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**YORK COUNTY COMMUNITY COLLEGE**  
**MASTER PLAN UPDATE**  
*Wells and Sanford, Maine Campuses*  
PROJECT #18607

October 4, 2019



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## 1. Executive Summary

## 1.1 Purpose and Background

This Master Plan Update offers a comprehensive set of assessments and vision for the future of the York County Community College (YCCC) campuses and facilities in Wells and Sanford, Maine. The planning assessments and recommendations encompass four categories:

- **Program** (space needs analysis);
- **Campus** (site design, security, and parking);
- **Facilities** (architectural, engineering, and security);
- **Energy** (usage compared to peer institutions).

York County Community College is a non-residential college primarily serving Southern Maine and the Seacoast region of New Hampshire from a main campus in Wells and a training center site in Sanford. YCCC offers a variety of degree and certificate training programs that are closely tied to the regional economy. The purpose of this Master Plan Update is to assess YCCC comprehensively as an institution to provide recommendations that will help its facilities successfully meet current and future needs.

At the heart of YCCC are its core values of accountability, innovation, cooperation, and empowerment.

- **Accountability:** We are responsible to our community.
- **Innovation:** We promote curiosity and discovery.
- **Cooperation:** We value collaboration through mutual contribution and collective efforts.
- **Empowerment:** We appreciate and value the inherent potential of our community.

The Master Plan Update also considered how YCCC's strategic goals, as outlined in its 2018-2023 Strategic Plan, could be reinforced by the planning recommendations. The five strategic goals are:

1. **Pursue educational excellence by promoting and measuring student success in all forms.**
2. **Enhance collaboration and strengthen connections to meet community needs.**
3. **Maintain and advance our technological and physical infrastructures to meet the needs of the college community.**
4. **Continually assess and improve accountability and resource stewardship focused on efficiency and effectiveness.**
5. **Foster innovation by investing in and empowering our employees.**

Recommendations from the Master Plan are intended to provide near-term (immediate), medium-term (within the next five to ten years), and long-term (ten to twenty years) solutions to support YCCC in its education, economic, and cultural mission.

## 1.2 Master Planning Process

In late 2018, York County Community College engaged a consultant team, led by Harriman, to prepare a Master Plan update for its campus. The planning process began with a kick-off meeting and workshop in early 2019 at the Wells campus. Harriman and the Master Plan Steering Committee, made up of administrative

staff, faculty, and students discussed planning goals and the school community's aspirations for the Wells and Sanford campuses.

A subsequent site evaluation of each campus was made by Harriman to analyze various aspects of the site and facilities in the context of current conditions, functions, and operations. Working with Master Plan Steering Committee representatives in a series of meetings and using information gathered from a public open house, Harriman identified key issues and opportunities that would inform the recommendations within this report. The team subsequently developed illustrative design concepts and outlined ways to improve the College's two campuses. This Master Plan Update encompasses the results of the process, reflecting the input and directions of YCCC's constituents.

### 1.3 Campus Master Plan Drivers

YCCC's Strategic Plan 2018-2023 established the foundation of the Master Plan. Using the College's core values and strategic goals as a reference, the Master Plan Steering Committee generated the following drivers that are the basis of the planning recommendations. These drivers were reviewed by the Steering Committee and at a Campus-wide open house event. The drivers apply to YCCC as an institution, spanning both campus locations.

1. **Improve YCCC visibility and image.** Utilize signage and site improvements to improve YCCC's first impression to all who visit.
2. **Leverage local assets to improve education opportunities.** Build upon successful training partnerships with local business.
3. **Increase enrollment and branding of YCCC's most successful courses.** Celebrate and market YCCC's most unique and popular areas of study.
4. **Improve the student experience.** From entry to campus to social time between classes.
5. **Identify efficiencies in education delivery.** Right size classrooms to curriculum, increase online delivery, and optimize faculty.
6. **Identify new program opportunities.** Seek partnerships with peer institutions, local business, and education trends to evolve YCCC's curriculum and training effectiveness.

### 1.4 Space Needs Analysis

The space needs analysis, performed by Rickes Associates and Harriman, included a comprehensive review of classrooms and teaching laboratories, including current and projected need as well as a migration plan identifying potential near-term moves to alleviate some of the College's pressing space needs. The conclusion of the study indicates that YCCC currently has enough physical space on the Wells campus and Sanford site to support all of its program needs. Recommendations of the space needs analysis are that YCCC take steps to renovate and relocate existing spaces to better serve program needs and improve departmental adjacencies.

## 1.5 Campus Assessment

Both Wells and Sanford campus locations were analyzed to understand current site utilization and development potential. Review categories include: zoning, buildable areas (both total acreage and total building square footage), wayfinding, environmental factors, campus edges, pedestrian circulation, and vehicular circulation.

Although it resides on a large parcel of land, the Wells campus has extremely limited development potential given the extensive wetlands throughout the site. The remote nature of the Wells site was also noted.

The Sanford Instructional Facility has much better development potential although the facility and its parking are difficult to identify from the street due to the industrial park setting of the campus.

## 1.6 Facility Assessment

The facility assessment was limited to the Main Building of the Wells campus due to the new age of the Pratt & Whitney Building and ongoing renovations to the Sanford facility. Overall the Main Building was found to be in fair condition with a limited number of deferred maintenance items that require immediate attention. Near-term facility projects include a full window replacement and flooring upgrades.

An energy assessment was performed to compare the annual energy usage of the three YCCC facilities to peer institution benchmarks. YCCC facility energy consumption is lower than the national average for similar type buildings.

- Main Building operates at 24% below national average.
- Pratt & Whitney Building operates at 52% below national average.
- Sanford Building operates at 48% below national average.
- Total greenhouse emissions for YCCC facilities = 525 metric tons CO<sub>2</sub>e/year. Main building is higher than the national average.
- Greenhouse emissions can be lowered by changing fuel sources to renewable and/or improving facility's energy efficiency.

## 1.7 Parking Assessment

The scope of the 2019 Master Plan included a parking assessment for the Sanford site only. Parking for the Wells campus had been expanded with the recent completion of the Pratt & Whitney Building. Parking counts were dictated by the Town of Wells to be in excess of typical campus development. Visual observations confirmed that Wells has roughly twice the parking it needs to support its programs. The recommendation for the Wells campus is to revisit its parking with the Town of Wells within the next five years.

The assessment was performed by Walker Parking Consultants and included field observations and specific parking counts. The assessment determined there is currently ample parking at both YCCC campus locations.

## 1.8 Security Assessment

The Master Plan included an assessment of campus security by Pamela Perini Consulting and Harriman. Security review included site safety, building safety, preparedness, and technology. Principles such as Crime Prevention Through Environmental Design (CPTED) were used as well as specific recommendations for building access controls and integrated technology systems.

A series of standards and guidelines have been established in the full security report to support improvements in YCCC security that range from passive to active systems. The fluid nature of security and threats require institutions such as YCCC to make deliberate policy and management decisions about how to balance protection and preparedness with an open and inviting campus.

## 1.9 Master Plan Recommendations

Recommendations of the Master Plan Update serve as the instructions to move YCCC campuses, facilities, and programs into the future. The first several recommendations are intended to be catalysts to spur future projects and build momentum toward a fully realized Master Plan. Projects are intended to be realistic, financially responsible, and limited enough in scope to minimize disruption to ongoing campus programs. Recommendations are generally listed in order of urgency and importance.



Figure 1.1.1 Overall recommendations site map, Wells Campus



Figure 1.1.2 Overall recommendations site map, Sanford Campus



## Near-term (Immediate) Recommendations (Wells)

- A. **Community Courtyard:** Create a dedicated outdoor gathering and social space between the Main Building and Pratt & Whitney Building.



*Figure 1.1.3 Proposed Community Courtyard*

- B. **Campus Approach and Signage:** Improve campus visibility for visitors and the YCCC community by modifying and adding signage at the campus entrance.



*Figure 1.1.4*  
*Potential location of new campus sign*  
*Drive*



*Figure 1.1.5*  
*Photo simulation of new campus sign seen from College*  
*Drive*

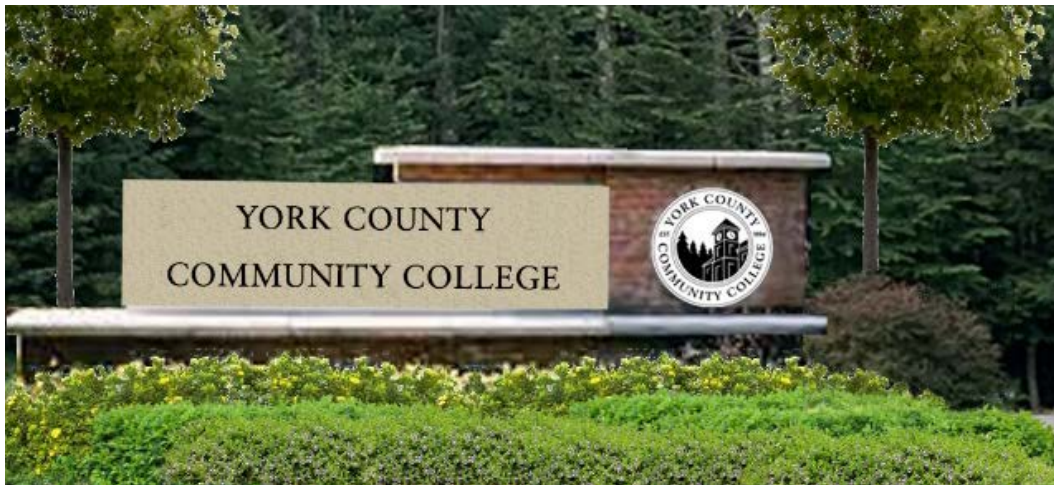


Figure 1.1.6 Enlarged photo rendering of potential campus sign

- C. Main Building Interior Renovations: Improve space and building utilization through a series of minor and medium-scale interior renovations.



Figure 1.1.7 Wells Main Building renovations

- C-1 **Library and Adjacent Corridor Renovation:** Modify the Library and adjacent corridor spaces to provide a 21<sup>st</sup> Century Learning Commons.
  - C-2 **Lobby Renovation and Security Upgrades:** Add to or renovate the main entrance to improve security and flow into the building.
  - C-3 **Corridor Refresh:** Finishes and lighting upgrades to break up long corridors and improve user experience.
  - C-4 **Student Lounge Upgrades:** Create a dedicated and more permanent student space.
  - C-6 **Culinary Arts Improvements:** Showcase the culinary arts program from the main lobby area.
- D. **Redefine Parking Areas:** Create designated areas for staff, students, and visitors to park to relieve congestion and improve controlled access to the Main Building.



*Figure 1.1.8 Proposed parking modifications*

- E. **Facility Improvements:** Address deferred maintenance at the Main Building. Projects include window replacement and upgrades to lighting and interior finishes.



## Near-Term (Immediate) Recommendations (Sanford)

- F. Dedicated entry vestibule to the building: Add a dedicated and secure entry to the Sanford Building to create a visible front door, improve access control, and buffer indoor spaces from the weather.



Figure 1.1.9 Sanford Center: New Vestibule

- G. Campus Approach and Welcome Signage: Add a two-sided sign at the main entry to the Sanford Building to improve wayfinding.



Figure 1.1.10 Sanford Center: Welcome Signage

## Medium-term Recommendations (Wells)

- H. Establish View Corridors: Thin and clear vegetation to create views to the campus buildings along the entry drive.



Figure 1.1.11 Wells Campus View Corridors

## Medium-term Recommendations (Sanford)

- I. Sanford Building Facility improvements: Continued renovations to meet training curriculum needs.

## Long-term Recommendations (Sanford)

- J. Additions to the Sanford Campus: Phased expansion of building and parking to meet growth of changing program needs. A completed new addition would include a new entry for the Sanford campus facility.



*Figure 1.1.12 Sanford Center: Future Additions*



## 1.10 Acknowledgements

The Master Planning Team would like to acknowledge the following groups for their contribution to this effort:

### YCCC Master Plan Steering Committee

Eric Bourque, Director of Information Technology  
Sam Ellis, Dean of Finance and Administration  
Barbara Finkelstein, former President, York County Community College  
Jim Fitzgerald, Chair, YCCC Foundation  
Emil Genest, Coordinator of Facilities Management, Maine Community College System  
Nick Gill, Associate Dean of Institutional Research and Planning  
Joan Ludwig, YCCC Master Plan Steering Committee Coordinator  
Tom McGinn, Chair/Faculty Architecture and Engineering Design  
Mark Paradis, College Safety and Security Manager  
Dana Peterson, Manager of Facilities  
Amber Tatnall, Director of Library and Learning Resources  
Jenna Weaver, Student Representative

### Master Planning Team

Harriman, Architects, Engineers, and Planners  
Rickes Associates, Higher Education Space Planning Consultants  
Walker Parking Consultants  
Pamela Perini, Security Consultant

## 2. Assessments and Analysis

## 2.1 Introduction

The Master Planning Team conducted extensive analysis of current existing conditions on both the Wells and Sanford campuses. Analysis was focused on specific topics in order to create master planning recommendations. The final master planning recommendations are a response to items identified through the analysis and assessment of existing conditions.

## 2.2 Space Needs Analysis

### A. Summary

York County Community College (YCCC) engaged Rickes Associates (RA) and Harriman to develop a Master Plan addressing the needs of both the Wells and Sanford campuses. This space needs analysis is grounded in defined institutional strategic drivers of enrollment and personnel. It is supported by the space inventory that is driven by nationally recognized space planning guidelines and tempered by the specific needs of the College.

The outcomes of this analysis are twofold:

- A targeted review of classrooms and teaching laboratories, including current and projected needs.
- A migration plan identifying potential near-term moves to alleviate some of the College's pressing space needs.

On the Wells campus, there are two buildings comprising 63,307 assignable square feet (ASF). This reflects the core campus space including classrooms, laboratories, offices, library, special and general use, and central facilities.

The Sanford campus is comprised of one building encompassing 16,033 ASF. Sanford provides specialty training in Precision Machining Technology. YCCC is in the process of renovating the Sanford building to create three new instructional spaces that will be used for workforce and community training.

The complete space needs report can be found in the Appendix.

### B. Wells Campus Recommendations

#### General-Purpose Classrooms

The figure below presents the existing distribution and calculated need for classrooms. For both analyses, the need was calculated based on guidelines of 67 percent average weekly daytime hour utilization and 67 percent average seat occupancy. Projected Scenario 1 increases course enrollment and course hours, while Scenario 2 maintains course enrollment sizes and increases the number of hours. By "capping" course sizes the campus can eliminate the potential need for 31 to 40 seat classrooms. Scenario 2 permits YCCC to address projected space needs without incurring capital expense.

Capacity Category	Existing: 833 FTE	Calculated: 833 FTE	Projected: Scenario 1 981 FTE	Projected: Scenario 2 981 FTE	Final Recommended
1 to 20	1	3	2	3	1
21 to 30	11	5	4	7	10
31 to 40	0	0	3	0	0
Total	12	8	9	10	11
ASF	8,334	5,250	6,640	6,750	7,688
Seats	282	210	280	270	258

Figure 1: Existing, Calculated, Projected, and Recommended Classroom Need

Currently, there is a surplus in ASF and number of classrooms. As the College moves forward with the proposed migration proposal and seeks to incorporate different types of pedagogy, there may be opportunity to repurpose at least one of the existing classrooms.

### Dedicated Classrooms

In addition to the general-purpose classrooms, in Fall 2018 there were four spaces and 2,645 ASF assigned to dedicated/priority use. The four department-controlled classrooms were used for a wide array of purposes. Two rooms held credit-bearing courses and had an average weekly hour utilization rate of 23 percent or almost six hours per week per room. Average seat occupancy was 42 percent. The low average hour utilization could be due, in part, to the dual roles these rooms serve. Each of these spaces should be evaluated for total departmental use to determine if it is being optimally utilized. In contrast, the Early Childhood Education program is being taught out, which will allow the existing classroom to be repurposed. Lastly, for the purpose of this analysis, the remaining three rooms were maintained.

Building and Room	Department	Rooms	ASF	Seats	ASF/Seat	Weekly Hours	% Hours	% Seats Occupied
<b>Credit-Bearing Instruction</b>								
Main C113	Veterinary Technology	1	728	24	30.3	1.25	5%	21%
Main C120	Early Childhood Education.	1	883	20	44.2	10.83	42%	49%
<b>Main Total</b>		<b>2</b>	<b>1,611</b>	<b>44</b>	<b>36.6</b>	<b>12.08</b>	<b>23%</b>	<b>42%</b>
<b>Noncredit-Bearing Instruction</b>								
Main B107	Training	1	496	20	24.8			
Main B109	Senior College	1	538	20	26.9			
<b>Main Total</b>		<b>2</b>	<b>1,034</b>	<b>40</b>	<b>25.9</b>			
<b>Grand Total</b>		<b>4</b>	<b>2,645</b>	<b>84</b>	<b>31.5</b>			

Figure 2: Dedicated Classroom Utilization

### Specialized Instructional Spaces

There are fourteen (14) spaces and 12,919 ASF assigned to specialized instructional (SI) teaching lab space, such as Biology, Art, Culinary Training, etc. Space needs for specialized instructional spaces are based on the number of hours by discipline of the courses, as many courses/programs cannot share space, although there are some exceptions.

Using the rubrics of 80 percent station occupancy, 50 percent weekly hour utilization, and discipline-specific ASF per station, it is recommended that, beyond maintaining its current complement of SI spaces, YCCC add up to three (3) additional labs. These labs include: Biology-Anatomy and Physiology Lab, Multipurpose Computer Lab, and a Veterinary Technology Lab. During a site walkthrough, the Veterinary Technology department stated that the recent addition of the dedicated classroom will meet current instructional space needs.

Discipline	Incremental Need					
	Current		Projected		Total:	
	Rooms	ASF	Rooms	ASF	Current and Projected Rooms	Current and Projected ASF
Art – General	0	0	1	960	1	960
Biology – Anatomy and Physiology	1	1,440	0	0	1	1,440
Biology - General	0	0	0	0	0	0
Chemistry - General	0	0	0	0	0	0
Computer Lab - CADD	0	0	0	0	0	0
Computer Lab - Digital Media	0	0	0	0	0	0
Computer Lab – Multipurpose	1	960	1	960	2	1,920
Culinary	0	0	1	960	1	960
Medical Assistant	0	0	0	0	0	0
Veterinary Technology*	1	1,440	0	0	1	1,440
<b>Grand Total</b>	<b>3</b>	<b>3,840</b>	<b>3</b>	<b>2,880</b>	<b>6</b>	<b>6,720</b>

Figure 3: Specialized Instructional Space, Current and Projected Need

The instructional space needs findings are consistent with a shift to more on-line courses (reduced classroom need) with required lab attendance on campus (increased SI need). If this trend continues, the campus will need additional SI space and fewer classrooms in the future.

### Migration Proposal

Upon completion of the space needs analysis, on-site walkthrough, and conversations with campus stakeholders, RA proposed targeted space recommendations. The migration proposal is covered in-depth in the augmented PowerPoint and includes ideas such as: repurposing a classroom into a Veterans Services office suite, converting the Early Childhood Education classroom into a Medical Assistant Lab and the Medical Assistant Lab into a Biology-Anatomy and Physiology Lab, and repurposing some quiet study space into a Disability Services Suite. YCCC can meet these space needs with the targeted realignment of existing space.

### C. Sanford Campus Recommendations

The Sanford campus currently has three spaces and 9,114 ASF used for the instruction of Precision Machining Technology. YCCC is in the process of adding three new spaces that will be used for community and workforce training. RA will provide a follow-up review of Sanford's space use after a year's worth of scheduling data is available.



Type/ Building and Room	Discipline	Room Count	ASF	Seats	ASF/ Seat	Weekly Hours	% Hours	% Seats Occupied
<b>Classrooms</b>								
Sanford A (109)	Classroom	1	296	12	24.7	10.82	42%	58%
<b>Classroom Total</b>		<b>1</b>	<b>296</b>	<b>12</b>	<b>24.7</b>	<b>10.82</b>	<b>42%</b>	<b>58%</b>
<b>Specialized Instructional</b>								
Sanford B (108)	Precision Machining	1	8,361	12	696.8	13.32	51%	92%
Sanford C (110)	Computer Lab	1	457	12	38.1	8.32	32%	83%
<b>Specialized Instructional Total</b>		<b>2</b>	<b>8,818</b>	<b>24</b>	<b>367.4</b>	<b>21.64</b>	<b>42%</b>	<b>88%</b>

Figure 4: Instructional Space Utilization

#### D. High School Demographics

YCCC requested RA to make observations regarding area K-12 demographics. RA used data provided by the College to determine headcount enrollment by municipality within York County and those municipalities outside the county from which the College draws a significant number of students. Trends in College headcount enrollment for these municipalities were compared to trends in the population of high school seniors from these communities. A cursory analysis was conducted of headcount enrollment from the 29 cities and towns in York County and the City of Portland for academic years 2014-2015 to 2018-2019 and the number of high school seniors residing in these communities for academic years 2008-2009 to 2018-2019.

Together, residents of these municipalities contributed between 91 and 93 percent of the headcount enrollment during the current and prior four academic years. For each academic year during this period, the six cities and towns with the highest headcounts have contributed at least half of the total headcount enrollment. Five communities have consistently appeared among the top six: Kennebunk/Arundel (combined due to shared ZIP Code in the enrollment data), Sanford, South Berwick, Wells, and York.

#### E. Conclusion

In light of today's fiscal climate, thoughtful and purposeful planning is required to make the highest and best use of current space. New or renovated instructional spaces should be flexible enough to accommodate evolving pedagogies and technologies. Detailed instructional space findings, targeted space recommendations, and related information are presented in Appendix A. Rickes Associates is confident that the information compiled, and the analysis completed by the YCCC consultant planning team, will provide YCCC with the guidance it needs to chart a responsible and navigable course for sustainable success where current and future space needs are concerned.

## 2.3 Campus Assessments

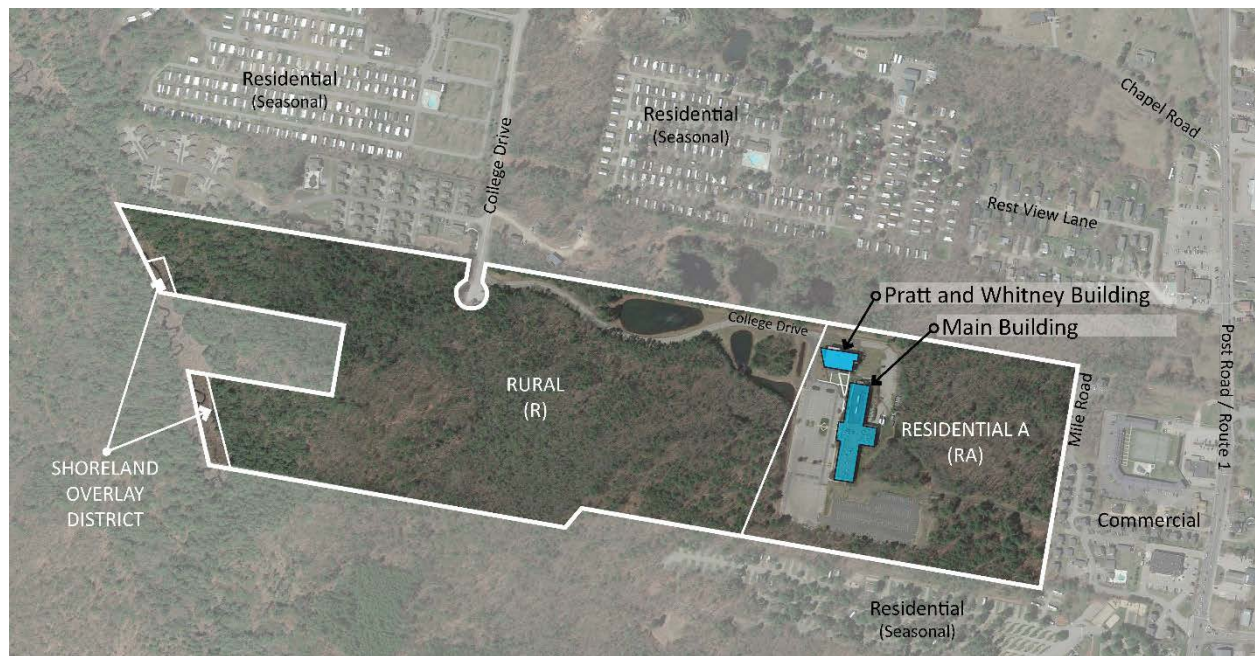


Figure 2.3.1 Wells Campus

### A. Wells Campus

#### History

York County Community College (YCCC) was established in 1994 as York County Technical College by the Maine State Legislature. At that time, the YCCC became the seventh college in the Maine Community College System.

