, additional information was obtained at the space category level. The following table lists peer results for those participating in the study. The peer analysis focused on the ASF/FTE for the peer average, existing space at WCU, and the amount of space needed at the plan horizon based on the space needs analysis. The goal was to compare PASSHE and the consultant's space guidelines to the peer average, with the intent of elevating WCU within the peer range for each of the major space categories.

A review of ASF per Student FTE across the space use categories reveals that WCU's existing space (ASF/Student FTE) is lower for each space category than the average of the peers. For example, the average of the peer on classroom space averaged 10.6 ASF/FTE while WCU averaged 8.0 ASF/FTE during Fall 2009.

Application of the Classroom space guideline at the plan horizon will bring WCU to 10.3 ASF/FTE and in relative balance with the peer institutions. The space needs analysis results are also closely aligned to peer averages for Library or study space and support space.

For Teaching Laboratories, Research Laboratories space, and Office space, the peers are slightly out of reach. While the plan horizon guidelines raise the ASF/FTE, as compared to existing space, the ASF/FTE average for peer institutions is still higher. This may be due to a slightly different mix of programs or other activities at peer institutions that are not directly comparable to WCU. Research space will be reviewed independently in the next section.

### Comparative Analysis - Peer ASF by Space Category

Institution Name	State	Classrooms ASF	Teaching/ Open Laboratories ASF	Research Laboratories	Office Space	Study Space	Support Space	Other Space
California State University - San Bernadino	CA	119,981	168,458	47,300	338,024	164,974	98,062	314,508
Ferris State University	MI							
Minnesota State University-Mankato	MN	81,860	145,588	48,726	187,989	183,143	33,026	168,427
Northern Kentucky University	KY	106,446	154,836	4,635	255,833	121,900	54,375	548,890
St Cloud State University, Mn State System	MN	117,022	175,435	45,083	198,646	98,107	34,525	437,299
Buffalo State College	NY							
University of Nebraska-Omaha	NE	115,652	213,579	41,583	285,541	153,080	67,233	407,337
University of North Florida	FL	90,648	148,713	39,445	350,881	129,861	44,570	158,808
University of Northern Iowa	IA	191,620					75,443	
University of North Carolina - Wilmington	NC	184,440	108,115	78,105	304,698	184,810	56,637	530,152
University of Wisconsin-Oshkosh, UW System	WI	107,145	161,805	31,856	271,013	136,301	52,247	390,678
Valdosta State University	GA	93,302	81,204	30,176	181,541	90,768	89,835	882,347
Western Washington University	WA	158,124	162,086					
<b>Peer Average</b>		<b>124,204</b>	<b>151,982</b>	<b>40,768</b>	<b>263,796</b>	<b>140,327</b>	<b>60,595</b>	<b>426,494</b>
<b>Peer Space Category ASF per Student FTE</b>		<b>10.6</b>	<b>12.9</b>	<b>3.5</b>	<b>22.5</b>	<b>11.9</b>	<b>5.2</b>	<b>36.3</b>
West Chester University (Existing Space)	PA	98,226	114,993	28,903	233,691	112,027	62,747	439,670
<b>WCU Space Category ASF per Student FTE</b>		<b>8.0</b>	<b>9.4</b>	<b>2.4</b>	<b>19.1</b>	<b>9.1</b>	<b>5.1</b>	<b>35.9</b>
West Chester University (Plan Horizon Guideline)	PA	145,363	155,880	42,512	272,860	166,806	76,793	622,828
<b>WCU Space Category ASF per Student FTE</b>		<b>10.3</b>	<b>11.0</b>	<b>3.0</b>	<b>19.3</b>	<b>11.8</b>	<b>5.4</b>	<b>44.0</b>

ASF = Assignable Square Feet

### Research Laboratory ASF and R&D Expenditures

Since WCU has placed a strategic priority on research, it was determined that Research Laboratories spaces at peer institutions should be analyzed for each of the benchmark institutions supplying this data. For clarity, peer institutions that reported substantial administrative or other organizational research laboratory spaces (i.e., centers, institutes) on the main campus were included in the ASF numbers. Northern Kentucky University, with only 4,635 ASF of research space was not analyzed as it skewed the overall results.

Research and Development expenditures were calculated based on information secured from the National Science Foundation. Multi-campus expenditures were allocated based on a percentage of expenditures on each campus. The results are illustrated in the following table.

**Comparative Analysis - Research Laboratories**

Institution Name	State	FTE Student Enrollment	2008 R&D Expenditures	Research Laboratories (ASF)	R&D Expenditures per ASF
California State University - San Bernadino	CA	15,021	\$ 9,703,000	47,300	\$ 205
Minnesota State University-Mankato	MN	11,487	\$ 1,521,000	48,726	\$ 31
St Cloud State University, Mn State System	MN	12,786	\$ 3,543,000	45,083	\$ 79
University of Nebraska-Omaha	NE	11,490	\$ 5,454,000	41,583	\$ 131
University of North Florida	FL	10,148	\$ 3,158,000	39,445	\$ 80
University of North Carolina - Wilmington	NC	11,742	\$ 20,100,000	78,105	\$ 257
University of Wisconsin-Oshkosh, UW System	WI	10,585	\$ 1,062,000	31,856	\$ 33
Valdosta State University	GA	11,853	\$ 2,607,000	30,176	\$ 86
<b>Average</b>		<b>11,889</b>	<b>\$ 5,893,500</b>	<b>45,284</b>	<b>\$ 130</b>
West Chester University (Existing Space)	PA	12,252	\$ 2,454,000	28,903	\$ 85

ASF = Assignable Square Feet

First, WCU has less than half the R&D expenditures (\$2,454,000) of the average of peer institutions (\$5,894,000) and slightly more than half of the space (28,903 ASF vs. 45,284 ASF). The analysis indicates that WCU, on average, has 64% less total Research Laboratories and support space than the peer average. However, when R&D expenditures per ASF as compared, WCU has \$85 per ASF while peers generate \$130 per ASF on average. This suggests that WCU has capacity to accommodate an increase in its total R&D expenditures through more intense use of Research Laboratories space.

**Staffing Analysis**

Staffing data from peer institutions was analyzed to determine the adequacy of personnel as related the space needs analysis. Personnel information was obtain from the IPEDS Human Resources File for 2009. The table summarizes the data for WCU and the peer institutions. Overall, the results indicate that WCU has lower levels of staff in several categories as compared to peer averages. However, the data in this table has not been normalized by student FTE as some institutions are larger than WCU and have greater staffing needs.

**Space Needs Analysis Staffing Review - Fall 2009**

Institution Name	Student-to-faculty ratio	Grand Total Fall 2009 (Full and Part Time)								
		Total Employees	Faculty - Instruction/ Research/ Public service	Graduate Assistants	Exec/ Admin and Managerial	Other Professionals	Technical/ Para-professionals	Clerical and Secretarial	Skilled Crafts	Service/ Maintenance
West Chester University	18	1779	839	158	54	274	42	189	56	167
Peer Average	19	2098	839	207	113	411	99	215	52	162
WCU Compared to Peer Average		(319)	0	(49)	(59)	(137)	(57)	(26)	4	5
WCU as a Percent of Peer Average		85%	100%	76%	48%	67%	42%	88%	107%	103%

Source: IPEDS Human Resources File

The next table shows the same data normalized by Total Student fall semester Headcount. For example, WCU had one (1) employee for every eight students while the peer average was one employee for every seven students. The greatest shortage was evident in the Executive/Administrative and Managerial category where WCU had one position for every 263 students while the peer average was one position for every 159 students.

**Space Needs Analysis Staffing Review - Normalized by Student Headcount**

Institution Name	Student-to-faculty ratio	Student Headcount per Employee Type								
		Total Employees	Faculty - Instruction/ Research/ Public Service	Graduate Assistants	Exec/ Admin and Managerial	Other Professionals	Technical/ Para-professionals	Clerical and Secretarial	Skilled Crafts	Service/ Maintenance
West Chester University	18	8.0	16.9	89.9	263.2	51.9	338.4	75.2	253.8	85.1
Peer Average	19	7.0	17.0	123.7	158.8	37.7	303.1	72.5	330.6	103.0
WCU Compared to Peer Average		(1)	0	34	(104)	(14)	(35)	(3)	77	18
WCU as a Percent of Peer Average		88%	100%	138%	60%	73%	90%	96%	130%	121%

Source: IPEDS Human Resources File

It is interesting to note that the number of faculty (Instruction, Research and Public Service) is comparable between WCU and the peers. To compensate for differences between WCU and the peers, growth rates for administrative units, which contain the bulk of administrative, professional, and technical titles, was increased slightly at the plan horizon. The growth rate also takes into account job vacancies and unfilled positions due to budget reductions.



## **Classroom & Teaching Laboratory Utilization**



## CLASSROOM & TEACHING LABORATORY UTILIZATION

### How is Utilization Determined?

The utilization of classrooms and teaching laboratories was examined using WCU's Fall 2009 course and facilities data. Understanding how classrooms and teaching laboratories are scheduled and utilized provides the foundation for and assists in the formulation of the guideline application for these two space categories. The number of student stations for each classroom and teaching laboratory was first provided in the facilities inventory. Supplemental data provided by the University Registrar as well as field verification provided additional input. Scheduled use is defined as use verifiable through the registrar's course data.

The analysis includes scheduled classroom use by day and time of day, as well as classroom and teaching laboratory utilization analyzing average weekly room hour use and student station occupancy percentage. The following definitions are critical to understanding the finding in this section:

- A weekly room hour, not to be confused with a credit hour, is defined as the length of time a course meets (end time minus start time) times the number of days per week throughout the semester.
- Student station occupancy is defined as the number of student seats filled divided by the total number of student seats in the room when the room is scheduled.

The utilization of a room is determined by calculating the average enrollment of the courses taught in a room along with total weekly student contact hours, weekly room hours, and student station occupancy percentage. Weekly student contact hours are calculated by multiplying the enrollment of a course by the weekly contact, or room hours, during which the course is held. Weekly room/contact hours are determined by calculating the number of hours a course meets (start and end times) and multiplying the result by the number of days the course meets each week. Both of these factors are totaled on a room-by-room basis. If a course does not meet for a full term, the number of hours for a room is prorated by the number of weeks in a term.

**WEEKLY ROOM/CONTACT HOURS (WRH OR WCH)** = No. of Days X ((End Time - Start Time)/60)

**WEEKLY STUDENT CONTACT HOURS (WSCH)** = Students X Weekly Room/Contact Hours

**WEEKLY STUDENT CONTACT HOUR CAPACITY** = Student Stations X Weekly Room/Contact Hours

**STUDENT STATION OCCUPANCY %** = WSCH / WSCH Capacity

**HOURS PER SEAT** = WSCH / No. of Student Stations

The student station occupancy for a room is determined by dividing the room's weekly student contact hours by the room's weekly student contact hour capacity (a course's weekly contact hours times the room's number of student stations).

This study did not include an analysis of space quality, sight lines, acoustics, or media equipment in the rooms. However, these characteristics or, lack thereof, contribute to a room's popularity, functionality and usability.

## **Classroom Utilization**

### ***Classrooms Defined***

Classrooms are rooms that are regularly scheduled and suitable for instruction by any discipline. Classrooms are normally accessible from a major corridor. If a room is accessible by first circulating through another space, like a laboratory, another space classification should be considered. A conference room or meeting room used occasionally for regularly scheduled instruction should not be classified as a classroom. Auditoria with limited scheduling capabilities due to productions or reserved for special occasions should not be considered as classroom space. Once a room is classified as a classroom it usually has utilization expectations.

### ***PASSHE Utilization Expectations***

The Pennsylvania State System of Higher Education (PASSHE) utilization expectations for classrooms is 37.5 hours per week with a 67% student station occupancy (the percentage of seats filled when the room is in use). The underlying assumption is that the maximum number of hours a room could be used in a week is 50 hours at a room use rate of 75% which produces the 37.5 weekly room hour expectation.

### ***Which Classrooms are Included?***

West Chester University has 116 rooms identified as classrooms on the main campus (refer to Appendix A for a detailed listing). The E. O. Bull Center was just coming off-line at the beginning of the Fall 2009 term and was not included the utilization analysis.

### ***Classroom Observations***

- Seventy-seven or 66% of the classrooms were scheduled at the PASSHE weekly room hour expectation of 37.5 hours or more. Of the total, 27 rooms were scheduled 50 or more hours per week.
- Eight classrooms had 20 hours or less of scheduled use.
- When classrooms are scheduled, 96 or 72% of all classrooms averaged a 67% student station occupancy rate or higher, meeting the PASSHE expectation. Over half of these rooms achieved an occupancy rate of 80% or more.
- The average assignable square foot (ASF) per student station is 20 ASF which is equal to PASSHE's space guideline including service space. For today's collaborative pedagogy and technology rich environments, a better average would be between 22 and 25 ASF per student station. Main Hall's 22 classrooms average 20 ASF per station while Ruby Jones Hall's five classrooms averaged 17 ASF per station, which is one of the lowest among the facilities with classrooms.

***Scheduled Classroom Use by Day and Hour***

For Fall 2009, Monday and Wednesday, from 9:00 AM until 5:00 PM no fewer than 70% of all rooms are scheduled on average. On Tuesdays and Thursdays, from 9:00 AM to 5:59 PM, no less than 77% are scheduled for use.

On average, the most heavily scheduled time is at 12:00 PM on Tuesdays when 95% of all rooms are scheduled. The next most heavily scheduled time is at 9:00 AM also on Tuesdays and Thursdays. Not surprisingly, use on Friday afternoon starting at 3:00 PM is the lowest. There is minimal (2% to 4%) scheduled use on Saturday and Sunday.

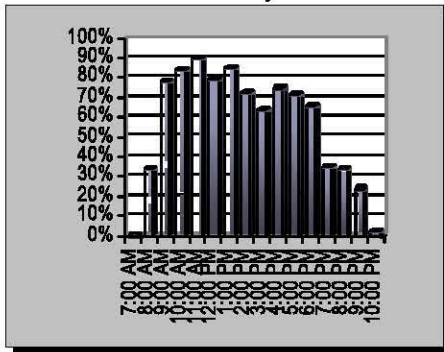
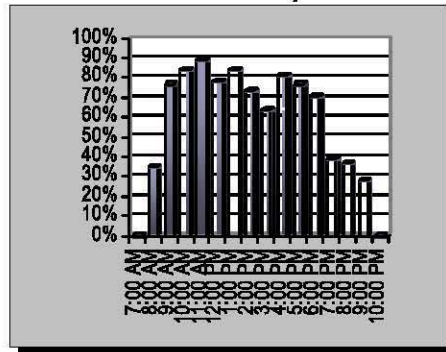
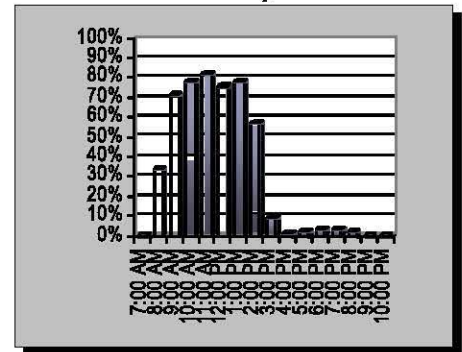
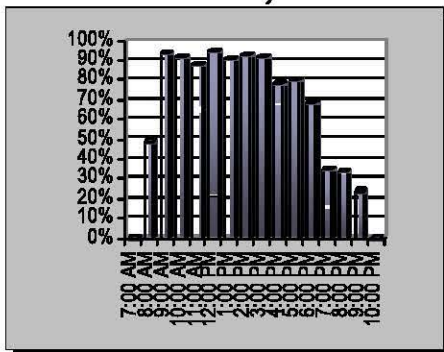
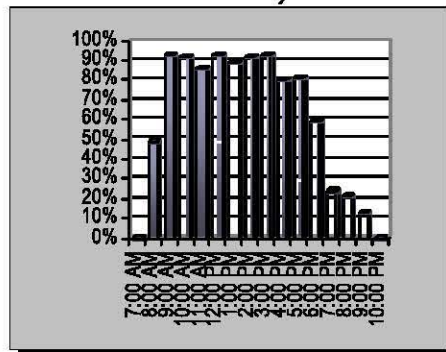
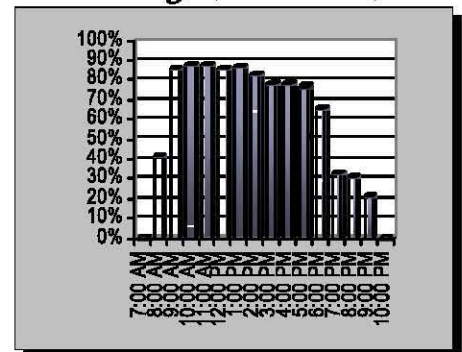
It is worth noting that when an institution consistently reaches and exceeds the 80% level of classrooms in use, the more difficult it becomes to find available classrooms in the right geographical locations with the right classroom capacities. The table and graphs illustrate the class-room use by most popular start times each day of the week. The average percent of classrooms in use is based on Monday through Thursday, as Friday is typically underutilized.

**Scheduled Classroom Use by Day and Hour**

Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Average*	
	Rooms In Use	% In Use	Rooms In Use	% In Use	Rooms In Use	% In Use	Rooms In Use	% In Use	Rooms In Use	% In Use	Rooms In Use	% In Use	Rooms In Use	% In Use	Rooms In Use	% In Use
7:00 AM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
8:00 AM	40	34%	57	49%	41	35%	57	49%	39	34%	5	4%	0	0%	49	42%
9:00 AM	91	78%	109	94%	89	77%	108	93%	84	72%	5	4%	0	0%	99	86%
10:00 AM	98	84%	107	92%	97	84%	107	92%	90	78%	5	4%	0	0%	102	88%
11:00 AM	104	90%	102	88%	103	89%	100	86%	95	82%	5	4%	2	2%	102	88%
12:00 PM	92	79%	110	95%	91	78%	108	93%	88	76%	5	4%	2	2%	100	86%
1:00 PM	99	85%	105	91%	98	84%	103	89%	90	78%	4	3%	2	2%	101	87%
2:00 PM	85	73%	108	93%	86	74%	107	92%	66	57%	4	3%	2	2%	97	83%
3:00 PM	74	64%	107	92%	74	64%	108	93%	10	9%	4	3%	2	2%	91	78%
4:00 PM	87	75%	90	78%	94	81%	93	80%	1	1%	3	3%	2	2%	91	78%
5:00 PM	83	72%	93	80%	89	77%	94	81%	2	2%	0	0%	0	0%	90	77%
6:00 PM	76	66%	80	69%	82	71%	68	59%	4	3%	0	0%	0	0%	77	66%
7:00 PM	41	35%	41	35%	45	39%	28	24%	4	3%	0	0%	0	0%	39	33%
8:00 PM	39	34%	39	34%	43	37%	25	22%	2	2%	0	0%	0	0%	37	31%
9:00 PM	28	24%	28	24%	33	28%	15	13%	0	0%	0	0%	0	0%	26	22%
10:00 PM	2	2%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%

Note: Based on total classrooms of 116

\* Based upon the consultant's experience, Friday is typically underutilized, therefore the average is calculated on Monday thru Thursday use.

**Percent of Classrooms In Use***Monday**Wednesday**Friday**Tuesday**Thursday**Average (Mon-Thurs)*

### Classroom Utilization by Building

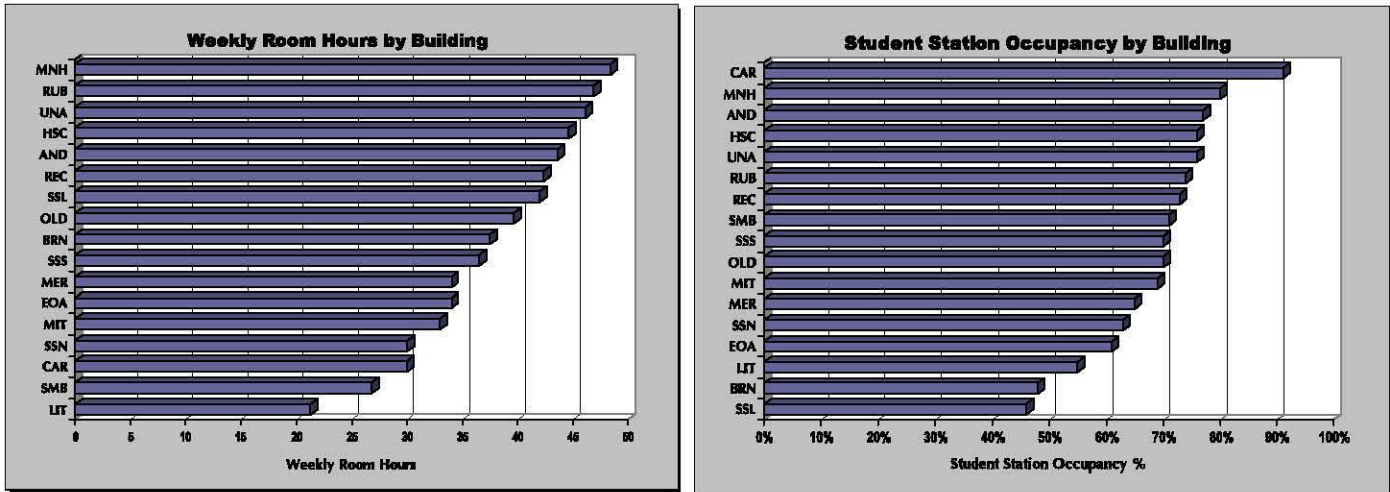
There are 17 buildings that contain the 116 classrooms used at West Chester University. Approximately half, or 8 of the 17 campus buildings averaged 40 or more weekly room hours. Those buildings averaging the most scheduled use per week include the classrooms in: Main Hall with 48 hours of scheduled use per week; Ruby Jones Hall at 47 hours per week; and 25 University Avenue at 46 hours per week. Those buildings averaging the least scheduled use include: Swope Music Building at 27 hours of scheduled use, and the one classroom in 210 E. Rosedale with 21 hours of use per week.

While Main Hall has the highest weekly room hour average, it also has one of the highest student station occupancies, with 80% of the seats filled on average. Brandywine Hall, with 48% student station occupancy, is low compared to the campus average of 74%. This result may have been due to the fact that the building was completed just prior to the start of the Fall 2009 semester and may not have had ample time to be scheduled for optimal capacity.

### Classroom Utilization Analysis by Building Summary

Building Name and Id		No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
201 Carter Dr	CAR	1	431	17	23	30	91%
210 E Rosedale	LIT	1	454	18	14	21	55%
25 University Ave (Old Swope)	UNA	9	854	21	30	46	76%
Anderson Hall	AND	23	699	19	29	44	77%
Brandywine Hall	BRN	4	1,482	17	45	38	48%
Ehinger Office Annex	EOA	1	1,292	22	36	34	61%
Main Hall	MNH	22	820	20	32	48	80%
Merion Hall (formerly Boucher)	MER	2	1,352	15	59	34	65%
Mitchell Hall	MIT	1	1,040	21	34	33	69%
Old Library	OLD	4	990	20	31	40	70%
Recitation Hall	REC	14	727	20	26	42	73%
Ruby Jones Hall	RUB	5	698	17	29	47	74%
Schmucker Science Center Link	SSL	1	2,597	13	95	42	46%
Schmucker Science Center North	SSN	3	922	17	33	30	63%
Schmucker Science Center South	SSS	2	866	16	36	37	70%
Sturzebecker HSC	HSC	13	817	21	31	45	76%
Swope Music Bldg	SMB	10	522	20	17	27	71%
<b>AVERAGE TOTAL</b>		<b>116</b>	<b>812</b>	<b>20</b>	<b>30</b>	<b>42</b>	<b>74%</b>

### Classroom Utilization Analysis by Building Summary



### Classroom Utilization Analysis by College

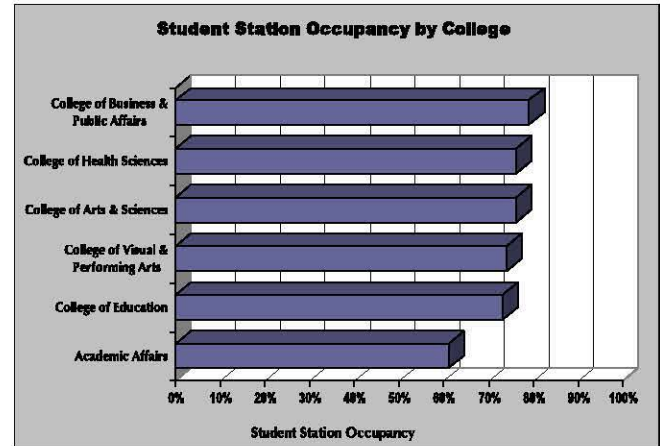
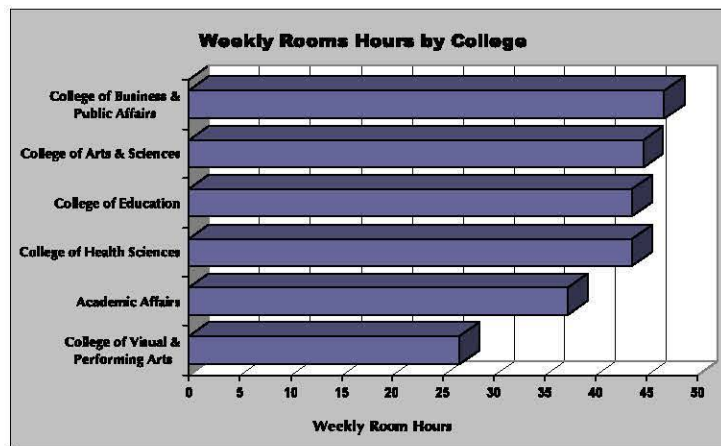
The table and charts below illustrate the classroom utilization findings by College. The rooms attributed to each college do not represent ownership, but are rather an attempt to show utilization by primary user as the University views all space on campus as being university owned. The classrooms listed under Academic Affairs are classrooms specifically scheduled by the Registrar and are noted a centrally scheduled classrooms.

As the table and charts indicate, the College of Arts and Sciences and the College of Business and Public Affairs had the highest use of classrooms at 45 and 47 weekly room hours respectively. The College of Visual & Performing Arts used classrooms in the Swope Music Buildings an average of 27 hours per week.

Overall, student station occupancy ranges from 73% to 79% for classrooms used by the Colleges. Centrally scheduled classrooms had the lowest overall student station occupancy, with an average of 61%.

### Classroom Utilization Analysis by College Summary

College/Administrative Unit	No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
Academic Affairs	15	1,517	17	54	37	61%
College of Arts & Sciences	47	728	19	27	45	76%
College of Business & Public Affairs	16	671	18	29	47	79%
College of Education	12	707	20	25	44	73%
College of Health Sciences	14	789	21	30	44	76%
College of Visual & Performing Arts	12	579	22	19	27	74%
<b>AVERAGE TOTAL</b>	<b>116</b>	<b>812</b>	<b>20</b>	<b>30</b>	<b>42</b>	<b>74%</b>



### ***Classroom Utilization Analysis by Room Capacity***

Classrooms were divided into 13 categories based on size with results noted in the following table. Classrooms with 36–40 seats or stations were the largest category, containing 39 of the 116 rooms and were used an average of 45 hours per week. The five classrooms with capacities of 41 to 45 stations had the highest use with 49 weekly room hours.

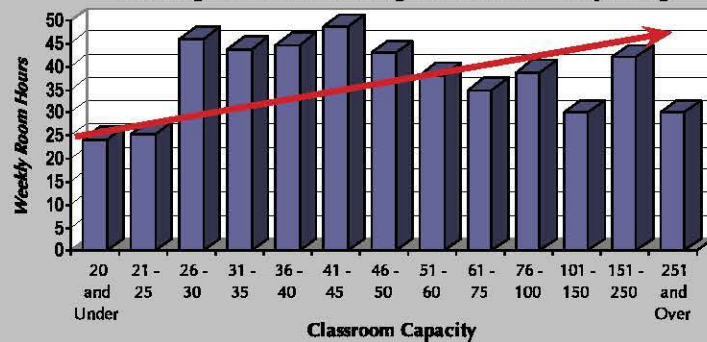
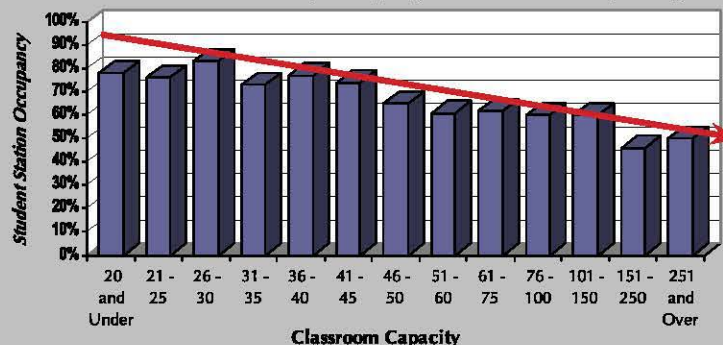
The seven rooms with 20 and under stations were only utilized 24 hours per week as many of these rooms are seminar rooms and conference rooms outside of scheduled instruction. Also with a lower average (25 WRH) are the eight classrooms with capacities of 21 to 25. Classrooms with capacities of 101–150 seats and 251 or more seats are scheduled 30 hours per week.

The 26 rooms with capacities of 26 to 30 have the highest student station occupancy rate of 83% while the largest rooms (151–250 and 251 seats and Over) had the lowest overall student station occupancy with 46% and 50% of the seats filled during scheduled use. Overall, classrooms with capacities of over 51 tend to have lower occupancy rates suggesting the need to reevaluate classroom capacities.

Usual trends show that smaller capacity classrooms are not scheduled as much as the larger classrooms, so as the capacity of the classrooms increases, so do the weekly room hours. Conversely, smaller classrooms tend to have a greater student station occupancy ratio while the larger rooms have a lower student station occupancy ratio with many as low as 46%. As noted in the Weekly Room Hours by Classroom Capacity and Student Station Occupancy by Classrooms Capacity charts, West Chester University does not completely follow the weekly room hour trend, however it does follow the student station occupancy trend found on most college campuses.