The college operated briefly out of the Village By The Sea Hotel and Conference Center until a new campus was approved by the Maine DEP and the Town of Wells in 1996. In 1997, YCCC relocated to a new college campus off College Drive in Wells, Maine. The campus is located 1.7 miles from Exit 19 of the Maine Turnpike making it easily accessible for students commuting to the school by automobile. Three years later, the college expanded its main building footprint to 77,000 sq. ft. including twenty-eight (28) classrooms and labs, staff and faculty offices, library, cafeteria, bookstore and a student lounge.

#### Zoning

The YCCC campus lies within three zoning districts of the Town of Wells land use ordinance. The southerly portion of the campus is zoned General Business due to this portion of the campus being in close proximity to Route One. A majority of the campus and developable area is zoned as Residential A. A 1995 amendment to the town ordinance was enacted to allow educational use to be permitted in the zoning district. A westerly portion of the campus is zoned Rural. This zoning was also amended in 1995 to allow the College to be a permitted use.

## Buildable Areas

The site plan approved in 1997 permitted a two-story, 90,000 sf building (1.02 ac), and 600 parking spaces on a parcel of land approximately 86 acres in size. By 2005, YCCC had developed into a campus comprised of a 45,000 sq. ft (90,000 sq. ft. two-story) building, 1.02 acres of ground area, and nearly four acres of paved parking and pedestrian pathways. Development of the Pratt and Whitney Building in 2017 added 18,000 square feet of building and additional paved parking to accommodate the school's growing needs. The configuration of the campus was largely determined by the environmental conditions of the parcel of land.

The locations of environmentally sensitive areas have not been mapped for the entire property. However, through campus planning and development initiatives it is thought that wetlands and similar ecosystems exist on more than two thirds of the school property. It is estimated that combined upland area suitable for future development is less than 10 acres.

## Signage

YCCC has a sign to the College at the end of College Drive. This sign is remote and unseen from the nearby traffic routes of Chapel Road and Route One and is only helpful to identify the campus location to visitors arriving at the edge of the campus. Much smaller MDOT approved signs are placed on Route 9, Chapel Road, and Route One.



*Figure 2.3.2 Primary Campus Sign at College Drive Entrance*

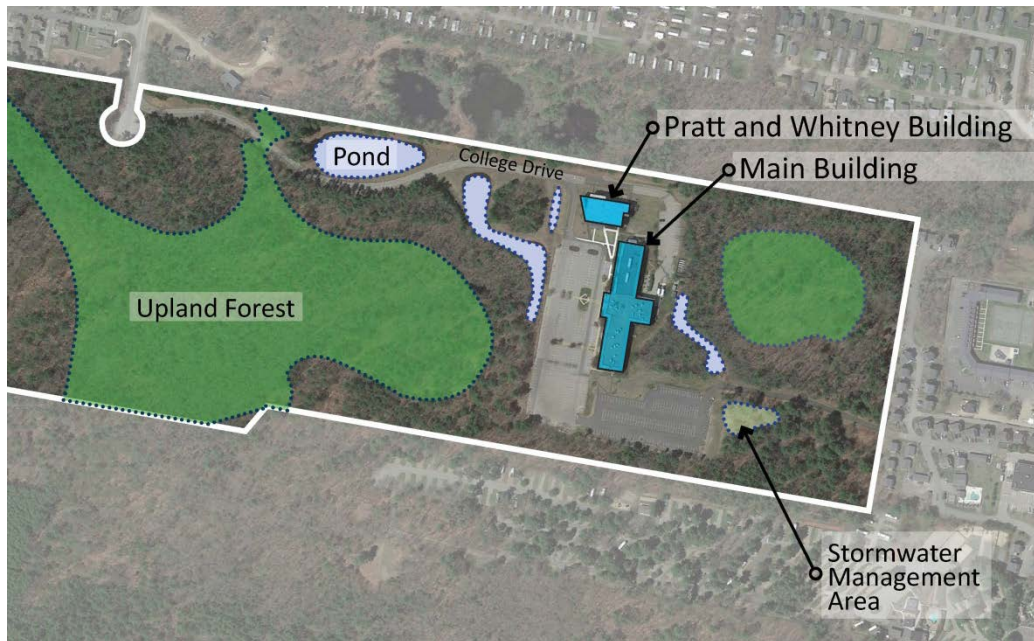
Even within the College's relatively brief history, it has become an important economic and cultural asset for the community and region. The College should work with the Town and the State to increase its visibility.

There is one roadway into the college campus. Given this configuration it is easy for campus visitors to determine the main campus building and entry location. However, the limited campus signage system does little to establish an identity for the school. Similar to recommendations made in the 2005 *Campus*



*Master Plan*, this 2019 Master Plan Update recommends YCCC consider development of a consistent signage program consisting of identification signage and directional signage to provide a universal informational system that improves the visual identity of the school.

## Environment



*Figure 2.3.3 Environmental Factors Diagram*



*Figure 2.3.4 Pond along College Drive*

As noted above, the campus consists mostly of woodland and wetland areas. The woodland lies mostly on the periphery of the campus while wetlands of various sizes, shown in green above, are dispersed across the entire campus. These wetland areas are both naturally occurring and man-made. The man-made areas are water collection and treatment zones consisting of detention ponds and vegetated swales. This storm water drainage system is designed to accommodate the current impervious area consisting of buildings, parking areas, roadway and pedestrian pathways.

### Campus Edge



*Figure 2.3.5 Campus Edge Diagram*

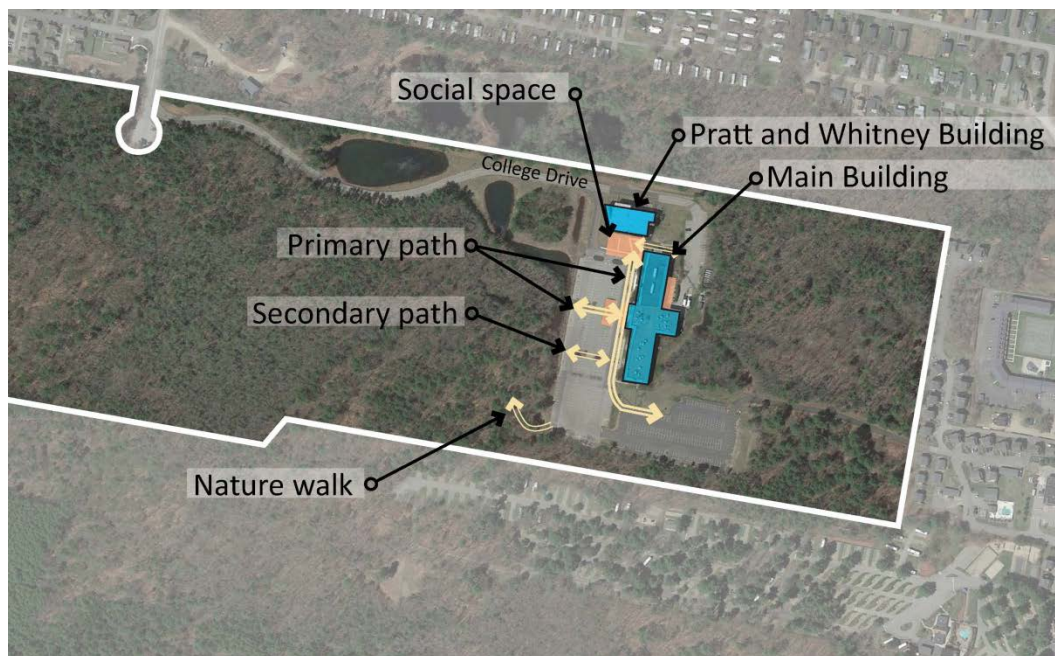
The YCCC campus is mostly undeveloped and primarily consists of a central campus comprised of two buildings, associated parking, and a roadway that connects the developed area of campus with College Drive. The edges of the YCCC campus are visually and physically described by the limits of the woodlands that surround the built portions of the campus. This treeline is a mix of deciduous and evergreen trees and understory growth that combine to create a substantial buffer between the campus and surrounding land uses. Only during winter months are views of off-campus uses available, and are limited to the southern portion of the campus where portions of the Wells Beach Resort Campground may be seen.





*Figure 2.3.6 Campus Edge along College Drive*

## Pedestrian Circulation



*Figure 2.3.7 Pedestrian Circulation*

The pedestrian pathways between the campus buildings and parking areas are essentially the pedestrian circulation network for the campus. A small trail system within the woods in the eastern portion of the campus is the exception. These pedestrian pathways connecting parking areas to the college buildings are comprised of painted markings or concrete sidewalks within four landscape islands. Pedestrian connections between buildings are both asphalt and concrete. Only in the primary building entry location at the Pratt and Whitney Building is the specialized paving used for pedestrian circulation use.



Figure 2.3.8 Connecting walkways between buildings

## Vehicular Circulation

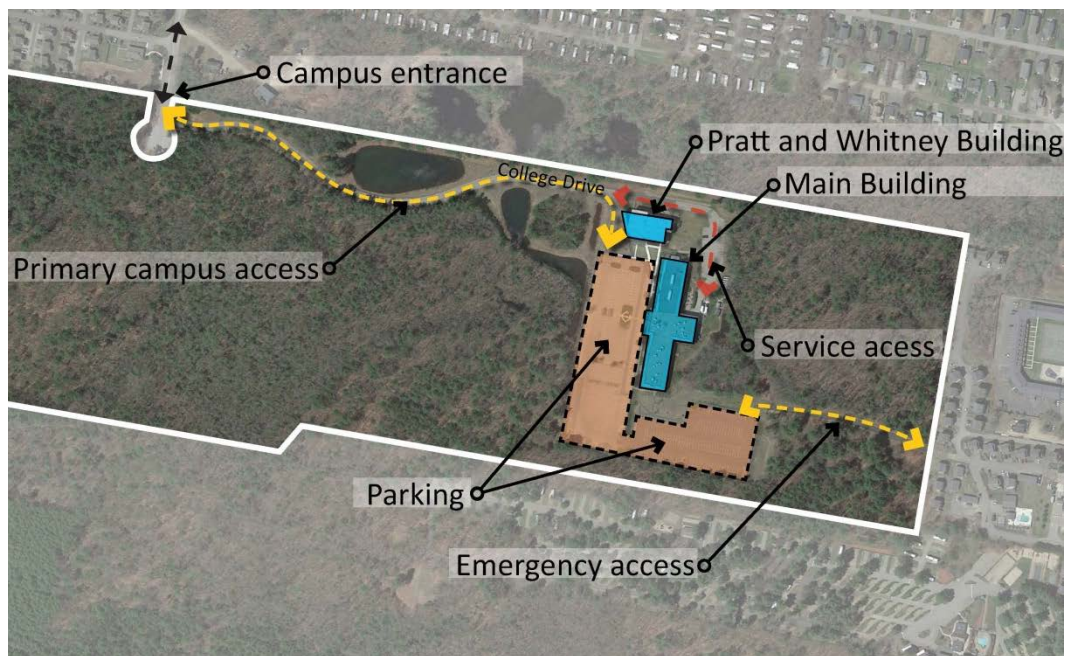


Figure 2.3.9 Vehicular Circulation



*Figure 2.3.8 College Drive approach to central portion of campus*

The College Drive entry to the primary parking lot area winds past several sizable detention ponds. This roadway is bordered on both sides by buffer areas of woodlands and some open space defined by the ponds. The character of the roadway is one of a rural road and is limited in its ability to provide a collegiate setting and landscape character for the school. Traffic flows onto and off the campus from this roadway.

When College Drive approaches the central portion of the campus it turns right and terminates in the primary parking area. A service drive extends straight at this turn, past the back of the Pratt and Whitney Building before turning right to terminate in the service yard for the Main Building. With the campus consisting of two academic buildings in close proximity to each other, and a substantial parking area situated next to both buildings, there is little vehicular circulation internal to the campus. A second vehicular route to the campus is located along a utility corridor and is for emergency response or utility service vehicles only with gated access from Route One.

The main parking area in front of the campus buildings is configured for ease in access and parking by students, faculty and campus visitors. The layout of the parking lot results in straight travel lanes of approximately 600 feet. While this parking layout is very efficient, breaking the lot into smaller areas would help to reduce traffic speeds, create a safer environment by reducing pedestrian and vehicle conflicts, and enhance the visual character of the school.



## Summary of Findings

The campus is only twenty-two years old, with its main building and primary infrastructure being built in 1997. The current arrangement of the YCCC campus reflects the evolution of the College's programs and limitations of site environmental factors. The configuration and length of College Drive is driven by the location of Chapel Road, which connects the campus to Route 109 and Route 1. The large parking areas are located next to the two academic buildings to serve the commuter-based population while avoiding the environmentally sensitive areas on the periphery of the campus grounds. The visual character of the campus is largely defined by the environmentally sensitive areas that consist of woodland and wetland areas. The campus character changes only at the central, developed portion. Improve areas to support the basic program needs of parking and facility access.

Additional assessments of the campus are outlined in the following bulleted points and expanded upon in other sections of this *Master Plan*.

- **Development capacity** – Environmentally sensitive areas that make up the majority of the site will define the type and location of any potential expansion of the current campus. Additionally, the property is abutted by several residential neighborhoods. The property edges that share boundaries with neighborhoods require sensitivity to maintain buffers and limit campus noise from affecting residential environments. Due to these factors, there is limited future development capacity on the Wells campus property.
- **Access** – Circulation of vehicles and pedestrians internal to the campus is functional but the distance of the campus from the regional roadway network is a challenge to commuting students. The direct access drive connecting to Route 1 is limited to emergency vehicle access only and is expected to remain so indefinitely.
- **Visibility** – Off-campus signage providing information and direction to campus visitors is limited. On-campus signage and wayfinding is also limited and could benefit from changes that would add visual and functional value to the campus landscape and function of college programs. Enhanced visibility of campus signage along the College Drive approach would mitigate the level of navigation confusion for first-time visitors.
- **Organization** – Configuration of development in the central portion of the campus is functional but the linear layout does not provide a “central” social and gathering place essential to the vitality of a college campus. Development of outdoor spaces programmed to support campus functions and social activities would greatly benefit the current organization via stronger outdoor connections between buildings.
- **Character** – The campus woodlands are mostly experienced from roads and perimeter paths. The developed portions of campus are experienced primarily by walking from parking areas to the buildings. Improvements are encouraged to provide greater access to the surrounding landscape and enhancing the grounds with vegetation would greatly improve the campus character, providing a unifying element for the college.

## B. Sanford Campus



Figure 2.3.9 Sanford Campus

### Context

The Sanford campus is situated within the Sanford Industrial Park and consists primarily of a single building on two adjoining parcels of land. The southern parcel is developed with an industrial styled building encompassing 16,033 ASF with associated parking and service yard that combine to cover approximately a third of the parcel. The associated parking is paved in asphalt while the service yard is a combination of asphalt, compacted soil and gravel. These facilities were purchased in 2017 from the Industrial Development Corporation of Sanford. YCCC had been leasing the building and property since 2012 to support the College's Precision Technology Machining Program.

The second northern parcel is undeveloped and covered with trees and understory growth. The terrain is undulating and appears to have been partially cleared within the past 20 years in preparation for development that did not occur. A substantial portion of this parcel is within a wellhead protection area that will restrict development in the future.

## Environment



Figure 2.3.10 Environmental Factors



Figure 2.3.11 Terrain behind industrial building



The eastern portion of the campus is developed with a large industrial styled building with parking areas in the front and along the western side of the structure. A service drive along the eastern side of the building accesses a loading area in the back of the building. Wooded areas of mature trees exist to the east of the service drive and north of the building. Younger trees and understory growth are reclaiming an open space area west of the parking area. The site is level in the area of development and rises in grade to the north into the wooded areas.

A second parcel of land owned by YCCC adjoins the developed parcel to the west. This parcel is undeveloped and comprised of younger trees with understory growth typical of land cleared within the last 20 to 30 years. This parcel appears to have undulating terrain with species of plants that are common to environmental sensitive areas appearing in lower portions of the property. Further investigation is needed to accurately understand any constraints the environment will have on future development of the parcel. It is known that northern portions of this parcel and the developed parcel are subject to regulations by the Town as it lies within a water wellhead protection area.

### Campus Edge



Figure 2.3.12 Campus Edge



*Figure 2.3.13 Campus Edge along Community Drive*

The single building and primary parking areas on the Sanford campus are accessed from Community Drive by two short driveways. The area in-between these two driveways is filled with mature trees and understory growth. This condition frames views of the parking area and campus building. This landscape character describes the setting and image of the Sanford Campus.

This image of the campus is reinforced by the landscape of mature trees and understory growth that is seen close to the campus building to the east and the woodlands existing to the north. This landscape visually defines the eastern and northern edge of the campus. The open space area to the west is described by the growth of transitional forest species that creates some visual understanding of the edge of the campus. For the most part, the campus edge is mainly described by the limits of the parking area and service area asphalt pavement.

## Pedestrian Circulation



*Figure 2.3.14 Pedestrian Circulation*

Pedestrian circulation is primarily from the front parking area to the main entry of the campus building. This route is informal as visitors transition across the parking area from their parked automobiles to the building entry vestibule.

Secondary pedestrian circulation is limited and occurs when visitors use the overflow parking area to the west of the campus building. The route here is informal as well, pedestrians will cross through the parking area to gain access to the main entry in front of the building.



*Figure 2.3.15 Pedestrian connection at main building entry*



## Vehicular Circulation



*Figure 2.3.16 Vehicular Circulation*



*Figure 2.3.17 Driveway to campus building from Community Drive*

The single building and primary parking areas on the Sanford campus are accessed from Community Drive by two short driveways. One driveway is marked with a facility sign to encourage commuting students to use the driveway to access the primary parking in front of the building or the secondary parking aligned along the building's western side. Vehicular circulation routes in the Sanford campus are the travel lanes in these two parking areas. The second drive is less than a hundred feet down Community Drive and primarily used by service trucks using the service drive to the east of the building to make deliveries to the rear of the building.

### *Summary of Findings*

The Sanford campus is actually a single training facility situated within an industrial park. The site was acquired by YCCC in late 2017 to grow the college's manufacturing and other industrial training programs. The campus consists of two parcels. One is a cleared site comprised of an industrial styled building and associated improvements that reflect its twenty-year history as a warehouse and supply facility. The second adjoining parcel was once partially cleared but remains undeveloped.

Two small parking areas are situated in the front and to the side of the building with vehicular access to the service yard in the back of the building. The visual character of the campus remains aligned to its industrial use origins. Overall, the campus is limited in providing an appearance and visual character common to a collegiate academic facility.

Additional assessments of this campus are outlined in the following bulleted points and expanded upon in other sections of this *Master Plan*.

- **Development capabilities** – The site surrounding the singular building is relatively flat and appears suitable for expansion of the existing structure. Additional buildings could be developed on the adjoining vacant parcel to expand the Sanford training facility. However, any expansion of the campus will need to consider the limits and regulatory impacts of the aquifer and Sanford Water District that lies immediately to the north of the campus.
- **Access** – Circulation of vehicles and pedestrians internal to the campus is functional. Vehicles easily access the campus from two short driveways connecting the campus to Community Drive.
- **Visibility** – Off-campus signage providing information and direction to the Sanford campus is limited to a sign on Community Drive. A singular sign at one of the driveways provides identity of the facility to passers-by. Replacement of this sign with a more visible and well-branded sign would greatly improve the visual identity of the campus.
- **Organization** – Configuration of the campus building and parking in the central portion of the site is functional and provides ease of access for commuting students.
- **Character** – The surrounding industrial park establishes the character for visitors to the Sanford campus. The history of the site as an industrial use remains with few improvements that reflect the buildings use as a technical program and training facility. The campus is primarily experienced walking from parking area to the buildings. Strategic improvements to the area surrounding the campus building are needed to improve the visual character and identity of the site as a place of learning.

## 2.4 Facility Assessment

### A. Introduction

The scope of the 2019 Master Plan included a facility assessment for the Wells Campus, Main Building only. The assessment was performed by Harriman and included general building condition scoring of 38 categories. Overall, the building is in fair condition and requires limited immediate repairs and/or upgrades. Exterior windows and flooring were identified as requiring attention in the near-term. Roofing replacement and lighting upgrades were identified as medium-term maintenance items.



Summary Information	BUILDING NAME	Main Building
	ADDRESS	112 College Drive, Wells
	YEAR CONSTRUCTED	1994
	TOTAL # OF FLOORS	2
Building Exterior	Exposed Foundation	2
	Brick / Masonry	3
	Siding / Cladding	3
	Windows	2
	Doors	2
	Canopies / Overhangs	2
	Roof / Flashing	2
Life Safety	Fire Alarm / Strobes	3
	CO / Smoke Detector	2
	Life Safety: Exit Signs	3
	Life Safety: Emergency Lighting	3
Building Interior	Condition of Walls	3
	Base	2
	Flooring	1
	Ceiling	2
	Stairs	2
	Handrails	3
	Doors	3
	Glazing	3
Electric	Service Entrance	3
	Panel / Distribution	3
	Emergency Power	3
Light	Lighting	2
	Lighting Controls	2
Mechanical	Boiler	3
	Fuel	4
	HVAC	4
	Vented specialty areas	3
Plumbing	Toilet Rooms	3
	Kitchen	3
	Domestic Water	3
	Sprinkler Riser	3
	Sprinkler Distribution	3
	Showers	N/A
Structure	Observable Steel	3
	Observable Masonry	3
	Headers / Lintels	N/A
	Misc Metals / Stairs	3
Total Score		97
Average Rating		2.69
Overall Condition Rating		Fair-Good

Rating Index	
1	Poor
2	Fair
3	Good
4	Very Good
5	Brand New

Figure 2.4.1 Existing Facility Condition Summary Table: Main Building

The buildings scored better than average for energy consumption among similar building types. However, upgrades to the Main Building and Sanford Building including window replacement, lighting, and HVAC would yield energy use improvements and lower annual operating cost.

- YCCC facility energy consumption is lower than the national average for similar type buildings.
  - Main Building operates at 24% below national average.
  - Pratt & Whitney Building operates at 52% below national average.
  - Sanford Building operates at 48% below national average.
- Total greenhouse emissions for YCCC facilities = 525 metric tons CO<sub>2</sub>e/year. Main building is higher than the national average.
- Greenhouse emissions can be lowered by changing fuel sources to renewable and/or improving facility's energy efficiency.

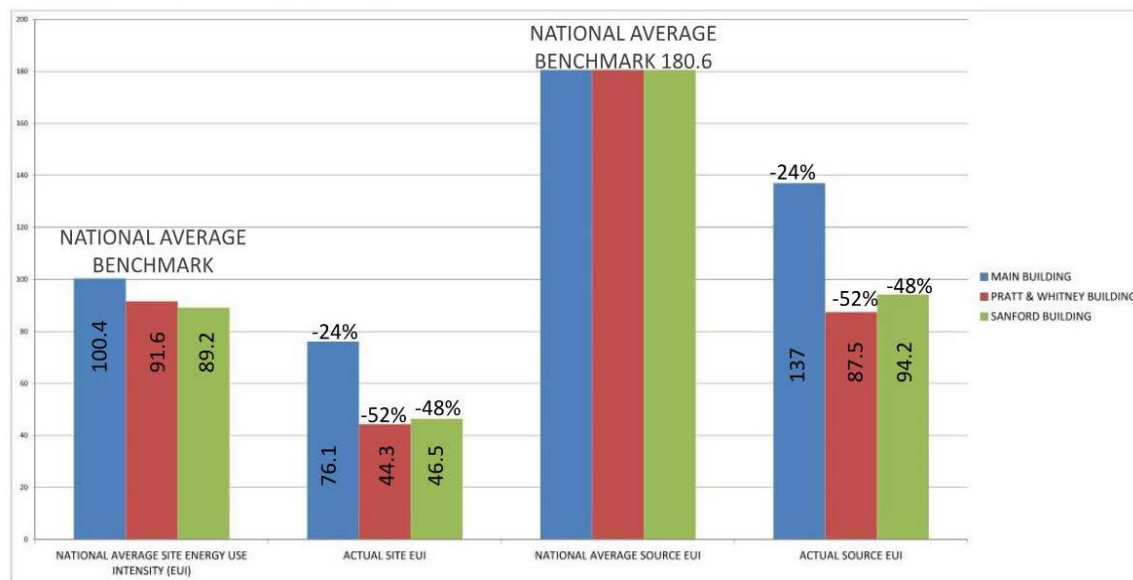


Figure 2.4.2 YCCC Energy Analysis Chart

## B. Main Building, Wells Campus

The two-story facility consists of an original construction, identified as Wings A and B, and an addition identified as Wing C. All wings of the building are over twenty years old. The entire building is constructed with structural steel and an exterior finish of brick veneer. Given its age, components such as windows, roof, and flooring are at or beyond their useful lives. The original section was constructed as a design-build project with several small rooftop HVAC units serving spaces on both floors. Wing C has a single, large rooftop package HVAC system serving all spaces. Facility recommendations in order of importance and urgency include:

- Replace all exterior windows with more energy efficient units. Window frame material options include metal or fiberglass.
- Replace VCT flooring in the lobby, stairwell, and corridor areas with flooring of higher quality such as rubber, linoleum, or porcelain tile. Consider installing walk-off mat material and/or tile at building entry locations.
- Replace roof within the next five years.
- Upgrade lighting throughout the building to LED to improve energy efficiency, improve lighting control of individual spaces, and save on energy costs.
- Consider upgrading HVAC air handling unit equipment at Wings A and B to higher efficiency systems.

### C. Pratt and Whitney Building, Wells Campus

A facility assessment of this building was not included in the Master Plan since it less than three years old.

### D. Main Building, Sanford Campus

A facility assessment of this building was not included in the Master Plan since an interior renovation was in progress and the general condition of the building was known.

### E. Assessment: Overall Facility Summary

- The character of the Wells and Sanford sites reflect their commuter and training center histories. Modest improvements to site signage, walking areas, and vegetation can elevate the character of these sites to improve navigation and visitor experience.
- The Main Building in Wells was the only facility of three that was assessed in the Master Plan. The overall facility condition of the Main Building is fair. Specific improvements to the windows, flooring, interior finishes, lighting, and roof should be considered over the next several years. The other two buildings were identified as being new or having recent extensive renovations to deem them in good condition.
- The facilities and supporting site elements such as parking are adequate to support YCCC's current academic programs. Deficiencies exist with regard to alignment of existing spaces to current programs and classroom needs. Minor-to-modest renovations of existing spaces over the next several years will help YCCC keep its teaching spaces relevant to its academic programs.

## 2.5 Parking Assessment

The scope of the 2019 Master Plan included a parking assessment for the Sanford campus only. The assessment was performed by Walker Parking Consultants and included field observations and specific parking counts. Information regarding the Sanford campus is limited to recommendations only which can be found in section 4.

### A. Wells Campus

The following content regarding parking for the Wells campus is from the 2005 Master Plan report and is provided here for reference and informational purposes, only. Parking on the Wells campus increased as a concurrent part of the construction of the Pratt & Whitney Building. General observation and discussion about the Wells parking concluded that parking is ample but can be managed better by focusing different user groups in designated parking areas. Parking counts at YCCC have been developed with the Town of Wells during the various planning phases of past design and construction projects. When the opportunity arises in the future for YCCC to re-evaluate its parking situation with the Town they should discuss opportunities to soften the parking lots with landscape and/or walkway elements.

*The college currently has roughly 447 parking spaces of which 19 are handicap and 428 are standard. The site plan approved in 1997 was designed with 600 spaces for the 90,000 square foot facility. The town ordinance has no current standards for the number required for a college use. The town requires 3.5 spaces for every 1,000 sq. ft. office or business uses, and 1 space for every three seats for an assembly use, such as an auditorium or theater. The current parking is approximately 60% utilized, about 270 spaces, during the most heavily occupied class times.*

*Parking for the combined program outlined above should be between 550 to 600 total parking spaces. Current American with Disabilities (ADA) accessibility guidelines require 2% of the total spaces for lots between 501 to 1000 be handicap accessible and that one in every eight of those be designed for van accessibility.*

*As a largely commuter college, the greatest parking demand at YCCC is generated from classroom use. With current classroom utilization at an average of 30%, a doubling of enrollment will not require a doubling of current parking. While there may be times when an assembly function may coincide with classroom use, it would not be advisable to construct parking for maximum potential peak demand. It is suggested that the college develop an event policy to limit overlapping of functions and the resulting increased parking demand.*

*The current lot is designed as a single large lot with few landscaped islands. The final campus plan suggests an increase in the number of islands, as well as larger specimen trees for greater canopy coverage, improved landscape scale and appearance. The lot is divided at its center into two halves, which are further separated into smaller areas. Islands are increased to accommodate larger shade trees. Future parking should not be contiguous to the main lot.*

## B. Sanford Campus

Walker Parking evaluated the parking capacity at the Sanford location by capturing field data on a day that had a higher than average parking demand. They tracked the number of cars arriving over a nine hour period and compared the data to YCCC's existing parking capacity. In support of the Sanford facility's current programs the existing parking capacity, including handicap parking, was determined to be adequate. Classroom renovations were occurring during the study and it is recommended that a follow up parking capacity assessment be made in 2020 to better understand the actual parking requirements resulting from the renovations.

### 1. Existing Conditions

- i. 38 Standard Parking Stalls
- ii. 4 Accessible Stalls

### 2. Off-Street Parking Zoning Requirements

- i. Schools other than Listed = 1 per each 2 Students, Plus 1 for each Employee

### 3. Field Survey

- i. On-Site Counts Performed at 30 Minute Intervals
- ii. Vehicles Monitored for Duration of Stay
- iii. Conducted on a "busy" day with 3 Programs Scheduled Concurrently

### 4. Findings

### 5. Peak demand of 22 spaces (9AM)

### 6. Adequate parking for current demand and future use

### 7. Ratio: 1 Space/56 SQ FT (Classroom & Instruction ASF)

Hour	Data Collection Times		Regular Spaces (38 Spaces Total)	HP (4 Spaces Total)	% Full
	Start Time	End Time			
# spaces			38	4	
8:00 AM	7:59 AM	8:02 AM	15	0	36%
8:30 AM	8:30 AM	8:32 AM	19	0	45%
9:00 AM	9:02 AM	9:04 AM	21	0	50%
9:30 AM	9:31 AM	9:33 AM	22	0	52%
10:00 AM	10:01 AM	10:03 AM	21	0	50%
10:30 AM	10:30 AM	10:32 AM	21	0	50%
11:00 AM	11:00 AM	11:02 AM	21	0	50%
11:30 AM	11:30 AM	11:32 AM	19	0	45%
12:00 PM	12:05 PM	12:07 PM	12	0	29%
12:30 PM	12:33 PM	12:35 PM	18	0	43%
1:00 PM	1:00 PM	1:02 PM	18	0	43%
1:30 PM	1:32 PM	1:34 PM	18	0	43%
2:00 PM	2:00 PM	2:02 PM	17	0	40%
2:30 PM	2:30 PM	2:32 PM	18	0	43%
3:00 PM	3:00 PM	3:32 PM	18	0	43%
3:30 PM	3:31 PM	3:32 PM	13	0	31%
4:00 PM	4:02 PM	4:04 PM	18	1	45%
4:30 PM	4:33 PM	4:35 PM	13	1	33%
5:00 PM	4:50 PM	4:52 PM	0	1	2%

Figure 2.5.1 Parking Analysis: Data Collection Chart: Sanford Campus



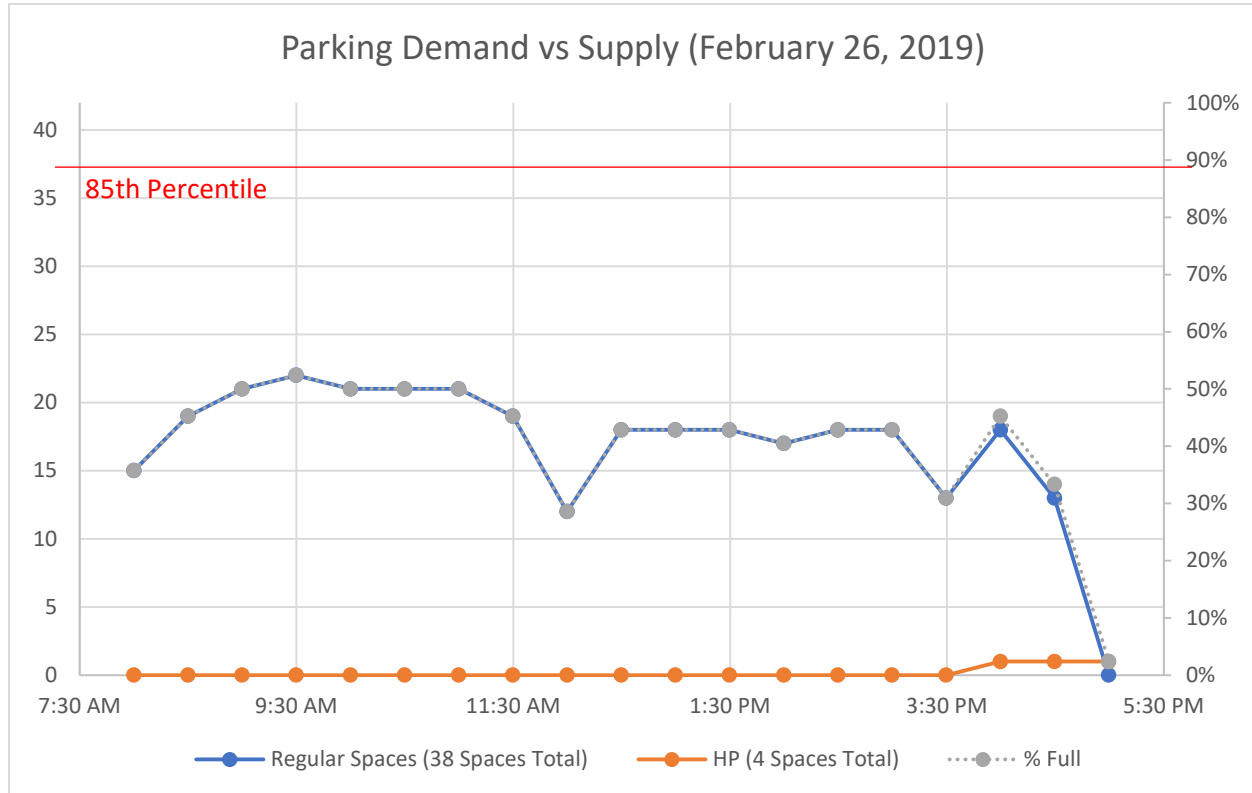


Figure 2.5.2 Parking Analysis: Supply Chart: Sanford Campus

### C. Assessment: Overall Parking Summary

- Capacity:** Based on field assessments, observation, and information from YCCC staff, parking capacity at both Wells and Sanford is adequate for current and near-future needs. As program needs evolve and change YCCC should reassess its parking capacity to assure its commuting population has convenient access to the campuses.
- Layout and Efficiency:** In general, the parking layout in both locations is highly efficient. This is due to very little area being dedicated to pedestrian circulation, vegetated buffers, and other landscape elements. The high level of efficiency creates a fairly barren parking landscape which should be reconsidered if the opportunity arises to replace some parking stalls with pedestrian or landscape elements.
- Condition:** The physical condition of the parking at the Wells campus is fair with a need to repave and restripe within the next 5-10 years. The physical condition at the Sanford location is in fair-to-poor and requires repaving and restriping within the next 2-5 years.

## 2.6 Security Master Plan

### A. Introduction

The primary intent of the Security Master Plan is to provide the York County Community College with a set of guidelines and recommendations for the selection, implementation, management and operation of programmatic, procedural, physical, electronic, environmental and behavioral security modifications designed to minimize risk and maximize the protection of the Colleges employees, students, property and information. It is also the intent to begin the process of defining campus standards and guidelines for systems and hardware to be retrofitted, or added, as the campus continues to grow. There is opportunity for economies of scale with labor and materials; and continuity of systems. Considering an institutional scale security system for YCCC will also allow for uniformity and remote access.

The Security Master Plan uses Vulnerability/Risk Analysis as a foundation for developing guidelines and recommendations, and incorporates an assessment of current threats faced by YCCC. The Vulnerability/Risk Analysis is further used to define the priorities for a set of risk mitigation recommendations. To develop the Security Assessment, Pamela Perini Consulting has performed site surveys and interviews, analyzed crime index data, reviewed the relevant technologies, and assessed the campus facilities physical environment with respect to the safety and security of students, faculty, staff, visitors and property. A final goal and objective of the Security Master Plan, is to provide a Safety and Security Program that is to be presented as a tool to speak of the campus's preparedness. Preparedness will show potential students that the campuses are a safe and secure educational environment. Safe and secure environments are germane to the learning process and all students, faculty and staff deserve a safe and secure environment for 21<sup>st</sup> century learning.

The complete security report can be found in Appendix C.

### B. Overview

Pamela Perini Consulting was engaged by Harriman to assess existing Security Program conditions and provide a Security Master Plan draft report. The process includes a high-level assessment of existing conditions of the two campuses. The most effective way for the York County Community College to build a long-term Security Master Plan and Program is to create a physical and logical security committee team. The team should consist of various members of the Community College campuses that represents Security, IT, Facilities, Capital Planning and Construction, and the Finance and Administration Department. The security master plan's development should outline the operational aspects of the Campus Safety and Security, along with long-term systems information and compatibility, communication infrastructure, product obsolescence and life cycle, long term costs on materials and labor, and many other items including guard services and security staff. It should be noted that although security technology is important to the enhanced reactive response to issues and concerns on campus, it does not function exclusively without a programmatic view of policy, processes, training and the like. It is also noted that communication with outside agencies (Local First Responders, Police/Fire, MEMA and FEMA as examples) is critical to its success.

It is recommended that the Committee assess current vulnerabilities and risks, the current measures in place to mitigate the risks, and how to measure the effectiveness of the implemented measures. Pamela Perini Consulting has conducted interviews and discussed daily routines of faculty, staff, students, visitors, contractors, delivery services and the like with Mark Paradis, Security Director, as a critical segment of the overall design of a campus Security Master Plan. Site visits and previews were also done as an important part of gauging the campus functions and temperament. These interviews and discussions provided valuable insight into the effectiveness of current physical security measures in place, and how they align with the perceived level of vulnerability and risk.

### Assessment and Recommendations from Key Findings

The high-level vulnerability/risk/threat assessment and observations provided a number of deficiencies for consideration. The observations will assist in identifying threats, and thereby provide viable mitigation solutions to increase safety and security on the campuses. It is important to understand that risk is fluid and unpredictable, and no measure will mitigate every risk, vulnerability, or threat. YCCC has options when addressing the threats, risks and vulnerabilities that include: accepting the risk, mitigating the risk, and/or transferring the risk.

Included among the specifically identified deficiencies that have risk, or increase the campuses vulnerability, and recommendations include (in no particular order):

### Wells Campus

- There is a lack of connection (and limited communication) between Physical and Logical Security on Campus. Physical security includes object such as bollards, doors, locks, intercoms, and lack of hiding places. Logical security includes technology or software-related elements that reduce a facility's or campus's vulnerability to threats.
  - The current configuration of these functions is not connected but needs to be. There is correlation between physical and logical security that needs to span IT, Security and Operations/Facilities. Without this connection, the management of the security systems is costly. All of the systems require infrastructure/IT, network connectivity, electricity and integration. Access Control doors require electrified locking hardware that is typically managed by facilities. The relationship between software and hardware components should be strengthened.
- From a building access control standpoint it is optimal to have a single means of ingress/entrance to any one building. This is the only way to control who comes into the building. Controlling buildings to limit entrance will also allow the campus to know who is on campus. It is an auditing tool for any required muster (headcount) reports. Additionally, it is difficult to control unwanted persons on the campuses that may be under restraining or harassment orders. Controlling entrances into buildings through a single access point will allow for better control.
- Increasing Access Control on the campus will provide for less needed key control. When access control doors are added to any facility there is a lower need for keys. This allows the campus to better control who has access to buildings, and locations, and when. In the event keys are misplaced on campus, costly re-keying is not required.

- The lack of continuity of security systems from building to building is very costly for YCCC. The savings of low initial first cost becomes costly with regard to long-term management.
  - The campus Security Director is required to drive from building to building to retrieve video for forensic activities.
- There is a lack of written policy.
- The signage coming into both campuses lacks clarity. Way-finding to and on both campuses is lacking, particularly at main entrance locations.
- YCCC should consider large format monitors at the main entrances of all buildings to display important campus information or alerts.
- Detailed signage for parking needs improvement.
- There is a lack of video surveillance cameras for high value/high attractive nuisance targets, and building perimeters.
- The campus should consider adding IR cameras in the Pratt and Whitney Building Auditorium. This space has large groups gathering inside, and IR cameras would improve visuals inside the space under low light conditions, and in the case of an emergency incident.
- The local police and fire cannot have access to a single video system of the Wells campus with its current configuration. The campus should provide for a single video system with remote access for local first responders.
- “My YCCC” is the internal platform by which many student, faculty and staff communications and functions are managed. The Campus should consider a series of required videos for incident training that would be added for onboarding and introductions to campus safety and security. FEMA provides many great free online videos.
- Passive physical security recommendations should be developed to protect building entrances, particularly at the Pratt & Whitney Building.
- It was suggested that the night time lighting is insufficient and needs to be assessed.
- Detailed criteria and guidelines for all building, parking and site location selection of electronic security components and devices needs development.

### Sanford Campus

- The Sanford campus has no continuity of systems and does not work in conjunction with the Wells campus. A lack of centralized control is costly to the college.
- Parking at the Sanford campus is not labeled and way-finding is lacking.
- Video surveillance inside the building is minimal and should be improved.
- The opportunity for more industrial type risks and accidents is high given the certification program and the dangerous automated equipment. The student training at the Sanford campus should be reviewed.
- The perimeter lighting is poor.
- The Sanford campus cannot perform a lock down from a single location.

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### 3. Master Plan Recommendations

### 3.1 Introduction

Recommendations for YCCC are intended to be realistic, actionable, and aspirational suggestions to improve the environments of both the Wells and Sanford campuses. Space needs, facility, parking, and security recommendations from Section 2, *Assessments and Analysis*, are included within various Master Plan recommendations. Many of the recommendations are relatively small in scope but have the potential to make a meaningful impact on the YCCC campuses. By keeping recommended initiatives and projects limited in scope, many can be achieved during school breaks with limited disruptions to ongoing campus operations. The subsections below are generally listed in order of most urgent and highest immediate impact to longest-term or most aspirational.

The YCCC master plan and its recommendations have been developed based on a set of assumed circumstances established through analysis of the existing conditions and as set for by the Master Plan Steering Committee based on financial, operational and strategic planning. These assumptions include the following:

- Facilities have sufficient area to accommodate current program needs and enrollment with capacity for growth. Current enrollment, per the Space Needs Analysis, is 833 FTE and projected is 981 FTE.
- The College will remain as a community school with no residential program.
- Athletic facilities are not part of the master plan scope.
- The Sanford campus is primarily a technology focused training and certificate center.
- The Wells campus is the primary academic and administrative center.



Figure 3.1.1 Overall recommendations site map, Wells Campus



Figure 3.1.2 Overall recommendations site map, Sanford Campus

#### Wells Campus Recommendations

- A. Community Courtyard
- B. Approach and Signage
- C. Main Building Interior Renovations
- D. Redefine Parking Areas
- E. Facility Improvements
- H. Establish View Corridor

#### Sanford Campus Recommendations

- F. Entry Vestibule
- G. Campus Approach & Signage
- I. Future Building Development



## 3.2 Near-term (Immediate) Recommendations: Wells

### A. Community Courtyard

The YCCC community is in need of a dedicated outdoor gathering space for social activities of various sizes and function. Currently, community members consisting of school students, faculty and area citizens are only able to congregate on campus in two dedicated locations; on a patio between the Main Building and its service yard, and a small terrace at the entry to the Pratt and Whitney Building. The campus parking areas are able to be staged for events of larger size but are not as conducive to the social functions that a purposefully designed space would provide.

This Master Plan considers a community courtyard in the area between the Main Building and the Pratt and Whitney Building. This location allows for a purposefully designed courtyard to be situated in the academic center of the campus. Here the space would be easily accessed from both academic buildings as students cross the courtyard to attend classes. The space should be designed in a way that allows it to become the cultural heart of the school.

Design considerations for the courtyard space should include:

- Seating comprised of fixed benches and movable chairs located in a manner that supports social interactions and gatherings of various sizes, from small study groups to campus wide events.
- Stone walls that are constructed so pedestrians have a place to perch, to serve as a visual screen of the nearby service road, and to separate the adjoining parking and service yard.
- Plantings, seating, and pavement areas that allow for an amphitheater “zone” within the courtyard so lecture, performance, and other similar uses in various formats and scale are supported.
- Appropriate size and scale so the space could be used as a community resource to be rented out for events that will attract other area residents not usually part of the campus community.