**Classroom Utilization Analysis by Capacity Summary**

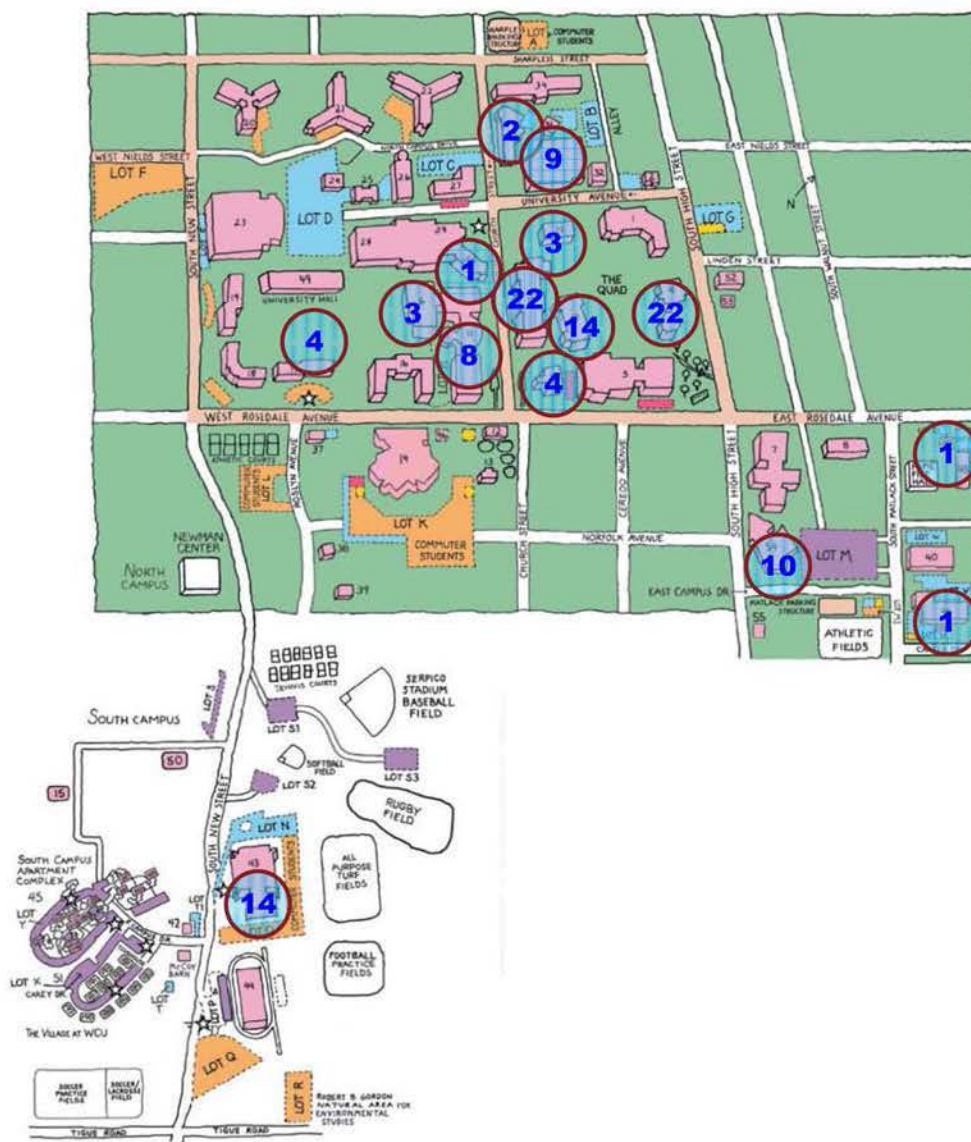
Room Capacity	No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
20 and Under	4	416	27	13	24	78%
21 - 25	7	513	21	17	25	76%
26 - 30	20	614	21	24	46	83%
31 - 35	17	643	19	25	44	73%
36 - 40	39	725	19	29	45	77%
41 - 45	5	805	19	31	49	74%
46 - 50	9	962	20	32	43	65%
51 - 60	5	1,114	19	35	38	61%
61 - 75	2	1,376	19	42	35	62%
76 - 100	4	1,397	16	53	39	60%
101 - 150	2	1,549	14	68	30	60%
151 - 250	1	2,597	13	95	42	46%
251 and Over	1	5,180	15	183	30	50%
<b>AVERAGE TOTAL</b>	<b>116</b>	<b>812</b>	<b>20</b>	<b>30</b>	<b>42</b>	<b>74%</b>

**Weekly Room Hours by Classroom Capacity****Student Station Occupancy by Classroom Capacity**

### ***Classroom Utilization by Average Hours per Seat***

To put the above findings in perspective and to look at the distribution of classrooms across campus and the average hours per seat, the consultants reviewed the distribution of classrooms by building. The following map illustrated classroom densities and clearly shows the heart of the north campus around the Quad has the greatest density of classrooms on campus. In the Sturzebecker Science Center South there are 14 classrooms, and on the East Campus there are 12 classrooms. The remaining 90 classrooms are located in the heart of the North Campus.

The following map illustrates classroom densities by building.



## Classroom & Teaching Laboratory Utilization

### Classroom - Average Hours per Seat

Predinct	No. of Class-rooms	Total No. of Seats	WSCH Generation	Average Hours per Seat
Ruby Jones Hall	5	200	6,952	34.8
25 University	9	366	12,650	34.6
Anderson Hall	22	880	29,836	33.9
Sturzeburger Hlth	14	534	17,801	33.3
Main Hall	22	991	31,255	31.5
Recitation Hall	14	501	15,433	30.8
201 Carter Dr.	1	25	684	27.4
Old Library	4	197	5,144	26.1
Ehinger Office Annex	1	60	1,238	20.6
Merlon Hall	3	198	3,926	19.8
Schmucker Science Center	8	533	10,448	19.6
Mitchel Hall	2	70	1,367	19.5
Swope Music Bldg	10	263	5,064	19.3
Brandywine Hall	4	361	6,558	18.2
210 E. Rosedale	1	25	292	11.7
West Chester University				28.6
PASSHE Utilization Target				25.1

WSCH = Weekly Student Contact Hour

Another method for comparing PASSHE utilization expectations to West Chester University's actual utilization of classrooms, is to look at the average hours per set. When reviewing seat hours, PASSHE's utilization expectations calculate to 25.1 hours per station (37.5 weekly room hours x 67% student station occupancy). West Chester University averages 28.6 hours per student station, which is almost 15% greater than the PASSHE expectation.

When comparing classroom utilization at West Chester University to PASSHE's expectation for utilization, all methods concur that WCU exceeds these expectations by a substantial amount. This is a clear indicator that, as WCU moves toward the space needs analysis, the application of the PASSHE guidelines for classroom use will produce a significant deficit of classrooms on campus.

### National Perspective on Classroom Utilization

Approximately half the states either have a statewide expectation or there are system expectations in one or more of their public higher education systems. The lowest classroom target currently in use is 30 hours per week. Traditionally, this has been the most widely accepted standard and remains the most commonly used figure today. In many jurisdictions weekly room hours were based on day usage only, with evening and weekend usage being excluded from the expectation. Recently, the more common practice is to use that target as an all-hours expectation.

In a few states, much higher utilization targets have been adopted. The average of those systems which have classroom utilization targets is now 35 hours.

The consultants have performed utilization studies for over 100 campuses. The most common findings are between 25 average weekly hours per classroom and 35 average weekly hours per classroom. This is scheduled use, for credit instruction.

The second utilization factor, which is normally part of the utilization expectation in those jurisdictions which have adopted them, is the percentage of seats filled when the rooms are in use. The most widely used number is 60%. There has recently been a strong push to increase the utilization factor to 67%. One jurisdiction, the Arizona Board of Regents, has gone to 75% for a particular subset of classrooms. In the many studies the consultant has conducted, the actual use tends to be between 50% and 65%. Because institutions do not ultimately control the final enrollment in a specific course, there will always be a degree of mismatch between estimated course size and the actual size of the course.

The consultant has conducted utilization studies for several of the PASSHE institutions over the last five years. The classroom utilization at these institutions has ranged as follows:

- Weekly Room Hours – 25 to 35 hours
- Student Station Occupancy – 65% to 73%

### National Classroom Guideline Survey

Scheduled Use	Weekly Room Hours	Student Station Occupancy Percentage
Average of Guidelines	35	64%
Median	32	65%
Most Used Guideline	30	60%
<b>PASSHE Guidelines</b>	<b>37.5</b>	<b>67%</b>
<b>West Chester University</b>	<b>42</b>	<b>74%</b>

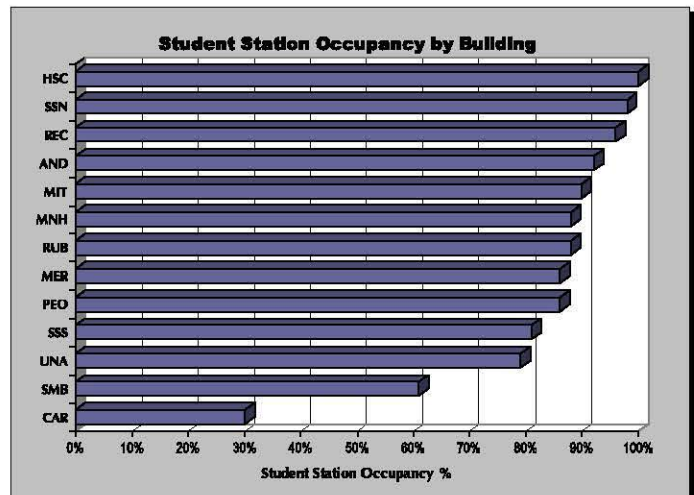
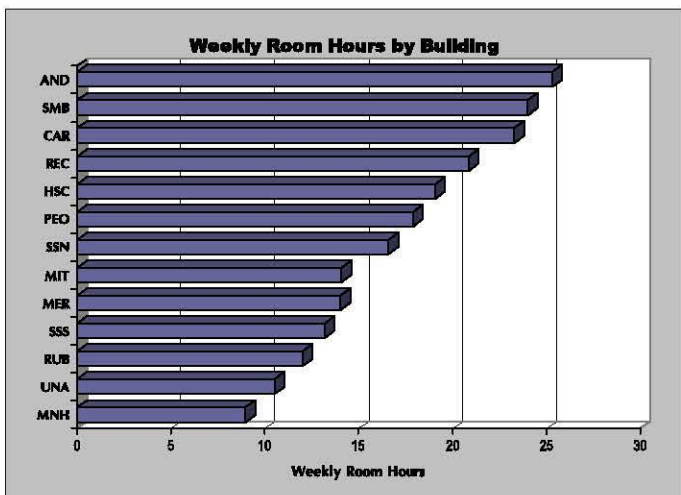
West Chester University's average of 42 Weekly Room Hours and 74% Student Station Occupancy is consistently higher than other PASSHE institutions as the findings are toward the upper end of the range.

## Teaching Laboratory Utilization

In Fall 2009, there were 68 rooms classified as teaching laboratories within the West Chester University facilities inventory. The largest number of laboratories can be found in Merion Hall (Sciences) and Mitchell Hall (Temporary home of the Fine Arts). As the tables and charts indicate, WCU teaching laboratories averaged 17 room hours per week, at 86% student station occupancy. This averages 14.6 hours per student station which is 91% of the PASSHE standard of 16.1 hours per station (23 weekly room hour expectation times 70% student station occupancy). Seventeen of the labs, representing a quarter of the total laboratories, averaged 24 weekly room hours or higher. Laboratories with low weekly room hours were noted in Main Hall (9 WRH) and Ruby Jones Hall (12 WRH).

## Teaching Laboratory Utilization Analysis by Building Summary

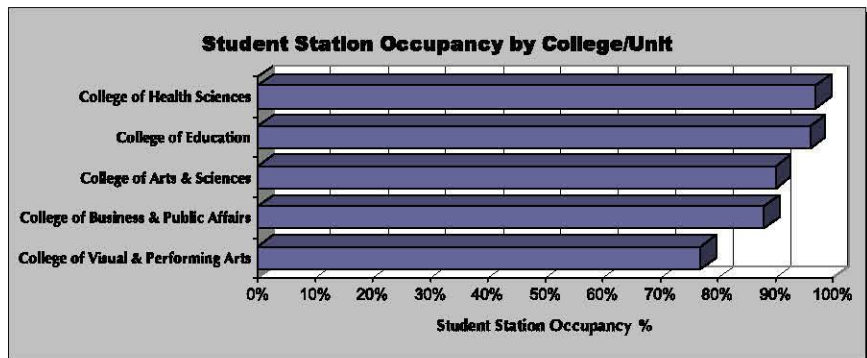
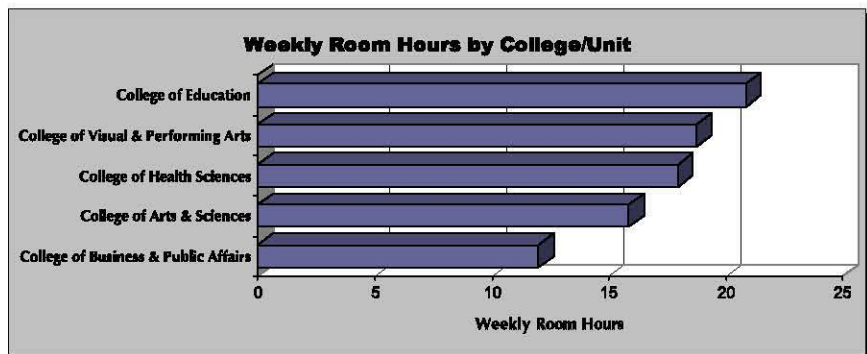
Building Name and Id		No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
201 Carter Dr	CAR	1	347	35	3	23	30%
25 University Ave (Old Swope)	UNA	2	574	39	14	11	79%
Anderson Hall	AND	7	819	35	22	25	92%
Main Hall	MNH	1	666	25	24	9	88%
Merion Hall (formerly Boucher)	MER	13	940	41	21	14	86%
Mitchell Hall	MIT	10	882	33	19	14	90%
Peoples Building	PEO	2	583	28	18	18	86%
Recitation Hall	REC	2	793	29	26	21	96%
Ruby Jones Hall	RUB	1	630	29	19	12	88%
Schmucker Science Center North	SSN	8	1,047	44	20	17	98%
Schmucker Science Center South	SSS	9	1,033	43	21	13	81%
Sturzebecker HSC	HSC	6	1,061	47	23	19	108%
Swope Music Bldg	SMB	6	869	24	18	24	61%
AVERAGE TOTAL		68	876	37	20	17	86%



When results are sorted by College, the College of Education had the highest room usage, with an average of 21 hours per week. Laboratories in the College of Arts and Sciences averaged 16 hours per week. This low utilization is partly due to the low utilization of science labs in Schmucker Science Center – South, which averaged 13 week room hours.

### Teaching Laboratory Utilization Analysis by College/Unit Summary

College/Unit	No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Average Weekly Room Hours	Hours in Use Student Station Occupancy %
College of Arts & Sciences	40	907	39	21	16	90%
College of Business & Public Affairs	1	630	29	19	12	88%
College of Education	2	793	29	26	21	96%
College of Health Sciences	5	762	40	19	18	97%
College of Visual & Performing Arts	20	863	36	18	19	77%
<b>AVERAGE TOTAL</b>	<b>68</b>	<b>876</b>	<b>37</b>	<b>20</b>	<b>17</b>	<b>86%</b>



Of the total 68 laboratories, approximately 74% or 48 rooms had an occupancy rate at or above 70%. Only four laboratories had average student station fill rate of 50% or lower. Laboratories in the Sturzebecker Health Science Center had the highest student station occupancy, averaging over 100%. This average is due to the varied functions of several rooms. For example, a dance

class with enrollments of 18 during one section and a kinesiology class with enrollments of 36 during another section.

### ***National Perspective on Teaching Laboratory Utilization***

As with classroom utilization, guideline targets are usually implemented by states, systems, or institutions within the public education sector. These targets tend to oversimplify the use of teaching laboratories. Some guideline targets are based on discipline while others are based on the intensity in which a discipline relies on laboratories for instructional delivery.

The most used guideline targets have expectations of 20 hours per week at an 80% student station occupancy rate. In an effort to increase the use of it laboratories, one state has raised its utilization goals to an extreme of 40 hours per week at 85% student station occupancy. One set of published guidelines recommends 11.25 weekly room hours for certain heavily equipped labs such as engineering, agriculture, and the health professions but maintains the 80% student station occupancy rate.

While 80% student station occupancy is the most used rate in guideline targets, most universities rarely achieve it. In reality, occupancy averages that the consultants have studied typically range between 60% and 75%.

Teaching laboratory usage has as much to do with course level, instructional methods, and student research activities and capstone experiences, as it does discipline or discipline type. It is not unusual to find lower scheduled use (ten hours and under) in upper division laboratories. On the other hand, entry level laboratories can have much higher levels of scheduled use – 20 hours or more.

When more than one laboratory is required and is equipped in the same fashion as another, serious consideration should be given to making sure that a higher level of usage is being achieved. Laboratories tend to be subject specific and do not lend well to sharing among disciplines. However, more laboratories are being used for interdisciplinary activities which can assist in achieving higher weekly room hour usage. Conversely, if customized labs are required for interdisciplinary activities then scheduled use may be low.

Laboratory utilization can be more difficult to measure through standardized course data. The reasons for this are many. A laboratory is sometimes a suite of rooms that are split into activity specific functions. The students arrive for class and then rotate through the different rooms. Sometimes a class is split into smaller cohorts where some use the lab through the first half of the semester and the others use the lab for the second half. Many upper division laboratories are also used for student research activities or capstone experiences and have very low regularly scheduled use.

Laboratories have additional time demands that classrooms typically do not have. For example, there is setup and preparation time required, sometimes for a class, sometimes for the day. Other laboratories require an experiment to stay set up for multiple lab sessions or the entire semester which excludes the room from other scheduled activity.

### **National Teaching Laboratory Guideline Survey**

Scheduled Use	Weekly Room Hours	Student Station Occupancy Percentage
Average of Guidelines	23	78%
Median	23	80%
Most Used Guideline	20	80%
<b>PASSHE Guidelines</b>	<b>23</b>	<b>70%</b>
<b>West Chester University</b>	<b>17</b>	<b>86%</b>

The consultant has conducted utilization studies for several of the PASSHE institutions over the last five years. The teaching laboratory utilization at these universities has ranged as follows:

- Weekly Room Hours – 10 to 25 hours
- Student Station Occupancy – 74% to 82%

West Chester University's averages are at the middle range of the weekly room hours and upper end of the range for student station occupancy.



# **Space Needs Analysis**

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## SPACE NEEDS ANALYSIS

### Guideline Assumptions and Application

This section summarizes the space needs by functional space category. The different methods used included PASSHE state guideline recommendations, benchmarking, review of design and/or program plans completed for prior projects and empirical data to project space needs. Paulien & Associates also completed space need analyses for several other universities in Pennsylvania. In an effort to maintain consistency of analysis, if applicable to West Chester University, many of the same guideline application parameters were used in this study.

### Interpretation of Space Needs Analysis Outcomes

For each space category, four columns illustrate the findings at the base year (Fall 2009) and the plan horizon (Fall 2020). The Existing ASF at the base year and plan horizon includes all current academic facilities. Only assignable square feet (ASF) were included, which is the usable area of a building and does not include circulation areas such as corridors, mechanical/electrical areas, building structure space, custodial closets, or restrooms. As an illustration, on the WCU campus there was 98,226 ASF of existing Classrooms & Service space in Fall 2009 (see Campuswide Space Needs Analysis Table). At the plan horizon, the existing ASF includes additional space due to renovation of E. O. Bull, and new construction (BPAC).

Reviewing the second column, the Guideline ASF is a calculation of how much space is ideally needed in each space category at the base year and plan horizon, given enrollment, program, and staffing assumptions. The consultant reviewed PASSHE and peer results and applied appropriate guidelines relative to an institution of WCU's enrollment, program mix, and mission. Referring to the table, the guideline calculation produced a need for 130,445 ASF of Classroom & Service space at the base year (Fall 2009).

The Surplus/(Deficit) column is the difference between the Existing ASF and Guideline ASF totals, while the Percent Surplus/(Deficit) column is the magnitude of the difference expressed as a percent. For each column, deficits are in parentheses and indicate a space need in that category. Referring to the example, the WCU campus had a 27,286 ASF or 23% deficit of Classroom & Service space at the plan horizon. The space needs analysis is quantitative only and does not take into account the quality of space to serve the campus mission.

### Campuswide Space Needs Analysis

The Space Needs Analysis by space category is noted in the next table. At the Fall 2009 base year, there was an overall deficit of slightly more than 308,000 ASF of space on the West Chester University Campus. With the exception of Administrative Offices & Service, space deficits were noted in each space category. The largest deficits were noted in the Recreation and Student Center categories, accounting for 37% of the campus deficit total.

## Campuswide Space Needs Analysis

### West Chester University of Pennsylvania

SPACE CATEGORY	Fall 2009 Student Headcount = 14,211 Staffing FTE = 1,007				Plan Horizon Student Headcount = 16,605 Staffing FTE = 1,200			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	98,226	130,445	(32,219)	(33%)	118,077	145,363	(27,286)	(23%)
Teaching Laboratories & Service	85,186	107,082	(21,896)	(26%)	95,168	113,368	(18,200)	(19%)
Open Laboratories & Service	29,807	36,758	(6,951)	(23%)	29,555	42,512	(12,957)	(44%)
Research Laboratories & Service	28,903	38,440	(9,537)	(33%)	28,903	43,750	(14,847)	(51%)
Academic Offices & Service	150,562	168,675	(18,113)	(12%)	164,942	184,445	(19,503)	(12%)
Other Academic Department Space	35,735	41,858	(5,923)	(17%)	39,455	48,182	(8,727)	(22%)
<i>Academic Space Subtotal</i>	<i>428,419</i>	<i>523,058</i>	<i>(94,639)</i>	<i>(22%)</i>	<i>476,100</i>	<i>577,620</i>	<i>(101,520)</i>	<i>(21%)</i>
<b>Academic Support Space</b>								
Administrative Offices & Service	83,129	81,335	1,794	2%	84,051	88,415	(4,364)	(5%)
Library	112,027	148,757	(34,730)	(31%)	112,027	186,806	(54,779)	(49%)
Assembly & Exhibit	38,076	65,962	(27,886)	(73%)	48,282	77,472	(29,190)	(60%)
Physical Plant	62,747	65,162	(2,415)	(4%)	63,297	76,793	(13,496)	(21%)
Other Administrative Department Spa	17,697	18,378	(681)	(4%)	17,897	21,257	(3,360)	(19%)
<i>Academic Support Space Subtotal</i>	<i>313,676</i>	<i>377,594</i>	<i>(63,918)</i>	<i>(20%)</i>	<i>325,554</i>	<i>430,743</i>	<i>(105,189)</i>	<i>(32%)</i>
<b>PE / Recreation / Athletics</b>								
Recreation	14,599	76,261	(61,662)	(422%)	61,965	85,850	(23,885)	(39%)
Athletics/PE	125,124	159,619	(34,495)	(28%)	125,124	176,881	(51,757)	(41%)
<i>PE / Recreation / Athletics Subtotal</i>	<i>139,723</i>	<i>235,880</i>	<i>(96,157)</i>	<i>(69%)</i>	<i>187,089</i>	<i>262,731</i>	<i>(75,642)</i>	<i>(40%)</i>
<b>Auxiliary Space</b>								
Student Center	57,331	110,269	(52,938)	(92%)	62,945	127,530	(64,585)	(103%)
Student Health Care	4,244	4,776	(532)	(13%)	4,244	5,351	(1,107)	(26%)
Graduate Business Center	28,644	28,644	0	0%	28,644	28,644	0	0%
<i>Auxiliary Space Subtotal</i>	<i>90,219</i>	<i>143,689</i>	<i>(53,470)</i>	<i>(59%)</i>	<i>95,833</i>	<i>161,525</i>	<i>(65,692)</i>	<i>(69%)</i>
<b>CAMPUS TOTAL</b>	<b>972,037</b>	<b>1,280,221</b>	<b>(308,184)</b>	<b>(32%)</b>	<b>1,084,576</b>	<b>1,432,619</b>	<b>(348,043)</b>	<b>(32%)</b>
<i>Childcare Center</i>	<i>5,834</i>				<i>5,834</i>			
<i>Inactive/Conversion Space</i>	<i>35,511</i>				<i>30,461</i>			
<i>Outside Organizations</i>	<i>14,128</i>				<i>14,128</i>			

As the campus grows to an institution of over 16,600 headcount students and develops additional programs and services, the need for additional Academic Space is illustrated in the table. At the plan horizon, deficits exist in every space category, with a campus total need of more than 348,000 ASF. The largest deficits are in the Student Center, Library, and Athletics/PE categories. A significant portion of the deficit in the Recreation space category is eliminated with the opening of the new recreation center.

***Academic Space***

Slightly more than a third of the space deficits are contained within the six categories that make up the Academic Space portion of the space needs analysis.

Classrooms are defined as any room generally used for scheduled instruction requiring no special equipment and referred to as a general purpose classroom, seminar room, or lecture hall. As WCU classroom utilization exceeds PASSHE guidelines, the space needs analysis generated a 27,286 ASF deficit of Classroom & Service space at the plan horizon.

Existing teaching laboratories at the West Chester University Campus include computer, health occupations, art, and science laboratories. However, the campus requires additional Teaching Laboratories and related support space. Specifically, many health laboratories and support areas are smaller than the consultants would typically see for related enrollments. The 18,200 ASF deficit at the plan horizon includes inadequacies of space in existing laboratories, space for additional enrollment growth, and the creation of new laboratories for anticipated programs. The analysis also assumes that the art related laboratories in the renovated E. O. Bull Center and the computer laboratories in the BPAC facility are completed.

The space classified as Open Laboratories includes rooms that are open for student use and are not used on a regularly scheduled basis. At the plan horizon, the need for an additional 12,957 ASF Open Laboratories space on campus was generated. Examples of Open Laboratories space include open computer labs and specialized laboratories such as the tutoring areas and the academic learning center areas for LARC.

There is an increased emphasis being placed on research at WCU. The space needs analysis generated a deficit of 14,847 ASF at the plan horizon as additional faculty engage in research and current spaces are expanded as research and development expenditures increase over the planning period.

The Academic Offices & Service category includes office space for full- and temporary faculty and any staff that are working under academic colleges or Academic Affairs. The Academic Office category also includes conference rooms and service areas such as workrooms where faculty and staff may make copies, use the fax machine, or gather office related materials. At the plan horizon, the campus will require substantially more office space (19,503 ASF) than is currently available. The factor driving the deficit is related to the growth of full-time faculty to accommodate increased enrollments as well as the need for additional conference rooms for faculty meetings. The guideline also included additional space for part time faculty. Areas for part time faculty are typically spread throughout the campus, but located within proximity to full-time faculty and the division office to foster collaboration and unity as well as to avoid duplication of resources.

Facilities classified as Other Academic Department space include all other areas assigned to an academic department that were not included in the other classifications of Classrooms, Teaching Laboratories, Open Laboratories,

Research Laboratories, or Office. Other Academic Department space at the WCU campus included faculty lounges, greenhouses, meeting rooms, and resource and media center spaces. A deficit of slightly less than 9,000 ASF of space was generated at the plan horizon.

### ***Academic Support Space***

Academic Support Space includes all spaces that directly or indirectly support the academic mission of WCU. Overall, an additional 105,189 ASF of additional space is needed in these categories at the plan horizon.

Similar to the Academic Offices & Service category, the Administrative Offices & Service category includes space for administrators and staff who are working outside of the academic units. This includes the President, Student Affairs, Business, and Finance Services, Information Technology, and University Advancement Foundation. The plan horizon indicates a 4,364 ASF deficit of space as new positions are needed to manage planned enrollment growth and to compensate for position vacancies.

The Library consists of stacks area, casual seating, on-line resource area, staff offices, various study rooms, work rooms (copier, printer, etc.), and areas containing open use computers in the Francis Harvey Green Library and the Presser Music Library. The guideline application, as illustrated in the table, generated a deficit of 54,779 ASF in this type of space at the plan horizon.

Assembly & Exhibit Space is defined as any room designed and equipped for the assembly of large numbers of students or community members. This includes the Emile K. Asplundh Concert Hall, the Madeleine Wing Adler Theatre, art galleries, the Gates Recital Hall, and related support spaces. The guideline generated a need for an additional 29,190 ASF at the plan horizon.

Physical Plant space includes carpenter, plumbing, HVAC, electrical, and painting, printing shops and tool rooms as well as any centralized storage space. At the time of this report, facilities was also maintaining many of the older residential life facilities on the campus. Additional shops, printing/copy areas and central storage spaces will be needed as the campus continues to increase enrollments. The guideline generated a need for an additional 13,496 ASF at the plan horizon.

As with Other Academic Department space, Other Administrative Department space consists of the same types of spaces with the exception that the areas are allocated to administrative units. These spaces include non-office related work and processing rooms, telecommunication/server rooms, phone rooms, lounge areas, and general meeting rooms. The consultant shows a 3,360 ASF need in this space category at the plan horizon.

### ***Physical Education/ Recreation and Athletics***

At the West Chester University Campus, physical education, recreation and athletics have dedicated spaces but also share many facilities. A new recreation center is scheduled to be constructed on the campus, reducing the overall deficit at the plan horizon to 23,885 ASF. It is expected that the current recreation areas located in the Sykes Student Union will be re-purposed after construction of the new Recreation Center is complete.

Physical Education/Athletic space includes gymnasias, basketball courts, weight or exercise rooms, indoor swimming pools, and similar. The guideline generated a substantial need of 51,757 ASF in this area for the expansion of team rooms, visiting team lockers, an indoor practice field house, and weight room areas.

### ***Auxiliary Space***

The facilities within the Sykes Student Union and parts of Lawrence Hall include food services and dining, bookstore, student meeting rooms, offices for student government and clubs, and student lounges. Areas that contain Student Affairs personnel and Student Services Inc. were included in the administrative office guideline. Despite the consultants applying a slightly reduced PASSHE guideline, there is a need for an additional 64,585 ASF at the plan horizon.

The Student Health and Wellness Center is located on the second floor of Wayne Hall. Application of the PASSHE guideline generated a need for an additional 1,107 ASF at the plan horizon.