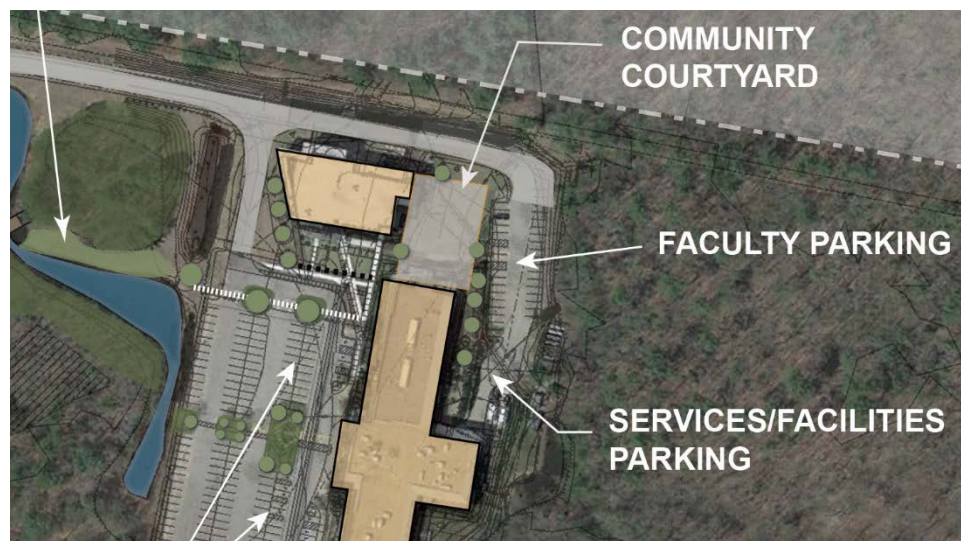


Figure 3.2.1 Community Courtyard Site Plan





*Figure 3.2.2A Community Courtyard Rendering*



*Figure 3.2.2B Community Courtyard Rendering Detail*

## B. Campus Approach and Signage

From Chapel Road, YCCC visitors travel along College Drive to access the campus. This is the only road to the campus and it is not until the Summerscape Seasonal Cottage driveway that a driver will know where to access the campus. It is here that a driver first sees a campus sign that identifies YCCC. This approach is the entrance to the campus but provides a limited first impression to visitors.



*Figure 3.2.3 Image of Existing Campus Approach Taken from College Drive*

The campus sign is enclosed by woodlands but situated to the left of a cul-de-sac styled turn around area. As drivers follow College Drive to the left, there is a lack of navigational and community information that would create a sense of arrival onto a college campus. For the remaining length of College Drive, the roadway has a rural road appearance as it navigates towards the center of the campus where it terminates in the parking area for the Main Building.

Modifications to this portion of the campus will better define a transition from the public realm to the academic realm of the campus. Improvements here are critical to the enhancement of the campus landscape, to the enrichment of the visitor experience, and to strengthening an identifiable image of the school. Improvements have the potential to transform this portion of the campus into a gateway that provides an enhanced first impression to visitors.

Improvements to this area of the campus should include:

- Modification or removal of pavement to replace the current cul-de-sac “end of the road” appearance and to better facilitate the movement of traffic as College Drive continues to the left.
- Replacement of the existing campus sign with a new sign that is more visible and identifiable to drivers farther away on College Drive, and to establish a landmark that reinforces the location as a gateway to the YCCC campus.
- Installation of a campus welcome sign further along College Drive to provide visitors with YCCC information in a dynamic format that reflects the campus culture and adds to the campus identity.





*Figure 3.2.4 Rendering of Proposed Campus Sign at Campus Approach*



*Figure 3.2.5 Detail View of Proposed Campus Sign*







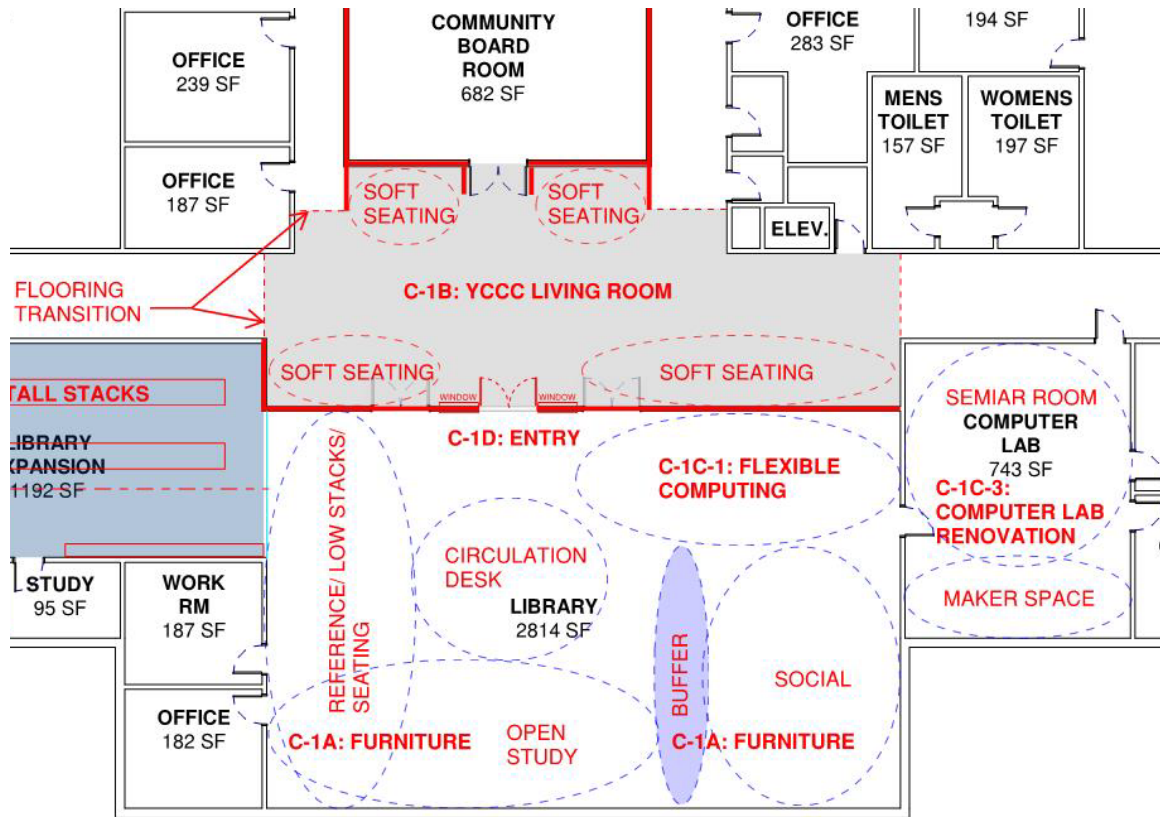


Figure 3.2.8 Library and Adjacent Corridor Renovations: Enlarged Plan Diagram

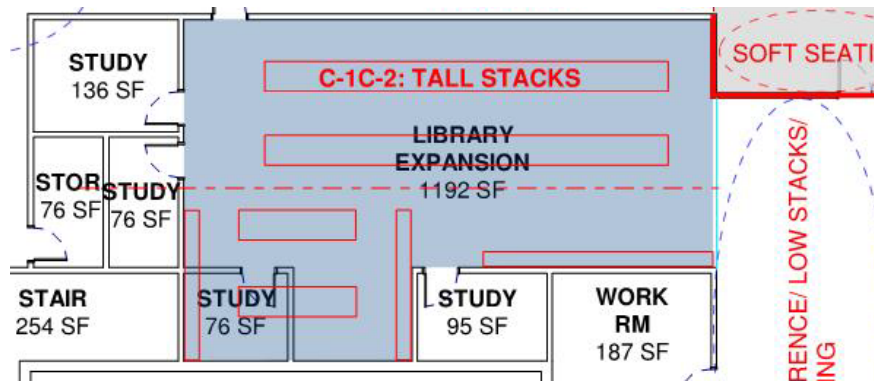


Figure 3.2.9 Library and Adjacent Corridor Renovations: Enlarged Plan Diagram

## C-2 Lobby Renovation and Security Upgrades

Improve building oversight and security by modifying the configuration of the lobby and limiting access points into the building.

1. Upgrade main entry vestibule and other exterior doors with access controls. Limit access at rear and parking lot side of building to staff only with card access.
2. Move YCCC Security Director to office adjacent to the lobby.
3. Remove existing reception desk and create a more defined waiting area with soft seating to contain visitors or those waiting for transportation.
4. Expand lobby into portion of the Business Office Suite to improve sight lines through the space and allow for more seating.

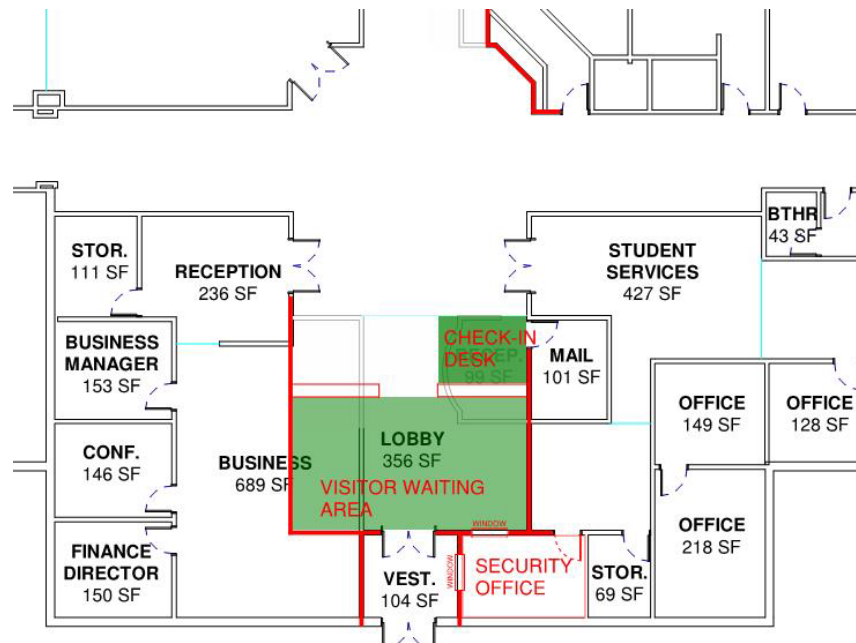


Figure 3.2.10 Lobby Renovation and security upgrades

## C-3 Corridor Refresh

Minor improvements to long corridors including shifting partitions, painting, and adding accent lighting or graphics would lessen the appearance of very long corridors and add visual interest. Locations are referenced in figure 3.2.6.

#### C-4 Student Lounge Upgrades

Clarify the student lounge area by creating a permanent room for their use.

1. Add a fixed partition in place of the existing operable partition. Using the existing columns, closets can be carved out for both the student lounge side and the mid-café side to create much needed storage.
2. Relocate door to reduce impact into corridor.
3. Interior finish and lighting upgrades.

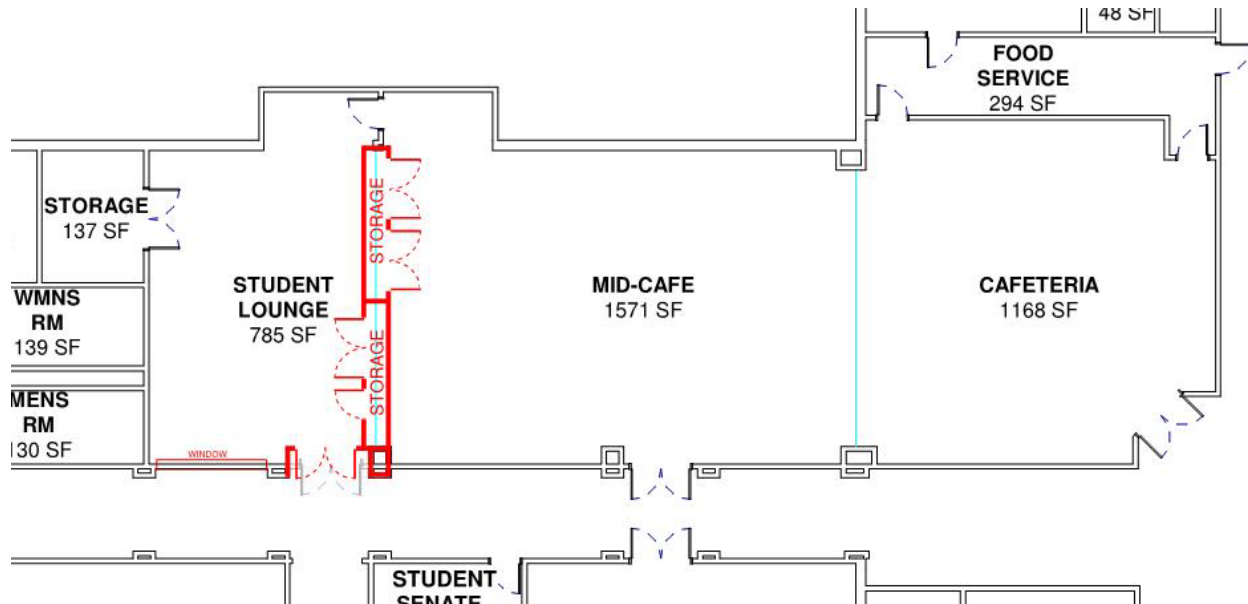


Figure 3.2.11 Student Lounge Renovations

#### C-5 Classroom reorganization

Leverage needed classroom renovations to meet adjacency goals as outlined in the Space Needs Analysis. See detailed recommendations described in the full Space Needs Analysis document.



### C-6 Culinary Arts Improvements

Improve visibility to one of YCCC's signature programs by renovating the adjacent corridor and adding glass between the corridor and Culinary Arts Lab. Relocate vending machines to open views from the lobby to the Culinary Arts area.

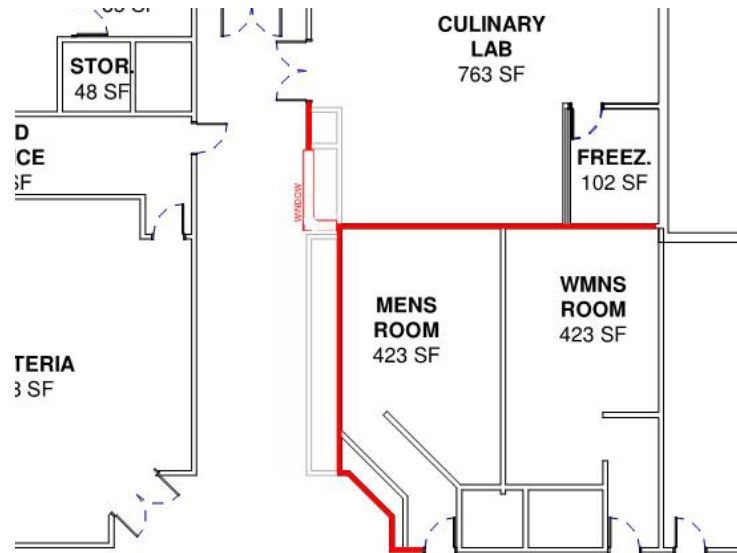


Figure 3.2.11: Culinary Arts Renovations

#### D. Redefine Parking Areas

Parking at YCCC is situated across two large lots; one in front of the Main Building and a newer lot constructed to the southeast of the Main Building. Both of these parking lots are located in close proximity to both campus buildings and easily accessed by paved pedestrian pathways. A smaller parking area is situated to the northeast of the Main Building and provides convenient parking to both the Main Building and the Pratt and Whitney Building.

The northern portion of the larger lot in front of the Main Building has a few landscape islands that help to reduce the visual impact and scale of the pavement area to drivers arriving from College Drive. The southern portion of the same parking lot, and the entire parking area to the southeast of the Main Building, are without any landscape islands and appear vast in size and are unwelcoming. At night, area lighting is limited to the periphery of the parking areas but the interior areas appear dark and somewhat unsafe.

Drivers crowd the parking spaces closest to the entry locations of both campus buildings. The expanse of parking area to the southeast is left mostly unused except for seasonal campus community events that may fill the parking areas to full capacity. The smaller parking area northeast of the Main Building appears favored by faculty and school staff but is also the access route for vehicles accessing the service yard of the Main Building. This causes some conflicts between passenger cars and semi- trucks.

The large parking area in front of the main buildings plays a substantial role in the function and visual identity of the YCCC. Improvements to this and the other parking areas are important to both increase efficiency and visual appearance. It is understood that the number of existing parking spaces was specifically prescribed by the Town of Wells and any proposed modifications that reduce total parking counts should be reviewed with Town planning staff.

Changes to the various parking facilities should include:

- Designation of areas for parking by students, staff, faculty, and visitors to better manage and increase efficient use of, existing parking spaces.
- Improve pedestrian zones throughout parking areas to clarify vehicular and pedestrian circulation routes. Modify existing planted median areas and end parking rows to create and better define dedicated vehicular and pedestrian circulation routes.
- Add islands in areas of expansive asphalt parking to accommodate plantings and site lighting that will improve the visual appearance and safety of the parking areas.
- Formalize the service and delivery zone behind the Main Building to facilitate delivery and service operations.
- Relocate the existing patio and landscape features behind the Main Building to the area between the two campus buildings to create a more accessible community courtyard. This will reduce the impact of service operations on outdoor student gatherings, and allow for the expansion of the parking area and service yard.

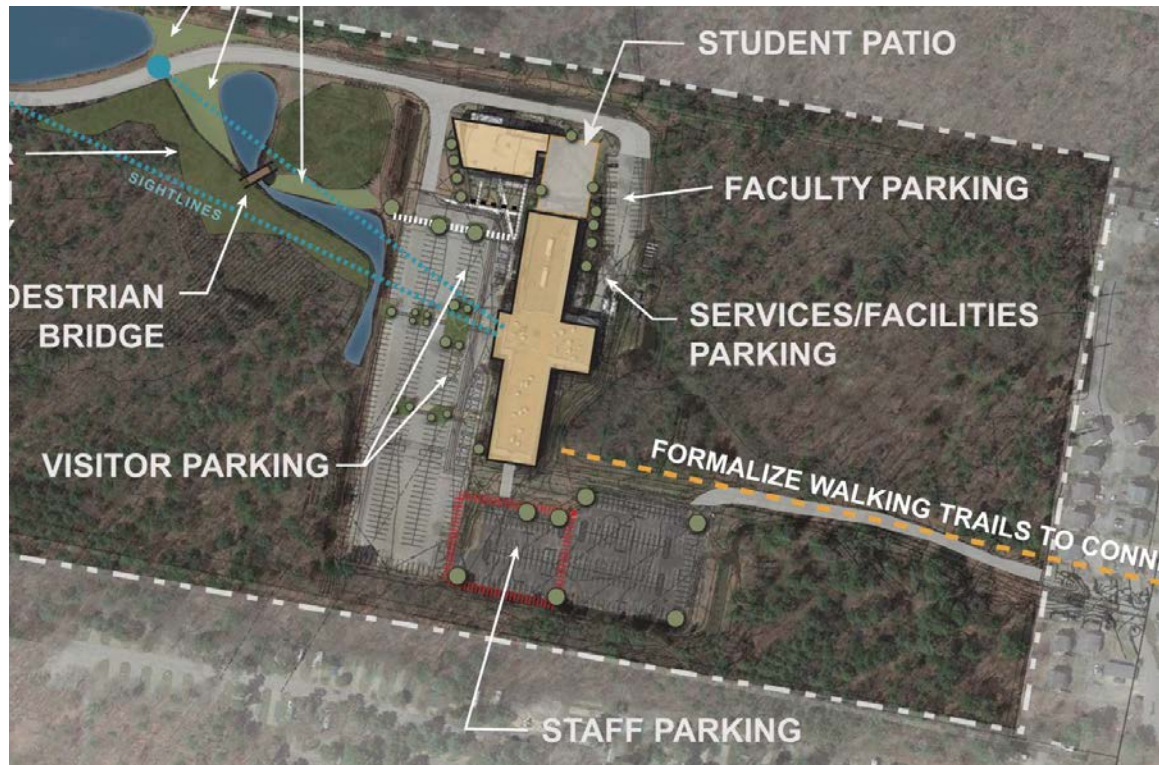


Figure 3.2.12: Parking Areas

## E. Facility Improvements

Findings from the facility assessment of the Master Plan identified several deferred maintenance and future projects to improve energy efficiency and occupant comfort. Areas of focus should include:

- Window replacement: The most immediate facility need will improve occupant comfort by replacing existing windows with higher efficiency units. Areas of highest impact are the Library, student lounge, classrooms, and offices.
- Flooring replacement: During the course of the Master Plan several areas identified as needing flooring replacement were corrected. However, an ongoing initiative for replacing carpet and resilient flooring replacement is recommended, especially in high traffic areas.
- Lighting upgrades: Building-wide lighting upgrades in the Main Building will improve light quality, lower energy cost, and make spaces more equivalent in character to the new Pratt and Whitney Building. In addition to replacing fixtures in the ACT ceiling grids, accent lighting and wall washing fixtures can help to add visual interest to long corridors and lounge spaces.

### 3.3 Near-Term (Immediate) Recommendations (Sanford)

#### F. Dedicated entry vestibule to the building.

The Sanford facility lacks an identifiable main entry and does not have a vestibule to protect from the weather or provide secure access control.

- Construct a vestibule addition to serve as a front door, buffer from exterior weather, and controlled access point. The project will impact available parking by removing up to 4 spaces from the parking field in front of the building. Per the Parking Assessment, this impact will not be detrimental to the current parking needs of the Sanford campus.



*Figure 3.2.13: Sanford Vestibule*

#### G. Campus Approach and Welcome Signage

The Sanford campus of the YCCC is a property containing a single building situated within an industrial park area near the regional airport. This property is not easily identifiable as an academic campus and the building appears similar to the other industrial use structures in the area.

The campus approach is essentially two short driveways from Community Drive. One driveway is the primary vehicular access to the parking in front of the building and the second is the primary delivery access. These driveways are approximately 175' apart with a stand of mature trees between them. There is a sign that provides a driver on Community Drive information that the location is a YCCC instructional site. The campus approach and signage are limited in providing any academic or campus identity to the property or image of the property that separates the academic use of the property from the surrounding industrial uses.

Changes to the campus edge along Community Drive will greatly improve the identity of the campus, create an academic image for the building and lessen the "workplace" appearance of the building.



Changes to the campus area along Community Drive should include:

- Construction of a new campus sign at each entry to provide an academic identity to the property and reinforce the building and grounds as a place of learning.
- Incorporate into the new campus signs directional information to delineate the proper routes for passenger vehicles and delivery vehicles to parking and service yard locations.
- Selective clearing of the vegetation between the two entries to improve views to the building and parking areas, and to foster an academic campus identity to attract potential students.
- Improve parking area plantings and provide vegetative screening of service and delivery areas to mitigate the industrial appearance of the site and to create a more welcoming building front to students and faculty.



*Figure 3.2.14: Campus Approach*

### 3.4 Medium-term Recommendations: Wells

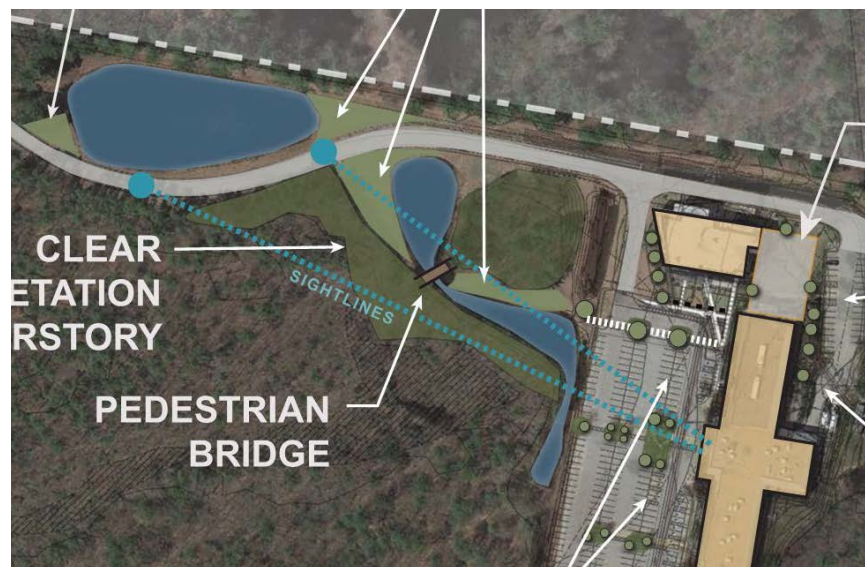
#### H. Establish View Corridors

After College Drive turns at the existing campus sign, it proceeds westerly towards the central portion of the campus where the Main Building, Pratt and Whitney Building, and parking areas are situated. This length of College Drive meanders past woodlands, ponds and some open space before making a hard right at the Pratt and Whitney Building and terminating onto a parking area.

From the turn at the campus sign to the Main Building, College Drive has a simple landscape character and limited views of the central campus. Beautification of this roadway will greatly advance the school's effort to improve campus identity and character. Improvements to this portion of the campus will build upon and connect previous individual initiatives and make the landscape more accessible. Most of all, enhancing the landscape character along College Drive will create a procession, from the campus gateway to the school buildings, for the campus visitor and better identify the YCCC Wells property as an academic campus.

Changes along College Drive from the gateway to the Pratt and Whitney Building should include:

- Selective removal of understory vegetation in woodland areas to provide views of the central portions of campus from College Drive that will produce a more collegiate campus appearance for YCCC.
- Plant appropriate vegetation around the edges of the ponds to provide wildlife habitat, foster biodiversity, and offer a visual amenity to drivers as a way to beautify the campus landscape.
- Construct a pedestrian pathway network to connect and makes accessible the various destinations, such as the ponds and installed artwork, along College Drive with the campus buildings.
- Establish additional amenities along the proposed pedestrian network, such as pedestrian bridges, picnic tables and art work, to provide a campus wide amenity to the school community.
- Remove boulders lining College Drive, especially near signage locations, to mitigate the rural appearance of the roadway, and to provide drivers with a more collegiate campus appearance.



*Figure 3.2.15: View Corridors*

### 3.5 Medium-term Recommendations: Sanford

#### I. Sanford Building Facility improvements

Classroom expansion improvements to the Sanford Building were ongoing throughout the Master Plan process. Although the roof was not accessible, YCCC was interested in having the roof of the Sanford Building analyzed for structural capacity. This initiative can be undertaken at any time.

### 3.6 Long-term Recommendations: Sanford

#### J. Additions to the Sanford Campus

To accommodate long-term growth potential for skills and job training, the Master Plan included a vision for expanding facility and parking capacity. This plan proposes to create a new connected building behind the existing Sanford facility and add parking on the north side of the existing developed site. If this major expansion is realized, a new main entry is envisioned to be connected to the new building construction. The expansion is designed to be incremental along a long rectangle. YCCC will be able to develop as much area as they need at any given time to support new training programs and/or increased enrollment.



Figure 3.2.16: Sanford Expansion

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## 4. Cost Modeling

### 4.1 Introduction

Opinions of probable cost are included to give a conceptual idea of cost implications for each Master Plan recommendation. Costs are based on 2020 construction cost for institutional grade work and are generated using building cost per square foot. Inflation factors must be applied to projects executed in the future. Generally, an inflation factor of 0.5% per month (or 6% per year) will provide a reasonable understanding of future cost. The construction market in Maine is experiencing a higher than average escalation factor that began in 2017. Until the current market trend slows, it is recommended that YCCC use an escalation factor of 0.625% (or 7.5% per year) to plan for near-term initiatives.

Cost values are limited to construction cost only, which includes building and related site costs. For project budgeting purposes, YCCC should consider the total project cost which includes fees for permitting, design, and testing as well as other soft costs such as furniture, fixtures, and equipment (FF&E), Owner's Project Manager (OPM), technology, commissioning, and other related costs. The total project cost ranges from 1.25 – 1.5 times the construction cost.

As projects are approved in the budgeting process and designs are developed, more refined cost estimates can be created. The cost considerations in the Master Plan are based on orders of magnitude rather than unit cost and are general in nature.

### 4.2 Cost Table

Project	Estimated Costs/ Construction Duration	Priority	Scope Comments
A (Wells Campus) Community Courtyard	\$200,000 - \$250,000 4 months	Immediate	8,600 SF patio and associated landscaping
B (Wells Campus) Campus Approach and Signage	\$80,000 - \$140,000 1 month	Immediate	2 signs at and near entry cul-de-sac and associated site work / landscaping
C-1 (Wells Campus) Main Building Interior Renovations: Library	\$600,000 – 700,000 3-5 months	Immediate	5,557 NSF Renovated
C-2 (Wells Campus) Main Building Interior Renovations: Lobby Renovation	\$100,000 - \$200,000 3-4 months	Immediate	Between 500 NSF and 800 NSF depending on final scope area
C-3 (Wells Campus) Main Building Interior Renovations: Corridor Refresh	\$40,000 - \$60,000 1 month	Medium-term	450 NSF total in 4 locations

Project	Estimated Costs/ Construction Duration	Priority	Scope Comments
C-4 (Wells Campus) Main Building Interior Renovations: Student Lounge Upgrades	\$75,000 - \$125,000  2-3 months	Medium-term	
C-5 (Wells Campus) Main Building Interior Renovations: Classroom Reorganization	Budget \$120 / SF or renovated area	Medium-term to Long-term	TBD based on types and sizes of classrooms renovated
C-6 (Wells Campus) Main Building Interior Renovations: Culinary Arts Improvements	\$20,000 – 40,000  1-2 months	Medium-term to Long-term	
D (Wells Campus) Redefine Parking Areas	\$40,000 - \$60,000  1-3 months	Medium-term	
E-1 (Wells Campus) Facility Improvements: Window Replacement	\$150,000 - \$200,000  1-3 months	Immediate	Based on Fiberglass window units: 14 SF and 28 SF
E-2 (Wells Campus) Facility Improvements: Flooring Replacement	\$350,000 – 450,000	Medium-term	50,000 SF could be phased by room or area over several summers
E-3 (Wells Campus) Facility Improvements: Lighting Upgrades	\$450,000 - \$550,000	Medium-term	
E-4 (Wells Campus) Facility Improvements: Roof Replacement	\$700,000 - \$900,000	Medium-term	Assumes new roof system including insulation
3.3 F (Sanford Campus) Dedicated Entry Vestibule	\$75,000 - \$100,000	Immediate	
3.3 G (Sanford Campus) Approach and Welcome Signage	\$50,000 - \$75,000	Immediate	
3.4 H (Wells Campus) Establish View Corridors	TBD	Medium-term	Scope includes clearing vegetation, path improvements, and pedestrian bridge
3.6 J (Sanford Campus) Additions to the Sanford Campus	Budget \$350 - \$400 / SF for new construction of premanufactured building and fit up	Long-term	TBD based on extent of new construction required



# York County Community College

Master Plan

DRAFT | April 2019



**Rickes Associates Inc.**  
Futuring Higher Education®





# Executive Summary

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# York County Community College

## Master Plan Executive Summary

York County Community College (YCCC) engaged Rickes Associates (RA) and Harriman Associates to develop a Master Plan addressing the needs of both the Wells and Sanford campus. This space needs analysis is grounded in defined institutional strategic drivers of enrollment and personnel. It is supported by the space inventory that is driven by nationally recognized space planning guidelines and tempered by the specific needs of the College.

The outcomes of this analysis are twofold:

- A targeted review of classrooms and teaching laboratories, including current and projected need.
- A migration plan identifying potential near-term moves to alleviate some of the College's pressing space needs.

On the Wells campus, there are two buildings comprising 63,307 assignable square feet (ASF). This reflects the core campus space including classrooms, laboratories, offices, library, special and general use, health care, and central facilities.

The Sanford campus is comprised of one building encompassing 16,033 ASF. Sanford provides specialty training in Precision Machining Technology. YCCC is in the process of adding three new instructional spaces that will be used for workforce and community training.

## Wells Campus Recommendations

### General-Purpose Classrooms

In Fall 2018, the Wells campus had 12 general-purpose classrooms and 8,334 ASF. While the projected calculated need indicated a shift to additional larger classrooms, this is not proposed under the assumption that enrollment/course sizes will remain relatively stable. The following table outlines YCCC classroom need presuming the schedule is smoothed out (class times are balanced throughout available time slots) across the week. It also presumes that courses scheduled elsewhere, such as in conference rooms, are incorporated into the projections.

The figure below, taken from the augmented PowerPoint, presents the existing distribution and calculated need for classrooms. For both analyses, the need was calculated based on guidelines of 67 percent average weekly daytime hour utilization and 67 percent average seat occupancy. Projected Scenario 1 increases course enrollment and course hours, while Scenario 2 maintains course enrollment sizes and increases the number of hours. By "capping" course sizes the campus can eliminate the potential need for 31 to 40 seat classrooms. Scenario 2 permits YCCC to address projected space needs without incurring capital expense.

**Figure 1: Existing, Calculated, Projected, and Recommended Classroom Need**

Capacity Category	Existing: 833 FTE	Calculated: 833 FTE	Projected: Scenario 1 981 FTE	Projected: Scenario 2 981 FTE	Final Recommended
1 to 20	1	3	2	3	1
21 to 30	11	5	4	7	10
31 to 40	0	0	3	0	0
Total	12	8	9	10	11
ASF	8,334	5,250	6,640	6,750	7,688
Seats	282	210	280	270	258

Currently, there is a surplus in ASF and number of classrooms. As the College moves forward with the proposed migration proposal and seeks to incorporate different types of pedagogy, there may be opportunity to repurpose at least one of the existing classrooms.

## Dedicated Classrooms

In addition to the general-purpose classrooms, in Fall 2018 there were four spaces and 2,645 ASF assigned to dedicated/priority use. The four department-controlled classrooms were used for a wide array of purposes. Two rooms held credit-bearing courses and had an average weekly hour utilization rate of 23 percent or almost six hours per week per room. Average seat occupancy was 42 percent. The low average hour utilization could be due, in part, to the dual roles these rooms serve. Each of these spaces should be evaluated for total departmental use to determine if it is being optimally utilized. In contrast, the Early Childhood Education program is being taught out, which will allow the existing classroom to be repurposed. Lastly, for the purpose of this analysis, the remaining three rooms were maintained.

**Figure 2: Dedicated Classroom Utilization**

Building and Room	Department	Rooms	ASF	Seats	ASF/Seat	Weekly Hours	% Hours	% Seats Occupied
<b>Credit-Bearing Instruction</b>								
Main C113	Veterinary Technology	1	728	24	30.3	1.25	5%	21%
Main C120	Early Childhood Education.	1	883	20	44.2	10.83	42%	49%
<b>Main Total</b>		<b>2</b>	<b>1,611</b>	<b>44</b>	<b>36.6</b>	<b>12.08</b>	<b>23%</b>	<b>42%</b>
<b>Noncredit-Bearing Instruction</b>								
Main B107	Training	1	496	20	24.8			
Main B109	Senior College	1	538	20	26.9			
<b>Main Total</b>		<b>2</b>	<b>1,034</b>	<b>40</b>	<b>25.9</b>			
<b>Grand Total</b>		<b>4</b>	<b>2,645</b>	<b>84</b>	<b>31.5</b>			

## Specialized Instructional Spaces

There are 14 spaces and 12,919 ASF assigned to specialized instructional (SI) teaching lab space, such as Biology, Art, Culinary Training, Art, etc. Space needs for specialized instructional space are based on the number of hours by discipline of the courses as many courses/programs cannot share space, although there are some acceptable exceptions.

Using the rubrics of 80 percent station occupancy, 50 percent weekly hour utilization, and discipline-specific ASF per station, it is recommended that, beyond maintaining its current complement of SI spaces, YCCC add up to three (3) additional labs. These labs include: Biology-Anatomy and Physiology Lab, multipurpose computer lab, and a Veterinary Technology Lab. During a site walkthrough, the Veterinary Technology department stated that the recent addition of the dedicated classroom will meet current instructional space needs.

**Figure 3: Specialized Instructional Space, Current and Projected Need**

Discipline	Incremental Need					
	Current		Projected		Total: Current and Projected	
	Rooms	ASF	Rooms	ASF	Rooms	ASF
Art – General	0	0	1	960	1	960
Biology – Anatomy and Physiology	1	1,440	0	0	1	1,440
Biology - General	0	0	0	0	0	0
Chemistry - General	0	0	0	0	0	0
Computer Lab - CADD	0	0	0	0	0	0
Computer Lab - Digital Media	0	0	0	0	0	0
Computer Lab – Multipurpose	1	960	1	960	2	1,920
Culinary	0	0	1	960	1	960
Medical Assistant	0	0	0	0	0	0
Veterinary Technology*	1	1,440	0	0	1	1,440
<b>Grand Total</b>	<b>3</b>	<b>3,840</b>	<b>3</b>	<b>2,880</b>	<b>6</b>	<b>6,720</b>

The instructional space needs findings are consistent with a shift to more on-line courses (reduced classroom need) with required lab attendance on campus (increased SI need). If this trend continues, the campus will need additional SI space and fewer classrooms in the future.



## Migration Proposal

Upon completion of the space needs analysis, on-site walkthrough, and conversations with campus stakeholders, RA proposed targeted space recommendations. The migration proposal is covered in-depth in the augmented PowerPoint and includes ideas such as: repurposing a classroom into a Veterans Services office suite, converting the Early Childhood Education classroom into a Medical Assistant Lab and the Medical Assistant Lab into a Biology-Anatomy and Physiology Lab, and repurposing some quiet study space into a Disability Services suite. YCCC can meet these space needs with the targeted realignment of existing space.

## Sanford Campus Recommendations

The Sanford campus currently has three spaces and 9,114 ASF used for the instruction of Precision Machining Technology. YCCC is in the process of adding three new spaces that will be used for community and workforce training. RA will provide a follow-up review of Sanford's space use after a year's worth of scheduling data is available.

**Figure 4: Instructional Space Utilization**

Type/ Building and Room	Discipline	Room Count	ASF	Seats	ASF/ Seat	Weekly Hours	% Hours	% Seats Occupied
<b>Classrooms</b>								
Sanford A (109)	Classroom	1	296	12	24.7	10.82	42%	58%
<b>Classroom Total</b>		<b>1</b>	<b>296</b>	<b>12</b>	<b>24.7</b>	<b>10.82</b>	<b>42%</b>	<b>58%</b>
<b>Specialized Instructional</b>								
Sanford B (108)	Precision Machining	1	8,361	12	696.8	13.32	51%	92%
Sanford C (110)	Computer Lab	1	457	12	38.1	8.32	32%	83%
<b>Specialized Instructional Total</b>		<b>2</b>	<b>8,818</b>	<b>24</b>	<b>367.4</b>	<b>21.64</b>	<b>42%</b>	<b>88%</b>

## High School Demographics

YCCC requested RA to make observations regarding area K-12 demographics. RA used data provided by the College to determine headcount enrollment by municipality within York County and those municipalities outside the county from which the College draws a significant number of students. Trends in College headcount enrollment for these municipalities were compared to trends in the population of high school seniors from these communities. A cursory analysis was conducted of headcount enrollment from the 29 cities and towns in York County and the City of Portland for academic years 2014-2015 to 2018-2019 and the number of high school seniors residing in these communities for academic years 2008-2009 to 2018-2019.

Together, residents of these municipalities contributed between 91 and 93 percent of the headcount enrollment during the current and prior four academic years. For each academic year during this period, the six cities and towns with the highest headcounts have contributed at least half of the total headcount enrollment. Five communities have consistently appeared among the top six: Kennebunk/Arundel (combined due to shared ZIP Code in the enrollment data), Sanford, South Berwick, Wells, and York.

More detailed findings are presented in a separate document.

## Conclusion

In light of today's fiscal climate, thoughtful and purposeful planning is required to make the highest and best use of current space. New or renovated instructional spaces should be flexible enough to accommodate evolving pedagogies and technologies. Detailed instructional space findings, targeted space recommendations, and related information are presented in the augmented PowerPoint.

Rickes Associates is confident that the information compiled, and the analysis completed by the YCCC consultant planning team, will provide YCCC with the guidance it needs to chart a responsible and navigable course for sustainable success where current and future space needs are concerned.



# Augmented PowerPoint







# York County Community College Master Plan: Space Utilization and Needs Analysis

DRAFT | April 2019



## **Project Goal:**

Perform a comprehensive Space Utilization Study, analyzing current use of existing classroom and specialized instructional space, and conduct a comprehensive Space Needs Analysis, determining current and future space needs of all functional areas of the College. The approach applied A4LE calculations augmented by Rickes Associates. The analysis incorporated both qualitative and quantitative analysis.

# Methodology

## Quantitative Analysis

- Strategic Drivers
  - Enrollment
  - Personnel
  - Space
- Instructional Space Utilization
  - General-Purpose Classrooms
  - Dedicated Classrooms
  - Specialized Instructional Spaces

## Qualitative Integration

- Incorporate Trends
- Walkthrough Observations

## Determine Findings and Recommendations



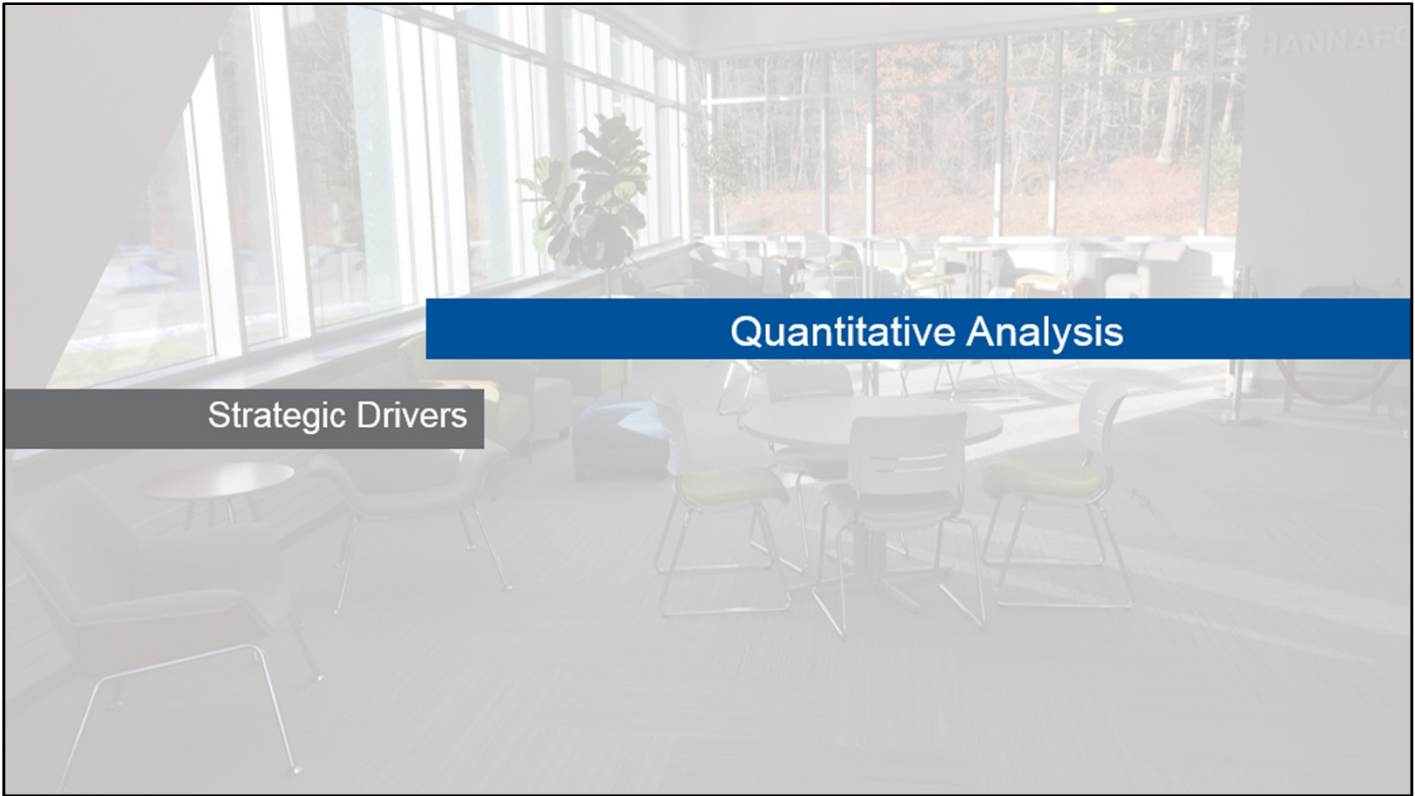
Identifying, adjusting, and proposing space needs is as much an **art** as it is **science**.

It requires a solid foundation of data and understanding of the culture, both of the institution as well as within higher education.

**The Science** is the application of space guidelines and quantitative calculations to provide a working pool of space within which recommendations and allocations can be transcribed.

**The Art** is understanding that numbers must be understood within the context of the culture of the institution, its place in the community, and the shifting paradigm of teaching and learning through the next generation of students.

**The Outcome** is a customized order-of-magnitude space program that incorporates both the quantitative and qualitative information, identifying both near-term and long-term space needs. Opportunities through communication and data analysis combine to provide a path for future and more detailed exploration directed by strategic goals and supported by data-driven decisions.



# Space Needs Foundation

## **FICM:** *Facilities Inventory & Classification Manual*

- Categorizes Space by Type
- 10 Main categories & 80+ sub-categories

## **A4LE:** *Association for Learning Environments (Formally CEFPI)*

- First iteration of space needs
- Pools of spaces by space type

## **RA:** *Rickes Associates*

- Deep understanding of the dynamic forces shaping the future of higher education
- Knowledge of the evolving student demographics and associated space needs



- Space needs calculations are grounded in national space planning metrics, as defined by the Council of Educational Facility Planners International (CEFPI), now identified as Association for Learning Environments (A4LE).
- These space classifications (and sub-classifications) include: library facilities, special use facilities (athletic), general use facilities (assembly, exhibition, food, lounge, merchandising, recreation), general support facilities, and health care facilities.

**To understand your space needs, we must first understand the existing space inventory, and how it is being used.**

# Definitions

## Assignable Square Feet (ASF):

Where we live....

Discrete spaces in which specific functions occur

## Non-Assignable Square Feet:

Where we walk...how the building is run...

Corridors, stairs | Mechanical closets, lavatories, etc.

## Gross Square Feet (GSF):

And beyond....

The sum of all areas on all floors....  
to the exterior face of the building

FICM Category	Category Description
<b>100: Classrooms</b>	General-purpose instructional spaces
<b>200: Laboratory</b>	Specialized instructional   Research Space
<b>300: Office</b>	Academic/administrative offices and related
<b>400: Study/Library</b>	Traditional library space and related study
<b>500: Special Use</b>	Athletic, media, demonstration
<b>600: General Use</b>	Dining, bookstore, day care, student activities
<b>700: Support</b>	Shops, storage, mailroom, printing service
<b>800: Health Care</b>	Examination rooms, nurse station, waiting area
<b>900: Residential</b>	Housing for students, faculty, staff, visitors
<b>000: Unclassified</b>	Inactive, unassigned, unfinished, or renovation areas



To understand what exists, we will first review relevant definitions:

**Assignable square feet (ASF):** these are rooms, spaces, areas, interior wall to interior wall, in which specific functions occur. Examples include: classrooms, offices, labs, instructional support spaces, dining halls, bookstores, etc.

**Non-Assignable Square Feet:** These are spaces that connect ASF spaces, such as corridors, stairs, vestibules, etc. These are also spaces that “support” the function of a building. Electrical closets, lavatories, mechanical spaces, and the like.