## **College/Unit Space Needs Analysis**

The consultants met with College Deans and unit Vice Presidents at the West Chester University Campus. The space needs analysis was performed at the college level and summarized for WCU as a whole. While the previous section described the outcomes campuswide by type of space, this section describes the outcomes on a college/unit basis.

The following tables in this section of the report provide summaries of the key findings for each academic division and key administrative units. The major space categories of teaching laboratory, open laboratory, and office space are shown for each college unit and primarily office and other department space at the administrative level.

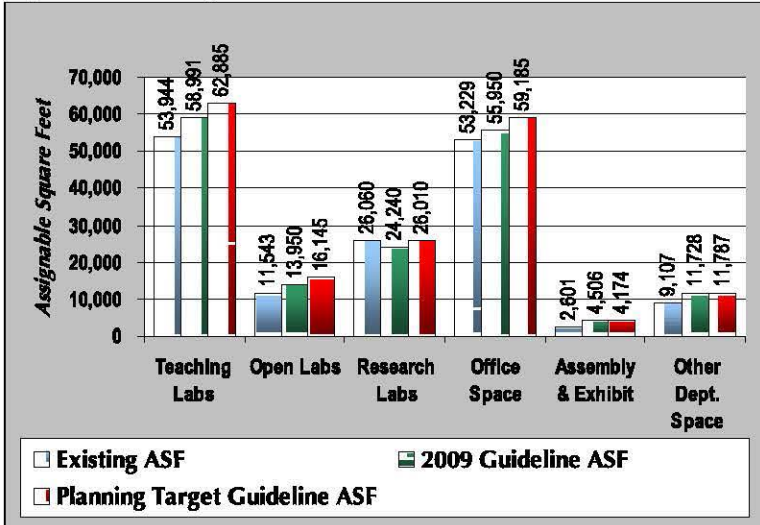
Each of the summary tables for the academic units shows an academic space total that excludes the existing classrooms and guideline assignable square feet, regardless of whether the classroom were dedicated to a particular school or college or were assigned centrally. Therefore, the overall classroom analysis is best viewed at the campuswide level.

The space needs analysis in the previous section show surpluses and deficits by functional space categories on a campuswide basis. The application and review of guidelines in relation to existing space at each college/unit shows the various surpluses and deficits that may exist that are not obvious on a campuswide study.

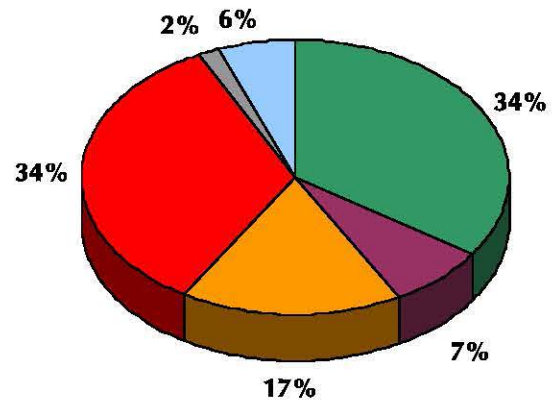
The remainder of this section concentrates on describing the space needs in relation to existing space for an individual college or administrative unit. Enrollment growth over the master plan period was noted earlier in this report and noted that each college/unit will grow at different rates for undergraduate and graduate students. These percentage increases were factored into the space needs analysis.

## College of Arts & Sciences

### Space Analysis



Teaching Labs  
Research Labs  
Assembly & Exhibit  
Open Labs  
Office Space  
Other Dept. Space



Existing Space Distribution

ASF = Assignable Square Feet

### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Other Acad Space	TOTAL OF ASF
210 E Rosedale				1,955			98	2,053
25 Univ. Ave.	1,273	2,138		8,967			406	12,784
823 S High St				501			830	1,331
Anderson Hall	3,406	2,090		2,712				8,208
Chem Stor Bldg							703	703
Main Hall	836	1,615		14,924			255	17,630
Merion Science	17,336	993	8,563	5,678			2,138	34,708
Mitchell Hall				1,109				1,109
Old Library	788	989		4,123		767	156	6,823
Peoples Building	1,276	611	180	4,277			956	7,300
Psych Trailer			1,046					1,046
Reynolds Hall				134				134
Schmucker Link	2,160		193	1,438		1,834	1,848	7,473
Schmucker North	11,646	1,539	4,800	3,807			1,402	23,194
Schmucker South	15,223	1,568	11,278	3,604			315	31,988
<b>TOTAL</b>	<b>53,944</b>	<b>11,543</b>	<b>26,060</b>	<b>53,229</b>		<b>2,601</b>	<b>9,107</b>	<b>156,484</b>

**College of Arts & Sciences****Current and Future Space Needs**

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Teaching Laboratories & Service	53,944	58,991	(5,047)	53,944	62,885	(8,941)
Open Laboratories & Service	11,543	13,950	(2,407)	11,543	16,145	(4,602)
Research Laboratories & Service	26,060	24,240	1,820	26,060	26,010	50
Academic Offices & Service	53,229	55,950	(2,721)	53,229	59,185	(5,956)
Other Academic Department Space	9,107	11,728	(2,621)	9,107	11,787	(2,680)
<i>Academic Space Subtotal</i>	<i>153,883</i>	<i>164,859</i>	<i>(10,976)</i>	<i>153,883</i>	<i>176,012</i>	<i>(22,129)</i>
<b>Academic Support Space</b>						
Assembly & Exhibit	2,601	4,506	(1,905)	2,601	4,174	(1,573)
<b>TOTAL</b>	<b>156,484</b>	<b>169,365</b>	<b>(12,881)</b>	<b>156,484</b>	<b>180,186</b>	<b>(23,702)</b>

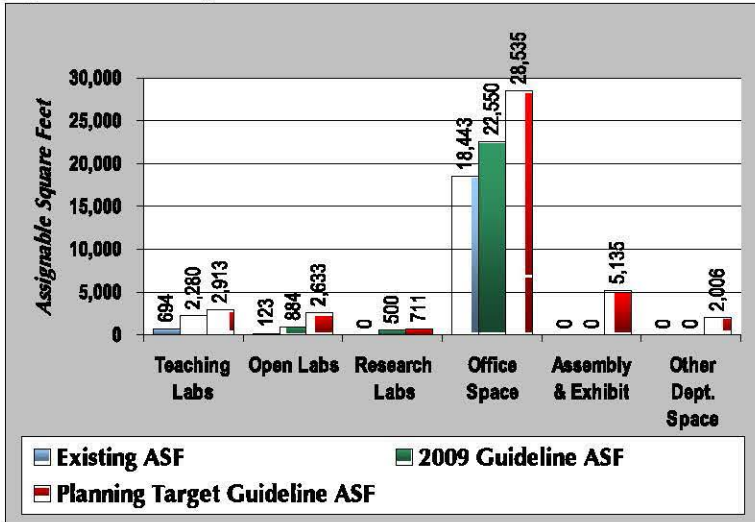
ASF = Assignable Square Feet

**College of Arts and Sciences**

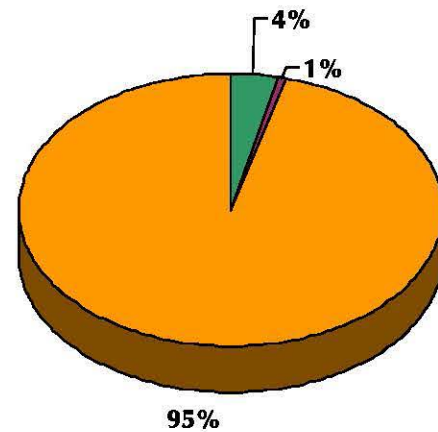
The College of Arts and Sciences provides many of the courses for general education and the core curriculum, including English, Mathematics, Physical Sciences (Biology, Chemistry, Physics, and Geology), Social Sciences, History, Philosophy, Psychology, and Sociology. The space needs analysis generated a need for additional teaching laboratories, especially in the physical sciences and psychology as undergraduate enrollments are expected to increase by 8.5%. As with each of the Colleges, additional faculty offices, part-time faculty areas, conference rooms and office support spaces will be needed at the plan horizon. Overall, the College of Arts and Sciences generated a deficit of approximately 24,000 ASF of space at the plan horizon, excluding classrooms.

## College of Business & Public Affairs

### Space Analysis



Teaching Labs Open Labs Office Space



Existing Space Distribution

ASF = Assignable Square Feet

### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Other Acad Space	TOTAL OF ASF
114 W Rosedale		123		1,704				1,827
Anderson Hall	64			7,665				7,729
BPAC								
Reynolds Hall				3,068				3,068
Ruby Jones Hall	630			6,006				6,636
<b>TOTAL</b>	<b>694</b>	<b>123</b>		<b>18,443</b>				<b>19,260</b>

### Current and Future Space Needs

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Teaching Laboratories & Service	694	2,280	(1,586)	1,250	2,913	(1,663)
Open Laboratories & Service	123	884	(761)	1,043	2,633	(1,590)
Research Laboratories & Service	0	500	(500)	0	711	(711)
Academic Offices & Service	18,443	22,550	(4,107)	29,997	28,535	1,462
Other Academic Department Space	0	0	0	1,550	2,006	(456)
<b>Academic Support Space</b>						
Assembly & Exhibit	0	0	0	3,200	5,135	(1,935)
<b>TOTAL</b>	<b>19,260</b>	<b>26,214</b>	<b>(6,954)</b>	<b>37,040</b>	<b>41,933</b>	<b>(4,893)</b>

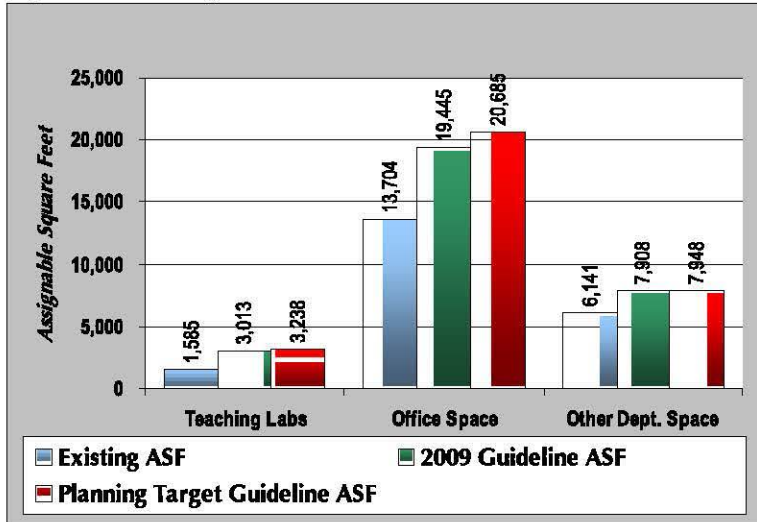
ASF = Assignable Square Feet

***College of Business and Public Affairs***

The College of Business and Public Affairs houses programs in Accounting, Economics & Finance, Management, Marketing, Criminal Justice, Geography & Planning, Political Science and Social Work. Existing and anticipated programs are expected to increase enrollments by 25% at the undergraduate level and approximately 84% at the graduate level. To accommodate enrollments, a new Business and Public Affairs Center (BPAC) is being planned. The BPAC will provide a new home for the College of Business and Public Affairs. As a result, the plan horizon space needs analysis generated a need of slightly less than 5,000 ASF of space once the BPAC is completed. The space need is contained predominately with the Teaching Laboratories and Open Laboratories categories.

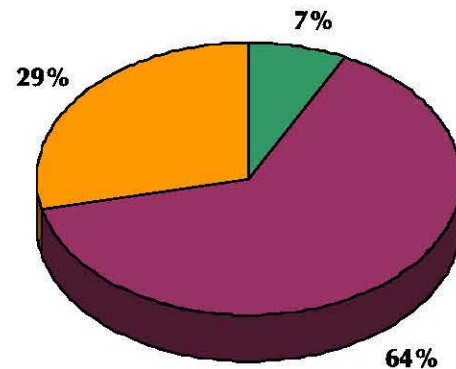
## College of Education

### Space Analysis



ASF = Assignable Square Feet

Teaching Labs      Office Space  
Other Dept. Space



Existing Space Distribution

### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Other Acad Space	TOTAL OF ASF
703 S High				960				960
Anderson Hall				507				507
Ehinger Office				1,427			234	1,661
FHG Library 1				837				837
Recitation Hall	1,585			9,973			5,907	17,465
<b>TOTAL</b>	<b>1,585</b>			<b>13,704</b>			<b>6,141</b>	<b>21,430</b>

### Current and Future Space Needs

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Teaching Laboratories & Service	1,585	3,013	(1,428)	1,585	3,238	(1,653)
Academic Offices & Service	13,704	19,445	(5,741)	13,704	20,685	(6,981)
Other Academic Department Space	6,141	7,908	(1,767)	6,141	7,948	(1,807)
<b>TOTAL</b>	<b>21,430</b>	<b>30,366</b>	<b>(8,936)</b>	<b>21,430</b>	<b>31,871</b>	<b>(10,441)</b>

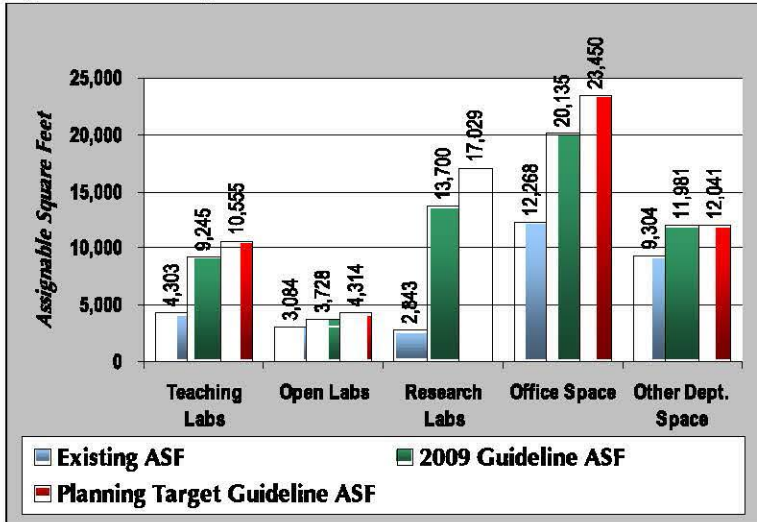
ASF = Assignable Square Feet

***College of Education***

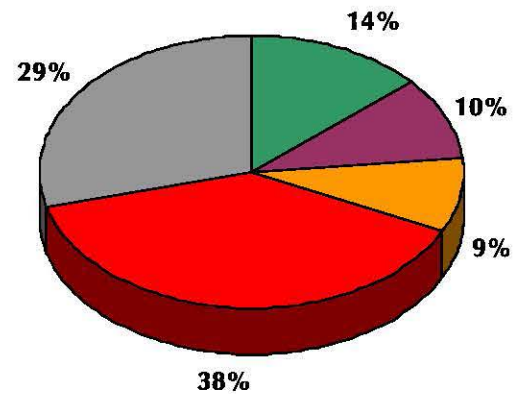
The College of Education is expected to increase on-campus enrollments by an average of 9%. Programs include Counselor Education, Early and Middle Grades Education, Special Education, Literacy, and Professional & Secondary Education. The College also houses an Educational Technology and Teacher Ed Center. The College's primary space is located in Recitation Hall, but also has space in other buildings. The space needs analysis generated a 10,441 ASF deficit at the plan horizon, excluding classroom and seminar rooms. There is a current shortage of office space as some faculty share offices. The approximately 7,000 ASF deficit in the Academic Offices & Service category is for additional faculty offices, conference rooms and office support spaces. Space needs for an expanded Literacy Clinic are noted under the Other Academic Department Space category.

## College of Health Sciences

### Space Analysis



Teaching Labs  
Research Labs  
Other Dept. Space  
Open Labs  
Office Space



Existing Space Distribution

ASF = Assignable Square Feet

### Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Other Acad Space	TOTAL OF ASF
201 Carter Dr	347			1,314			2,260	3,921
Sturzebecker HSC	3,956	3,084	2,843	10,954			7,044	27,881
<b>TOTAL</b>	<b>4,303</b>	<b>3,084</b>	<b>2,843</b>	<b>12,268</b>			<b>9,304</b>	<b>31,802</b>

### Current and Future Space Needs

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Teaching Laboratories & Service	4,303	9,245	(4,942)	4,303	10,555	(6,252)
Open Laboratories & Service	3,084	3,728	(644)	3,084	4,314	(1,230)
Research Laboratories & Service	2,843	13,700	(10,857)	2,843	17,029	(14,186)
Academic Offices & Service	12,268	20,135	(7,867)	12,268	23,450	(11,182)
Other Academic Department Space	9,304	11,981	(2,677)	9,304	12,041	(2,737)
<b>TOTAL</b>	<b>31,802</b>	<b>58,789</b>	<b>(26,987)</b>	<b>31,802</b>	<b>67,389</b>	<b>(35,587)</b>

ASF = Assignable Square Feet

***College of Health Sciences***

The College of Health Sciences offers degrees and programs in Communication Disorders, Health, Kinesiology, Nursing, and Sports Medicine. On-campus enrollment growth, established at 14% for undergraduates and 90% for graduates, is higher than most of the other Colleges, mostly due to local demand for health-related program graduates. The majority of these programs are housed at the Sturzebecker Health Sciences Center, located at the South Campus. New programs (Nutrition, Public Health, and Applied Doctorates) are being contemplated for the future.

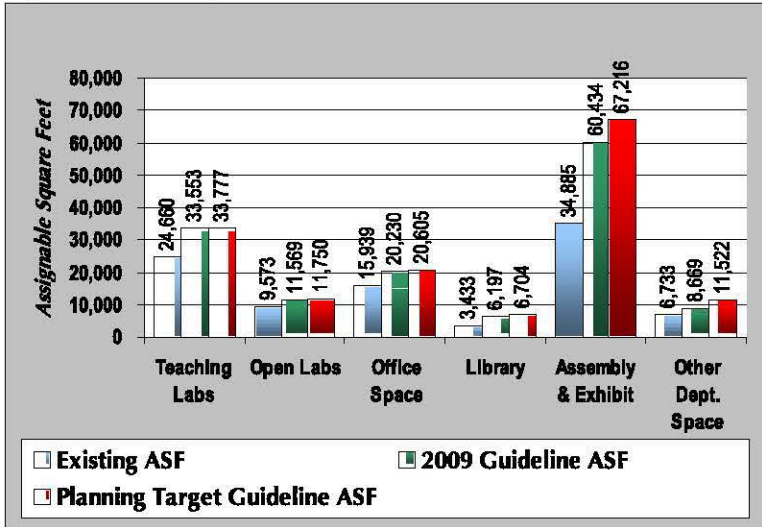
Many of the programs in the College of Health Sciences are laboratory intensive. As such, there will be a need for an additional 6,252 ASF of space in Teaching Laboratories & Service space. This need not only includes additional laboratory and support space for existing laboratories, especially in the Health, Nursing and Kinesiology, but new laboratories to support enrollment growth and new programs. Increased laboratory space would also allow for larger class sizes in most programs.

Research Laboratories space generates a significant need of over 17,000 ASF at the plan horizon. This is over a 14,000 ASF deficit of space when compared to existing space.

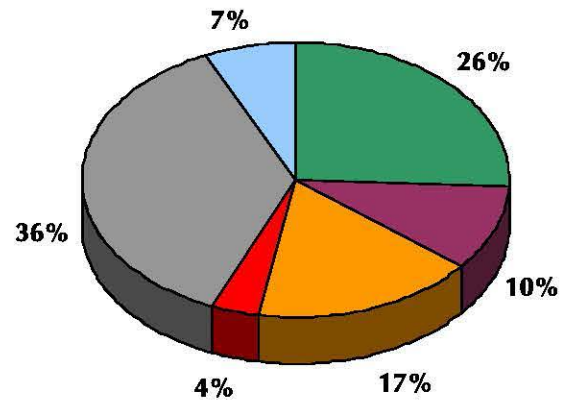
The 2,272 ASF in the Other Academic Department Space category includes the clinic portion of Communicative Disorders clinic as well as lounge space for graduate students. In summary, the space needs analysis for College of Health Sciences generated a need for slightly more than 67,000 ASF of space, excluding classrooms at the plan horizon. This is a deficit of more than 35,000 ASF when compared to existing space.

## College of Visual &amp; Performing Arts

## Space Analysis



Teaching Labs  
Office Space  
Assembly & Exhibit  
Open Labs  
Library  
Other Dept. Space



Existing Space Distribution

ASF = Assignable Square Feet

## Existing Space by Building

Building	Teaching Labs	Open Labs	Research Labs	Acad Offices	Library	Assembly /Exhibit	Other Acad Space	TOTAL OF ASF
201 Carter Dr	3,008							3,008
701 S High St							3,364	3,364
Anderson Hall	3,320			2,927			415	6,662
E O Bull Center								
Goshen Hall	20	1,880						1,900
Mitchell Hall	8,230	2,405		2,222		2,846		15,703
Phillips Memorial						19,140		19,140
Sturzebecker HSC	3,197			391				3,588
Swope Music Bldg	6,885	5,288		10,399	3,433	11,093	2,954	40,052
Sykes Student Union								
Tanglewood Garage						1,806		1,806
<b>TOTAL</b>	<b>24,660</b>	<b>9,573</b>		<b>15,939</b>	<b>3,433</b>	<b>34,885</b>	<b>6,733</b>	<b>95,223</b>

**College of Visual & Performing Arts****Current and Future Space Needs**

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Teaching Laboratories & Service	24,660	33,553	(8,893)	34,086	33,777	309
Open Laboratories & Service	9,573	11,569	(1,996)	8,401	11,750	(3,349)
Academic Offices & Service	15,939	20,230	(4,291)	18,765	20,605	(1,840)
Other Academic Department Space	6,733	8,669	(1,936)	8,903	11,522	(2,619)
<i>Academic Space Subtotal</i>	<i>56,905</i>	<i>74,021</i>	<i>(17,116)</i>	<i>70,155</i>	<i>77,654</i>	<i>(7,499)</i>
<b>Academic Support Space</b>						
Library	3,433	6,197	(2,764)	3,433	6,704	(3,271)
Assembly & Exhibit	34,885	60,434	(25,549)	41,891	67,216	(25,325)
<i>Academic Support Space Subtotal</i>	<i>38,318</i>	<i>66,631</i>	<i>(28,313)</i>	<i>45,324</i>	<i>73,920</i>	<i>(28,596)</i>
<b>TOTAL</b>	<b>95,223</b>	<b>140,652</b>	<b>(45,429)</b>	<b>115,479</b>	<b>151,574</b>	<b>(36,095)</b>

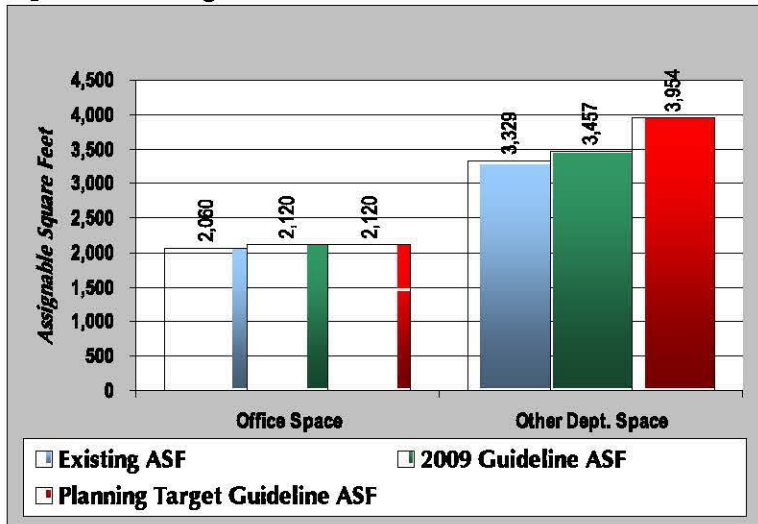
ASF = Assignable Square Feet

**College of Visual and Performing Arts**

The College of Visual and Performing Arts includes programs in Applied Music, Music Education and history, Music Theory & Composition, Art, and Theatre and Dance. The College is housed primarily in the Swope Music and Performing Arts Building and E. O. Bull Center, which was under renovation at this time of this report. Enrollments are expected to increase slightly over the plan horizon by an average of 4.5% at the undergraduate and graduate level.

Excluding classrooms, the space needs analysis generated a need for approximately 37,000 ASF at the plan horizon. Given the renovation and modest expansion of the E. O. Bull Center, this will still be a need for additional space at the plan horizon. The greatest need was generated in the Assembly & Exhibit space category as current theatre and music performance venues and art gallery space are undersized at the projected student enrollment level. There is also a need for a additional set and costume storage. Faculty chairs also expressed a need for more performance space availability as all senior students perform recitals.

The 3,349 ASF of additional need in the Open Laboratories & Service space category includes areas for additional lighting design labs, scene and set building open spaces, and unscheduled acting/rehearsal rooms. The Presser Music Library is cramped and lacking space to grow. As a result, the space needs analysis generated a need for an additional 3,271 ASF, almost doubling the size of the current facility.

**President****Space Analysis**

ASF = Assignable Square Feet

**Existing Space by Building**

Building	Open Labs	Admn Offices	Library	REC Rec	Athletics Athletics	Student Center	Physical Plant	Other Acad Space	Other Admn Space	TOTAL OF ASF
13-15 Univ. Ave		200								200
823 S High St		155								155
Philips Memorial		1,705							3,329	5,034
<b>TOTAL</b>		<b>2,060</b>							<b>3,329</b>	<b>5,389</b>

**Current and Future Space Needs**

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Support Space</b>						
Administrative Offices & Service	2,060	2,120	(60)	2,060	2,120	(60)
Other Administrative Department Space	3,329	3,457	(128)	3,329	3,954	(625)
<b>TOTAL</b>	<b>5,389</b>	<b>5,577</b>	<b>(188)</b>	<b>5,389</b>	<b>6,074</b>	<b>(685)</b>

ASF = Assignable Square Feet

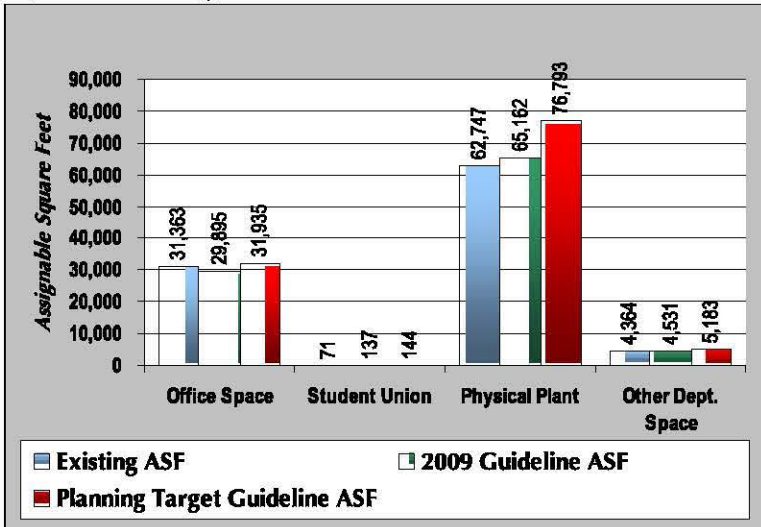
### ***Administrative Units***

#### **President**

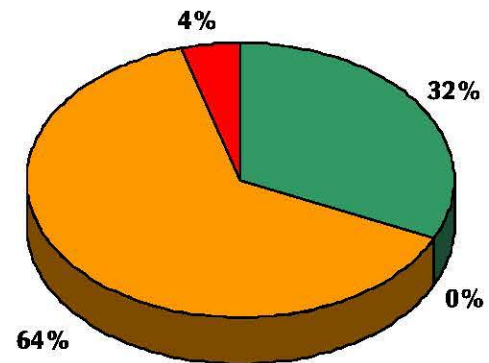
This unit contains space allocated to the university president and staff, and is comprised of administrative offices, including the Board Room and the Community Room. The space needs analysis generated a small 685 ASF deficit of space at the plan horizon.

## Administration &amp; Finance

## Space Analysis



Office Space      Student Union  
Physical Plant      Other Dept. Space



ASF = Assignable Square Feet

## Existing Space Distribution

## Existing Space by Building

Building	Open Labs	Admn Offices	Library	REC Rec	Athletics Athletics	Student Center	Physical Plant	Other Acad Space	Other Admn Space	TOTAL OF ASF
201 Carter Dr		19,288					11,529		422	31,239
25 Univ. Ave.		1,823					159		346	2,328
703 S High Garage							374			374
Boiler Plant		247								247
BPAC										
Brandywine Hall									229	229
High St Garage							670			670
Main Hall							2,859			2,859
Maint. Shed							264			264
McCoy Barn							4,336			4,336
McCoy EQ Shed							3,348			3,348
McCoy Garrison		838								838
McCoy Main House		1,420								1,420
Peoples Building		1,656					276		400	2,332
Philips Memorial		958								958
Recitation Hall							3,009			3,009
Reynolds Garage							293			293
Reynolds Hall							579			579
Speakman Building		1,829					1,527		280	3,636
Sturzebecker HSC		427								427
Swope Music Bldg		120								120
Sykes Student Union						71	723			794
Warehouse		2,757					32,803		2,687	38,247
<b>TOTAL</b>		<b>31,363</b>				<b>71</b>	<b>62,747</b>		<b>4,364</b>	<b>98,545</b>

**Administration & Finance****Current and Future Space Needs**

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Support Space</b>						
Administrative Offices & Service	31,363	29,895	1,468	31,363	31,935	(572)
Physical Plant	62,747	65,162	(2,415)	63,297	76,793	(13,496)
Other Administrative Department Space	4,364	4,531	(167)	4,364	5,183	(819)
<i>Academic Support Space Subtotal</i>	<i>98,474</i>	<i>99,588</i>	<i>(1,114)</i>	<i>99,024</i>	<i>113,911</i>	<i>(14,887)</i>
<b>Auxiliary Space</b>						
Student Union	71	137	(66)	71	144	(73)
<b>TOTAL</b>	<b>98,545</b>	<b>99,725</b>	<b>(1,180)</b>	<b>99,095</b>	<b>114,055</b>	<b>(14,960)</b>

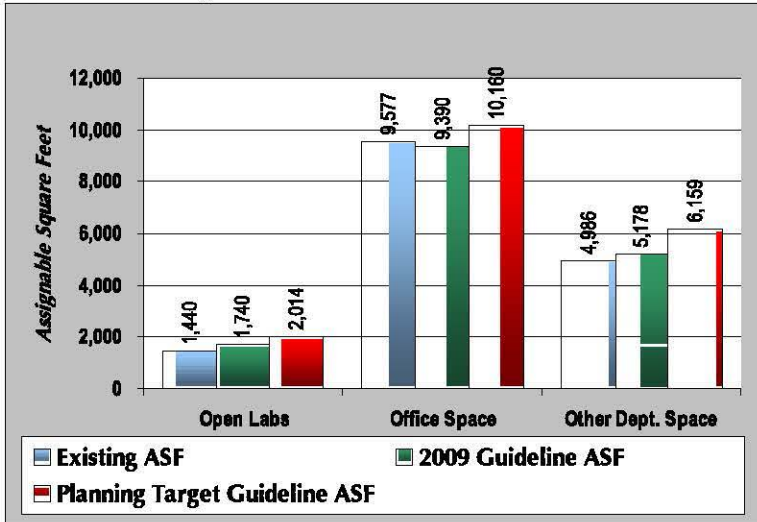
ASF = Assignable Square Feet

**Administration & Finance**

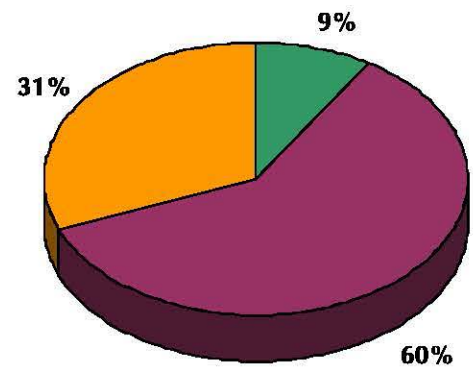
This administrative unit includes Finance & Business Services, Budget, Human Resources, Public Safety, Facilities Management, and Facilities Design & Construction. Overall, the space needs analysis generated a deficit of approximately 15,000 ASF at the plan horizon with the majority of space need in the Physical Plant space category.