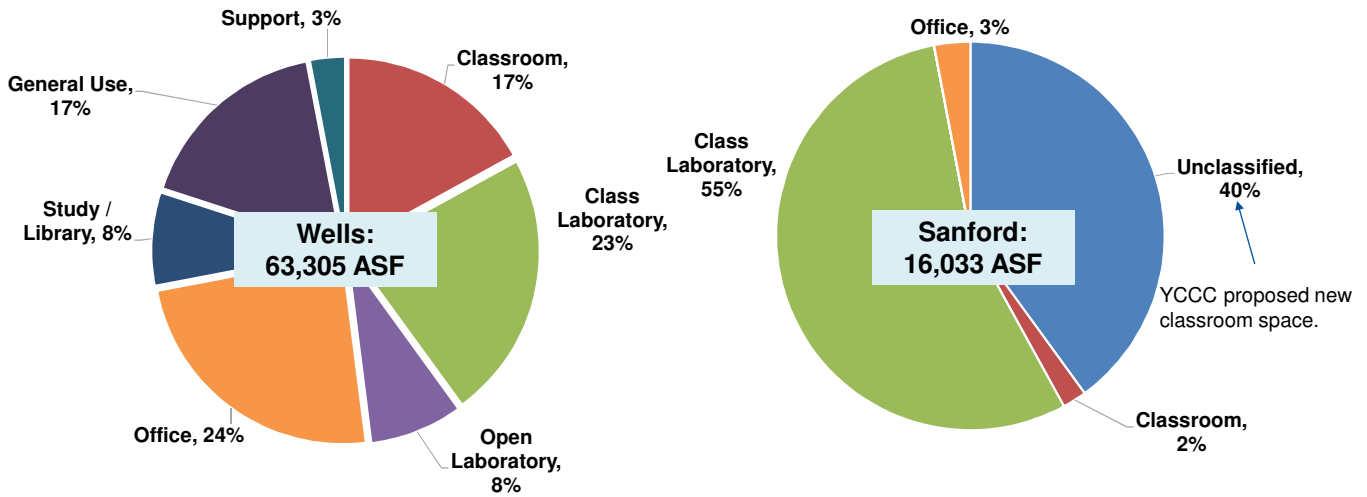
**Gross Square Feet (GSF):** This includes all square footage, above, as well as the structural elements of a building.

The above table describes FICM’s 10 main assignable space categories. Under each of these categories there are various sub-categories and associated support spaces.

We understand that the internal assignment of FICM categories may not always align with the formal definition. This is one of the many areas we review in the space inventory prior to the analysis to identify anomalies in space assignments.



## Distribution of Space by FICM and Site



After reviewing and adjusting the space inventory as needed, an analysis of the distribution of space by FICM categories on the campus was conducted.

The FICM distribution provides a snapshot of where the majority of space is assigned on campus. This provides a foundation from which to construct an overall order-of-magnitude space program.

The Wells site accounts for 80% of York County Community College's (YCCC) space and is the academic core of YCCC.

The Sanford site is about 20% of the total space. Sanford provides specialty training in Precision Machining Technology, and is in the process of adding three new instructional spaces that will be used for workforce and community training.

## Distribution of Space by FICM and Site

Wells		
FICM Category	ASF	Total
000: Unclassified	0	0%
100: Classroom	10,979	17%
200: Laboratory	20,099	32%
300: Office	14,900	24%
400: Study	4,947	8%
500: Special Use	0	0%
600: General Use	10,713	17%
700: Support	1,667	3%
800: Health Care	0	0%
<b>Grand Total</b>	<b>63,305</b>	<b>100%</b>

Sanford		
FICM Category	ASF	Total
000: Unclassified	6,419	40%
100: Classroom	296	2%
200: Laboratory	8,818	55%
300: Office	500	3%
400: Study	0	0%
500: Special Use	0	0%
600: General Use	0	0%
700: Support	0	0%
800: Health Care	0	0%
<b>Grand Total</b>	<b>16,033</b>	<b>100%</b>



- Tabular Summary by FICM by site.
- As illustrated in the previous slide, the majority of the space for both sites is within the FICM 200: Laboratory category. This reflects the shift to online lecture-based instruction, with lab courses held on-site.

## Personnel: Headcount

Division	Full-Time Personnel	Part-Time Personnel	Contract	Total Personnel
Academic Affairs	33	5	9	47
Finance and Administration	9	1	1	11
Information Technology	4	0	0	4
President	6	2	0	8
Student Affairs	2	1	8	11
Student Services	11	3	0	14
Workforce Development and Continuing Education	2	0	1	3
<b>Grand Total</b>	<b>67</b>	<b>12</b>	<b>19</b>	<b>98</b>

Excludes Adjuncts and Student Workers:  
 Adjuncts = 117 Contract Headcount  
 Student Workers = 24 Contract Headcount



### Personnel FTE:

Using the information provided by Human Resources, data was aligned and classified based on title, level, and full-or part-time status. Positions, responsibilities, and time, all align to equal space. This is the quantitative analysis with an application of standardized space planning multipliers.

*Note:* these are NOT programming multipliers. Planning multipliers incorporate the defined space to be distributed to office space and includes add-on ASF that is then allocated to office support, conference rooms, etc. These are the pools of space that allow for blocking/stacking and re-arrangement of spaces on campus and is the precursor of a detailed space program.

To conduct this analysis, personnel must be codified to a normative number (as will also be done for students) of an FTE or full-time equivalent. For this exercise, any part-time person is considered 0.5 FTE for simplicity.

Using this methodology for example, the identified 98 headcount is converted to 82.5 FTE.

### Exception:

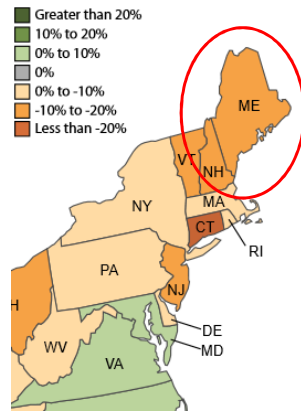
The space for the student workers are not calculated based on an equivalency factor. They are calculated according to department/unit in relation to actual numbers that use a space at a particular time. Unlike part-time adjuncts for whom shared spaces may be assigned, student workers generally do not have assigned central group work areas.

Space needs for student workers are determined on an as needed basis by unit/department.

# Population and Enrollment

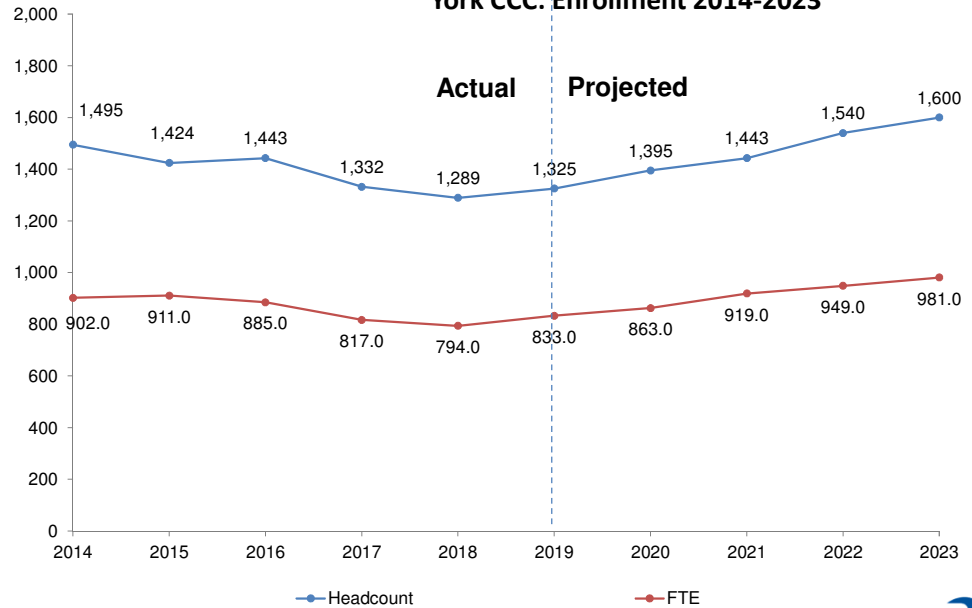
## High School Graduates 2017 – 2032

Changes in the Number of  
Public & Private Graduates



© Rickes Associates  
Data Source:  
WICHE Knocking at the College Door: Projections  
of High School Graduates December, 2016

## York CCC: Enrollment 2014-2023

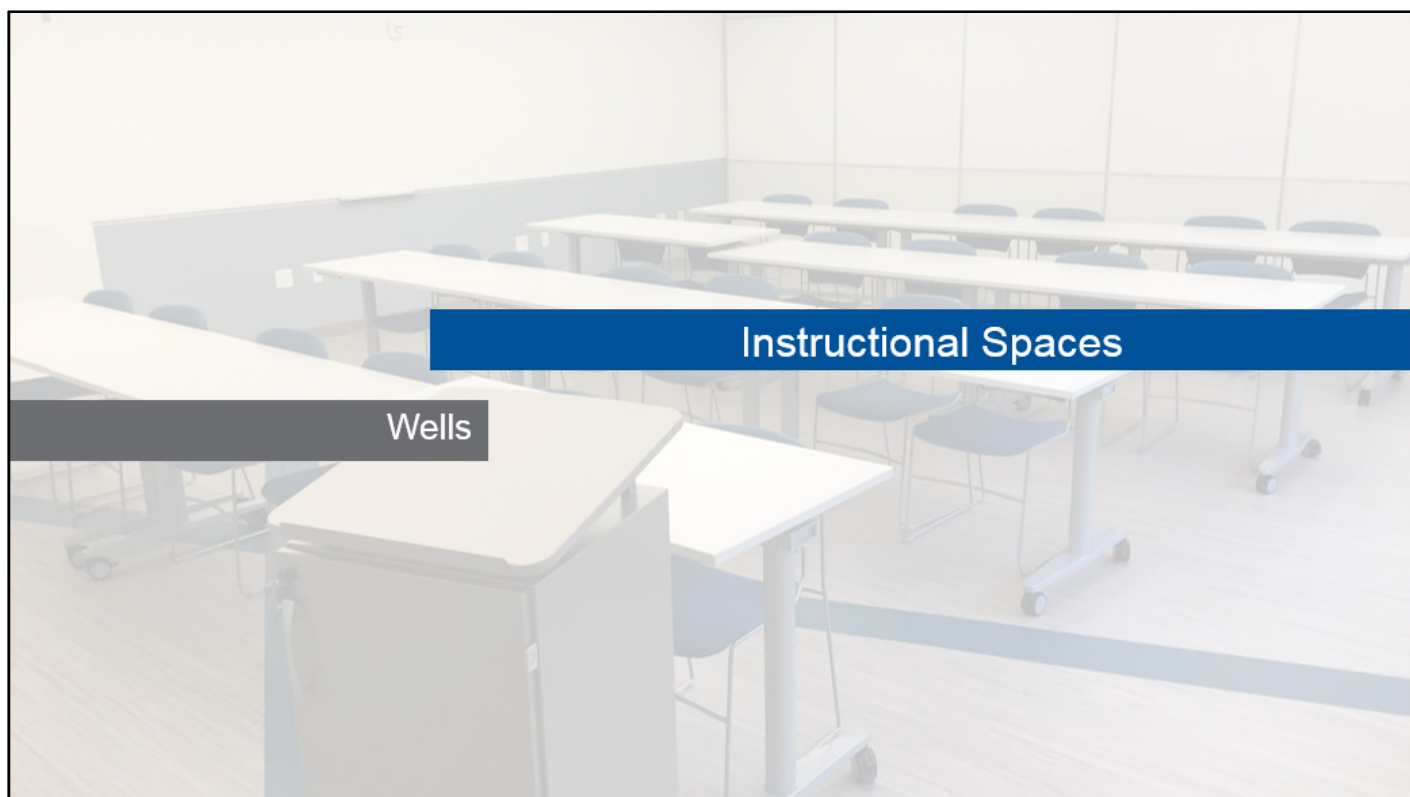


### National Map:

- Beginning Fall 2011, total higher education enrollment in the U.S. began to decrease for the first time since the mid-1990s as a result of fewer students in the pipeline.
- This demographic storm is not over yet and will continue to impact the majority of the eastern U.S. from now through 2032, which is the limit of current data.
- States in gold, such as Maine, are those states that will experience declines in the number of available high school graduates during this period – and likely beyond.

### Campus:

- The Fall 2018 FTE informs the space needs for the campus, in conjunction with the personnel FTE figures.
- Understanding the impact of declining enrollment allows for a college to redefine itself to weather the demographic storm.



Analysis of Fall 2018 course data on the Wells site for both general-purpose classrooms, dedicated classrooms, and specialized instructional spaces (teaching labs, studios)



## Instructional Space Utilization Analysis: Wells

**12 General-Purpose Classrooms | 8,334 ASF**

**4 Dedicated Classrooms | 2,645 ASF**

**14 Specialized Instructional Spaces | 12,919 ASF**

**30 Instructional Spaces | 23,898 ASF**

*(excludes associated support/storage spaces)*



## Space Metrics

Assignable Square  
Feet per Seat

Seat Occupancy

Scheduling Window

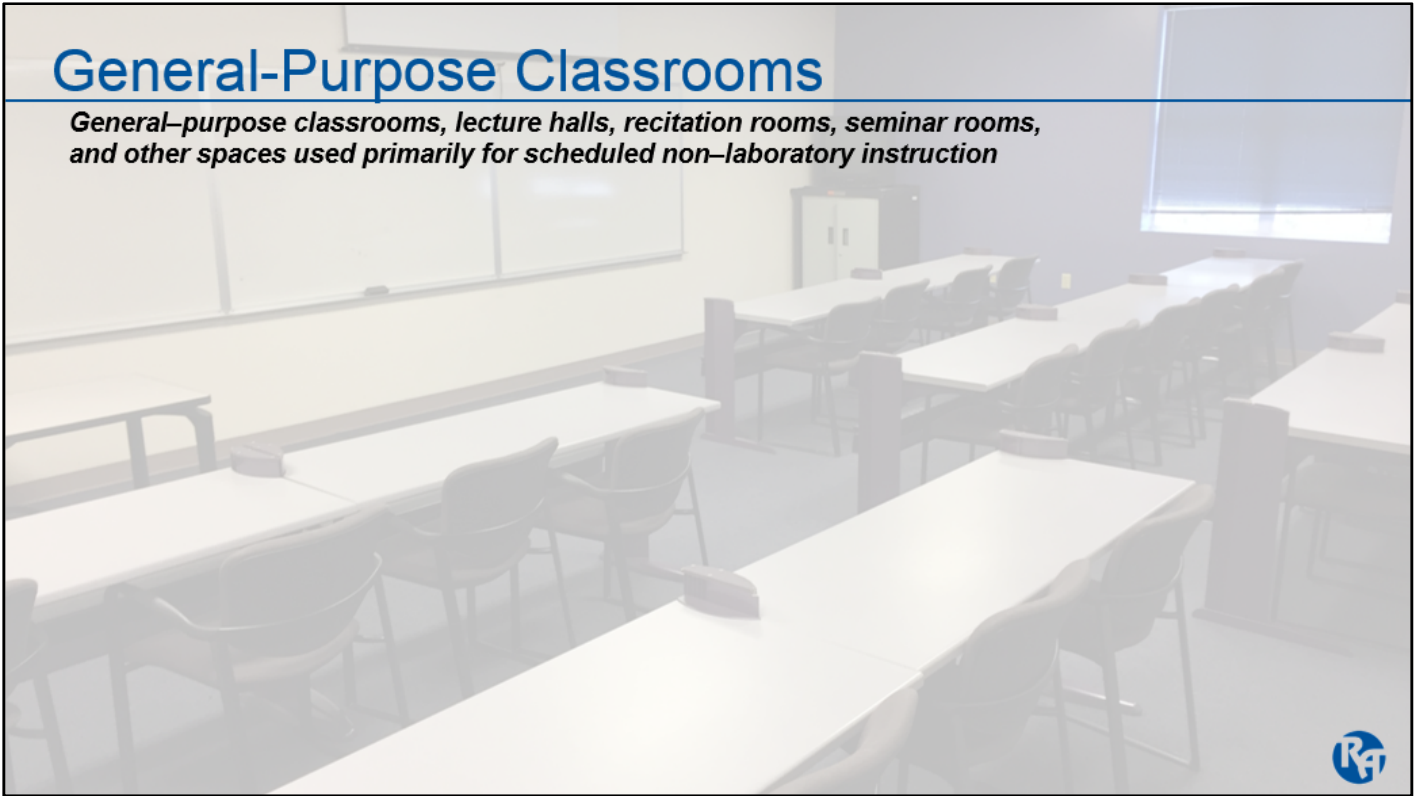
Weekly Room Hour  
Utilization



Rickes Associates applies a *detailed room-by-room analysis* of instructional space. This analysis is based on seat occupancy, scheduling window, room hour utilization (hours of instruction), and available assignable square feet per seat. This detailed analysis of use provides optimal recommendations by number of instructional spaces by capacity and square footage.

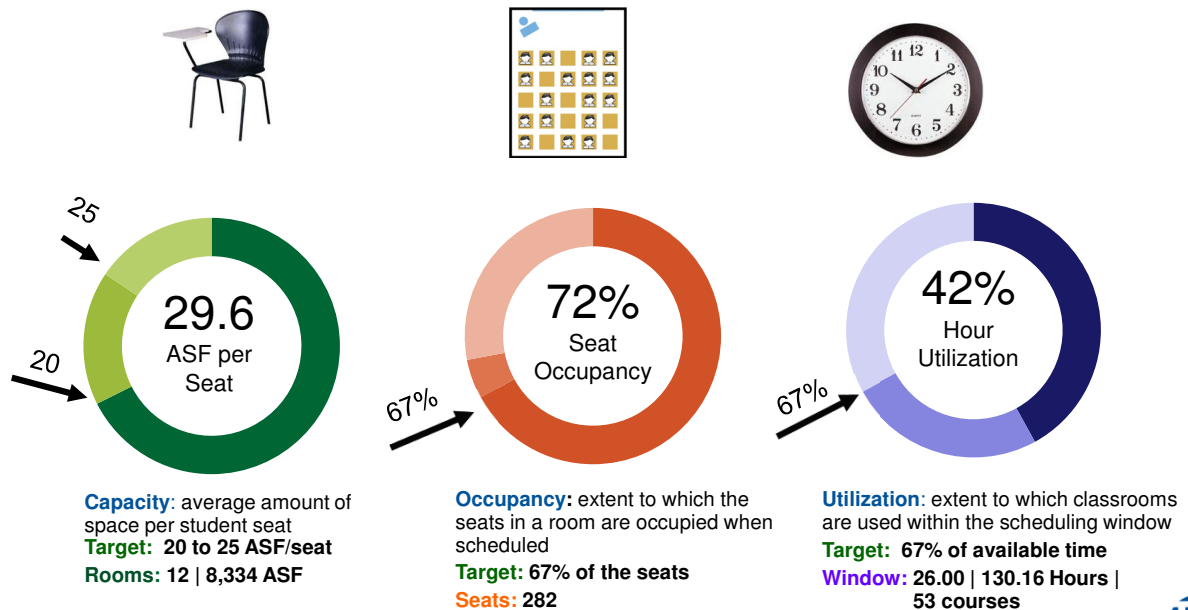
## General-Purpose Classrooms

*General-purpose classrooms, lecture halls, recitation rooms, seminar rooms, and other spaces used primarily for scheduled non-laboratory instruction*



General-purpose classroom needs can be identified as shared resource use, meaning if appropriately sized, any class can be scheduled in any classroom.

# Classrooms: Guidelines and Findings



The three metrics used to determine how well an institution is able to satisfy instructional demand are **fit/capacity** (square feet per seat), **utilization** (percent hours scheduled), and **occupancy** (percent seats occupied when scheduled). The analysis is run on a room-by-room basis to identify over- and under-utilized spaces, in terms of time, fill, and fit.

This statistical methodology applied by RA to the instructional space utilization analysis is widely used and accepted in the realm of higher education. The analysis incorporates suggested guidelines for classroom utilization of 67 to 70 percent weekly hour utilization and seat occupancy. Again, it is critical to note that these sizes are *planning factors* and not design guidelines.

The outcome of the instructional space utilization analysis will include the number of spaces, capacities, and assignable square footage needed to support the current and projected instructional load. Options for achieving the appropriate mix, now and projected – including non-capital alternatives and policy changes – will be proposed. The potential impact of shifts in pedagogy and programs on space needs will also be incorporated.

Each of these metrics and the associated findings are individually discussed in the following sections.

# Capacity: $\text{ASF} \div \text{Seat Count} = \text{ASF per Seat}$

## Furniture Defines Space Capacity



Low

Main B209  
27.8 ASF/Seat



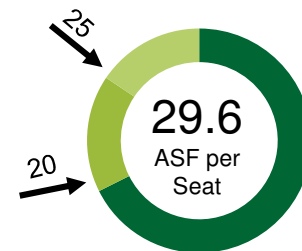
High

Pratt and Whitney D203  
32.5 ASF/Seat

**Capacity:** Average amount of space per student seat

**Target:** 20 to 25 ASF/seat

**Rooms:** 12 | 8,334 ASF | 282 Seats



### Why is there a need to address the ASF/Seat?

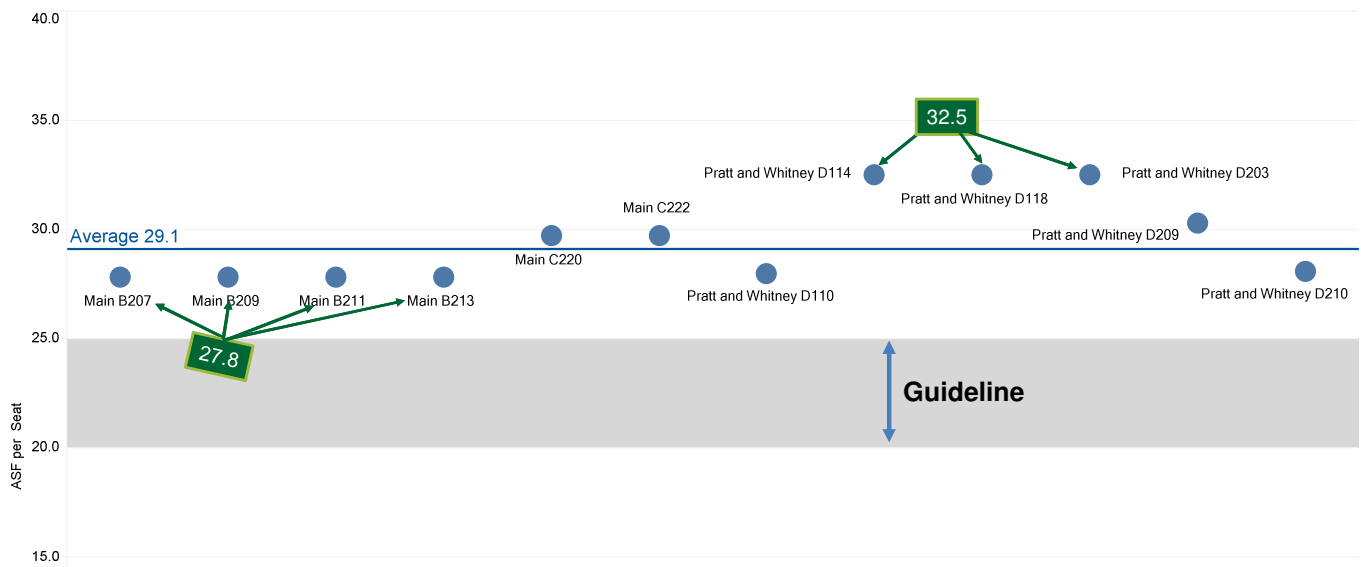
- **Pedagogy:**  
Pedagogy has evolved from students seated in tablet armchairs while taking notes from a lecturing professor ("sage on a stage") to small working groups, collaborative classrooms, etc. where the instructor moves among/between students and requires the space to do so. This increased ASF also allows for students to reconfigure their seating arrangements with flexible furniture.
- **Stuff:**  
Students simply have more stuff, e.g., laptops, and books, notebooks, phones, etc. Tablet armchairs were not designed to support the variety of items a student accesses during a lecture or working group. Those in the colder climates have coats, boots, etc. Storage is also needed for oversized backpacks.
- **Size:**  
We are becoming an obese society and it is starting earlier than ever. Students are bigger and require more space. Universal design with flexible furniture and appropriate room ASF would address this challenge both now and in the future.
- **Furniture:**  
The type of furniture, or pedagogy, in a room will define the number of seats. Tables and chairs generally need 22 to 25 ASF/seat vs tablets at 20, or collaborative rooms with high technology at 35+asf/seat. For example: a room of 640 ASF may hold 32 tablets, but only 26 seats with tables and chairs. As rooms are renovated or modified, care must be taken in furniture choice so as to not overcrowd a room.

### Future:

There has been a shift towards augmented reality where groups of students are working together, but wearing AR goggles and seeing the same image as one. Spaces such as this will require additional ASF to allow for groups to spread out.



# Capacity: ASF per Seat



- YCCC exceeds planning guidelines of 22 to 25 asf/seat, and as such there were no recommendations to modify existing room capacities.

# Occupancy: Percent Seats Filled



666 ASF  
24 Seats  
27.8 ASF/Seat

Low

Main B207  
21% fill - 1 Course



535 ASF  
18 Seats  
28.1 ASF/Seat

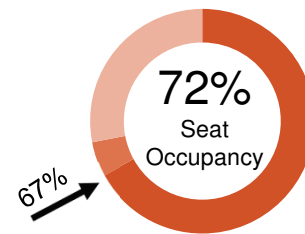
High

Pratt and Whitney D210  
96% fill – 3 Courses

**Capacity:** Extent to which the seats in a room are occupied when scheduled

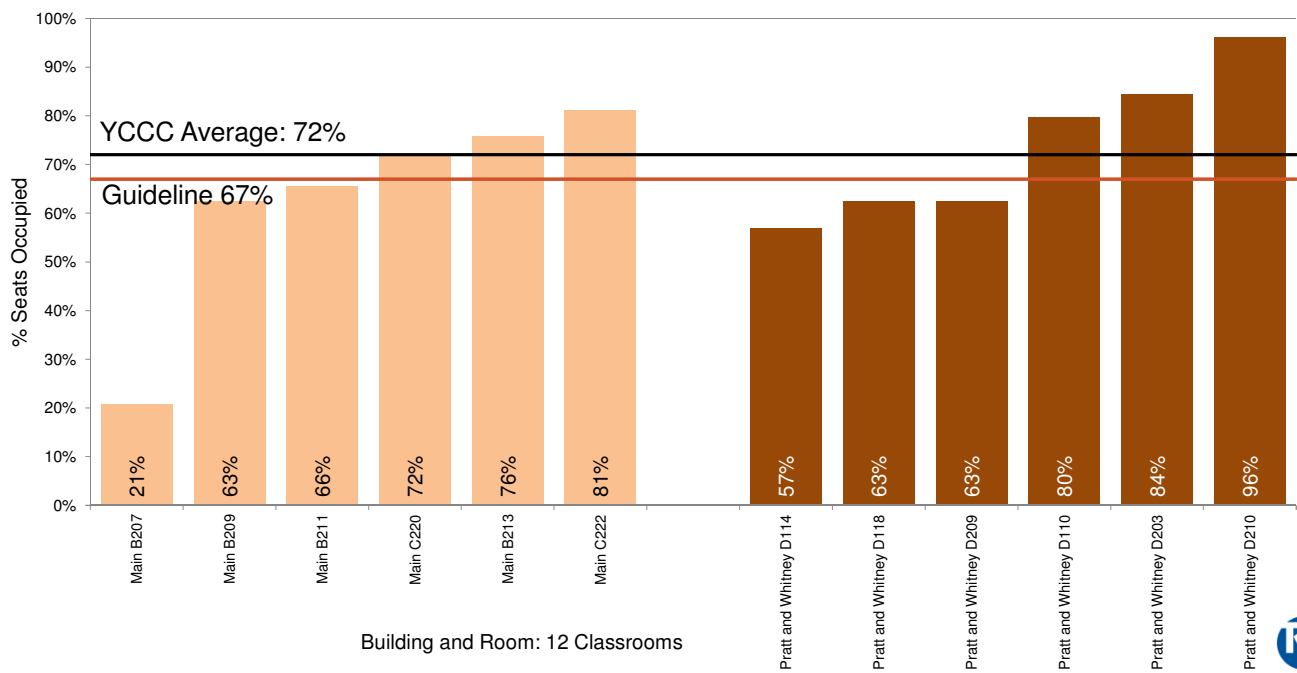
**Target:** 67% seat fill

**Seats:** 282



- 67% occupancy allows for flexibility in the class and provides space for additional students, guests
- YCCC is slightly above target, but still in a comfortable range.
- Range (Scheduled):
  - 21% in Main B207: 1 course | 24-seat room | 666 ASF | 27.8 ASF/seat
  - 98% in Pratt and Whitney D210: 3 courses | 18-seat room | 506 ASF | 28.1 ASF/seat

## Seat Occupancy: By Building and Room



- Six of the 12 classrooms meet/exceed the 67% occupancy guideline indicating they may be preferred spaces.

# Utilization: Percent Hours Scheduled



1 course  
2.5 hours

Main B207  
10% Hour Utilization



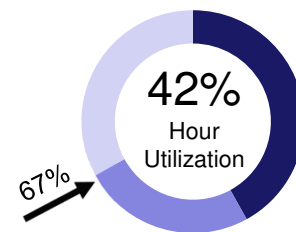
9 courses  
22.5 hours

Pratt and Whitney D110  
87% Hour Utilization

**Utilization:** Extent to which classrooms are used within the scheduling window

**Target:** 67% of available time

**Window:** 26.00 | 130.16 Hours | 53 Courses



## Scheduling Window

8:00 AM to 3:45 PM MW

9:00 AM to 3:45 PM TR

Less: Activity Period 12:15 PM to 1:00 PM MTWR

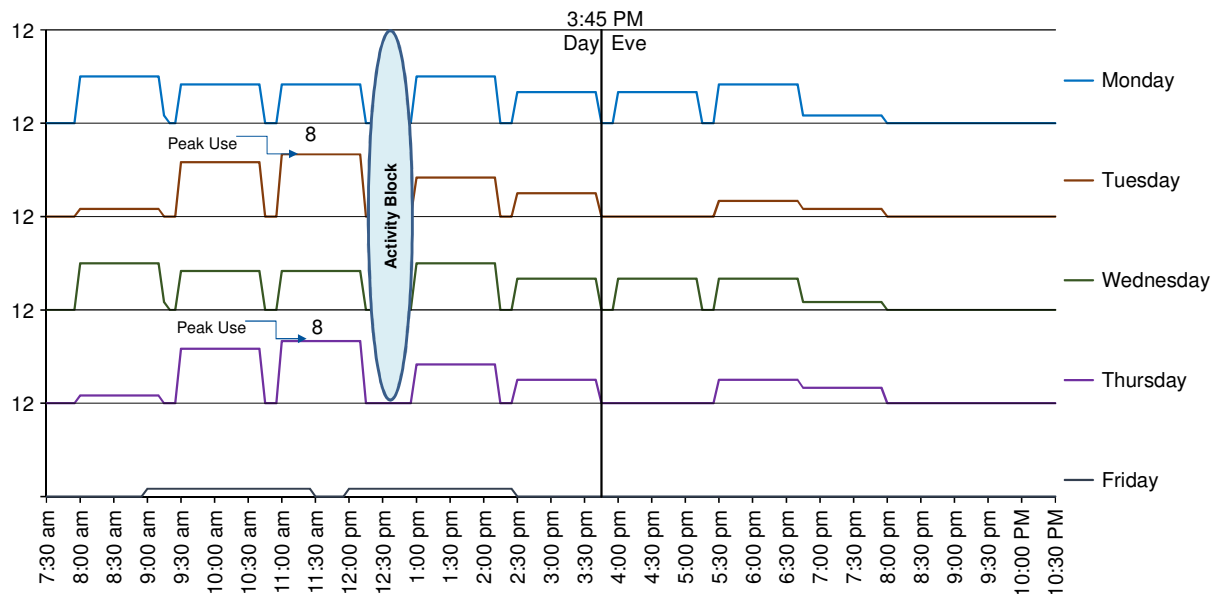
Excludes Fridays

**Total Daytime Scheduling Window = 26.00 hours.** This is within the traditional day-windows seen at other community colleges, which can average up to a 30-hour window.

## Findings:

- The scheduling blocks are reviewed to determine the demarcation between day and evening. A formal window was identified and is the base for the analysis of use.
- The 26.00-hour day window was applied and excludes the 3-hour activity period and Fridays.
- Hour utilization rates of scheduled classrooms range from
  - 10% in Main B207: 1 course | 24-seat room | 666 ASF | 27.8 ASF/seat | 21% occupancy
  - 87% in Pratt and Whitney D110: 9 courses | 24-seat room | 709 ASF | 29.5 ASF/seat | 80% occupancy
- YCCC has capacity for additional course instruction.

# Utilization: By Day and Time



## Campus EKG

This is the “EKG” or the “heartbeat” of the campus.

- By graphing the number of rooms in use by 5-minute time periods by day of the week, if there was scheduling in non-standard blocks, or a large decline in scheduling at certain times, it would become clear in this graph.
- Activity periods occur from 12:15 p.m. to 1:00 p.m. Monday through Thursday and equal three hours.
- Due to minimal scheduling on Friday (peak use of one classroom), Fridays were excluded from the scheduling window.
- The break between day and evening occurs at 3:45 p.m.
- Course scheduling start varies by day of the week.

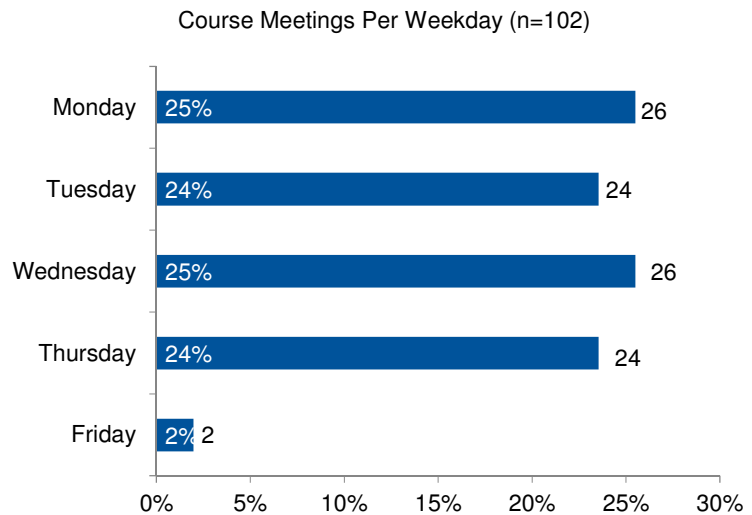
Peak # of rooms in use by day of week:

- Monday – 6 rooms at 8:00 a.m. and 11:00 a.m.
- Tuesday – 8 rooms at 10:00 a.m.
- Wednesday – 6 rooms at 8:00 a.m. and 11:00 a.m.
- Thursday – 8 rooms at 11:00 a.m.
- Friday – 1 room at 9:00 a.m. and 12:00 p.m.



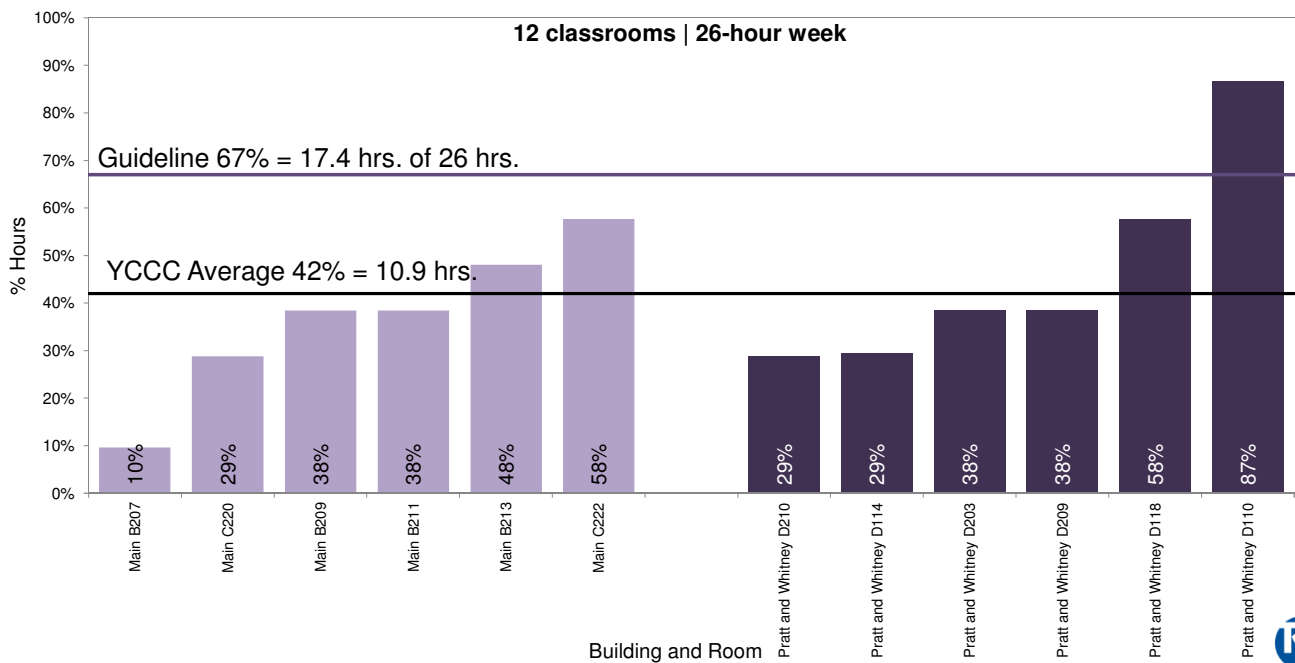
# Course Scheduling: Patterns

Course Day Combinations	Daytime Courses (N=53)
MW	26
TR	23
F	2
T	1
R	1
<b>Total</b>	<b>53</b>



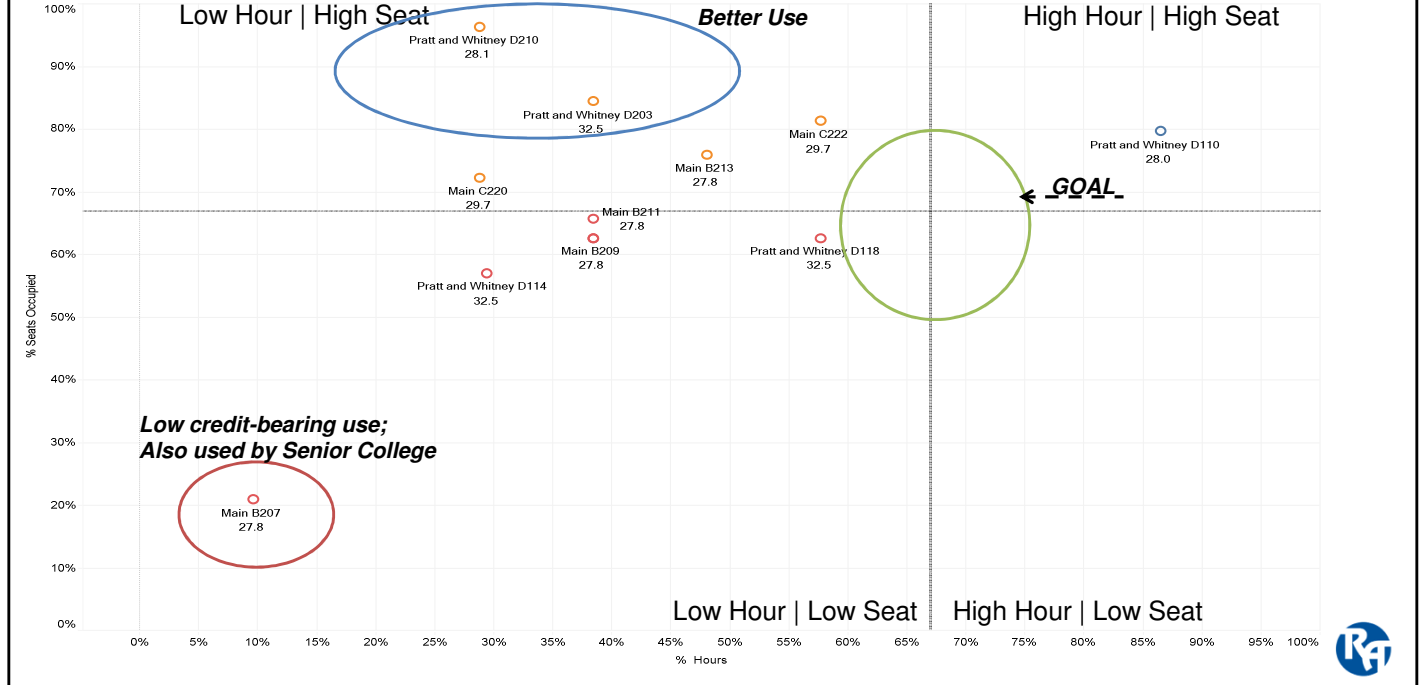
- At YCCC the majority of courses are scheduled within a two-day meeting pattern.
- Only two courses were scheduled on Friday.
- There were 102 course meetings scheduled during the official weekly daytime window. The number of course meetings is greater than the number of courses due to some courses meeting on multiple days of the week. A single Monday-Wednesday course, for instance, yields two individual course meetings per week.
  - If course meetings were distributed evenly across the five days of the week, 20 percent of all course meetings would occur each day. As the number, of course, meetings increase on any given day, scheduling flexibility declines as a greater number of classrooms are in use.

# Hour Utilization: By Building and Room



- Overall daytime hour utilization is 42 percent of the 26-hour daytime scheduling window, which is below the 67 percent guideline.
- Of scheduled spaces, hour utilization ranged from a low of 10 percent in Main B207 (one credit-bearing course in space also used by Senior College) to a high of 87 percent in Pratt and Whitney D110 in which nine courses were scheduled.
- Main B207's low use may be due to the College scheduling a total of 53 courses, which indicates course capacity for YCCC's classrooms as a whole.
- Classroom D110 may be used as a model for other classrooms due to its much higher hour utilization (almost 30% differential between D110 and next highest of D118 and C222). D110 has multiple white boards, hard flooring, and movable furniture. The room also has bright lighting and faces the Main building.

# Utilization: Occupancy & Capacity



This graph indicates how well spaces are used as a function of both hour utilization and seat occupancy.

Color corresponds to quadrant.

- Dark Blue = High Hour | High Seat
- Red = Low Hour | High Seat
- Orange = High Hour | Low Seat
- Turquoise = Low Hour | Low Seat
- The highest used room in occupancy and utilization is Pratt and Whitney D110 at 87% hour utilization and 80% seat occupancy.
- The lowest use room is Main B207 at 10% hour utilization and 21% seat occupancy. The room is also used by Senior College for an additional 26 semester hours (or an average of 1.86 hours per week). Space could be potentially repurposed with Senior College needs being met by room B109.
- At YCCC the majority of the rooms fall within the low hour/high seat category, meaning that the rooms are not used often, but are filled when they are in use.

# Summary

				67%	67%	20-25
Seat Range	Main	Pratt and Whitney	Rooms	Hour Utilization	Seat Occupancy	ASF per Seat
001 to 020	0	1	1	29%	96%	28.1
021 to 030	6	5	11	43%	71%	29.7
Spaces	6	6	12	Overall Avg.	Overall Avg.	Overall Avg.
Hour Utilization	37%	47%	Overall Avg.	42%	Overall Avg.	Overall Avg.
Seat Occupancy	70%	73%	Overall Avg.	Overall Avg.	72%	Overall Avg.
ASF per Seat	28.4	30.8	Overall Avg.	Overall Avg.	Overall Avg.	29.6



- Summary of findings by building and associated seat capacity range.
- Pratt and Whitney had an hour utilization 10% higher then the Main building. This is in part due to the unusually high hour utilization of room D110 (87%).
- Excluding Pratt and Whitney D110, the remaining rooms all have additional capacity for more course instruction.

# Classroom Need

Capacity Category	Existing: 833 FTE	Calculated: 833 FTE	Projected: Scenario 1 981 FTE	Projected: Scenario 2 981 FTE	Final Recommended
1 to 20	1	3	2	3	1
21 to 30	11	5	4	7	10
31 to 40	0	0	3	0	0
<b>Total</b>	<b>12</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>ASF</b>	<b>8,334</b>	<b>5,250</b>	<b>6,640</b>	<b>6,750</b>	<b>7,688</b>
<b>Seats</b>	<b>282</b>	<b>210</b>	<b>280</b>	<b>270</b>	<b>258</b>

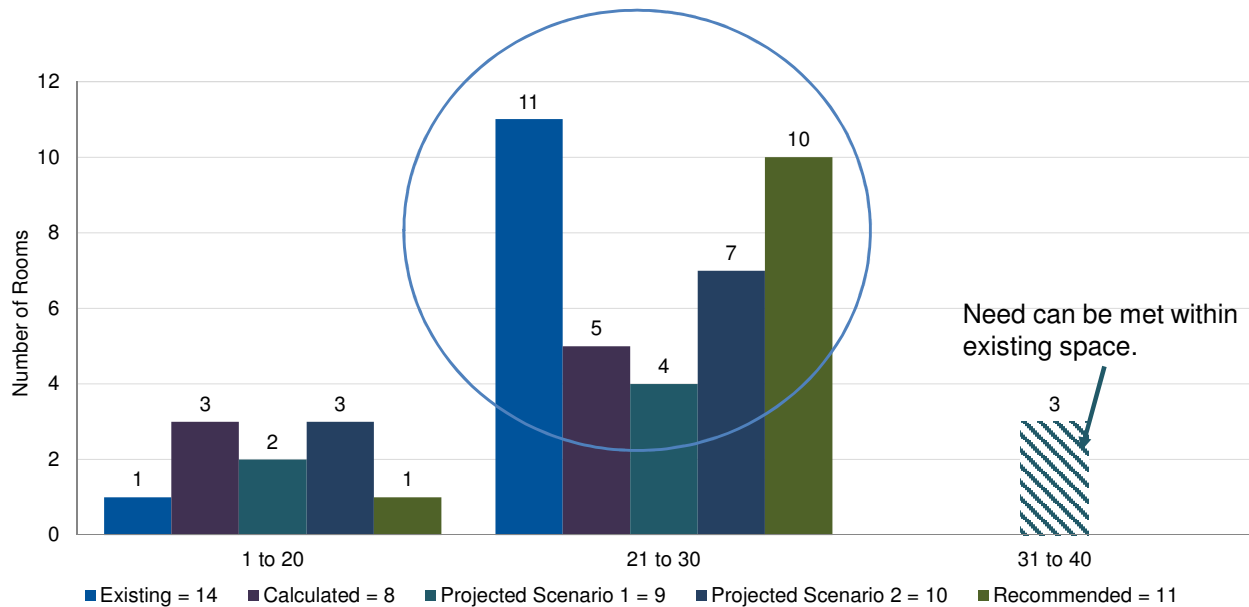
Continued on next slide.