## Information Services

### Space Analysis



Open Labs Office Space Other Dept. Space



Existing Space Distribution

ASF = Assignable Square Feet

### Existing Space by Building

Building	Open Labs	Admn Offices	Library	REC Rec	Athletics Athletics	Student Center	Physical Plant	Other Acad Space	Other Admn Space	TOTAL OF ASF
25 Univ. Ave.									177	177
Allegheny Hall		4,175							1,356	5,531
Anderson Hall	1,440	3,925							1,538	6,903
BPAC										
Brandywine Hall		1,477							1,915	3,392
<b>TOTAL</b>	<b>1,440</b>	<b>9,577</b>							<b>4,986</b>	<b>16,003</b>

### Current and Future Space Needs

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Open Laboratories & Service	1,440	1,740	(300)	1,440	2,014	(574)
<b>Academic Support Space</b>						
Administrative Offices & Service	9,577	9,390	187	9,593	10,160	(567)
Other Administrative Department Space	4,986	5,178	(192)	5,186	6,159	(973)
<i>Academic Support Space Subtotal</i>	<b>14,563</b>	<b>14,568</b>	<b>(5)</b>	<b>14,779</b>	<b>16,319</b>	<b>(1,540)</b>
<b>TOTAL</b>	<b>16,003</b>	<b>16,308</b>	<b>(305)</b>	<b>16,219</b>	<b>18,333</b>	<b>(2,114)</b>

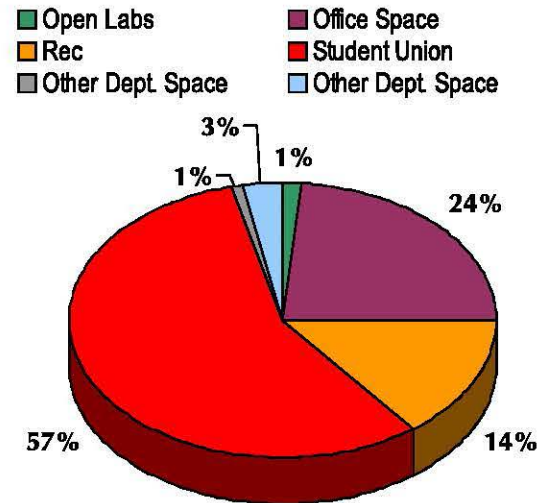
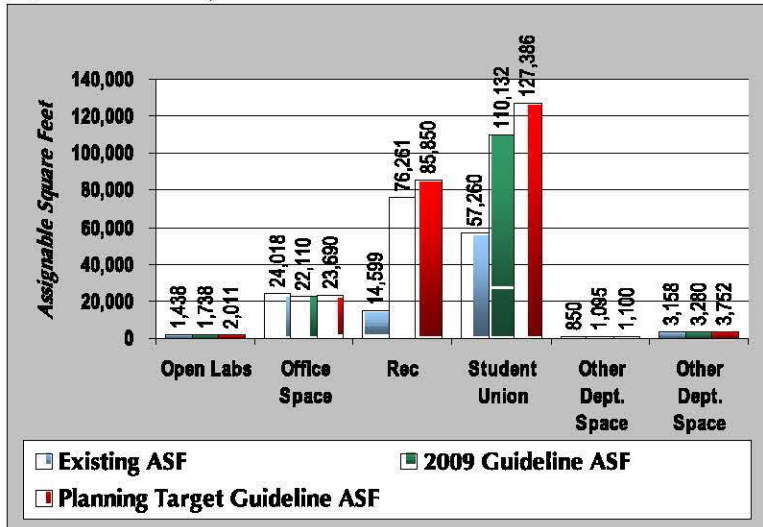
ASF = Assignable Square Feet

**Information Services**

This unit includes administrative and academic computing and generated a need for an additional 2,114 ASF at the plan horizon. The greatest need was generated in the Other Academic Department Space category and includes additional space for server, telecommunications and equipment rooms.

## Student Affairs

## Space Analysis



ASF = Assignable Square Feet

## Existing Space Distribution

## Existing Space by Building

Building	Open Labs	Admn Offices	Library	REC Rec	Athletics Athletics	Student Center	Physical Plant	Other Acad Space	Other Admn Space	TOTAL OF ASF
13-15 Univ. Ave		402								402
Ehinger Gym		1,476		8,985						10,461
Lawrence Hall	1,438	12,996				7,619			2,330	24,383
Recreation Center										
Sykes Student Union		7,768		5,614		49,641			828	63,851
Tyson Hall								850		850
Wayne Hall		1,376								1,376
<b>TOTAL</b>	<b>1,438</b>	<b>24,018</b>		<b>14,599</b>		<b>57,260</b>		<b>850</b>	<b>3,158</b>	<b>101,323</b>

**Student Affairs****Current and Future Space Needs**

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Space</b>						
Open Laboratories & Service	1,438	1,738	(300)	1,438	2,011	(573)
Other Academic Department Space	850	1,095	(245)	850	1,100	(250)
<i>Academic Space Subtotal</i>	<i>2,288</i>	<i>2,833</i>	<i>(545)</i>	<i>2,288</i>	<i>3,111</i>	<i>(823)</i>
<b>Academic Support Space</b>						
Administrative Offices & Service	24,018	22,110	1,908	24,924	23,690	1,234
Other Administrative Department Space	3,158	3,280	(122)	3,158	3,752	(594)
<i>Academic Support Space Subtotal</i>	<i>27,176</i>	<i>25,390</i>	<i>1,786</i>	<i>28,082</i>	<i>27,442</i>	<i>640</i>
<b>PE / Recreation / Athletics</b>						
Recreation	14,599	76,261	(61,662)	61,965	85,850	(23,885)
<b>Auxiliary Space</b>						
Student Union	57,260	110,132	(52,872)	62,874	127,386	(64,512)
<b>TOTAL</b>	<b>101,323</b>	<b>214,616</b>	<b>(113,293)</b>	<b>155,209</b>	<b>243,789</b>	<b>(88,580)</b>

ASF = Assignable Square Feet

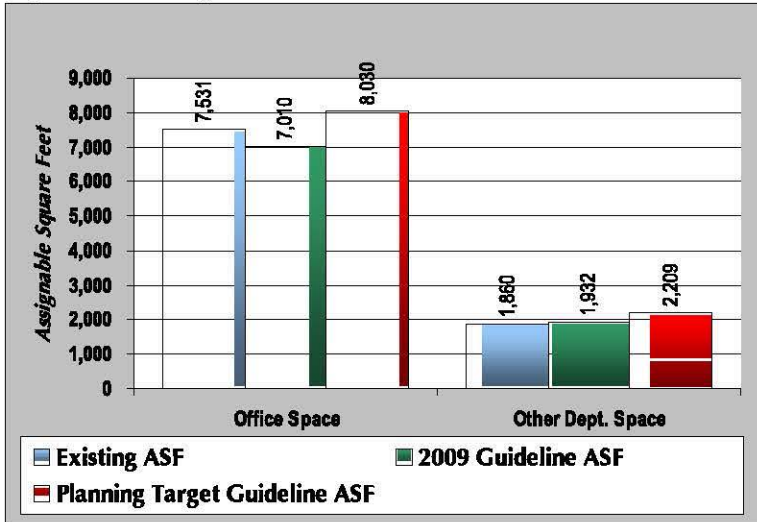
**Student Affairs**

Student Affairs and the Dean of Students is comprised of a large number of departments and units, including Residence Life, Athletics, Student Health Centers, Sykes Student Union, Service Learning, Children's Center, Multicultural Affairs, Recreation and Leisure, and the Career Development Center to name a few. Student Affairs operations are contained within a number of buildings on the campus, including Sykes Student Union and Lawrence Hall.

The space needs analysis generated a total space need of 243,789 ASF at the plan horizon, a deficit of more than 88,000 ASF. A majority of this space need (64,512 ASF) is within the Student Union category. Existing space is greater at the plan horizon as the new Recreation Center is completed and occupied, offsetting the space need. Athletics is not included in the Student Affairs analysis as it was analyzed separately.

## University Advancement

### Space Analysis



ASF = Assignable Square Feet

### Existing Space by Building

Building	Open Labs	Admn Offices	Library	REC Rec	Athletics Athletics	Student Center	Physical Plant	Other Acad Space	Other Admn Space	TOTAL OF ASF
13-15 Univ. Ave		2,094								2,094
Alumni House		926							1,162	2,088
Filano House		2,883								2,883
Warehouse		1,628							698	2,326
<b>TOTAL</b>		<b>7,531</b>							<b>1,860</b>	<b>9,391</b>

### Current and Future Space Needs

SPACE CATEGORY	Fall 2009			Plan Horizon		
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)
<b>Academic Support Space</b>						
Administrative Offices & Service	7,531	7,010	521	7,531	8,030	(499)
Other Administrative Department Space	1,860	1,932	(72)	1,860	2,209	(349)
<b>TOTAL</b>	<b>9,391</b>	<b>8,942</b>	<b>449</b>	<b>9,391</b>	<b>10,239</b>	<b>(848)</b>

ASF = Assignable Square Feet

**University Advancement**

This administrative unit includes Graphics and Printing, Public Relations and Marketing, Advancement, and Development. There is a need for approximately 848 ASF at the plan horizon. As this unit is located in older houses (Alumni and Filano Houses) offices are not correctly sized based on PASSHE guidelines, reducing the severity of space needs in the Administrative Offices & Service Category. Space needs include additional offices for staff, a small call center, and space for storage of marketing materials.





# **Space Needs Guideline Application**



## **SPACE NEEDS GUIDELINE APPLICATION**

### **Process**

Paulien & Associates was provided with enrollment, course, and staffing data from Fall 2009. The facilities inventory, as verified by the consultants, included information on square footages, space use codes, and departmental assignment on a room-by-room basis. The course data contained the course number and description, student enrollments, start and stop times, and meeting locations. The staffing data contained headcount by major employee category on a departmental basis. The data provided a snapshot of the activities for the Fall 2009 semester which was used as the comprehensive master planning base year.

### **On-site Work Sessions and Space Verification**

Three separate visits were made to the West Chester University Campus. The first visit was to conduct a room-by-room site verification of all academic buildings on the campus. The consultants performed random checks of square footage, verified space use codes, and counted the number of student stations in each room for classrooms and laboratories. A room-by-room spreadsheet was developed and was used as the basis of this study.

The second visit was a set of works sessions with key academic deans and faculty chairs to discuss enrollment growth, vision, research goals, and space needs. During these sessions, visits were made to various buildings, grounds and spaces throughout the campus to gain familiarity and assess the overall reliability of the facilities inventory. A third visit was necessary to meet with administrative personnel (president, provost, vice presidents, and directors) regarding strategic goals, service levels, and university vision. Additional work sessions (retreats) were held to discuss and present preliminary findings and to discuss the physical response to the space needs findings.

### **Guideline Assumptions and Application**

This section summarizes the space needs by functional space category. The Pennsylvania State System of Higher Education (PASSHE) has established space guidelines that are used to determine space needs on each of its campuses. As part of the scope of this analysis, Paulien & Associates was asked to review these guidelines as compared to space standards established in previous work of the consultants for similar institutions. Where PASSHE guidelines or recommendations were determined inappropriate or silent, the consultant used a modified application of the PASSHE guideline or employed a different guideline method. The different methods include benchmarking, review of design and/or program plans completed for prior projects, and empirical data to project space needs.

The operating assumption in applying these guidelines was to provide the University with enough space to conduct its current and future activities. The sections below specify which guideline was applied to each space category and

provides an explanation of the guideline application and, where pertinent, a comparison to the PASSHE guideline. In order to apply the various guidelines and conduct the space needs analysis, several assumptions were made in this report. Assumptions applied to specific space categories are listed in this section.

## Classroom & Classroom Service Space

Classrooms are defined as any room generally used for scheduled instruction requiring no special equipment and referred to as a "general purpose" classroom, seminar room, or lecture hall. Classroom service space directly supports one or more classrooms as an extension of the classroom activities, providing media space, preparation areas, or storage. The classroom station size guideline is considered as including the classroom service area space. However, additional service space can be justified on a program or classroom basis.

Prior to 2000, many guidelines for classroom space were developed at a time when tablet armchair classrooms were the predominant seating preference. These guidelines called for approximately 15 ASF per student station which is significantly lower than what today's active classrooms require. Classrooms that have good sight lines which are required by technology and flexible seating arrangements usually average between 20 and 25 ASF per student station. For this exercise, the consultants used 22 ASF per student station (20 ASF per Station multiplied by 1.1 to account for PASSHE's service factor). This factor will provide enough space for a variety of seating arrangements across the University.

### Classroom Utilization

	Fall 2009 Utilization	PASSHE Guidelines
Weekly Room Hours	42	37.5
Student Station Occupancy	74%	67%
ASF per Student Station	20	20

Review of the classroom utilization analysis presented previously in this document showed that, on average, West Chester University schedules its classrooms higher than current utilization expectations. However, its average student station size is equal to the PASSHE guideline of 20 ASF per student station. The consultant used the PASSHE classroom utilization goals as well as its space guideline of 22 ASF per classroom student station (20 ASF per station plus ten percent service space) to determine classroom needs. Classroom space requirements are determined by a formula that takes the target utilization of 37.5 hours per week, multiplies it by the target student station occupancy of 67% and divides the result into the 22 square feet per student station. This calculation produces a guideline of 0.88 ASF per weekly student contact hour (WSCH) for lecture courses. Assignable square feet per weekly student contact hour (ASF/WSCH) is calculated as follows:

**Lecture Guideline per Weekly Student Contact Hour (WSCH):**

$$\frac{22 \text{ ASF/STATION}}{37.5 \text{ WEEKLY ROOM HOURS} \times 67\% \text{ STUDENT STATION OCCUPANCY}} = 0.876 \text{ ASF/WSCH}$$

As further explanation, the total number of weekly contact hours for a lecture course section is obtained by multiplying the enrollment of the course section by the number of meeting hours in one week. For example a history course with 55 students enrolled which meets three (3) times a week for one hour produces 165 weekly student contact hours (WSCH). Multiplying the 165 weekly student contact hours by the classroom guideline of 0.876 generates 144.5 ASF of classroom space.

**EXAMPLE OF CLASSROOM GUIDELINE APPLICATION**

**Step 1 • Calculate Weekly Student Contact Hours for Lecture Section**

Enrollment (55) X Weekly Room Hours (3) = Weekly Student Contact Hours (165)

**Step 2 • Calculate Classroom Guideline**

$$\frac{22 \text{ ASF/Station}}{37.5 \text{ Weekly Room Hours} \times 67\% \text{ Student Station Occupancy}} = 0.876 \text{ ASF/WSCH}$$

**Step 3 • Calculate Guideline Square Footage**

Weekly Student Contact Hours (165) X ASF/WSCH (0.876) = Guideline Square Footage (144.5)

At a campuswide level, the Classroom guideline application for West Chester University generated an 33% deficit of approximately 32,219 ASF for Fall 2009. This is the result of the actual classroom utilization (weekly room hours and student station occupancy) being higher than PASSHE standards.

The guideline ASF increases in the target year to approximately 145,363 ASF, however, the overall deficit is reduced as classrooms in the E. O. Bull Center and the BPAC become available. A detailed classroom mix analysis was not part of the scope of this study. However, a cursory review shows that classrooms with larger seating capacities are needed, in particular, classrooms with capacities of 46 to 50 seats. As the University changes its existing instructional paradigm and grows, it may need access to some larger rooms to provide scheduling flexibilities. The consultants recommend that a detailed classroom mix analysis be conducted before existing facilities are renovated or new facilities are constructed containing a substantial number of new classrooms.

It should be noted that there is no true comparison of existing Classroom space to guideline space on a college-by-college basis. This is due to the fact that the guidelines are applied by course and the departmental classroom needs can then be calculated; however, most classrooms are viewed as a campuswide resource and are centrally scheduled. In practice, most departments do not control the classrooms they use but have first choice of hours when they can schedule the room.

Collaborative learning environments and technology require more space per student than traditional classroom arrangements. As new classrooms are constructed that do not have traditional tablet armchairs, more space will be required than in the past. As existing classrooms are renovated, seating capacity will be lost to accommodate technology and create collaborative environments.

## Teaching Laboratories & Service Space

Teaching Laboratories are defined as rooms used primarily by regularly scheduled classes that require special purpose equipment to serve the needs of particular disciplines for group instruction, participation, observation, experimentation, or practice. Station sizes in teaching laboratories vary by discipline. Space requirements are calculated with a formula that is similar to those used to determine classroom space requirements, except that the ASF per student station and weekly room hour expectation varies by discipline.

### Teaching Laboratory Utilization

	Fall 2009 Utilization	PASSHE Guidelines
Weekly Room Hours	17	23
Student Station Occupancy	86%	70%
ASF per Student Station	Varies	50

Even though West Chester University has a lower weekly room hour average (17 hours) than the PASSHE target of 23 hours per week, and because it exceeds the student station occupancy expectation by 16%, West Chester University is slightly out of line with the overall PASSHE seat hour expectation for teaching laboratories. With a 14.6 seat hour average, it is just under the PASSHE 16.1 seat hour average.

The PASSHE space factor is 50 ASF per student station plus a 25% service factor. The PASSHE guideline includes open laboratory space. This guideline may be appropriate for a global examination of the University's teaching and open laboratory space needs; however it is not appropriate for the level of planning conducted in this scope of services. It assumes that the rough average of need is approximately 62.5 ASF per student station without consideration as to the concentration of teaching laboratory needs in specific disciplines.

For this analysis the consultants employed a space per student station guideline based on approximately 20 different subject areas. Traditionally, the guideline systems which use this type of approach express the space guideline as a range often including and excluding service space. Based on the consultant's experience, both at the master plan level and at a program plan level, guidelines were selected for the disciplines shown in the table on the following page. The scheduled weekly room hour average for teaching laboratories is generally found to be less than scheduled use of classrooms due to the need for preparation time of specialized equipment prior to class. Conversely, the student station occupancy is normally higher as the number

enrolled in a laboratory exercise is more closely monitored, safety being a key issue as well as the limitations of faculty observation. In keeping with the spirit of the PASSHE guidelines, the utilization goals of 23 weekly room hours and 70% student station occupancy were used for all disciplines.

## Teaching Laboratory Guidelines

Program	ASF per Student Station	Weekly Room Hours	Student Station Occupancy	ASF per WSCH
Anthropology; Communciation & Media Studies	60	23	70%	3.727
Art	60	23	70%	3.727
Biology; Chemistry; Physics	75	23	70%	4.658
Computer Sciences; Geosciences	60	23	70%	3.727
Dance	150	23	70%	9.317
Elementary Education; Secondary Education; Special Education & School Psychology	40	23	70%	2.484
English	40	23	70%	2.484
Health Professions	75	23	70%	4.658
Music	60	23	70%	3.727
Nursing	65	23	70%	4.037
Physical Education	100	23	70%	6.211
Theatre Arts	100	23	70%	6.211

ASF = Assignable Square Feet; WSCH = Weekly Student Contact Hour

In the consultant's experience a range of 16 to 23 hours per week is adequate depending on the discipline. For certain disciplines in which a variety of laboratories are needed, it is very difficult to achieve over 16 hours of weekly use. These disciplines may include but are not limited to Art, Biology, and Chemistry. At small to medium sized comprehensive universities, it is especially difficult to reach an economy of scale. It is important to understand that the amount of teaching laboratory space actually required at WCU may be greater than what these guidelines generate at a master planning level.

For Fall 2009, West Chester University University generated a campuswide teaching laboratory space deficit of approximately 22,000 ASF or 27%. However, the deficit decreases at the plan horizon as new fine arts and theater arts laboratory space in the E. O. Bull Center and BPAC is completed. After the renovation and expansion, the space needs analysis generated a need for an additional 7,000 ASF of space.

## Open Laboratories

The space classified as Open Laboratories includes rooms that are open for student use and that are not used on a regularly scheduled basis. These rooms may provide equipment to serve the needs of particular disciplines for group instruction in informally or irregularly scheduled classes. Alternatively,

these rooms are used for individual student experimentation, observation, or practice in a particular field of study. The size of these laboratories is based on equipment size, the station size, and student count desired, and therefore should be determined on an individual basis. Types of rooms included in this category include computer laboratories, language laboratories, independent art studios, music practice rooms, and tutorial and testing facilities. For purposes of this analysis, senior capstone space is also considered open laboratory space as well as collaborative learning spaces.

Open laboratories are not specifically addressed by most guideline systems. In recent benchmarking and consulting work with several statewide systems, the consultant found between five (5) and ten (10) ASF per student FTE allocated for space in this category. The consultants note that the amount of space the University has classified in this category is approximately 2.4 ASF per student FTE, slightly lower than what the consultants typically expect to find at institutions similar to West Chester (i.e., comprehensive universities with similar missions).

The consultants believe that a reasonable guideline for the University in open laboratory space is three (3) ASF per student FTE. This guideline is sufficient to provide the existing programs with space lacking in this category (i.e., LARC) as well as provide some senior capstone space and collaborative learning spaces throughout campus. The guideline produced a deficit of about 7,000 ASF of open laboratory space in the base year and a 13,000 ASF space deficit in the plan horizon. The guideline was portioned out among the existing programs based upon needs expressed during the on-site work sessions.

## **Research Laboratories**

Research laboratories (space use code 250's) are rooms used for unscheduled laboratory experimentation or training in research methods and observation. The research may be conducted by either faculty or students for both funded and non-funded research. This room type does not have utilization expectations.

The computation of research space is a complex issue, especially for a comprehensive university that is not research intensive. There are different approaches that could be used at the master planning level – a space factor per \$100,000 in research expenditures; or a space factor per research team; or a space factor per tenured/tenure track faculty.

Because research expenditures are not large enough at West Chester University to predict an adequate amount of research space and there are no "research teams" at the University, the consultants chose a space factor per full-time faculty in selected programs. Only those programs or disciplines which require research space or for which non-office based research space is needed, are included in the analysis. To determine space needs that fit the current sponsored research level, it was more reasonable to use an approach based on tenured and tenure-track faculty headcounts. This approach was patterned after the PASSHE guidelines.

## Research Space Guideline Application

Discipline	Number of FT Faculty	% Of Faculty in Research	Number of Faculty in Research	Module Size	Total Base Year ASF	Number of Faculty In Research (Target Year)	Target Year ASF
Anthropology	10	80%	8	400	3,200	9	3,434
Biology	18	100%	18	400	7,200	19	7,726
Chemistry	11	100%	11	400	4,400	12	4,721
Computer Science	11	20%	2	200	440	2	472
Physics	6	100%	6	400	2,400	6	2,575
Geology and Astronomy	12	100%	12	200	2,400	13	2,575
GIS	3	50%	2	200	300	2	395
Psychology	21	100%	21	200	4,200	23	4,507
Health	20	50%	10	400	4,000	12	4,972
Kinesiology	15	75%	11	400	4,500	14	5,594
Social Work (Graduate)	6	20%	1	200	240	2	316
Sports Medicine	7	100%	7	400	2,800	9	3,480
Communicative Disorders	6	100%	6	400	2,400	7	2,983
<b>Total</b>	<b>146</b>		<b>115</b>		<b>38,440</b>	<b>130</b>	<b>43,750</b>

Following the PASSHE approach, the programs with research space needs were split into the two different modules and a square footage per faculty was applied. Further, only a percentage of the full-time faculty members were expected to engage in research, as noted in the table. Additionally, most science research modules are based on about 320 ASF per module. Adding approximately 20% of this amount for service space creates a research module of about 400 ASF for most disciplines.

The guidelines produced a deficit of approximately 9,500 ASF at the base year. The deficit increases to approximately 14,800 at the plan horizon as additional faculty are employed. In reviewing the table, the majority of need is in the College of Health Sciences.

## Office Space (Academic and Administrative)

The guideline application for office space needs is based upon employee types and the additional application of space amounts for office service and conference space needs. West Chester University provided staffing information with individual job title, EEO code, department, headcount, and full-time or part-time status. The consultant then organized each into major categories as shown in the *Office Guidelines* table.

Using the PASSHE space guidelines as a foundation, the consultants developed guidelines that are more specific to job titles and position. For example, top level administrators such as the President and Vice Presidents require larger offices and a greater allocation for conference room and service space. Some units also have a need for additional conference or service space (such as Admissions and Financial Aid). The chair and faculty in music are given an additional space allowance as typically their offices contain their studio where private lessons are given.

## Office Guidelines

Employee Type	Office ASF	Conference ASF	Service ASF
President	350	100	50
Vice President; Provost	300	50	30
Dean	200	50	30
Executive/Administrative	180	50	30
Chair	160	20	20
Faculty	150	20	20
Faculty (Music)	230	20	20
Faculty Part-time	75	0	0
Professional Non-Faculty	150	20	20
Professional Non-Faculty Part-time	75	0	0
Technical / Paraprofessional	120	20	20
Secretarial & Clerical	120	0	0
Graduate Assistant	50	0	0
Student Work Station	45	0	0
Police Officer (office required)	150	20	20
Athletic Coach	150	30	50
Service / Maintenance / Skilled Crafts (no office required)			
Library Personnel (Office Space in Library Service Guidelines)			
<b>Applied as needed:</b>			
Additional Service Space	150 ASF - 500 ASF		
Additional Conference Space	180 ASF - 600 ASF		

ASF = Assignable Square Feet

During the work sessions it was mentioned numerous times that there was not an adequate amount of office service space on campus. The field observation seemed to confirm the need for additional space in this category, especially in academic areas. The space needs analysis outcomes shows that there is a deficit of academic office space (18,000 ASF) but a surplus of administrative space (1,800 ASF) at the base year. The surplus of administrative space is the result of larger offices that are located on older buildings and homes that have been converted to office buildings with little renovation. Over the life of the master plan, many of these spaces will be remodeled or used for other purposes.

At the plan horizon, the analysis shows a space deficit at the base year for academic office space totaling about 19,500 ASF, despite the addition of faculty offices when the E.O. Bull Center and the BPAC is completed. The administrative office analysis projects a space deficit approximately 4,300 ASF at the base year as additional positions are needed to manage enrollment growth.

## Library Space

Most of the guideline systems for library space utilize one set of factors for collections, another for readers, and a third for service space. PASSHE has a set of library guidelines that are very similar to guidelines that were published by the Association of College and Research Libraries (ACRL) collections guideline and used by CEFPI. The application of the PASSHE space standards provides a generous amount of Library space. In other guideline systems, office space for library personnel is included in the service space factor as is the study service space. Open stack study space is not an additional factor but a portion of the total reader stations/study space generation.

Libraries at West Chester University include the Francis Harvey Green Library and the Presser Music Library. For the main library, non-library entities such as the Teacher Education Center and LARC spaces were not included under library space. Overall, there are 1,248 total unrestricted public seats and 137 computers for student use. Due to lack of adequate storage space, the library also has space in Brandywine Hall (Room 11) which includes approximately 478,000 microforms. There is also a Starbucks Coffee Café on the first floor of the library. The guideline analysis takes into account this space

The Music Library opened in spring 2007 in is located on the first floor of the Swope School of Music Building and Performing Arts Center. This library includes seating for 38 students with five computer stations. Overall, the

physical size of the library was reduced during the design process. Currently, the Music Library is undersized for the number of students in the music program.

### ***Library Collections***

At the base year, the University library maintained approximately 826,000 volume equivalents (including collections in Brandywine Hall) while the Presser Music Library contains slightly under 55,500 volume equivalents. That figure is expected to increase on average by 16% for both libraries based on historical trends in the target year totaling just under 952,000 and 65,000 volume equivalents respectively.

The PASSHE graduated guideline typically assumes that 0.10 ASF per volume is used for the first 150,000 volumes, at which point the factor drops to .09 ASF per volume. After 300,000 volumes are reached, the factor goes down to .08 ASF and then down again to .07 ASF for more than 600,000 volumes. This portion of the PASSHE guideline was applied without modification to the Francis Harvey Green Library.

The Presser Music Library consists of mostly compact shelving. As such, a guideline of 0.04 ASF per volume was used to generate collection space in this facility.

### ***Study Space***

The PASSHE library guidelines suggest that reader/study stations be provided for 15% of the student and faculty FTE. The consultant used 10% for graduate students with no dedicated space for faculty reader stations. Study space is then calculated at 30 ASF per reader/study station. This portion of the PASSHE guideline was applied for both libraries; however no additional guideline was applied for open-stack study space. At the Music Library, 25% of the stations were calculated at 35 ASF per reader/study station to account for music listening equipment.

### ***Service Space***

PASSHE guidelines state that 12.5% of the total collection and all study space are for processing space. Slightly straying from the PASSHE guidelines, 12.5% of the total collection and study space is provided for service space which includes not only processing space, but office space for library personnel in the main library.

Since acquisitions are processed at the main library for the Music Library, the service space guideline was reduced to 6.0% of the total collection and reader station space for service and staff space. **It should be noted that the service space calculation is intended to include office space for the library staff.**

### ***Lounge Space***

PASSHE does not have a guideline for lounge space. For this analysis, two (2) ASF per study station was provided for lounge space in the main library to offset the space contained within the Starbuck's Coffee Café.

**Library****Library  
Collections**

	Current Items	Conversion Factor	Fall 2009 Volumes	Volume Growth	Plan Horizon
Books/Serials (Volumes)	779,524	1.00	779,524	15.00%	896,453
Manuscripts & Archives	0	1.00	0	0.00%	0
Unbound Serials (Displ)	9,961	0.50	19,922	20.00%	23,906
Microforms	934,181	80.00	11,677	2.00%	11,911
Audio/Visual Materials	73,989	5.00	14,798	30.00%	19,237
<b>Total Volume Equivalents</b>			<b>825,921</b>		<b>951,507</b>

**Library Guideline Application and Analysis**

<b>Collection Space</b>	<b>No. of Volume Equivalents</b>					<b>FALL 2009 Guideline ASF</b>	<b>PLAN HORIZON Guideline ASF</b>
	<b>0 - 150,000</b>	<b>150,001 - 300,000</b>	<b>300,001 - 600,000</b>	<b>600,001 - 2,000,000</b>	<b>2,000,001 and above</b>		
<i>ASF per Volume</i>	<i>0.10</i>	<i>0.09</i>	<i>0.08</i>	<i>0.07</i>	<i>0.02</i>		
Fall 2009 Collection Space	15,000	13,500	24,000	15,814	0		
Plan Horizon Collection Space	15,000	13,500	24,000	24,605	0		
<b>Total Collection Space</b>						<b>68,314</b>	<b>77,105</b>
<b>Study Space</b>	<b>Percent of FTE</b>	<b>Fall 2009 FTE</b>	<b>Fall 2009 Stations</b>	<b>Plan Horizon</b>	<b>Plan Horizon</b>		
Undergraduate Students	15%	11,128	1,669	12,690	1,904		
Graduate Students	10%	1,124	112	1,480	148		
Faculty (Headcount)	0%	490	0	620	0		
<b>Total Study Stations</b>			<b>1,782</b>		<b>2,052</b>		
<i>Regular Study Stations</i>	<i>100% @ 30 ASF/Station</i>		53,460		61,560		
<i>Multimedia Study Stations</i>	<i>% @ 35 ASF/Station</i>		0		0		
<b>Total Study Space</b>						<b>53,460</b>	<b>61,560</b>
<b>TOTAL COLLECTION &amp; STUDY SPACE</b>						<b>121,774</b>	<b>138,665</b>
<b>Service Space</b> <i>(12.5% of Total Collection and Study Space)</i>						<b>15,222</b>	<b>17,333</b>
<b>Lounge Space</b> <i>(2 ASF per Study Station)</i>						<b>3,563</b>	<b>4,103</b>
<b>TOTAL LIBRARY GUIDELINE SPACE</b>						<b>140,559</b>	<b>160,102</b>
<i>Existing Space</i>						<b>108,594</b>	<b>108,594</b>
<b>SURPLUS / (DEFICIT)</b>						<b>(31,965)</b>	<b>(51,508)</b>

As noted in the tables, the guideline generated a deficit of space of approximately 32,000 ASF in the Francis Harvey Green Library at the base year. At the plan horizon, the deficit increases slightly more than 51,500 ASF. Some of this deficit could be addressed by moving non-library units out of the Library.

**Music Library****Library  
Collections**

	Current Items	Conversion Factor	Fall 2009 Volumes	Volume Growth	Plan Horizon
Books/Serials (Volumes)	45,108	1.00	45,108	15.00%	51,874
	0	1.00	0	0.00%	0
Unbound Serials (Displ)	0	1.00	0	0.00%	0
Microforms	5	80.00	0	2.00%	0
Audio/Visual Materials	52,080	5.00	10,416	20.00%	12,499
<b>Total Volume Equivalents</b>			<b>55,524</b>		<b>64,373</b>

**Library Guideline Application and Analysis**

<b>Collection Space</b>	<b>No. of Volume Equivalents</b>					<b>FALL 2009 Guideline ASF</b>	<b>PLAN HORIZON Guideline ASF</b>
	<b>0 - 150,000</b>	<b>150,001 - 300,000</b>	<b>300,001 - 600,000</b>	<b>600,001 - 2,000,000</b>	<b>2,000,001 and above</b>		
<i>ASF per Volume</i>	<i>0.04</i>	<i>0.03</i>	<i>0.02</i>	<i>0.01</i>	<i>0.01</i>		
Fall 2009 Collection Space	2,221	0	0	0	0		
Plan Horizon Collection Space	2,575	0	0	0	0		
<b>Total Collection Space</b>						<b>2,221</b>	<b>2,575</b>
<b>Study Space</b>	<b>Percent of Headcount</b>	<b>Fall 2009 Headcount</b>	<b>Fall 2009 Stations</b>	<b>Plan Horizon</b>	<b>Plan Horizon</b>		
Undergraduate Students	15%	724	109	750	113		
Graduate Students	10%	76	8	80	8		
Faculty (FTE)	0%	0	0	0	0		
<b>Total Study Stations</b>			<b>118</b>		<b>121</b>		
<i>Regular Study Stations</i>	<i>75% @ 30 ASF/Station</i>		<b>2,610</b>		<b>2,700</b>		
<i>Multimedia Study Stations</i>	<i>25% @ 35 ASF/Station</i>		<b>1,015</b>		<b>1,050</b>		
<b>Total Study Space</b>						<b>3,625</b>	<b>3,750</b>
<b>TOTAL COLLECTION &amp; STUDY SPACE</b>						<b>5,846</b>	<b>6,325</b>
<b>Service Space</b> <i>(6.0% of Total Collection and Study Space)</i>						<b>351</b>	<b>379</b>
<b>TOTAL LIBRARY GUIDELINE SPACE</b>						<b>6,197</b>	<b>6,704</b>
<i>Existing Space</i>						<b>3,433</b>	<b>3,433</b>
<b>SURPLUS / (DEFICIT)</b>						<b>(2,764)</b>	<b>(3,271)</b>

For the Presser Music Library, the guideline generated a need for an additional 3,271 ASF of space at the plan horizon. With existing space of 3,433 ASF, the music library will need to double in size to accommodate the growth in collections and student enrollments.

### Other Department Space (Academic and Administrative)

The space classified as Other Department Space includes all other space assigned to a department that has not been included in the other classifications of classrooms, teaching laboratories, open laboratories, research, or office. These areas consist of a variety of spaces including:

- |                         |                  |                |
|-------------------------|------------------|----------------|
| ▪ study rooms           | food facilities  | meeting rooms  |
| ▪ locker rooms          | media production | clinic space   |
| ▪ demonstration rooms   | animal quarters  | greenhouses    |
| ▪ learning center space | lounges          | computer rooms |

Due to the diversity of these spaces and the different ways various campuses might classify these spaces, they are not specifically addressed by recognized guideline systems. PASSHE addresses these spaces by space category, including media production (530/535), clinic and clinic service (540/545), animal quarters (570/575), greenhouse and service (580-585), Lounges/Merchandising (650/660), and meeting rooms (680/685).

#### ***Other Academic Department Space***

Some of the University specific spaces in this category include: Animal quarters and animal quarters service in Merion Hall, Schmucker Science, and Peoples Building. Greenhouses in Merion and Schmucker, lounges and meeting rooms (multiple buildings), reading and study rooms in Recitation Hall, and the Communicative Disorders clinic at 201 Carter Drive were also included in this category.

Other academic space at the University averaged just under three (3) ASF per student FTE. The consultants believe that a reasonable guideline to apply in this category is approximately 3.5 ASF per student FTE. This factor reflects the needs of all academic units for additional spaces of this nature across the campus and the midpoint of the benchmark range of space at other similar universities. For Fall 2009, the guideline application shows a space deficit of just under 6,000 ASF in this category and slightly less than 9,000 ASF deficit at the plan horizon.

As with the open laboratory space category, the guideline was portioned out among the existing programs based upon needs expressed during the on-site work sessions, current and projected student FTE enrollments, and existing building and program plans. In particular, a total of 1,500 ASF at the target year was portioned to Academic Affairs. This is for distance education and on-line learning support. As West Chester University becomes more involved in distance learning, there will be a need for more space to support those endeavors. In particular, curriculum development spaces, taping and editing spaces, and a state-of-the art classroom studio.

***Other Administrative Department Space***

As with Other Academic Department Space, Other Administrative Department Space consists of the same types of spaces except they are allocated to administrative units. These spaces include non-office related work and processing rooms, telecommunications/server rooms, lounge areas, and general meeting rooms. No specific PASSHE guideline exists to deal in a generalized way with such a diverse set of space needs. In recent benchmarking studies, the consultant found other administrative department space as small as one (1) ASF and as great as 18 ASF per student FTE which illustrates that the needs in this area are institution specific.

Specific University spaces included in this category are: media production areas in Brandywine Hall, administrative lounges (multiple buildings), meetings rooms (multiple buildings), locker rooms, the board/meeting room in Philips Memorial, Central Computer/Server/ Telecom areas in numerous buildings, and central service space in the Warehouse.

Other Administrative Space at West Chester University averaged approximately 1.4 ASF per student FTE. The consultant applied a guideline of 1.5 ASF per student FTE, which produced a 681 ASF space deficit in the base year and a 3,360 ASF space deficit at the plan horizon.

As with Other Academic Department Space some specific allocations of space were provided to various units. In particular, additional space was provided to Academic and Administrative Computing.

**Assembly and Exhibit Space**

Assembly and Exhibit Space is defined as any room designed and equipped for the assembly of large numbers of people. This includes theaters, auditoriums, concert halls, and arenas. Exhibit spaces are used for exhibition of materials, works of art, or artifacts intended for general use by students and the public.

In recent years Paulien & Associates has been using a guideline originally promulgated by the Council of Educational Facility Planners International. This guideline has a core allowance of 22,450 ASF for institutions with a minimum of 5,000 student FTE and an active fine arts program. It then allows for an additional six (6) ASF per student FTE over the 5,000 FTE minimum. This guideline also adds 5,000 ASF for institutions with an active music program. The PASSHE guidelines for this space category are based on these guidelines. Therefore, the consultants used the PASSHE guideline for the analysis.

The guideline application produced a significant deficit of 27,886 ASF of Assembly and Exhibit Space at the base year. This deficit increases to 29,190 ASF at the plan horizon after this type of space is included in the renovation and expansion of the E. O. Bull Center and BPAC. The consultants portioned the guideline among the departments that require this space type. The Theatre department was allocated the majority of the space followed by Music and Art. The observatory, geology museum, and specimen rooms in the sciences was also included in the this category.

## Physical Plant

Physical Plant Space includes room use codes 720 through 765 and excludes parking decks. If central storage space (730's) is not space assigned to and controlled by physical plant operations, it is counted in other space categories such as other academic or administrative department space, library, or athletics.

Most guidelines suggest a percentage of six (6) to eight percent (8%) of all square footage on campus, minus existing physical plant and residence life space, be used to drive master plan needs in this category. In most cases, these percentages generate a space need that is greater than the amount of physical plant space typically found at an institution.

From previous studies, the consultants have found that the average percentage used to generate physical plant space needs is approximately four (4) to six percent (6%). One of the reasons a lower percentage is adequate for master planning purposes is the fact that many physical plant departments are increasing the outsourcing of many typical shop functions and are using just-in-time purchasing methods to decrease warehousing needs. The PASSHE guideline recommends five percent (5%) of all other space excluding physical plant space.

One of the major discrepancies in accounting for space occurred in the Central Utility Plant category. The PASSHE taxonomy for defining central utility/boiler plants categorizes this space as an assignable square foot category. It clearly states in the FICM that central utility plants are non-assignable spaces designed to house mechanical equipment and utility services. Therefore, the consultants excluded the WCU Boiler Plant building from the analysis.

For West Chester University the consultant applied the PASSHE recommended five percent (5%) as the physical plant guideline. While residence life is not part of this analysis, physical plant is responsible for the maintenance of several dorms. This includes Killinger Hall, Tyson Hall, and Goshen Hall.

At the base year, the guideline is calculated against existing ASF, but for the target year it is calculated against the target guideline ASF. In the base year, the guideline generated a 2,400 ASF deficit while at the plan horizon, a 13,300 ASF space deficit was generated.

## Physical Education / Student Recreation / Athletics

This category includes rooms that have space use codes of 520, 523, 525, 670, and 675 which are used for physical education programs, student recreation, and intercollegiate athletics. At many universities these three functions tend to have some sharing of facilities. Because of this overlap, it is sometimes difficult to attribute the space to one area over another. To further confound the issue, the funds used to pay for these types of facilities are very distinct. In the most cases, E&G funds normally pay for the facilities to support the physical education program. Athletic space is normally auxiliary funded and student recreation space varies between auxiliary and E&G funding depending on the type of institution.

Traditionally, the space standards used to generate this type of space covers physical education and student recreation but not athletics. The need for athletic space is based on the number, type, and level of competitive sports played. At West Chester University, the athletic and physical education facilities are E&G funded but student recreation space is auxiliary funded.

PASSHE space standards for athletics and physical education and are based upon a core of 50,000 ASF plus six (6) ASF per student FTE over 1,500 student FTEs for 520 space, and the current inventory for 523 (spectator seating) space use codes. For 525 space (Athletics/PE Service) the space standard is 10,000 ASF plus six (6) ASF per student FTE over 2,000 student FTEs.

The PASSHE student recreation space standard uses 20,000 ASF as a core and five (5) ASF per student FTE over 1,000 student FTEs. This total is then multiplied by 1.15 for growth to determine the total student recreation space needed.

### ***Student Recreation Space***

Typically, the consultants would use an approach tested by Paulien & Associates and regularly applied in other master planning studies for these types of spaces. However, the University is constructing a new recreation center that was based on needs developed in-part from the PASSHE space standards. For direct comparison, the consultants used the PASSHE recreational facilities (Category 670/675) space guidelines.

At the base year, the guideline generated a need for an additional 61,662 ASF of space. At the plan horizon, the new recreation center is expected to be completed, reducing the need to approximately 85,850 or a deficit of about 24,000 ASF.

### ***Athletic Space***

Due to the varied space requirements of indoor athletics programs, there is not one guideline that addresses this space category. Athletic space needs are usually based on the number and competitive level of the intercollegiate athletic activities.

The amount of space generated for this space type does not include offices for the staff, which is included in the office space guidelines. It includes only athletic or physical education room use codes (520, 523, and 525) plus space for concessions, training facilities, locker/shower rooms, and meeting/viewing/conference facilities required to support intercollegiate athletics. Space needs calculated in this report are for indoor space only and do not include the needs for outdoor athletic facilities.

The consultant calculated the athletic/physical education space needs based on the three PASSHE standards for this type of space with one exception. For athletic service space, the factor of 6 ASF per FTES was modified to 3 ASF per FTES based on benchmarking studies conducted by the consultants. It was determined that the PASSHE standards over generate space in this area for institutions with 10,000 or more FTES.

The guidelines generated 160,000 ASF at the base year and approximately 177,000 ASF at the plan horizon. Compared to the amount of existing space in this category (125,124 ASF), the guidelines produced an 51,757 ASF deficit at the plan horizon as there is a need for a new field house/training facility as well as a need for expanded locker and training rooms in existing facilities.

### **Student Union (Excluding Residential Dining)**

Widely used guideline formulas recommend nine (9) or ten (10) ASF per student for generating student center space. These guidelines for space application provide space for the various functions and the space use code designations that are typically found in a comprehensive student center including: food service (630s), bookstore (660s), lounge (650s), recreation space like video game rooms, billiards, etc. (670s), meeting space (680s), student government/club space (300s and 680s), and other student service type space categories.

The existing space counted in this guideline included the Sykes Union (excluding the Fitness Center/Aerobics areas and Student Affairs) and a portion of Lawrence Hall (Diner, C-Store, Einstein Bros. Bagels). The balance of the first floor of Lawrence Hall (Campus Dining Hall) is considered residential life space and is not included in the analysis.

Existing space counted in this category averages about five (5) ASF per student FTE. The guideline applied by the consultants was nine (9) ASF per FTES, slightly lower than PASSHE's guideline of ten (10) ASF per student FTE for student union space. Again, based on benchmark studies by the consultant, this guideline may over generate ASF for institutions with enrollments greater than 10,000 FTES. At Fall 2009 enrollment levels, the application of this space guideline generated a deficit of about 52,938 ASF. At the plan horizon, the deficit increases to slightly more than 65,500 ASF.

### **Student Health Care Facilities**

Based on national comparisons, the PASSHE guideline is representative in that it provides for a core of 2,000 ASF plus three (0.3) ASF per student FTE over 3,000 student FTEs. This guideline generates a need for a total of 4,776 ASF at the base year. The guideline application shows a relatively small deficit of existing space for both the base and target year of approximately 532 ASF and 1,107 ASF respectively.

The WSU Student Health and Wellness Center is located in Wayne Hall. It should be noted that in future programming efforts the approximate amount of facilities required for the Health and Wellness Services at the University would be the total of this guideline plus the office space required for personnel who are assigned to that unit.

### **Graduate Business Center**

The Graduate Business Center (McDermott Drive) is located approximately 5 miles from the main West Chester University campus. The Center is used primarily for the graduate programs in the College of Business and Public Affairs as well as the College of Education. Part of the space in the facility

is also leased to outside agencies. In order to adequately reflect the space needs for the main campus, this facility was listed separately in the analysis. It is assumed that the facility is adequate through the master plan period.

## **Inactive / Conversion Space**

For Fall 2009, this space category includes space that is coded as inactive or under renovation. The buildings in which there are significant amounts of space at the base year include E. O. Bull Center and the McCoy Main House. A few offices in the Old Library were also listed inactive for safety code reasons.

At the plan horizon, it was assumed that the E.O. Bull Center would be completely renovated and the BPAC building would be finished. As a result, Ruby Jones Hall and parts of Mitchell Hall and Anderson Hall are schedule to be vacated. These spaces were listed as inactive as there was no decision for their reuse at the time of the analysis.

## **Outside Organizations**

This category includes spaces that are being occupied by entities outside of the institution through some type of contractual or lease arrangement. Several facilities were listed as part of outside organizations. This include the main floor of 701 S. High Street (Burrito Loco and Papa John's Pizza), the Dynamic Bookstore at 20 Linden Street, and the Equine Testing Lab at 220 E. Rosedale.





# **Space Reallocation Scenarios**



## **SPACE REALLOCATION SCENARIOS**

Based on the outcomes of the utilization and space needs planning component of the comprehensive facilities planning effort, issues for consideration during the physical planning process can be addressed. While the space needs analysis is a quantitative assessment, qualitative issues and functionality of space must also be considered during the physical planning process.

A substantial deficit of space is predicted at the plan horizon based on student enrollment, program development, and staffing to support both student headcount and program goals. A series of implementation strategies that include both new construction and the backfilling of existing space made available by new construction and renovation, will need to occur to not only satisfy the space needs but also to provide quality academic space for the units affected. The ongoing capital planning of the University to balance space needs with the space necessary to serve the mission of the University will need to look at both short range and long-range projects. The University's five-year spending plan, which includes the Business and Public Affairs Center (BPAC), will begin the process toward satisfying the gap between existing and needed facilities as the University continues to grow.

### **Scenarios by Space Type**

There are four categories contained within the space needs analysis report. These categories include: Academic Space, Academic Support Space, PE/ Recreation/Athletics, and Auxiliary Space. In all four categories, space deficits occur at the plan horizon. As explained previously in this document, the existing assignable square feet (ASF) on campus has been adjusted for known projects of the University that have been scheduled for completion prior to the plan horizon. Examples of this adjustment would be the Student Recreation Center, the E. O. Bull Center, expansion and the BPAC. Even with these facilities included, significant space deficits continue to be reflected as student headcount increases.

Classrooms & Service Space will continue to be in serious deficit and will need to be addressed through capital planning, most likely through the construction of new facilities. In concert with Classrooms & Service Space, Academic Offices & Services Space is also in deficit at the plan horizon, the combination of which may suggest an academic classroom office building be considered during the physical planning process.

The planned replacement of Main Hall will most likely not increase the total amount of space over what presently exists in the current building. However, the new space will be far more functional and can include Open Laboratories, Research, and other academic space types to provide these academic support functions within a replacement to Main Hall.

The greatest deficits in the Teaching Laboratories & Service category occur in the College of Health Sciences and the College of Arts and Sciences. Kinesiology, Nursing, and Sports Medicine show the greatest deficits of Teaching Laboratories & Service Space within the College of Health Sciences. Within the College of Arts and Sciences, the departments of Biology and Computer Science show the greatest deficits of Teaching Laboratories &

Service Space, with Biology showing almost a 5,800 ASF deficit and Computer Science showing an approximately 4,500 ASF deficit.

The Open Laboratories & Service Space category includes specialized space not used for general purpose instruction. As new buildings are constructed and the renovation of existing buildings occurs, open laboratory space, which includes collaborative learning spaces, needs to be programmed into each new facility to provide active accessible group-based learning environments throughout the campus.

In the Academic Support Space category, the Library and the Assembly & Exhibit categories show the greatest overall deficit at the plan horizon. The Library category consists of the Francis Hardy Green Library, as well as the Presser Music Library located in the Swope Music Building. The Music Library generates a space deficit of over 3,000 ASF, primarily in reader stations that consist of spaces for review of musical scores and performing arts viewing. The Main Library generates a significant deficit in not only reader stations and study space, but also in collection space and general library service space. The physical response to the Music Library will be difficult since the Swope Music Building was recently constructed and is approaching capacity for all venues. The Main Library deficit of over 50,000 ASF will need to be studied in detail. Relative to its placement on campus, the existing library's ability to be repurposed (due to the open space nature of libraries) and the significant deficit will need to be taken into consideration during physical planning. One possibility is the development of a health library on the South Campus.

With the opening of the E. O. Bull Center and the performance venues located with that facility, there still remains an Assembly & Exhibit Space deficit at the plan horizon. The Assembly & Exhibit Space category includes many different types of spaces such as museums, galleries, and performance spaces in general. Focus group meetings held during physical planning with the College of Arts and Sciences, particularly with the Performing and Visual Arts as well as Music, will need to establish whether there is a need for a larger performance space on campus at some point in time, or whether additional gallery or museum space is the Assembly & Exhibit Space type allocation desired on the North and/or South Campus. Additional storage space is also an issue going into the future.

While Physical Plant has a substantial amount of space, much of that space is in old houses, old buildings, basements of existing buildings, or old farm barns such as those that exist on the South Campus. The Warehouse Building and 201 Carter Drive facilities are examples of the types of spaces Physical Plant needs to support the academic and auxiliary spaces of the West Chester University campus. As additional facilities are constructed, Physical Plant will need additional facilities that are strategically located to service those buildings as they come online.

The combined categories of Physical Education, Recreation, and Athletics show more than 75,000 ASF space deficit at the plan horizon. This is after the inclusion of the soon-to-be constructed Student Recreation Center in the northwest corner of the North Campus. The physical response will need to consider replacement or enhancements to the Ehinger Gymnasium and

the Hollinger Field House on the North Campus, as well as additional South Campus facilities relative to the Sturzebecker Health Sciences Center and the Farrell Stadium.

At both the base year and the plan horizon, the Student Center Space in the Auxiliary Space category is in significant deficit. The two primary locations for student center activities presently on the campus are in Lawrence Hall and Sykes Student Union. The large lower level food service area in Lawrence Hall is considered dining support for the housing at the University. Therefore, it was not included in the Student Center guideline as existing space. Much of the remainder of the Lawrence Center's lower level space and some space of the upper level, is part of the Student Center guideline, as well as most of the Sykes Student Union. Physical planning will need to consider the potential for expansion of Student Center Space, whether it is expansion of the existing facilities, creation of new facilities, or dispersing the Student Center functions across the North, South, and East Campuses.

## **Scenarios by College/Unit**

Some issues of particular interest from not only a quantitative but also a qualitative perspective would include some units that occupy functionally obsolete space. One example would be the department of Psychology within the College of Arts and Sciences. That unit presently occupies slightly over 10,000 ASF of space. At the plan horizon, it shows a need of approximately 21,000 ASF or 4,600 square feet if one does not consider classrooms as part of the program mix. The department is presently housed in the Peoples Building, along with Public Safety. An alternative location for Psychology should be investigated during physical planning to support their graduate and undergraduate programs and their substantial deficit in research space at the present location.

The Business and Public Affairs Center has completed its pre-design study and program. It is presently entering the design phase for this project. It is to be located on Sharpless Street across from the Sharpless parking structure. When the facility is occupied, it will vacate space in Anderson Hall and Ruby Jones Hall. The short term physical response will be to re-use all existing office and office support space in these facilities for incoming new faculty and staff. The non-office space will be available for re-use and the physical planning will need to address the expansion of programs in Anderson Hall, as well as the potential repurposing of Ruby Jones Hall for academic programs or administrative programs that need a direct presence on the University campus.

As the E. O. Bull Center comes back online, programs temporarily housed in Mitchell Hall and Anderson Hall will be vacated. In the short term, many of these spaces will be reverted back to classroom space because of the significant deficit in that space category. However, physical planning for the long term will need to address the permanent repurposing of Mitchell Hall to meet the academic needs of the University.

Over the plan horizon, the Schmucker Science Center and Merion Science Center appear to be able to meet the needs at the projected student headcount. As mentioned previously the Biology department has a deficit of space of teaching laboratories; however, the overall space needs for Biology, Chemistry,

Physics, and other occupants of these facilities show relative balance at the plan horizon.

The College of Education at the plan horizon shows a space deficit that primarily consists of Academic Offices & Service Space. The potential for expansion of the College within the existing facilities, as some of these facilities are vacated with the construction of new buildings, will need to be considered.

The College of Health Sciences shows the greatest overall space deficit of almost 35,000 ASF without classroom space added to the mix. A significant amount of that deficit is in Research Laboratories & Service and Academic Offices. Teaching Laboratories also show a significant deficit of over 6,000 ASF. Physical planning will need to address the South Campus from both an Athletics and a College of Health Sciences perspective to determine additional building envelopes and an overall plan for the South Campus in general. With the re-opening of the E. O. Bulls Center, the College of Arts and Sciences and the College of Visual Performing Arts (with minor specific exceptions) will show only minor space deficits at the plan horizon.

Several departments under Academic Affairs were noted to have substantial deficits of space at both the base year and the plan horizon. During on-campus work sessions it was noted that some units present locations and adjacencies are not ideal for delivering their services. These units could include student services and academic support functions; more specifically, departments such as Admissions, Financial Aid, and the LARC.

The majority of the LARC's functions are presently located in the Lawrence Center. If non-LARC functions were moved out of the Lawrence Center during its repurposing, some expansion of the LARC programs could occur. The Lawrence Center is considered to be a good location for these programs since most students visit the building to utilize food service venues.

On many comprehensive university campuses, Paulien & Associates has seen many of the functions of the LARC relative to academic support being included in library additions or new library facilities. Either the Lawrence Center or library location would seem to address the needs of the LARC, as both facilities are in close proximity to housing and the academic core.

Should the physical planning for the Comprehensive Facility Plan look at creating a front door to campus, it would be highly recommended that the admissions and financial aid process be included in that vision. Ease of access to these student service functions, adequacy of short-term parking, and a prime location for the beginning of tours will provide a positive venue for the functions of these departments.

The completion of the physical planning process of the Comprehensive Facility Plan will further clarify the capital projects that will form the implementation strategies for this master plan cycle. As each project process moves toward physical planning, more detailed facility feasibility studies will be developed to outline the programs to be included. The objective will be to consistently address the space needs analysis outcomes, to provide the correct quantity and quality of facilities to meet the University's academic goals and its vision for the future.

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## **Appendix A: ASF by Building by Campus**

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## APPENDIX A - ASF BY BUILDING BY CAMPUS

**Assignable Square Feet by Building by Campus***for Fall 2009*

Class-rooms (110-115)	Teaching Labs (210-215)	Open Labs (220-225)	Research Labs (250-255)	Office (300's)	Library & Study (400's)	Ath/Phys Ed & Rec (520-525)	Special Use (500's)	Assembly & Exhibit (610-625)	General Use (600's)	Support (700's)	Health Care (800's)	Residence (900's)	Inactive/ Conver- sion	Uncoded Space	TOTAL ASF
102 E RsdI Garage															
										462					462
114 W Rosedale															
		123		1,704											1,827
13/15 University Ave															
				3,556											3,556
201 Carter Dr															
431	3,355			20,499	166		2,094		525	11,529					38,599
210 E Rosedale															
454				1,955	98										2,507
220 E Rosedale															
														7,331	7,331
25 University Ave (Old Swope)															
8,244	1,856	1,555		17,902	406				561	265					30,789
624 S. High Street															
		201		365									2,745		3,311
701 S High St															
										3,954				3,166	7,120
703 S High Garage															
										374					374
703 S High St (Bayle House)															
				2,154											2,154
809 Roslyn Ave															
				1,445											1,445
823 S High St															
				656					830						1,486
850 S New St															
				2,979									446		3,425
Allegheny Hall															
				4,175					280	1,076					5,531

## Assignable Square Feet by Building by Campus

for Fall 2009

Class-rooms (110-115)	Teaching Labs (210-215)	Open Labs (220-225)	Research Labs (250-255)	Office (300's)	Library & Study (400's)	Ath/Phys Ed & Rec (520-525)	Special Use (500's)	Assembly & Exhibit (610-625)	General Use (600's)	Support (700's)	Health Care (800's)	Residence (900's)	Inactive/Conversion	Uncoded Space	TOTAL ASF
Alumni House															
				926					1,162			457			2,545
Anderson Hall															
16,342	6,790	3,530		18,140					1,649	304			0		46,755
Athletics Shed															
						200									200
Boiler Plant															
				247											247
Brandywine Hall															
6,090		216		1,875	1,240		1,836		116	308					11,681
Business and Public Affairs Center															
0	0	0		0				0	0	0					0
Chem Stor Bldg															
										703					703
Dynamic Bookstore															
														3,361	3,361
E O Bull - Old															
													29,419		29,419
E O Bull Center															
0	0	0		0	0			0	0	0					0
E O Bull Shed															
													188		188
Ehinger Gym															
				1,476		8,985									10,461
Ehinger Office Annex															
1,380				1,427					234						3,041
Farrell Stadium															
				725		1,724			166						2,615
FHG Library 1															
				4,031	38,078				2,218						44,327

**Assignable Square Feet by Building by Campus***for Fall 2009*

Class-rooms (110-115)	Teaching Labs (210-215)	Open Labs (220-225)	Research Labs (250-255)	Office (300's)	Library & Study (400's)	Ath/Phys Ed & Rec (520-525)	Special Use (500's)	Assembly & Exhibit (610-625)	General Use (600's)	Support (700's)	Health Care (800's)	Residence (900's)	Inactive/ Conver- sion	Uncoded Space	TOTAL ASF
FHG Library 2															
	746	1,567		2,080	59,497		750	367	1,599						66,606
Filano House															
				2,883											2,883
Goshen Hall															
	20	1,880													1,900
Graduate Business Center															
11,250		514		9,290					5,809	1,309				472	28,644
High St Garage															
										670					670
Hollinger Field house															
				2,405		39,962			75						42,442
Lawrence Hall															
		2,538		17,164					52,644						72,346
Lawrence Shed															
										180					180
Main Hall															
18,637	836	1,615		15,086					255	2,859					39,288
Maintenance Storage Shed															
										264					264
McCarthy Hall															
									5,834						5,834
McCoy Barn															
										4,336			2,464		6,800
McCoy EQ Shed															
										3,346					3,346
McCoy Garrison															
				838											838
McCoy Main House															
				1,500									1,097		2,597

## Assignable Square Feet by Building by Campus

for Fall 2009

Class-rooms (110-115)	Teaching Labs (210-215)	Open Labs (220-225)	Research Labs (250-255)	Office (300's)	Library & Study (400's)	Ath/Phys Ed & Rec (520-525)	Special Use (500's)	Assembly & Exhibit (610-625)	General Use (600's)	Support (700's)	Health Care (800's)	Residence (900's)	Inactive/Conversion	Uncoded Space	TOTAL ASF
McKelvie Hall (102 W. Rosedale)															
				3,152											3,152
Merion Hall (formerly Boucher)															
3,550	17,336	993	8,563	5,814			4,033		740						41,029
Messikomer Hall															
				12,806											12,806
Mitchell Hall															
1,040	8,230	2,405		4,190				2,846					0		18,711
Montemuro House (811 Roslyn)															
				1,490									0		1,490
New Recreation Center															
									0						0
Old Library															
4,064	788	989		5,549	156			767					757		13,070
Peoples Building															
	1,276	611	180	6,099			956		234	276					9,632
Philips Memorial															
				5,931				19,140	3,329						28,400
Psychology Research Trailer															
			1,046												1,046
Recitation Hall															
10,171	1,585			9,973	744		376		4,787	3,009					30,645
Reynolds Garage															
										293					293
Reynolds Hall															
				3,202						579					3,781
Ruby Jones Hall															
3,491	630			6,006									0		10,127
Schmucker Science Center Link															
2,632	2,160		193	1,438				1,834	1,298	550					10,105

**Assignable Square Feet by Building by Campus***for Fall 2009*

Class-rooms (110-115)	Teaching Labs (210-215)	Open Labs (220-225)	Research Labs (250-255)	Office (300's)	Library & Study (400's)	Ath/Phys Ed & Rec (520-525)	Special Use (500's)	Assembly & Exhibit (610-625)	General Use (600's)	Support (700's)	Health Care (800's)	Residence (900's)	Inactive/Conversion	Uncoded Space	TOTAL ASF
Schmucker Science Center North															
2,940	11,646	1,539	4,800	3,807			1,402								26,134
Schmucker Science Center South															
2,288	15,375	1,568	11,278	3,604					315					270	34,698
Speakman Building															
				1,829					280	1,527					3,636
Sturzebecker HSC															
10,828	7,153	3,084	2,843	14,272	360	88,811			870						128,221
Swope Music Bldg															
5,583	6,885	5,288		10,809	4,168		175	11,093	1,843	111					45,735
Sykes Student Union															
		654		11,174			1,649	10,431	39,586	1,151					64,645
Tanglewood															
												5,784			5,784
Tanglewood Garage															
								1,806				958			2,764
Tyson Hall															
									1,964						1,964
Warehouse															
				5,049					2,215	33,309					40,573
Wayne Hall (Student Health)															
				1,892			3,390		338						5,620
<b>INSTITUTION TOTAL</b>															
109,395	86,667	30,870	28,903	255,569	104,913	139,682	16,661	48,284	131,556	72,744		7,199	37,116	14,600	1,084,159
Fall 2009 Project Total Student Headcount: 14,211															
<b>Institution ASF/Headcount</b>															
8	6	2	2	18	7	10	1	3	9	5		1	3	1	76



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## **Appendix B: Classroom Utilization Analysis by Building**

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**APPENDIX B - CLASSROOM UTILIZATION ANALYSIS BY BUILDING*****Classroom Utilization Analysis by Building***

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
<b><i>201 Carter Dr</i></b>								
CAR 428	110	431	25	17	23	684	30	91%
<i>Building Average</i>		431	25	17	23		30	91%
<i>Building Total</i>		431	25			684	30	
<i>No. of Rooms</i>		1						
<b><i>210 E Rosedale</i></b>								
LIT 109	110	454	25	18	14	292	21	55%
<i>Building Average</i>		454	25	18	14		21	55%
<i>Building Total</i>		454	25			292	21	
<i>No. of Rooms</i>		1						
<b><i>25 University Ave (Old Swope)</i></b>								
UNA 119	110	620	34	18	28	1,458	52	82%
UNA 120	110	629	34	19	27	1,170	44	78%
UNA 125	110	630	34	19	27	1,287	48	79%
UNA 127	110	624	34	18	26	950	37	76%
UNA 155	110	979	48	20	34	1,484	44	70%
UNA 158	110	1,145	48	24	28	1,353	48	59%
UNA 161	110	1,210	48	25	38	1,846	48	80%
UNA 162	110	1,085	48	23	33	1,464	46	66%
UNA 166	110	760	38	20	34	1,638	48	90%
<i>Building Average</i>		854	41	21	30		46	76%
<i>Building Total</i>		7,682	366			12,650	415	
<i>No. of Rooms</i>		9						
<b><i>Anderson Hall</i></b>								
AND 101	110	675	37	18	23	960	42	62%
AND 102	110	675	38	18	23	833	36	61%
AND 103	110	1,320	99	13	67	2,952	41	73%
AND 108	110	649	32	20	24	835	35	75%
AND 109	110	634	36	18	25	1,038	42	69%
AND 115	110	681	40	17	25	1,128	45	63%
AND 117	110	675	40	17	22	888	38	59%
AND 120	110	676	16	42	21	246	12	128%
AND 201	110	675	34	20	26	1,236	48	76%
AND 202	110	675	35	19	25	1,283	51	72%
AND 203	110	645	36	18	31	1,673	54	87%

### ***Classroom Utilization Analysis by Building***

<b>Room Id</b>	<b>Room Use Code</b>	<b>Assignable Sq. Ft.</b>	<b>No. of Stations</b>	<b>Assignable Sq. Ft. Per Station</b>	<b>Average Enrollment</b>	<b>Weekly Student Contact Hours</b>	<b>Weekly Room Hours</b>	<b>Hours in Use Student Station Occupancy %</b>
AND 204	110	645	40	16	32	1,242	39	80%
AND 205	110	623	36	17	28	1,530	54	79%
AND 207	110	634	37	17	28	1,176	42	76%
AND 208	110	753	41	18	32	1,557	48	79%
AND 209	110	634	40	16	35	1,975	56	88%
AND 211	110	634	38	17	32	1,554	48	85%
AND 212	110	644	36	18	24	1,066	44	67%
AND 213	110	638	37	17	32	1,734	54	87%
AND 215	110	640	36	18	33	1,596	48	92%
AND 217	110	660	36	18	33	1,677	51	91%
AND 219	110	850	40	21	31	1,320	42	79%
AND 222	110	743	36	21	18	583	34	48%
<i>Building Average</i>		699	39	19	29		44	77%
<i>Building Total</i>		16,078	896			30,082	1,003	
<i>No. of Rooms</i>		23						

#### ***Brandywine Hall***

BRN 004	110	1,645	100	16	37	1,560	42	37%
BRN 010	110	1,308	60	22	22	873	39	37%
BRN 031	110	1,261	85	15	53	2,058	39	62%
BRN 033	110	1,714	116	15	69	2,067	30	59%
<i>Building Average</i>		1,482	90	17	45		38	48%
<i>Building Total</i>		5,928	361			6,558	150	
<i>No. of Rooms</i>		4						

#### ***Ehinger Office Annex***

EOA 101	110	1,292	60	22	36	1,238	34	61%
<i>Building Average</i>		1,292	60	22	36		34	61%
<i>Building Total</i>		1,292	60			1,238	34	
<i>No. of Rooms</i>		1						

#### ***Main Hall***

MNH 168	110	5,180	351	15	183	5,222	30	50%
MNH 202	110	660	30	22	26	1,410	54	87%
MNH 212	110	660	36	18	30	1,542	51	84%
MNH 213	110	655	30	22	25	1,344	54	83%
MNH 214	110	650	30	22	28	1,185	42	94%
MNH 215	110	650	31	21	22	1,178	50	76%

**Classroom Utilization Analysis by Building**

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
MNH 300	110	625	30	21	24	1,353	57	79%
MNH 301	110	650	30	22	25	1,479	60	82%
MNH 302	110	650	30	22	24	1,245	51	81%
MNH 303	110	630	30	21	24	1,016	42	81%
MNH 313	110	625	30	21	26	1,380	54	86%
MNH 314	110	653	30	22	28	1,329	48	92%
MNH 315	110	650	30	22	25	1,440	57	84%
MNH 316	110	325	30	11	24	1,314	54	81%
MNH 400	110	656	36	18	24	1,347	57	66%
MNH 401	110	650	40	16	28	1,170	42	70%
MNH 402	110	651	30	22	23	1,263	54	78%
MNH 403	110	630	30	21	28	1,344	48	93%
MNH 413	110	944	45	21	37	1,752	48	81%
MNH 415	110	287	14	21	11	357	33	77%
MNH 416	110	300	14	21	10	281	26	78%
MNH 418	110	660	34	19	24	1,304	54	71%
<i>Building Average</i>		820	45	20	32		48	80%
<i>Building Total</i>		18,041	991			31,255	1,065	
<i>No. of Rooms</i>		22						
<b>Merion Hall (formerly Boucher)</b>								
MER 112	110	1,320	74	18	50	1,925	38	68%
MER 113	110	1,383	109	13	68	1,983	30	61%
<i>Building Average</i>		1,352	92	15	59		34	65%
<i>Building Total</i>		2,703	183			3,908	68	
<i>No. of Rooms</i>		2						
<b>Mitchell Hall</b>								
MIT 201	110	1,040	49	21	34	1,113	33	69%
<i>Building Average</i>		1,040	49	21	34		33	69%
<i>Building Total</i>		1,040	49			1,113	33	
<i>No. of Rooms</i>		1						
<b>Old Library</b>								
OLD 003	110	838	42	20	25	1,235	47	63%
OLD 102	110	895	40	22	32	1,521	44	87%
OLD 202	110	795	47	17	34	1,218	36	72%
OLD 203	110	1,431	68	21	34	1,170	32	54%

### **Classroom Utilization Analysis by Building**

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
<i>Building Average</i>		990	49	20	31		40	70%
<i>Building Total</i>		3,959	197			5,144	158	
<i>No. of Rooms</i>		4						
<b><i>Recitation Hall</i></b>								
REC 101	110	766	38	20	24	1,017	42	64%
REC 102	110	730	36	20	27	1,227	45	76%
REC 102A	110	736	36	20	26	1,071	42	71%
REC 103	110	755	36	21	25	1,092	45	68%
REC 104	110	622	32	19	25	1,203	48	78%
REC 204	110	730	38	19	29	1,121	39	76%
REC 205	110	728	38	19	26	929	36	68%
REC 211	110	730	30	24	23	981	42	78%
REC 212	110	729	35	21	24	1,056	44	68%
REC 213	110	664	30	22	26	1,421	54	88%
REC 301	110	1,241	60	21	41	1,847	45	69%
REC 305	110	441	22	20	17	452	26	80%
REC 307	110	751	35	21	21	911	41	64%
REC 308	110	548	35	16	22	1,106	47	68%
<i>Building Average</i>		727	36	20	26		42	73%
<i>Building Total</i>		10,171	501			15,433	593	
<i>No. of Rooms</i>		14						
<b><i>Ruby Jones Hall</i></b>								
RUB 001	110	640	40	16	32	1,431	45	80%
RUB 102	110	677	40	17	25	1,134	45	63%
RUB 104	110	802	42	19	26	1,306	47	66%
RUB 202	110	688	42	16	33	1,797	54	79%
RUB 204	110	684	36	19	28	1,284	44	82%
<i>Building Average</i>		698	40	17	29		47	74%
<i>Building Total</i>		3,491	200			6,952	234	
<i>No. of Rooms</i>		5						
<b><i>Schmucker Science Center Link</i></b>								
SSL 151	110	2,597	206	13	95	3,994	42	46%

**Classroom Utilization Analysis by Building**

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
<i>Building Average</i>		2,597	206	13	95		42	46%
<i>Building Total</i>		2,597	206			3,994	42	
<i>No. of Rooms</i>		1						
<b>Schmucker Science Center North</b>								
SSN 190	110	1,363	77	18	55	1,787	33	70%
SSN 191	110	828	50	17	24	694	28	50%
SSN 192	110	574	33	17	19	641	30	66%
<i>Building Average</i>		922	53	17	33		30	63%
<i>Building Total</i>		2,765	160			3,122	90	
<i>No. of Rooms</i>		3						
<b>Schmucker Science Center South</b>								
SSS 107	110	894	53	17	35	1,127	31	69%
SSS 109	110	837	54	16	38	1,605	42	71%
<i>Building Average</i>		866	54	16	36		37	70%
<i>Building Total</i>		1,731	107			2,732	73	
<i>No. of Rooms</i>		2						
<b>Sturzebecker HSC</b>								
HSC 108	110	600	32	19	28	642	23	86%
HSC 116A	110	804	49	16	29	1,704	63	55%
HSC 116B	110	776	49	16	32	1,338	42	65%
HSC 116C	110	944	40	24	36	2,130	59	91%
HSC 116D	110	935	40	23	27	626	27	59%
HSC 116E	110	917	30	31	26	942	37	86%
HSC 119A	110	650	35	19	24	1,176	60	56%
HSC 119B	110	644	35	18	30	1,005	33	87%
HSC 325	110	843	40	21	31	1,835	59	77%
HSC 327	110	912	40	23	34	1,582	47	85%
HSC 328	110	899	40	22	31	1,654	53	79%
HSC 329	110	857	40	21	41	1,435	37	97%
HSC 331	110	838	40	21	30	1,269	41	77%
<i>Building Average</i>		817	39	21	31		45	76%
<i>Building Total</i>		10,619	510			17,338	580	
<i>No. of Rooms</i>		13						

### ***Classroom Utilization Analysis by Building***

<b>Room Id</b>	<b>Room Use Code</b>	<b>Assignable Sq. Ft.</b>	<b>No. of Stations</b>	<b>Assignable Sq. Ft. Per Station</b>	<b>Average Enrollment</b>	<b>Weekly Student Contact Hours</b>	<b>Weekly Room Hours</b>	<b>Hours in Use Student Station Occupancy %</b>
<b><i>Swope Music Bldg</i></b>								
SMB 204	110	635	37	17	22	702	29	66%
SMB 208	110	607	24	25	18	440	25	73%
SMB 210	110	605	24	25	22	756	34	92%
SMB 220	110	645	30	22	19	748	31	81%
SMB 225	110	630	24	26	18	416	22	81%
SMB 303	110	426	26	16	20	638	32	77%
SMB 304	110	425	27	16	19	475	25	70%
SMB 307	110	425	29	15	17	443	25	61%
SMB 310	110	425	24	18	9	178	20	38%
SMB 311	110	400	18	22	10	268	26	57%
<i>Building Average</i>		522	26	20	17		27	71%
<i>Building Total</i>		5,223	263			5,064	268	
<i>No. of Rooms</i>		10						
<b>AVERAGE</b>		<b>812</b>	<b>44</b>	<b>20</b>	<b>30</b>		<b>42</b>	<b>74%</b>
<b>TOTAL</b>		<b>94,205</b>	<b>5,100</b>			<b>147,559</b>	<b>4,858</b>	
<b>NO. OF ROOMS</b>		<b>116</b>						

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## **Appendix C: Teaching Laboratory Utilization Analysis by Building**

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**APPENDIX C - TEACHING LABORATORY UTILIZATION ANALYSIS BY BUILDING****Teaching Laboratory Utilization Analysis by Building**

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
<b>201 Carter Dr</b>								
CAR 420	210	347	10	35	3	70	23	30%
Building Average		347	10	35	3		23	30%
Building Total ASF		347						
No. of Rooms		1						
<b>25 University Ave (Old Swope)</b>								
UNA 139	210	573	10	57	4	12	3	40%
UNA 141	210	574	28	21	24	432	18	86%
Building Average		574	19	39	14		11	79%
Building Total ASF		1,147						
No. of Rooms		2						
<b>Anderson Hall</b>								
AND 001	210	689	30	23	22	330	15	73%
AND 004	210	671	25	27	25	882	36	98%
AND 017	210	672	26	26	26	624	24	100%
AND 019	210	657	26	25	29	513	18	110%
AND 025	210	717	24	30	24	1,008	42	100%
AND 104	210	1,008	20	50	15	549	36	76%
AND 111	210	1,322	20	66	11	63	6	53%
Building Average		819	24	35	22		25	92%
Building Total ASF		5,736						
No. of Rooms		7						
<b>Main Hall</b>								
MNH 201	210	666	27	25	24	213	9	88%
Building Average		666	27	25	24		9	88%
Building Total ASF		666						
No. of Rooms		1						
<b>Merion Hall (formerly Boucher)</b>								
MER 109	210	1,031	40	26	24	567	23	62%
MER 118	210	640	12	53	8	16	2	67%
MER 122	210	1,194	20	60	19	154	8	96%
MER 124	210	1,167	20	58	17	240	14	86%
MER 208	210	779	18	43	11	44	4	61%
MER 216	210	844	30	28	28	389	14	93%
MER 219	210	695	30	23	29	286	10	95%
MER 220	210	816	30	27	30	536	18	99%
MER 222	210	1,097	28	39	26	752	28	96%
MER 304	210	1,120	24	47	20	328	17	83%

## Teaching Laboratory Utilization Analysis by Building

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
MER 307	210	619	20	31	11	61	6	53%
MER 314	210	1,101	24	46	19	366	19	81%
MER 316	210	1,120	24	47	24	484	20	101%
<i>Building Average</i>		940	25	41	21		14	86%
<i>Building Total ASF</i>		12,223						
<i>No. of Rooms</i>		13						
<b>Mitchell Hall</b>								
MIT 102	210	720	22	33	20	243	12	92%
MIT 103	210	600	20	30	24	72	3	120%
MIT 104	210	600	20	30	18	213	12	89%
MIT 106	210	725	24	30	23	744	33	94%
MIT 111	210	798	24	33	18	159	9	74%
MIT 200	210	639	23	28	21	318	15	92%
MIT 202	210	831	20	42	18	318	18	88%
MIT 203	210	592	22	27	21	444	21	96%
MIT 204	210	592	12	49	10	30	3	83%
MIT 206	210	725	23	32	18	273	15	79%
<i>Building Average</i>		682	21	33	19		14	90%
<i>Building Total ASF</i>		6,822						
<i>No. of Rooms</i>		10						
<b>Peoples Building</b>								
PEO 034	210	611	22	28	19	621	33	86%
PEO 060	210	555	20	28	16	48	3	80%
<i>Building Average</i>		583	21	28	18		18	86%
<i>Building Total ASF</i>		1,166						
<i>No. of Rooms</i>		2						
<b>Recitation Hall</b>								
REC 306	210	787	27	29	26	853	33	97%
REC 311	210	798	28	29	26	237	9	94%
<i>Building Average</i>		793	28	29	26		21	96%
<i>Building Total ASF</i>		1,585						
<i>No. of Rooms</i>		2						
<b>Ruby Jones Hall</b>								
RUB 006	210	630	22	29	19	231	12	88%
<i>Building Average</i>		630	22	29	19		12	88%
<i>Building Total ASF</i>		630						
<i>No. of Rooms</i>		1						

**Teaching Laboratory Utilization Analysis by Building**

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
<b>Schmucker Science Center North</b>								
SSN 174	210	1,109	24	46	24	1,204	50	100%
SSN 181	210	939	24	39	25	664	26	106%
SSN 183	210	1,014	24	42	24	310	13	102%
SSN 275	210	1,056	24	44	27	154	6	110%
SSN 276	210	1,005	24	42	23	391	17	95%
SSN 279	210	1,055	24	44	19	175	10	74%
SSN 379	210	1,097	24	46	20	208	11	81%
SSN 381	210	1,101	24	46	0	0	0	0%
<i>Building Average</i>		1,047	24	44	20		17	98%
<i>Building Total ASF</i>		8,376						
<i>No. of Rooms</i>		8						
<b>Schmucker Science Center South</b>								
SSS 011	210	886	30	30	28	422	15	94%
SSS 101	210	905	24	38	24	474	20	99%
SSS 103	210	986	25	39	24	282	12	95%
SSS 105	210	928	24	39	24	119	5	99%
SSS 207	210	1,003	18	56	18	72	4	100%
SSS 215	210	1,025	24	43	15	120	8	63%
SSS 217	210	1,013	24	42	12	137	12	48%
SSS 317	210	1,557	24	65	15	480	32	64%
SSS 402	210	998	30	33	30	343	12	99%
<i>Building Average</i>		1,033	25	43	21		13	81%
<i>Building Total ASF</i>		9,301						
<i>No. of Rooms</i>		9						
<b>Sturzebecker HSC</b>								
HSC 102	210	1,372	25	55	22	333	15	89%
HSC 104	210	1,530	25	61	22	732	33	89%
HSC 226	210	867	20	43	34	1,010	32	160%
HSC 326	210	863	20	43	17	151	9	86%
HSC 330	210	868	20	43	21	63	3	105%
HSC 332	210	863	24	36	20	463	23	84%
<i>Building Average</i>		1,061	22	47	23		19	108%
<i>Building Total ASF</i>		6,363						
<i>No. of Rooms</i>		6						
<b>Swope Music Bldg</b>								
SMB 141	210	1,960	98	20	42	2,888	44	67%
SMB 152	210	715	50	14	16	417	16	54%
SMB 320	210	1,445	100	14	22	693	31	23%
SMB 344	210	375	10	38	8	98	12	82%

### Teaching Laboratory Utilization Analysis by Building

Room Id	Room Use Code	Assignable Sq. Ft.	No. of Stations	Assignable Sq. Ft. Per Station	Average Enrollment	Weekly Student Contact Hours	Weekly Room Hours	Hours in Use Student Station Occupancy %
SMB 345	210	350	16	22	10	162	17	60%
SMB 346	210	370	10	37	9	227	25	91%
<i>Building Average</i>		<i>869</i>	<i>47</i>	<i>24</i>	<i>18</i>		<i>24</i>	<i>61%</i>
<i>Building Total ASF</i>		<i>5,215</i>						
<i>No. of Rooms</i>		<i>6</i>						
<b>AVERAGE</b>		<b>876</b>	<b>25</b>	<b>37</b>	<b>20</b>		<b>17</b>	<b>86%</b>
<b>TOTAL ASF</b>		<b>59,577</b>						
<b>NO. OF ROOMS</b>		<b>68</b>						

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## **Appendix D: Guideline Comparison**

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## APPENDIX D - GUIDELINE COMPARISON

**Paulien & Associates' Analysis Guidelines Compared to PASSHE Guidelines**

Paulien & Associates, Inc.					PASSHE																																																																																				
Space Category / Guidelines					PASSHE Space Categories																																																																																				
Classroom & Service	22 ASF per Student Station	37.5 Weekly Room Hours	87% Student Station Occupancy	= .8756 ASF per WSCH	20 ASF per Student Station	37.5 Weekly Room Hours	87% Student Station Occupancy	= .7960 ASF per WSCH X 1.1 for Service Factor = .8756 ASF per WSCH	110/115 Classrooms																																																																																
Key Difference: PASSHE WSCHs are an assumed average. P&A uses actual WSCHs generated from the Course File.					PASSHE assumption: 13.7 WSCH per FTES																																																																																				
Teaching Laboratories	<table><tr><th></th><th>ASF/ Station</th><th>Weekly Room Hours</th><th>Student Station Occupancy</th><th>ASF/WSCH</th></tr><tr><td>Business</td><td>40</td><td>23</td><td>70%</td><td>2.4845</td></tr><tr><td>Education</td><td></td><td></td><td></td><td></td></tr><tr><td>Education</td><td>40</td><td>23</td><td>70%</td><td>2.4845</td></tr><tr><td>Human Kinetics/Dance</td><td>150</td><td>23</td><td>70%</td><td>9.3168</td></tr><tr><td>Liberal Arts &amp; Sciences</td><td></td><td></td><td></td><td></td></tr><tr><td>Anthropology</td><td>60</td><td>23</td><td>70%</td><td>3.7267</td></tr><tr><td>Biology/Chemistry/Physical Science/Physics</td><td>75</td><td>23</td><td>70%</td><td>4.6584</td></tr><tr><td>Computer Science/Electronic Media/Geography/ Geology</td><td>60</td><td>23</td><td>70%</td><td>3.7267</td></tr><tr><td>Mathematics/English/Modern Languages</td><td>40</td><td>23</td><td>70%</td><td>2.4845</td></tr><tr><td>Nursing</td><td>65</td><td>23</td><td>70%</td><td>4.0373</td></tr><tr><td>Visual &amp; Performing Arts</td><td></td><td></td><td></td><td></td></tr><tr><td>Art</td><td>60</td><td>23</td><td>70%</td><td>3.7267</td></tr><tr><td>Art Education</td><td>40</td><td>23</td><td>70%</td><td>2.4845</td></tr><tr><td>Communication Design / Music</td><td>60</td><td>23</td><td>70%</td><td>3.7267</td></tr><tr><td>Theatre Arts</td><td>100</td><td>23</td><td>70%</td><td>6.2112</td></tr></table>					ASF/ Station	Weekly Room Hours	Student Station Occupancy	ASF/WSCH	Business	40	23	70%	2.4845	Education					Education	40	23	70%	2.4845	Human Kinetics/Dance	150	23	70%	9.3168	Liberal Arts & Sciences					Anthropology	60	23	70%	3.7267	Biology/Chemistry/Physical Science/Physics	75	23	70%	4.6584	Computer Science/Electronic Media/Geography/ Geology	60	23	70%	3.7267	Mathematics/English/Modern Languages	40	23	70%	2.4845	Nursing	65	23	70%	4.0373	Visual & Performing Arts					Art	60	23	70%	3.7267	Art Education	40	23	70%	2.4845	Communication Design / Music	60	23	70%	3.7267	Theatre Arts	100	23	70%	6.2112	50 ASF per Student Station	23 Weekly Room Hours	70% Student Station Occupancy	= 3.11 ASF per WSCH X 1.25 for Service Factor = 3.8875 ASF per WSCH	210/220 Teaching Lab & Open Lab
	ASF/ Station	Weekly Room Hours	Student Station Occupancy	ASF/WSCH																																																																																					
Business	40	23	70%	2.4845																																																																																					
Education																																																																																									
Education	40	23	70%	2.4845																																																																																					
Human Kinetics/Dance	150	23	70%	9.3168																																																																																					
Liberal Arts & Sciences																																																																																									
Anthropology	60	23	70%	3.7267																																																																																					
Biology/Chemistry/Physical Science/Physics	75	23	70%	4.6584																																																																																					
Computer Science/Electronic Media/Geography/ Geology	60	23	70%	3.7267																																																																																					
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Art Education	40	23	70%	2.4845																																																																																					
Communication Design / Music	60	23	70%	3.7267																																																																																					
Theatre Arts	100	23	70%	6.2112																																																																																					
Open Laboratories	3 ASF per Student FTE				PASSHE assumption: 4.2 WSCH per FTES																																																																																				
Key Difference: P&A separates teaching from open laboratories; teaching lab guidelines are discipline specific; PASSHE WSCHs are an assumed average. P&A uses actual WSCHs generated from the Course File.																																																																																									

**Paulien & Associates' Analysis Guidelines Compared to PASSHE Guidelines**

Paulien & Associates, Inc.				PASSHE																																																																																																		
Space Category / Guidelines				PASSHE Space Categories																																																																																																		
Research Laboratories				40 ASF per FTEF	5,000 ASF Minimum	250/255 Research/Nonclass Lab																																																																																																
<table><tr><th>Discipline</th><th>ASF</th></tr><tr><td>Anthropology</td><td>400</td></tr><tr><td>Biology/Chemistry/Physic</td><td>400</td></tr><tr><td>Health/Kinesiology</td><td>400</td></tr><tr><td>Computer Science/GIS</td><td>200</td></tr><tr><td>Geology/Astronomy</td><td>200</td></tr><tr><td>Social Work</td><td>200</td></tr><tr><td>Psychology</td><td>200</td></tr></table>				Discipline	ASF	Anthropology	400	Biology/Chemistry/Physic	400	Health/Kinesiology	400	Computer Science/GIS	200	Geology/Astronomy	200	Social Work	200	Psychology	200																																																																																			
Discipline	ASF																																																																																																					
Anthropology	400																																																																																																					
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Geology/Astronomy	200																																																																																																					
Social Work	200																																																																																																					
Psychology	200																																																																																																					
Key Difference: P&A applied modular standards to full-time Faculty for only those disciplines needing research space or who already have research space, based on CEFPI modules				PASSHE using CEFPI's latest standard																																																																																																		
Office Space				300s Office/Conference Room																																																																																																		
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Key Difference: P&A guidelines more specific to titles and applied per headcount. Service and conference room space more specific to units and their functions																																																																																																						

**Paulien & Associates' Analysis Guidelines Compared to PASSHE Guidelines**

Paulen & Associates, Inc.					PASSHE				
Space Category / Guidelines					PASSHE Space Categories				
Library	Study Space = 30 ASF	Stack Space = Sliding scale of 0.10 - .07 ASF per Volume Equivalent	Service Space = 12.5% of study space + collection space	Lounge Space = 2 ASF per Reader station	Study Space = 30 ASF	Stack Space = Sliding scale of 0.10 - .07 ASF per Volume Equivalent	Open Stack Study Space = 10% of Stack Space	Processing Space = 12.5% of study space + stack space + open stack study space	400 Study
	*(15% of FTES + FTEF)				*(15% of FTES + FTEF) * 1.1 for Study Service Space				
<i>Key Difference: P&amp;A includes office space in the service space; adds lounge space for those libraries with a café.</i>					Core = 10,000 for first 2,000 FTES	6 ASF per FTES above 2,000			
Physical Education & Athletics					Core = 50,000 for first 1,500 FTES	6 ASF per FTES above 1,500			520 Athletic or Physical Education Space
					No guideline	Existing Space in this category			523 Athletic or Physical Education Space (covered)
					Core = 10,000 for first 2,000 FTES	6 ASF per FTES above 2,000			525 Athletic or Phys. Educ. Service Space
<i>Key Difference: Used modified PASSHE guideline based on review of WCU faculties and space amounts from comparable institutions.</i>									

**Paulien & Associates' Analysis Guidelines Compared to PASSHE Guidelines**

<b>Paulien &amp; Associates, Inc.</b>		<b>PASSHE</b>			
<b>Space Category / Guidelines</b>		<b>PASSHE Space Categories</b>			
<b>Other Department Space</b>	(400 Space not under the University Library; 530 Media Production; 540 Clinic; 550 Demonstration; 560 Field Building; 570/575 Animal Quarter; 580/585 Greenhouse; 590 Other (All Purpose); 640/645 Day Care; 650/660 Lounge/Merchandising; 680/685 Meeting Room)	1 ASF per FTES	5,000 minimum		530 Media Production
	5 ASF per Student FTE	0.4 ASF per FTES			540 Clinic
		No guideline	Assumes space is a replication of some other space type		550 Demonstration
		No guideline	Existing Space in this category		560 Field Building
		0.2 ASF per FTES			570/575 Animal Quarter
		0.5 ASF per FTES			580/585 Greenhouse
		1 ASF per FTES	5,000 minimum		590 Other (All Purpose)
		No guideline	State Statutes; Existing Space		640/645 Day Care
		1 ASF per FTES + FTEF + FTEN (admin & clerical)	PLUS 4 ASF per FTEN (all other employees, except doctoral, graduate, and student workers)		650/660 Lounge/Merchandising
		Core = 5,000	1 ASF per FTES over 5,000		680/685 Meeting Room
<b>Assembly &amp; Exhibit</b>	<i>Key Difference: P&amp;A Guideline not space type specific but based on existing space allocations and space types that the University should have</i> <i>Used the PASSHE guideline as it is similar to others that we have used.</i>	Core = 14,500	6 ASF per FTES over 2,000	6 ASF per FTEN and FTEF PLUS 5,000 ASF for approved Music Program	610/615 Assembly
		Core = 1,500 ASF	1 ASF per FTES over 2,000	1 ASF per FTEN and FTEF	620/625 Exhibition Space

**Paulien & Associates' Analysis Guidelines Compared to PASSHE Guidelines**

<b>Paulien &amp; Associates, Inc.</b>		<b>PASSHE</b>	
<b>Space Category / Guidelines</b>		<b>PASSHE Space Categories</b>	
<b>Support Facilities</b>	<i>Used the PASSHE guideline as it is within space planning standards</i>	5% of total ASF	700 Support Facilities
<b>Student Union</b>	<i>Used 9 ASF per FTE: Within PASSHE guideline intentions for type of space and factors at WCU.</i>	10 ASF per FTE	980 Student Union

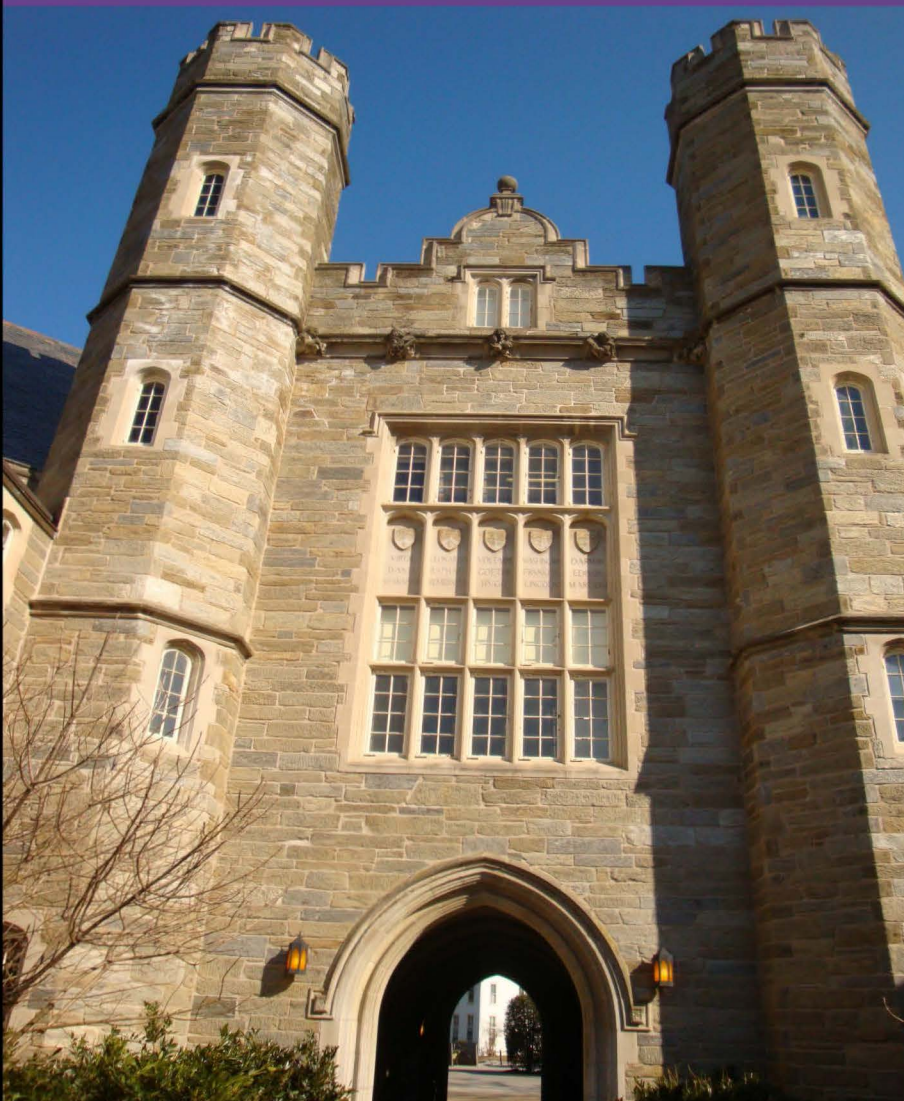
ASF = Assignable Square Feet



# West Chester University of Pennsylvania

## Space Needs Analysis for the Comprehensive Campus Plan

### ADDENDUM - Departmental Space Needs Analysis



February 2011

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# Executive Summary

## EXECUTIVE SUMMARY

### Process

This addendum is an extension to the larger study entitled *Space Needs Analysis for the Comprehensive Campus Plan*, dated December 2010. Every effort was made to maintain consistency with this report so guidelines and methodology could be compared across documents. For the addendum, Paulien & Associates was provided with revised enrollment data. With minor exceptions, the facilities inventory from the original report was used as the basis for this analysis. For continuity, course data from the Fall 2009 semester was used as the base year for this study.

On February 3<sup>rd</sup> and 4<sup>th</sup>, 2011, on-campus meetings were conducted with select department chairs (or designees) and college level deans from the College of Arts and Sciences and the College of Health Sciences. Before the meetings, the consultants reviewed the facility inventory at the departmental level, verifying departmental assignment, office occupancy, and the accuracy of space use codes.

### Departments in the Analysis

#### College of Arts and Sciences

Anthropology & Sociology
Communication Studies
English
Languages and Cultures
History
Liberal, Women's and Professional Studies
Philosophy
Psychology

#### College of Health Sciences

Health
Kinesiology
Nursing
Sports Medicine
Communicative Disorders
Dean's Area

The departmental space needs analysis included eight of the 15 departments from the College of Arts and Sciences and six departments from the College of Health Sciences. The College of Health Sciences also included the Dean's administrative area. The 14 departments are noted in the table shown to the left.

These departments were selected for several reasons. First, the College of Arts and Sciences and the College of Health Sciences generated large space deficits at the Plan Horizon (Fall 2020) based on the campus-wide space needs analysis study conducted in 2010. Second, selected departments

were in facilities that were being examined more closely as part of the overall Comprehensive Campus Plan. As an example, many of the humanities and liberal arts departments are housed in Main Hall, which is a five story building where each office typically houses two to four faculty members in a shared arrangement and the building is in need of repair and renovation.

## Enrollment Projections

On-campus enrollment projections were developed as part of the campus-wide space needs analysis for the Comprehensive Campus Plan (See Section 2, *Planning Assumptions* in separate report). For the College of Arts and Sciences, on-campus growth rates of 8.5% for undergraduates and 0% for graduate students were used to generate space needs at the college level, with the exception of Psychology, where graduate growth was established at 24%. For the College of Health Sciences, ten-year enrollment growth was projected at 13.9% for undergraduate programs and 90% for the majority of graduate programs. The Kinesiology Department graduate enrollment projections were increased due to the introduction of new degrees. Headcount and full-time equivalent (FTE) enrollments for Fall 2009 and the Plan Horizon (Fall 2020) are noted in the table below.

### Departmental Analysis - Enrollment Projections

College of Arts and Sciences	Fiscal Year 09-10 FTES		Fall 2009 Headcount Enrollment (Majors)		Plan Horizon Headcount Enrollment (On-Campus)		On-Campus Percent Change	
	Under graduate	Graduate	Under graduate	Graduate	Under graduate	Graduate	Under graduate	Graduate
Anthropology & Sociology	376.1	1.8	116	3	126	3	8.5%	0%
Communication Studies	562.3	20.8	326	31	354	31	8.5%	0%
English	1076.5	80.5	497	119	539	119	8.5%	0%
Languages and Cultures	508.7	22.1	150	31	163	31	8.5%	0%
History	405.1	26.1	463	58	502	58	8.5%	0%
Liberal Studies	3.9	0	440	0	477	0	8.5%	0%
Philosophy	292.2	14.9	39	20	42	20	8.5%	0%
Psychology	552.7	92.3	534	113	579	140	8.5%	24%
Women's Studies	61.4	0.3	15	0	16	0	8.5%	0%
<b>Total</b>	<b>3838.9</b>	<b>258.8</b>	<b>2580</b>	<b>375</b>	<b>2799</b>	<b>402</b>		

College of Health Sciences	Fiscal Year 09-10 FTES		Fall 2009 Headcount Enrollment (Majors)		Plan Horizon Headcount Enrollment (On-Campus)		On-Campus Percent Change	
	Under graduate	Graduate	Under graduate	Graduate	Under graduate	Graduate	Under graduate	Graduate
Health	625.8	115.3	500	144	570	274	13.9%	90%
Kinesiology	582.1	56.2	802	39	914	80	13.9%	105%
Nursing	241.7	22.2	365	37	416	70	13.9%	90%
Sports Medicine	80	0	141	0.0	161	0	13.9%	0%
Communicative Disorders	102.7	92.3	123	85	140	162	13.9%	90%
<b>Total</b>	<b>1632.3</b>	<b>286</b>	<b>1931</b>	<b>305.01</b>	<b>2200</b>	<b>586</b>		

The enrollment projections assume that the FTE to student headcount ratio and the student demographic remains relatively stable over the planning period. Again, the enrollment assumptions are based on the number of students that would be physically present at the West Chester campus.

## Staffing Projections

The consultants used the established student-faculty ratios to project faculty office needs at the Departmental level for the Plan Horizon. Growth in the number of faculty positions was based on Fall 2009 data, as noted in the table below. All other staff positions were assumed to grow at half the rate of enrollment growth based on an average of both graduate and undergraduate enrollments.

### Departmental Analysis - Staffing Projections

College of Arts and Sciences	Fall 2009 Faculty Headcount			New Faculty 2010	FY 2009 Student/ Faculty Ratio
Anthropology & Sociology	10	7	0	1	23.6
Communication Studies	18	15	0	1	18.1
English	50	18	0	4	18.4
Languages and Cultures	17	21	1	3	18.2
History	17	9	0	1	19.7
Liberal Studies	0	0	0	0	0.0
Philosophy	6	10	0	1	20.7
Psychology	21	9	0	1	24.0
Women's Studies	1	0	0	1	231.3

College of Health Sciences	Fall 2009 Faculty Headcount			New Faculty 2010	FY 2009 Student/ Faculty Ratio
Health	20	11	1	1	23.9
Kinesiology	15	19	2	1	21.9
Nursing	15	15	3	0	8.3
Sports Medicine	7	1	0	0	13.3
Communicative Disorders	6	11	1	1	15.1

## Guideline Application Assumptions

The original space needs guideline application (see original report) for each space category was used for this analysis. Departmental level space is mostly comprised of classrooms, laboratories, offices and academic supports spaces.

The consultant used the PASSHE classroom utilization goals as well as its space guideline of 22 ASF assignable square feet (ASF) per classroom student station (20 ASF per station plus ten percent service space) with a target utilization of 37.5 hours per week and student station occupancy of 67% to determine classroom space requirements.

In keeping with the spirit of the PASSHE guidelines for teaching laboratories, the utilization goals of 23 weekly room hours and 70% student station occupancy were used for all disciplines. The ASF per student station varied by discipline.

Research laboratories are rooms used for unscheduled laboratory experimentation or training in research methods and observation. The research may be conducted by either faculty or students for both funded and non-

funded research. Only those programs or disciplines which require research space or for which non-office based research space is needed were included in the analysis. The generation of research space was based on the number of tenured and tenure-track faculty conducting research. This approach was patterned after the PASSHE guidelines.

Using the PASSHE space guidelines as a foundation, the consultants developed office space guidelines for each department. Permanent faculty members were provided with a 150 ASF office while temporary and regular part time faculty members were programmed at two positions per 150 ASF office. The size of the office for Departmental chair faculty was increased to 160 ASF to accommodate a small conference table for meetings inside the office space. All administrative assistants received a 120 ASF office allocation.

In addition to office space, each permanent faculty member was allocated 40 ASF of office service space. This included spaces for departmental conference rooms, reception areas, mail and copier rooms, and storage areas. Each department requires a conference room to conduct departmental and committee meetings, thesis defense, or student meetings. When not being used as a conference room, the rooms are of adequate size to hold seminar courses of 10 to 16 students.

Other Academic Department Space varies by department and could include departmental libraries, interview rooms, student lounges, media production rooms, clinics, demonstration rooms, or meeting rooms. The space in this category is described in the section entitled "*Space Needs Analysis Outcomes by Department*," which follows this section.

For departments having graduate assistants, a space allocation of 120 ASF per FTE was used to generate space. In most cases, this results in four to six positions sharing a single office.

## **Interpretation of Departmental Space Needs Tables**

A space needs analysis was completed for each academic department. The results are displayed in a series of space needs analysis tables. The following section provides a description of how to interpret the results.

- For each space category, four columns illustrate the findings at the Base Year (Fall 2009) and the Plan Horizon. The Existing ASF at the Base Year and Plan Horizon includes all current and projected academic facilities. Only assignable square feet (ASF) were included, which is the usable area of a building and does not include circulation areas such as corridors, mechanical/electrical areas, building structure space, custodial closets, or restrooms. As an illustration, the Department of Anthropology and Sociology contained 3,381 of existing Academic Offices & Service space in Fall 2009 (see table on Page 9 of this report).
- Reviewing the second column, the Guideline ASF is a calculation of how much space is ideally needed in each space category at the Base Year and Plan Horizon, given

enrollment, program, and staffing assumptions. The consultants applied appropriate guidelines as previously noted. Referring to the table, the guideline calculation produced a need for 2,905 ASF of Academic Offices & Service space at the Base Year (Fall 2009) for the Department of Anthropology and Sociology.

- The Surplus/(Deficit) column is the difference between the Existing ASF and Guideline ASF totals, while the Percent Surplus/(Deficit) column is the magnitude of the difference expressed as a percent. For each column, deficits are presented in parentheses and indicate a space need in that category. Referring to the example on Page 9, the department had a 476 ASF or 14% surplus of Academic Offices & Service space during Fall 2009. The space needs analysis is quantitative only and does not take into account the quality of space to serve the campus mission.



# **Space Needs Analysis Outcomes by Department**

## **SPACE NEEDS ANALYSIS OUTCOMES BY DEPARTMENT**

The Space Needs Analysis by space category is noted in the following tables for each department. Each departmental analysis is comprised of three areas; Degrees and Program, Location, and Space Needs Analysis. The reader should review the original 2010 study to understand guideline applications for each space category.

The deficits identified in this addendum will require additional facilities to meet the future academic mission of the University. However, due to the different categories of space deficits, no one physical solution will suffice. The last section of this report describes many of the implications for physical planning.

## **COLLEGE OF ARTS AND SCIENCES**

### ***Anthropology & Sociology***

#### **Degrees and Programs**

The Department of Anthropology and Sociology offers Bachelor of Arts Degrees in Sociology and in Anthropology. The department does not offer graduate degrees in either Sociology or Anthropology. However, the department does offer a graduate certificate in Gerontology. The Department of Anthropology and Sociology also participates in a number of interdisciplinary and specialty programs, including Ethnic Studies, Women's Studies, and Archaeology.

#### **Location**

The department has been located in the Old Library building for a number of years and has adapted its needs to the existing floor plan of the building. The exhibit/gallery space in the original atrium center provides ample space to display artifacts and collections. Due to safety and fire code issues, the offices on the fourth floor of the Old Library are inactive. Currently, the department occupies 10,490 ASF (Active and Inactive) with additional space of 1,426 ASF available when Sponsored Research moves from the building.



#### **Space Needs Analysis**

At the Plan Horizon, application of the space guidelines at the projected enrollment and staffing levels generated a total need of approximately 10,232 ASF of space (excluding classrooms) or a 2,563 ASF deficit when compared to existing space.

The Teaching Laboratories & Service category includes space for expansion of existing programs and a 25 station computer laboratory for student projects and research. Open laboratory space is also needed for student projects and data coding.

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Research space for two small wet labs was factored into the analysis for archaeology and anthropology faculty and student research. The laboratories should be adjacent to classrooms and contain ample space for the storage of excavating and washing equipment.

The current amount of exhibit space is adequate for the department's collection. However, additional space is needed to store collections while not on display.

### *Anthropology & Sociology*

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	4,064	5,285	(1,221)	(30%)	4,064	5,666	(1,602)	(39%)
Teaching Laboratories & Service	788	800	(12)	(2%)	1,286	2,295	(1,009)	(78%)
Open Laboratories & Service	1,151	1,424	(273)	(24%)	1,151	1,533	(382)	(33%)
Research Laboratories & Service	0	900	(900)	n/a	0	1,800	(1,800)	n/a
Academic Offices & Service	3,381	2,905	476	14%	4,309	3,210	1,099	26%
Other Academic Department Space	156	232	(76)	(49%)	156	214	(58)	(37%)
<i>Academic Space Subtotal</i>	<i>9,540</i>	<i>11,546</i>	<i>(2,006)</i>	<i>(21%)</i>	<i>10,966</i>	<i>14,718</i>	<i>(3,752)</i>	<i>(34%)</i>
<b>Academic Support Space</b>								
Assembly & Exhibit	767	1,329	(562)	(73%)	767	1,180	(413)	(54%)
<i>Academic Support Space Subtotal</i>	<i>767</i>	<i>1,329</i>	<i>(562)</i>	<i>(73%)</i>	<i>767</i>	<i>1,180</i>	<i>(413)</i>	<i>(54%)</i>
<b>TOTAL</b>	<b>10,307</b>	<b>12,875</b>	<b>(2,568)</b>	<b>(25%)</b>	<b>11,733</b>	<b>15,898</b>	<b>(4,165)</b>	<b>(35%)</b>
<i>Total without Classrooms</i>	<i>6,243</i>	<i>7,590</i>	<i>(1,347)</i>	<i>(22%)</i>	<i>7,669</i>	<i>10,232</i>	<i>(2,563)</i>	<i>(33%)</i>
<i>Inactive/Conversion Space</i>	<i>183</i>				<i>183</i>			

## **Communication Studies**

### **Degrees and Programs**

The Department of Communication Studies offers a Bachelor of Arts Degree in Communication Studies. A Minor in Communication Studies is also offered in a B.A. or B.S. program. The graduate program offers a MA in Communication Studies with two program options. The Department of Communication Studies also offers an Internship Program that provides majors students with an opportunity to earn credit for qualified non-classroom experiences that are related to their major and course of study.



### **Location**

The department has a total of 2,992 ASF (excluding classrooms), which is currently located in three separate buildings. The majority of space, 3,196 ASF, is located in Main Hall. The remaining areas are located in Anderson Hall which has 1,381 ASF (office and classroom space), and Mitchell Hall with 401 ASF of office space. The Communications Studies program also uses the Digital Media Center of approximately 1,500 ASF in Brandywine Hall, and will remain in this location.

### **Space Needs Analysis**

The guideline generated a need for 6,489 ASF at the Plan Horizon, excluding classrooms, or a deficit of 3,497 ASF. The classroom deficit is the result of using general purpose classrooms that are assigned to the Registrar, and not the department. The largest need is in the Academic Offices & Service category as a single office was programmed for each permanent faculty. Shared office space was also generated for graduate assistants and is included in the total. Open laboratory space includes collaborative or group work spaces for student projects. This area can also double as a student lounge.

## **Communication Studies**

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	1,986	7,272	(5,286)	(266%)	1,986	7,816	(5,830)	(294%)
Teaching Laboratories & Service	0	410	(410)	n/a	0	429	(429)	n/a
Open Laboratories & Service	0	0	0	n/a	0	600	(600)	n/a
Academic Offices & Service	2,992	5,715	(2,723)	(91%)	2,992	5,460	(2,468)	(82%)
<b>TOTAL</b>	<b>4,978</b>	<b>13,397</b>	<b>(8,419)</b>	<b>(169%)</b>	<b>4,978</b>	<b>14,305</b>	<b>(9,327)</b>	<b>(187%)</b>
<i>Total without Classrooms</i>	2,992	6,125	(3,133)	(105%)	2,992	6,489	(3,497)	(117%)

## English

### Degrees and Programs

The English Department offers two undergraduate degree programs. These are a Bachelor of Arts degree in English and a Bachelor of Science in Education - English. Eight different minors are offered through the English Department. For Graduates, the English Department offers a Masters of Arts in English. Internship opportunities are also available to students who major in English.

### Location

The English Department has a total of 13,791 ASF with the majority of the space located in Main Hall and Anderson Hall. Main Hall has the most amount of space with 9,920 ASF, and Anderson Hall the second most amount of space being all classroom space of 2,088 ASF. The College Literature program of 1,052 ASF is located in 210 E. Rosedale and is not being considered for relocation as part of this study. In addition to the total department space listed above, the English Department also has the Poetry Center which occupies 1,331 ASF of space at 823 S. High Street. The Poetry Center also is not being considered for relocation and was excluded from the analysis.



### Space Needs Analysis

Excluding classrooms, the space needs analysis generated a need for 14,234 ASF or a deficit of 7,611 ASF at the Plan Horizon. As with most Humanities departments, the greatest need is in the Academic Department Space category, as space was appropriated for each permanent faculty member as well as sufficient conference and office support space. Expanded teaching lab and open lab space was generated for the film program.

## English

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	7,168	13,601	(6,433)	(90%)	7,168	14,570	(7,402)	(103%)
Teaching Laboratories & Service	0	665	(665)	n/a	0	717	(717)	n/a
Open Laboratories & Service	190	235	(45)	(24%)	190	253	(63)	(33%)
Academic Offices & Service	6,143	11,990	(5,847)	(95%)	6,143	12,865	(6,722)	(109%)
Other Academic Department Space	290	432	(142)	(49%)	290	399	(109)	(38%)
<b>TOTAL</b>	<b>13,791</b>	<b>26,923</b>	<b>(13,132)</b>	<b>(95%)</b>	<b>13,791</b>	<b>28,804</b>	<b>(15,013)</b>	<b>(109%)</b>
<i>Total without Classrooms</i>	<i>6,623</i>	<i>13,322</i>	<i>(6,699)</i>	<i>(101%)</i>	<i>6,623</i>	<i>14,234</i>	<i>(7,611)</i>	<i>(115%)</i>

## History

### Degrees and Programs

The History Department offers a Bachelor of Arts degree in History but also has a unique program that is a Bachelors of Arts in History with Elective Social Studies Teacher Certification. West Chester University is one of only a few universities in the United States to offer this program. Majors in History can also select a Bachelors of Arts in History with American Studies Concentration. A minor in History is available for students in other programs as well. For graduate programs, the History Department has two offerings. One is the Master of Arts in History, and the second one is Master of Education in Social Studies: History Concentration.



### Location

The History Department is located in two buildings and has a total of 4,958 ASF with the majority of the space located in Main Hall. Main Hall has the most amount of space with 4,824 ASF and the remaining space of 134 ASF is an office located in Reynolds Hall.

### Space Needs Analysis

At the Plan Horizon enrollment and staffing levels, the History Department will require a total of 5,585 ASF of space (excluding classrooms) or a 3,276 ASF deficit based on existing space. In addition to private offices for permanent faculty, the Academic Offices & Service guideline includes a dedicated conference room and reception space. Space in the Open Laboratories & Service guideline includes cubicles for make-up exams and a space for graduate student tutoring.

## History

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	2,649	5,777	(3,128)	(118%)	2,649	6,142	(3,493)	(132%)
Open Laboratories & Service	119	225	(106)	(89%)	119	825	(706)	(593%)
Academic Offices & Service	2,190	4,475	(2,285)	(104%)	2,190	4,760	(2,570)	(117%)
<b>TOTAL</b>	<b>4,958</b>	<b>10,477</b>	<b>(5,519)</b>	<b>(111%)</b>	<b>4,958</b>	<b>11,727</b>	<b>(6,769)</b>	<b>(137%)</b>
<i>Total without Classrooms</i>	2,309	4,700	(2,391)	(104%)	2,309	5,585	(3,276)	(142%)

***Interdisciplinary Studies*****Degrees and Programs**

The Interdisciplinary Studies program is made up of three different units that offer a multi-disciplinary academic opportunity that is flexible in developing a unique and individualized program of study. The Liberal Studies, Professional Studies, and Women's Studies all offer a wide range of academic and professional programs for degrees.

Students can select one of three degree tracks within the Liberal Studies program. These are a B.A. in Liberal Studies: Arts and Sciences; a B.A. in Liberal Studies: Math and Sciences, and a B.S. in Liberal Studies: Professional Studies. The Women's Studies program offers a Bachelor of Arts in Women's Studies, as well as a minor in Women's Studies.

**Location**

Interdisciplinary Studies is located on the first floor of Main Hall and occupies one office suite of 1,020 ASF. All three departments are housed in this suite and share a common reception area that also serves as a small informal meeting space.

**Space Needs Analysis**

The Plan Horizon space needs analysis indicates the three units that comprise the Interdisciplinary Studies program were in relative balance during Fall 2009. Additional office space will be needed as the number of staff increase over the planning period.

***Interdisciplinary Studies***

SPACE CATEGORY	<b>Fall 2009</b>				<b>Plan Horizon</b>			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Academic Offices & Service	1,020	1,045	(25)	(2%)	1,020	1,140	(120)	(12%)
<b>TOTAL</b>	<b>1,020</b>	<b>1,045</b>	<b>(25)</b>	<b>(2%)</b>	<b>1,020</b>	<b>1,140</b>	<b>(120)</b>	<b>(12%)</b>

## ***Languages and Cultures***

### **Degrees and Programs**

The undergraduate degrees offered in Languages and Cultures are Bachelors of Arts in French, German, Latin, Russian, or Spanish. A Bachelors of Arts with Elective Teaching Certificate (K-12) is also offered. The graduate degrees offered through the Languages and Cultures Department are a Master of Arts in French, a Master of Arts in Spanish, a Masters of Education in French, and a Masters of Education in Spanish.

### **Location**

The Languages and Cultures Department is located in two buildings and has 7,122 ASF of space on campus. Almost all of the space, 6,984 ASF, is located in Main Hall with one office space of 138 ASF located in Anderson Hall.

### **Space Needs Analysis**

The space needs analysis generated a guideline of 10,495 ASF (excluding classrooms) at the Plan Horizon for the department of Languages and Culture. The greatest space need is in the Academic Offices & Service category as multiple permanent faculty that are currently housed in a single office arrangement were each provided with private offices in the analysis. Temporary faculty members were programmed at two per office. Space was also allocated for storage.

Space in the Open Laboratories & Service category included expansion of the foreign language laboratory with storage space. The Other Academic Department Space category includes an interview room, student club area, and media room for a total of 975 ASF at the Plan Horizon in this category.

## ***Languages & Cultures***

SPACE CATEGORY	<b><i>Fall 2009</i></b>				<b><i>Plan Horizon</i></b>			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	2,356	6,276	(3,920)	(166%)	2,356	6,664	(4,308)	(183%)
Teaching Laboratories & Service	666	750	(84)	(13%)	666	900	(234)	(35%)
Open Laboratories & Service	1,476	1,800	(324)	(22%)	1,476	2,100	(624)	(42%)
Academic Offices & Service	2,624	6,100	(3,476)	(132%)	2,624	6,520	(3,896)	(148%)
Other Academic Department Space	0	150	(150)	n/a	0	975	(975)	n/a
<b>TOTAL</b>	<b>7,122</b>	<b>15,076</b>	<b>(7,954)</b>	<b>(112%)</b>	<b>7,122</b>	<b>17,159</b>	<b>(10,037)</b>	<b>(141%)</b>
<i>Total without Classrooms</i>	<i>4,766</i>	<i>8,800</i>	<i>(4,034)</i>	<i>(85%)</i>	<i>4,766</i>	<i>10,495</i>	<i>(5,729)</i>	<i>(120%)</i>

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## Philosophy

### Degrees and Programs

The Philosophy Department offers a Bachelor of Arts in Philosophy and a Master of Arts in Philosophy. Business Ethics or Healthcare Ethics Certificates are also offered through the Philosophy Department programs.

### Location

The Philosophy Department is completely housed in Main Hall and occupies 3,937 ASF of space, including classrooms.

### Space Needs Analysis

The guideline generated a need for 3,105 ASF of space at the Plan Horizon, excluding classrooms. Due to the small size of the department, additional space was programmed for a departmental conference room that can also serve as a place for thesis defense and lounge area. It should be noted that the classroom guideline includes several seminar type classrooms (12-16 students) with movable furniture to allow for multi-purpose use of spaces.



## Philosophy

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	2,260	3,806	(1,546)	(68%)	2,260	4,061	(1,801)	(80%)
Academic Offices & Service	1,677	2,990	(1,313)	(78%)	1,677	3,105	(1,428)	(85%)
<b>TOTAL</b>	<b>3,937</b>	<b>6,796</b>	<b>(2,859)</b>	<b>(73%)</b>	<b>3,937</b>	<b>7,166</b>	<b>(3,229)</b>	<b>(82%)</b>
<i>Total without Classrooms</i>	<i>1,677</i>	<i>2,990</i>	<i>(1,313)</i>	<i>(78%)</i>	<i>1,677</i>	<i>3,105</i>	<i>(1,428)</i>	<i>(85%)</i>

## Psychology

### Degrees and Programs

The department offers a B.A. in Psychology, leading to careers in clinics, guidance centers, industry, hospitals, schools, and government. The undergraduate degree also prepares students for postgraduate study. Several degree options are offered at the Graduate level. The Department of Psychology offers the Master of Arts degree with concentrations in clinical psychology, general psychology, and industrial/organizational psychology.

### Location

The Psychology Department is currently located in the Peoples Building and occupies 7,300 ASF of space. The Peoples Building also houses the Department of Public Safety. Modular trailers just outside and adjacent to the Peoples Building (1,046 ASF) are used for psychology research. It was assumed that

these trailers would be removed from the campus over the planning period. Due to capacity, temporary faculty are located in Mitchell Hall (557 ASF) while Psychology courses are taught in other academic buildings across campus.



### **Space Needs Analysis**

The Plan Horizon space need analysis was generated based on a meeting with the Psychology Department Chairperson and review of the department's Strategic Plan. The analysis indicates a need for an additional 7,886 ASF of space (excluding classrooms) at the Plan Horizon. The space needs that comprise the analysis are noted in each of the categories described in the following paragraphs.

Due to limited space in the Peoples building, psychology classes are taught in multiple buildings across campus. At the Plan Horizon, Psychology would need approximately 7,659 ASF of classroom space. Specific classroom configurations include a large multi-media lecture classroom of 100 stations, several classrooms with 35 to 50 stations, and multiple seminar rooms.

The 783 ASF deficit in the Teaching Laboratories & Service category includes expansion of the existing computer lab and Psychology laboratory (Biopsychology, Animal Behavior, Learning courses).

In the Open Laboratories & Service category, space was allocated for collaborative learning and groups study and can also be used for student training. The guideline also includes multiple spaces for observation and videotaping rooms for training sessions in group dynamics and therapy skills. These rooms are separate from those being used for research.

The Research Laboratories & Service space provides wet laboratory and human subject space for a large majority of faculty and graduate students to conduct research, as noted in the Department of Psychology Strategic Plan. The guideline also includes storage of participant documents and research equipment. Additional space is needed at the Plan Horizon as the Psychology research trailers are removed from campus. It must be noted that animal facilities (animal rooms, cages, procedure, operating, recovery, isolation and similar spaces) are not included as research space in PASSHE Space Guidelines. These types of spaces are accommodated in the Other Academic Department space category, as noted on page 17.

To accommodate growth and provide adequate office space for permanent and temporary faculty, an additional 1,250 ASF of office space will be needed at the Plan Horizon. The guideline also includes space for a departmental conference room and reception area.

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The Other Academic Department Space category includes a variety of space types at the Plan Horizon:

Animal Facilities – additional space was allocated for the introduction of another animal species plus the addition of histology and assay rooms to existing facilities.

A Clinical and Community Outreach Center comprised of two interview rooms, two group interaction rooms, two observation/video recording rooms, reception/waiting area, and file/equipment storage.

Small general purpose meeting rooms for student clubs, presentations, and project coordination of practicum and internship activities.

### *Psychology*

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	1,316	7,039	(5,723)	(435%)	1,316	7,659	(6,343)	(482%)
Teaching Laboratories & Service	1,276	1,882	(606)	(47%)	1,276	2,059	(783)	(61%)
Open Laboratories & Service	611	750	(139)	(23%)	611	1,250	(639)	(105%)
Research Laboratories & Service	1,226	2,400	(1,174)	(96%)	180	3,200	(3,020)	(1,678%)
Academic Offices & Service	4,441	5,385	(944)	(21%)	4,441	5,880	(1,439)	(32%)
Other Academic Department Space	1,349	2,345	(996)	(74%)	1,349	3,354	(2,005)	(149%)
<b>TOTAL</b>	<b>10,219</b>	<b>19,801</b>	<b>(9,582)</b>	<b>(94%)</b>	<b>9,173</b>	<b>23,402</b>	<b>(14,229)</b>	<b>(155%)</b>
<i>Total without Classrooms</i>	<i>8,903</i>	<i>12,762</i>	<i>(3,859)</i>	<i>(43%)</i>	<i>7,857</i>	<i>15,743</i>	<i>(7,886)</i>	<i>(100%)</i>

## **COLLEGE OF HEALTH SCIENCES**

### ***Communicative Disorders***

#### **Degrees and Programs**

Communicative Disorders offers three programs: B.A. in Communicative Disorders, a Pre-Graduate Certification Program (PCP), and a M.A. in Communication Disorders. In addition to offering these programs, the Communicative Disorders department operates a Speech and Hearing Clinic in their suite which is open to the West Chester Community and surrounding areas. Students serve as clinicians for learning opportunities in the clinic and assist in performing diagnostic procedures and evaluations.

#### **Location**

The Communicative Disorders department is located at 201 Carter Drive, Suite 400 in the Matlack Industrial Park, with a total of 4,352 ASF. The location of the clinic would benefit by co-locating with the other Health Science departments and programs that are currently located in Sturzebecker Health Science Center. It should be mentioned that the clinic would need to have appropriate parking and ease of access for public visitors. Although not required, a separate dedicated entrance for the clinic is desirable.

#### **Space Needs Analysis**

The Plan Horizon space needs analysis generated a total of 8,046 ASF, excluding classrooms to accommodate planned enrollment increases and faculty and staff expansion. This is a deficit of 4,125 ASF when compared to existing space.

For the academic programs, a dedicated distance learning classroom with the appropriate technology equipment is needed. The department currently uses a small classroom that also serves as the distance learning classroom, and the amount of space is not conducive to multi-functional set-ups for teaching opportunities.

Additional space was also generated in the Teaching Laboratories & Service space category as enrollments grow. Storage for biological models is needed to better understand the mechanics of speech and hearing.

The faculty currently has no dedicated research space. The current computer area used for faculty and student research is undersized and does not serve the students well in their learning experience. Dedicated research space for the faculty was generated that would allow students to assist with experiments and research work. Storage for electronic and diagnostic equipment was also included in the Research Laboratories & Service guideline.

The Academic Offices & Service Guideline provided adequate space for private permanent faculty offices and shared space for temporary faculty and graduate assistants. The guideline also includes a departmental conference room and mail/copy area. At the Plan Horizon, a deficit of 1,996 ASF was generated in this category.

The clinic is an integral part of the student learning process for the programs in Communicative Disorders. The clinic provides an opportunity for students to work with patients to achieve their 400 hours of clinical experience. Clinical Supervisors utilize state of the art video technology to observe students during clinical sessions. A properly sized acoustical room to conduct these testing and evaluation sessions was included as part of the Other Academic Department Space guideline. Student group study and meeting space was also included in this space category.

### *Communicative Disorders*

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	431	1,929	(1,498)	(348%)	431	2,527	(2,096)	(486%)
Teaching Laboratories & Service	347	456	(109)	(31%)	347	766	(419)	(121%)
Research Laboratories & Service	158	680	(522)	(330%)	158	980	(822)	(520%)
Academic Offices & Service	1,314	2,890	(1,576)	(120%)	1,314	3,310	(1,996)	(152%)
Other Academic Department Space	2,102	2,559	(457)	(22%)	2,102	2,990	(888)	(42%)
<b>TOTAL</b>	<b>4,352</b>	<b>8,514</b>	<b>(4,162)</b>	<b>(96%)</b>	<b>4,352</b>	<b>10,573</b>	<b>(6,221)</b>	<b>(143%)</b>
<i>Total without Classrooms</i>	<i>3,921</i>	<i>6,585</i>	<i>(2,664)</i>	<i>(68%)</i>	<i>3,921</i>	<i>8,046</i>	<i>(4,125)</i>	<i>(105%)</i>

### *Department of Health*

#### **Degrees and Programs**

The Department of Health includes six undergraduate programs: Public Health: Environmental Health, Public Health: Health Promotion, Health Sciences: General, Respiratory Care, Nutrition and Dietetics, and School Health. Graduate programs include the M.Ed. in School Health and a Masters of Public Health.

It is expected that over the planning period that a separate department will be created for the Nutrition and Dietetics programs. The program concentrates on the scientific study of food intake and preparation with the practical application of diet in relation to health and disease. Laboratories and classrooms are used to teach a combined interest in food, nutrition, fitness, health, and management with a relationship to the needs of individuals or groups in wellness, illness and physical performance. The program offers a B.S. in Nutrition and Dietetics as an undergraduate major or a second degree bachelors as well as a Nutrition Minor. The program currently has 360 majors and 150 nutrition minors. There are 15 students who will be starting in a Master's of Public Health in Nutrition program in Fall 2011 with growth to 30 students in subsequent years.



### **Location**

The Department of Health occupies a total of 12,622 ASF in the Sturzebecker Health Science Center. In addition to these spaces, both classrooms and computer labs are utilized in Anderson Hall. Larger (38-42 station) technology equipped classrooms and a flexible 90-station lecture hall for classes with larger enrollments are preferred.



### **Space Needs Analysis**

Application of the space needs guideline for each of the space categories generated a total need for 11,278 ASF at the Plan Horizon, excluding classrooms, or a deficit of 5,918 ASF.

Larger classrooms to hold 45 or more students when teaching 100's/200's/ and 300's level courses are desirable to accommodate students in this program as well as seminar rooms for graduate courses.

In the Teaching Laboratories & Service category, the existing food analysis laboratory and the environmental laboratory were sized based on guidelines for their purpose and enrollment levels. In the foods lab, a teaching station with digital camera technology and flat screen monitors would benefit the viewing angles for students. Laboratory storage space for materials and equipment was also included in the analysis as well as a dedicated instrumentation room.

Similar to other Health Departments, a larger open computer laboratory being located in Sturzebecker HSC would benefit students in their academic studies. Space for this laboratory was included under the College of Health Sciences analysis. A soundproof meditation room (Stress Management Center) was also included under the College of Health Sciences as part of the Integrative Health Clinic.

Providing dedicated faculty research space would benefit the program, especially Public Health. Most of the research is survey based, but there is still a need to compile materials and data. Interview rooms are also needed for the Public Health program for a total of 1,525 ASF in the Research Laboratories & Service category.

The department currently does not have adequate office space to accommodate faculty and staff. As the Nutrition and Dietetics program is likely to expand into its own department, dedicated space was added into the Academic Offices & Service category for a conference room, administrative assistant, and small mail/copy area.

There is also a growing interest in conducting Nutrition Counseling through a clinical program for the community or other clinical clients. Offices and a physical assessment area is needed for students to help conduct assessment sessions with clients. This physical assessment area could be shared with the Kinesiology program.

## Health

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	7,262	7,168	94	1%	7,262	8,586	(1,324)	(18%)
Teaching Laboratories & Service	1,753	2,204	(451)	(26%)	1,753	2,453	(700)	(40%)
Research Laboratories & Service	0	950	(950)	n/a	0	1,525	(1,525)	n/a
Academic Offices & Service	3,607	5,860	(2,253)	(62%)	3,607	6,850	(3,243)	(90%)
Other Academic Department Space	0	0	0	n/a	0	450	(450)	n/a
<b>TOTAL</b>	<b>12,622</b>	<b>16,182</b>	<b>(3,560)</b>	<b>(28%)</b>	<b>12,622</b>	<b>19,864</b>	<b>(7,242)</b>	<b>(57%)</b>
<i>Total without Classrooms</i>	<i>5,360</i>	<i>9,014</i>	<i>(3,654)</i>	<i>(68%)</i>	<i>5,360</i>	<i>11,278</i>	<i>(5,918)</i>	<i>(110%)</i>

## Kinesiology

### Degrees and Programs

The Department of Kinesiology offers both undergraduate and graduate degree programs. At the undergraduate level, these include Health and Physical Education Teacher Certification and Exercise Science Specialist; Pre-Physical Therapy; or Pre-Occupational Therapy. Areas of specialization offered are minors in athletic coaching, adapted physical education, and exercise science for teachers or non-majors.

The graduate programs that are available through the Department of Kinesiology are a Master of Science with specialization in General Physical Education or Exercise and Sport Physiology. A Master of Science in Administration with specialization in Sport and Athletic Administration is also offered in conjunction with the School of Business and Public Affairs. A graduate certificate program is available in adapted physical education.

Post-Baccalaureate Teacher Certification in Health and Physical Education is also available through the Department of Kinesiology. This program is designed to prepare academically competent students possessing a baccalaureate degree to teach health and physical education in schools. New programs include a master's degree in sports medicine.

### Location

The Kinesiology Department is located solely within the Sturzebecker Health Science Center with 7,222 ASF of dedicated space. Graduate programs are expected to grow at a faster rate than undergraduate programs over the planning period.



### Space Needs Analysis

Overall, the space needs analysis generated a need for 11,484 ASF at the Plan Horizon, excluding classroom space. The largest deficit is in the Academic Offices & Service category as each permanent faculty was provided with a private office.

Classroom and laboratory space is limited as programs have expanded over the years. The department utilizes several gymnasiums, but availability is inadequate due to heavy use by Athletics. Additional time is needed in the gyms to meet program requirements.

The Kinesiology Department has a Human Performance Instructional Laboratory with weight machines and cardio equipment included in the Teaching Laboratories & Service category. This space is expanded at the Plan Horizon with additional laboratory space for equipment storage (bikes, adventure equipment, etc.). The Open Laboratories & Service category includes an open computer lab that is dedicated to the department.

As graduate programs grow, small research rooms are needed for students to conduct video analysis of data. The department will also share the soundproof meditative room as described under the Department of Health for Yoga and Tai Chi.

As with other Health departments, the guideline for Academic Offices & Service category provides private offices for permanent faculty and shared office space for temporary faculty and graduate assistants.

### *Kinesiology*

SPACE CATEGORY	<b>Fall 2009</b>				<b>Plan Horizon</b>			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	1,649	4,358	(2,709)	(164%)	1,649	4,986	(3,337)	(202%)
Teaching Laboratories & Service	2,512	2,851	(339)	(13%)	2,512	3,221	(709)	(28%)
Open Laboratories & Service	430	532	(102)	(24%)	430	573	(143)	(33%)
Research Laboratories & Service	352	800	(448)	(127%)	406	1,600	(1,194)	(294%)
Academic Offices & Service	2,279	5,045	(2,766)	(121%)	2,279	6,090	(3,811)	(167%)
<b>TOTAL</b>	<b>7,222</b>	<b>13,586</b>	<b>(6,364)</b>	<b>(88%)</b>	<b>7,276</b>	<b>16,470</b>	<b>(9,194)</b>	<b>(126%)</b>
<i>Total without Classrooms</i>	<i>5,573</i>	<i>9,228</i>	<i>(3,655)</i>	<i>(66%)</i>	<i>5,627</i>	<i>11,484</i>	<i>(5,857)</i>	<i>(104%)</i>

## ***Nursing***

### **Degrees and Programs**

The Nursing Department currently offers three programs at the undergraduate level and one program at the graduate level. The undergraduate programs include Bachelor of Science in Nursing, Advance-2-Bachelor of Science in Nursing for those who have earned a bachelor degree in another discipline and have completed the science prerequisites that are required, and A Fast Track: Bachelor of Science in Nursing for the Registered Nurse (BSN-RN) Program. At the graduate level, students can earn a Master of Science in Nursing of Public Health.

### **Location**



The Nursing Department is predominately located in Sturzebecker Health Science Center on the 2nd level with 6,055 ASF of dedicated space. The nursing program is experiencing rapid growth which has caused deficiencies of space in the department. To accommodate new growth and the use of modern technology in the Teaching Lab spaces, existing nursing department spaces have been reduced or reallocated to accommodate other needs, reducing

the learning experience for the students. Although many classes in nursing are appropriately taught in traditional classroom type settings, modern pedagogy dictates more specialized spaces for simulation and online instructional delivery.

### **Space Needs Analysis**

At the Plan Horizon, application of the space guidelines at the projected enrollment and staffing levels generated a total need of 11,169 ASF of space (excluding classrooms) or a 6,993 ASF deficit when compared to existing space.

The Classroom and & Service category shows a 42% deficit at the Plan Horizon which equates to another large classroom space for the nursing program.

The Teaching Laboratories & Service category includes space for expansion of existing programs and includes more appropriate collaborative learning areas combined with bed lab and exam table areas. Simulation areas consisting of human patient simulators, control rooms, and properly sized accessible storage areas have been allocated. The Plan Horizon shows a total need of 3,172 ASF for the Teaching Laboratories & Service area, which is a deficit of 1,996 ASF. An appropriately sized Computerized Assisted Instructional Lab has also been included in the guideline for the Nursing Program, which can also serve as an open computer lab for nursing students during non-instructional periods.

The Open Laboratories & Services category requires a total space of 1,048 ASF at the Plan Horizon. This is a deficit of 815 ASF under the current Open Laboratories & Service space dedicated to the Nursing Program in Sturzebecker. Observation areas were included for the SIM lab to help further the educational experience that students can gain by watching others perform tasks and required skills.

The current amount of Academic Offices & Service area is inadequate requiring an increase of 152% at the Plan Horizon. The department has had to take existing conference rooms and use them to accommodate a growing faculty and staff. The guideline includes appropriately sized conference room space, meeting space, and office space to meet the growth of faculty and staff in the Nursing Program.

For the Other Academic Department Space category, a deficit of 519 ASF is shown for some additional student storage and locker areas and an open study / student meeting area that would be in close proximity to the Nursing Program.

## Nursing

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	1,879	2,212	(333)	(18%)	1,879	2,668	(789)	(42%)
Teaching Laboratories & Service	1,176	2,352	(1,176)	(100%)	1,176	3,172	(1,996)	(170%)
Open Laboratories & Service	233	475	(242)	(104%)	233	1,048	(815)	(350%)
Academic Offices & Service	2,407	5,060	(2,653)	(110%)	2,407	6,070	(3,663)	(152%)
Other Academic Department Space	360	536	(176)	(49%)	360	879	(519)	(144%)
<b>TOTAL</b>	<b>6,055</b>	<b>10,635</b>	<b>(4,580)</b>	<b>(76%)</b>	<b>6,055</b>	<b>13,837</b>	<b>(7,782)</b>	<b>(129%)</b>
<i>Total without Classrooms</i>	<i>4,176</i>	<i>8,423</i>	<i>(4,247)</i>	<i>(102%)</i>	<i>4,176</i>	<i>11,169</i>	<i>(6,993)</i>	<i>(167%)</i>

## Sports Medicine

### Degrees and Programs

The Department of Sports Medicine, within the College of Health Sciences, has as its primary role the preparation of students for careers in athletic training and related health care fields. Degrees include a Bachelor of Science in Athletic Training.

### Location

The program and faculty are housed in Sturzebecker Health Sciences Center with 6,104 ASF of dedicated space. There are two Athletic Training Rooms on campus. One is located in Hollinger Field House while the main Athletic



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Training Room is located on the South Campus in the Sturzebecker Health Sciences Center. Two of the classrooms used for instruction of Athletic Training include the Resource Room (HSC 114) and the laboratory in HSC 332.

### Space Needs Analysis

The Space Needs Analysis by space category is noted in the table below. The Plan Horizon guideline analysis generated a total need for 10,329 ASF, excluding classrooms.

The Classroom & Service space guideline includes a distance learning classroom with video equipment. Currently, the department uses room HSC 332 as an instructional laboratory. The guideline generated space for expansion of the treatment lab with additional modality tables plus space for a cadaver laboratory with multiple cadavers.

Space for research includes the HEAT Center. Additional space was generated in the Research Laboratories & Service category for both wet and computational labs for eight faculty.

The Other Academic Department Space category includes a student resource area for graduate students (HSC 114). This area was expanded at the Plan Horizon to accommodate additional student growth.

The Athletic Training rooms in Sturzebecker (HSC 144, 147, 147A) are used for instruction and clinical training by students in the athletic training program. These areas are also used by athletics during practice and games. These labs are critical to the Athletic Training program despite being listed as space for Athletics. As program enrollments increase, the guideline generated a need for an additional 708 ASF in this area.



### Sports Medicine

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Classroom & Service	38	627	(589)	(1,550%)	38	700	(662)	(1,742%)
Teaching Laboratories & Service	1,173	1,971	(798)	(68%)	1,173	2,178	(1,005)	(86%)
Open Laboratories & Service	731	904	(173)	(24%)	731	974	(243)	(33%)
Research Laboratories & Service	644	1,364	(720)	(112%)	644	2,084	(1,440)	(224%)
Academic Offices & Service	1,225	1,760	(535)	(44%)	1,225	1,950	(725)	(59%)
Other Academic Department Space	379	565	(186)	(49%)	379	521	(142)	(37%)
<i>Academic Space Subtotal</i>	<i>4,190</i>	<i>7,191</i>	<i>(3,001)</i>	<i>(72%)</i>	<i>4,190</i>	<i>8,407</i>	<i>(4,217)</i>	<i>(101%)</i>
<b>PE / Recreation / Athletics</b>								
Athletics/PE	1,914	2,366	(452)	(24%)	1,914	2,622	(708)	(37%)
<i>PE / Recreation / Athletics Subtotal</i>	<i>1,914</i>	<i>2,366</i>	<i>(452)</i>	<i>(24%)</i>	<i>1,914</i>	<i>2,622</i>	<i>(708)</i>	<i>(37%)</i>
<b>TOTAL</b>	<b>6,104</b>	<b>9,557</b>	<b>(3,453)</b>	<b>(57%)</b>	<b>6,104</b>	<b>11,029</b>	<b>(4,925)</b>	<b>(81%)</b>
<i>Total without Classrooms</i>	<i>6,066</i>	<i>8,930</i>	<i>(2,864)</i>	<i>(47%)</i>	<i>6,066</i>	<i>10,329</i>	<i>(4,263)</i>	<i>(70%)</i>

## ***College of Health Sciences***

### **Program**

The College of Health Sciences includes the Office of the Dean and all administrative assistant positions that support the Dean's office. The space needs analysis includes office space for the Dean and areas not assigned to any specific health sciences department. Until further defined at the departmental level, the proposed Integrative Health Clinic is also included at the college unit level.

### **Location**

The administrative unit of the College of Health Sciences is located in Sturzebecker Health Sciences Center in office suites HSC 204 and 205. Spaces assigned to the CHS include the Fitness Center (HSC 105), open computer laboratory (HSC 126), conference rooms (HSC 301A and 301B), and a college-wide storage (HSC 118) for a total of 9,554 ASF. The College of Health Sciences Fitness Center is operated by students as part of their educational experience.



### **Space Needs Analysis**

The College of Health Sciences (Dean's Office) will need a total of 23,245 ASF at the Plan Horizon based on strategic goals and planned enrollment growth of all the College of Health Sciences' departments.

The College of Health Sciences has a small open computer laboratory for student use in HSC 126. Many departments have expressed a need for a larger lab to accommodate the needs of all health science students on the South Campus. The space needs analysis guideline in the Open Laboratories & Service category satisfies this need.

There is a small space need in the Academic Offices & Service category to accommodate new staff positions. Since conference rooms were generated in the guideline for each department, the current conference rooms (HSC 301A & B) will not need to be expanded.

The Other Academic Space guideline includes two major items: Departmental storage space (HSC 118) for all health science programs and a proposed Integrative Health Clinic. The Clinic would bring together a broad spectrum of clinical applications from all five major departments of the College of Health Sciences into one facility. Faculty members and students will serve as clinicians, serving the needs of West Chester and surrounding communities. Possible centers include the Stress Management Center, Rehabilitation/Sports Exercise Counseling, Health Coaching, Sports Psychology, Center for Hypnosis Research, Nutrition and Dietetics Center, the Speech & Hearing Clinic (currently at 201 Carter Drive), and the Center for Healthy Schools.

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Due to the preliminary nature of this concept, the space needs analysis will need to be further defined after conceptual development. Spaces in the Plan Horizon space needs analysis include:

- A 200 seat auditorium for guest lectures and community health events of approximately 3,200 ASF. This space was included under the Assembly & Exhibit space category in the Table.
- A soundproof meditative/relaxation room of approximately 1,000 ASF.
- Three offices per center to include a combination of exam rooms, interview rooms and group areas. Seven centers of 350 ASF each for a total of 2,450 ASF.
- Two conference/seminar rooms of approximately 900 ASF.
- Common reception space with waiting area and records storage of approximately 650 ASF.
- A break room/vending area for clinicians and community of approximately 280 ASF.
- The Physical Education / Recreation / Athletics space includes the Fitness Facility (HSC 160A & B) and multi-use Activity room (HSC 105). Oversight of the Fitness Center is performed by the College of Health Sciences. However, the space needs guideline for the area is being driven by Athletics with need at the Plan Horizon of 7,965 ASF to accommodate weight training and conditioning of athletes.

### College of Health Sciences

SPACE CATEGORY	Fall 2009				Plan Horizon			
	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
<b>Academic Space</b>								
Open Laboratories & Service	422	600	(178)	(42%)	422	1,200	(778)	(184%)
Academic Offices & Service	1,585	2,125	(540)	(34%)	1,585	2,160	(575)	(36%)
Other Academic Department Space	1,733	2,165	(432)	(25%)	1,733	8,720	(6,987)	(403%)
<i>Academic Space Subtotal</i>	<i>3,740</i>	<i>4,890</i>	<i>(1,150)</i>	<i>(31%)</i>	<i>3,740</i>	<i>12,080</i>	<i>(8,340)</i>	<i>(223%)</i>
<b>Academic Support Space</b>								
Assembly & Exhibit	0	0	0	n/a	0	3,200	(3,200)	n/a
<i>Academic Support Space Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>n/a</i>	<i>0</i>	<i>3,200</i>	<i>(3,200)</i>	<i>n/a</i>
<b>PE / Recreation / Athletics</b>								
Athletics/PE	5,814	7,187	(1,373)	(24%)	5,814	7,965	(2,151)	(37%)
<i>PE / Recreation / Athletics Subtotal</i>	<i>5,814</i>	<i>7,187</i>	<i>(1,373)</i>	<i>(24%)</i>	<i>5,814</i>	<i>7,965</i>	<i>(2,151)</i>	<i>(37%)</i>
<b>TOTAL</b>	<b>9,554</b>	<b>12,077</b>	<b>(2,523)</b>	<b>(26%)</b>	<b>9,554</b>	<b>23,245</b>	<b>(13,691)</b>	<b>(143%)</b>





# **Space Needs Analysis Conclusions**

## SPACE NEEDS ANALYSIS CONCLUSIONS

The following is a brief summary of the departmental analysis results that will assist in the physical planning phase of the Comprehensive Campus Plan.

### College of Arts and Sciences - Humanities

- The Humanities Units of the College of Arts and Sciences occupy 56,712 ASF of existing space on campus with the largest portion of space located in Main Hall. Some departments like Psychology, Anthropology, and Sociology also occupy substantial areas of space in Peoples and the Old Library. At the Plan Horizon, the Humanities Units of the College of Arts and Sciences generated a need for 119,601 ASF in all space categories, a deficit of 62,889 ASF when compared to existing space.
- With the current space deficit in the Humanities and the anticipated enrollment growth, in the short term, moving some departments out of Main Hall should be considered and reviewed. Grouping of departments that have synergistic relationships like Anthropology and Sociology, Psychology and Communication Studies may allow educational opportunities between departments that do not currently exist. In the long term, all the Humanities would benefit by co-locating in an appropriately sized building that better allows space allocation as outlined in this report.
- Public Safety currently occupies space in the Peoples building with Psychology. Given the space deficit in the Psychology Department at the Plan Horizon, just moving Public Safety to another location does not provide enough space to satisfy the longer term Psychology Department's needs.

### College of Health Sciences

- The College of Health Sciences occupies 45,963 ASF of existing space in Sturzebecker Health Science Center and 201 Carter Drive. At the Plan Horizon, the College of Health Sciences generated a need for 95,018 ASF in all space categories, a deficit of 49,055 ASF when compared to existing space.
- The Integrative Health Sciences Clinic is estimated to need approximately 8,480 ASF for new centers and approximately 2,500 to move the existing Speech and Hearing Clinic to the South Campus for a total of 10,980 ASF. This number is included in the overall space needs analysis deficit of 49,055 ASF.