- “Calculated” refers to the number of classrooms required to support current course offerings, assuming that all classrooms are appropriately sized, mediated, located, and assigned equitably across the scheduling window.
- The calculations are based on 67% seat occupancy and 67% hour utilization.
- **Current:**
  - Based on pure calculations and using Fall 2018 course data, courses could be scheduled in 8 appropriately sized spaces.
  - There is an abundance of classrooms in the 21 to 30 seat range vs what is necessary, using the 67% occupancy and 67% hours metrics.
  - This does not include qualitative findings, geographical location, etc.
- **Projections:**
  - **Projected scenario 1:** *grow course enrollment and course hours*
  - **Projected scenario 2:** *Maintain enrollment sizes, while increasing the number of hours.* By “capping” course sizes the campus can eliminate potential need for 31 to 40 seat classrooms.  
Projected scenario 2 will allow YCCC to address need without capital expense.
- **Final Recommended:**
  - Repurpose room B207 (666 ASF and 24 seats).



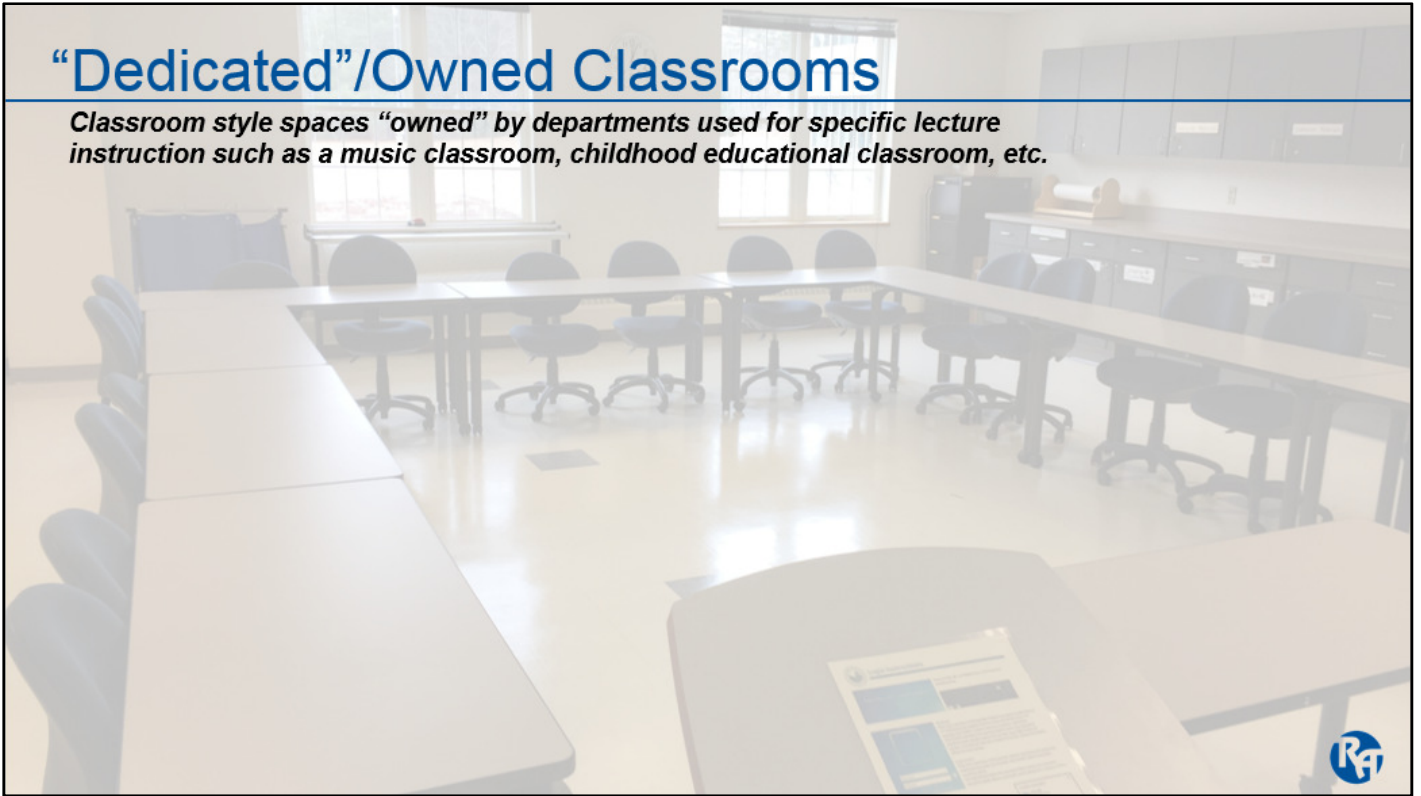
# Classroom Need



- This is a graphical representation of classroom need.
- The projected need for 31 to 40 seat classrooms can be met using non-capital solutions, such as capping course enrollment, and increasing the number of courses being taught.
- The recommended proposes repurposing room B207 (666 ASF and 24 seats) to meet other space needs.

## **“Dedicated”/Owned Classrooms**

*Classroom style spaces “owned” by departments used for specific lecture instruction such as a music classroom, childhood educational classroom, etc.*



- Some programs have what are defined as “dedicated” or owned classrooms (not to be confused with specialized/lab spaces).
- Dedicated, or owned classrooms, are seminar spaces or conference rooms the department uses for instructional purposes, or contain specific material/equipment that is in the space and is often used during instruction, e.g., sinks.
- Regardless of the reason a space is dedicated, these classrooms often show 50% or less use for credit-bearing courses, lower than the target rate in general classrooms.
- In addition to this type of space, some campuses offer priority scheduling for certain classrooms to departments for “first-opportunity” for scheduling before it is released to be backfilled with other courses.

## Dedicated Classroom Use

Building and Room	Department	Room Count	ASF	Seats	ASF/Seat	Weekly Hours	% Hours	% Seats Occupied
<b>Credit-Bearing Instruction</b>								
Main C113	Vet. Tech.	1	728	24	30.3	1.25	5%	21%
Main C120	Early Childhood Ed.	1	883	20	44.2	10.83	42%	49%
<b>Main Total</b>		<b>2</b>	<b>1,611</b>	<b>44</b>	<b>36.6</b>	<b>12.08</b>	<b>23%</b>	<b>42%</b>
<b>Noncredit-Bearing Instruction</b>								
Main B107	Training	1	496	20	24.8			
Main B109	Senior College	1	538	20	26.9			
		<b>2</b>	<b>1,034</b>	<b>40</b>	<b>25.9</b>			
<b>Grand Total</b>		<b>4</b>	<b>2,645</b>	<b>84</b>	<b>31.5</b>			



These are the four identified spaces that are either dedicated to a department, or set aside for a particular function/group.

- The Early Childhood Education program is currently being taught out, and the classroom space will become available for repurposing.
- The Veterinary Technology classroom is relatively new and was under renovations (just completed the addition of a new sink). The change in ownership/renovations may have contributed to the lower hour utilization.
- B107 hosts community training.
- Hours of Senior College instruction in room B207 can be accommodated in room B109 to allow for the repurposing of room B207.

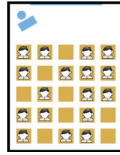
## Specialized Instructional Space

Rooms or spaces characterized by special purpose equipment or a specific configuration that ties instructional activities to a particular discipline or a closely related group of disciplines.



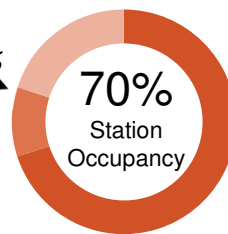
- The following is an overview summary of findings.
- YCCC has a partnership with Southern Maine Community College, offering some Nursing curriculum onsite. Instruction occurs in two “open labs”:
  - Main C115 – 728 ASF and 18 station Nursing Lab
  - Main B208A – 496 ASF and 18 station Computer Lab
  - Both spaces are maintained for the purposes of this study.

# Summary

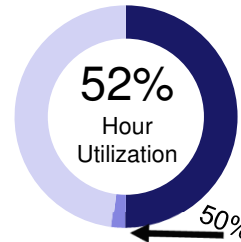


**Capacity:** average amount of space per student station  
**Target:** Varies by Discipline  
**Rooms:** 14 | 12,919 ASF

80%



**Occupancy:** extent to which the stations in a room are occupied when scheduled  
**Target:** 80% of the seats  
**Stations:** 248



**Utilization:** extent to which classrooms are used within the scheduling window  
**Target:** 50% of available time  
**Window:** 26.00 | 189.28 hours  
 75 courses



The metrics for specialized instructional spaces are the same: Capacity (ASF/station), Occupancy, and Utilization. It is the rates that are different.

## Capacity (ASF/station):

- The goal for ASF per station is variable as each discipline has specific guidelines and may range from 40 ASF/seat in a computer lab to 100+ in a dance studio, for example.

**Occupancy:** These spaces are expensive to build and the enrollment is generally known and controlled.

- The average occupancy or fill-rate range is 80% of the available seats in the space.
- A high occupancy is possible as SI spaces are capped at the number of students allowed per section.
- YCCC is below target at 70% occupancy, on average, across the 14 spaces.

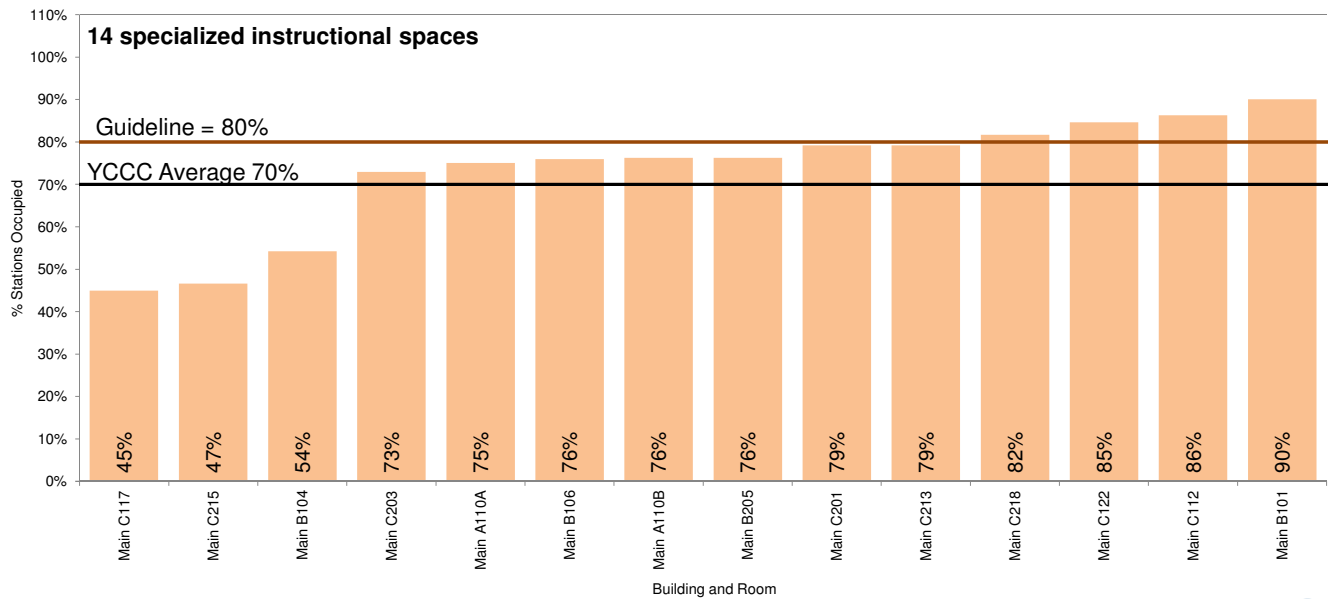
**Utilization:** To provide set-up and break-down time, and open time for student to either practice or have independent study.

- The average utilization rate is 50% of the available/identified hours.
- YCCC is slightly above target at 52% of the 26 hour weekly daytime window (or 13.5 hours per week).

For SI spaces the need is driven not by the room, but by the discipline of the courses and the type of room those courses need.



## Station Occupancy: By Building and Room



- Eleven rooms meet or exceeded YCCC's 70% occupancy rate.
- Four rooms meet or exceeded the guideline of 80% occupancy rate.
- The table on the next slide provides a more detailed description of use.

## Occupancy: Low and High

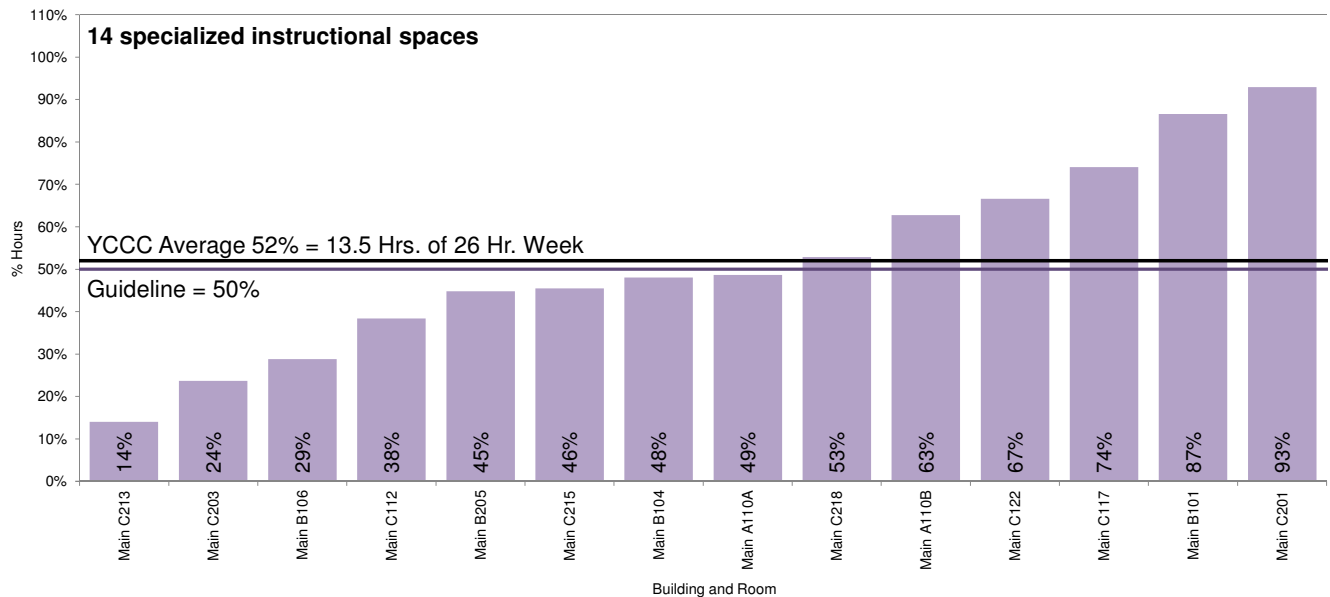
Building and Room	Discipline	Rm. Cap.	Average Enrolled	# Courses
<b>Lower Use (&lt;55%)</b>				
Main C117	Veterinary Technology	24	11	10
Main C215	Medical Assistant	24	11	5
Main B104	Computer Lab - Digital Media	21	11	5
<b>High Use (&gt;80%)</b>				
Main C218	Computer Lab - Multipurpose	20	16	6
Main C122	Art - General	13	11	7
Main C112	Computer Lab - Multipurpose	20	17	4
Main B101	Computer Lab - Multipurpose	20	18	9



These are the SI spaces with either low (<55%), or high (>80%) station occupancy.

- Based on data provided
  - Three rooms had an average utilization of below 70%
  - Four rooms were scheduled over the 80% guideline
  - Main B101, a multipurpose computer lab, had the highest use at 90% seat occupancy averaged over nine courses

# Hour Utilization: By Building and Room



- Five rooms meet or exceeded the guideline of 50% hour utilization
- The table on the next slide provides a more detailed description of use.

## Utilization: Low and High

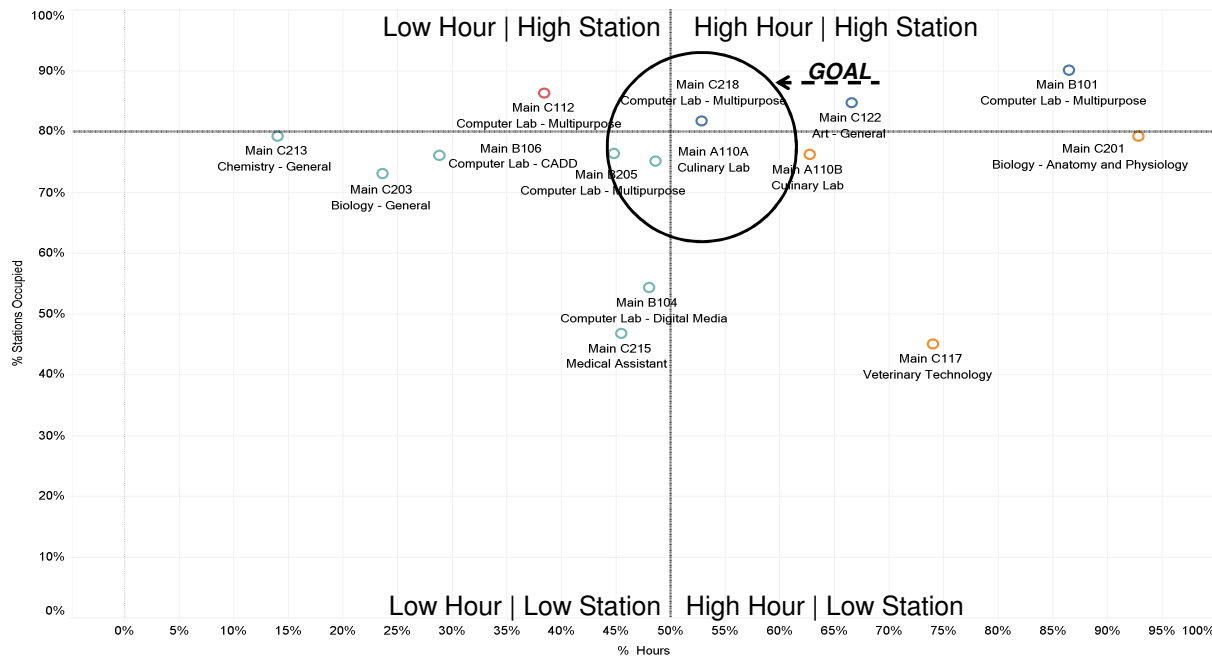
Building and Room	Discipline	Total Hours	# Courses
<b>Low Use (&lt;30%): 8 Hours or Fewer</b>			
Main C213	Chemistry - General	3.66	2
Main C203	Biology – General	6.16	3
Main B106	Computer Lab – CADD	7.50	3
<b>High Use (&gt;70%): 18 Hours or Greater</b>			
Main C117	Veterinary Technology	19.25	10
Main B101	Computer Lab - Multipurpose	22.50	9
Main C201	Biology - Anatomy and Physiology	24.16	12



These are the SI spaces with either low (<30%), or high (>70%) hour utilization.

- Based on data provided
  - 3 rooms were scheduled 8 hours or fewer during a week
  - 6 rooms were scheduled over the 50% guideline
  - Biology-Anatomy and Physiology has the highest use at over 24 hours of use for 12 courses.
- The General Chemistry lab in Main C213 will be hosting additional instruction in Waste Water Treatment by Fall 2019, which is expected to increase the lab's utilization.

# Utilization and Occupancy



Similar to the classroom analysis this graph indicates how well spaces are used as a function of both hour utilization and station occupancy.

Color corresponds to quadrant.

- Dark Blue = High Hour | High Seat
- Red = Low Hour | High Seat
- Orange = High Hour | Low Seat
- Turquoise = Low Hour | Low Seat

The lowest use room for hour utilization and station occupancy is the Medical Assistant Lab in C215 with a 46% hour utilization and 47% station occupancy.

Half of the SI spaces are within average acceptable limits of target guidelines.



## Additional Need

	Current Additional Need		Projected		Total Additional Need	
Discipline	+ Rooms	+ ASF	+ Rooms	+ ASF	+ Rooms	+ ASF
Art – General	0	0	1	960	1	960
Biology – Anatomy and Physiology	1	1,440	0	0	1	1,440
Computer Lab – Multipurpose	1	960	1	960	2	1,920
Culinary	0	0	1	960	1	960
Veterinary Technology*	1	1,440	0	0	1	1,440
<b>Grand Total</b>	<b>3</b>	<b>3,840</b>	<b>3</b>	<b>2,880</b>	<b>6</b>	<b>6,720</b>

For discussion

Current utilization identifies a deficit of 3 spaces and 3,840 ASF.

Should enrollment grow to 981 FTE, this will drive the need for another 3 spaces and 2,880 ASF.

\*During walkthroughs Veterinary Technology stated that the recent addition of the dedicated classroom will meet instructional space needs.



The table above is indicative of a shift to mostly on-line courses (reduced classroom need) with required lab attendance on campus. If this trend continues, the campus will need additional SI space and fewer classrooms.

## Instructional Spaces Scheduled by Senior College

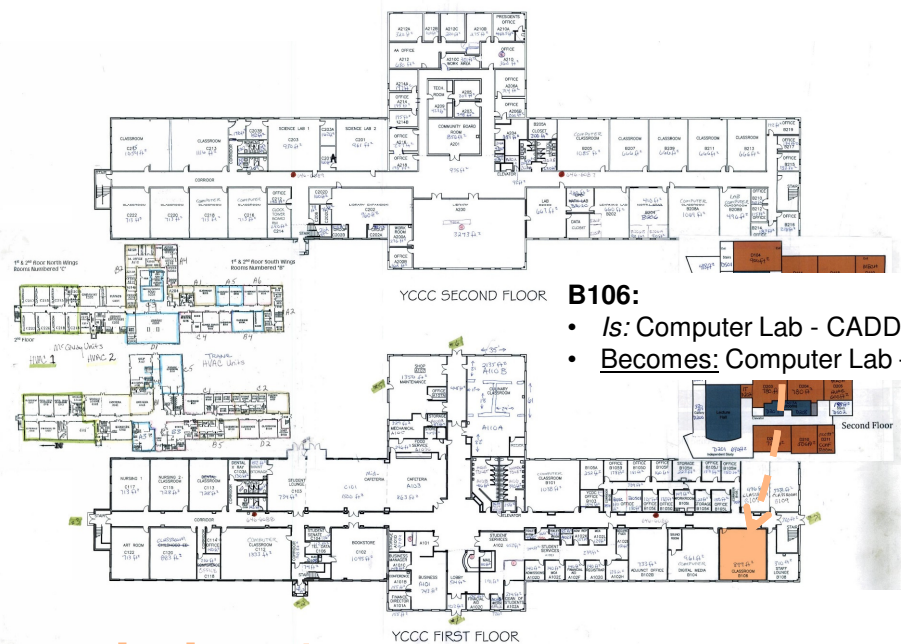
FICM/Room and Type	Semester Hours	Average Weekly Hours	Average Weekly Hour Utilization
<b>110</b>	<b>38.00</b>	<b>2.71</b>	<b>5%</b>
B207 – Classroom	26.00	1.86	7%
B211 – Classroom	12.00	0.86	3%
<b>110D</b>	<b>61.00</b>	<b>4.36</b>	<b>8%</b>
B109 – Senior College	59.00	4.21	16%
C120 – Early Childhood Ed.	2.00	0.14	1%
<b>210</b>	<b>10.00</b>	<b>0.71</b>	<b>1%</b>
C112 – Computer Lab	6.00	0.43	2%
C215 – Medical Assistant	4.00	0.29	1%
<b>Total</b>	<b>109.00</b>	<b>7.79</b>	<b>5%</b>

- Semester Hours converted to average weekly hours by dividing by 14 (total weeks in Fall 2018 semester).
- Semester hours exclude Friday.



- During conversations with the campus, non-credit-bearing use of instructional space, such as the Senior College, was identified.
- The Senior College, as a whole, adds an average of almost eight hours per week to YCCC's instructional load. Examining the credit-bearing uses of these six instructional spaces in relation to Senior College usage (excluding B109, which was used exclusively by Senior College), indicates that these added hours do not drive the need for more space.
- Reviewing the Senior College schedule, all classes currently held in B207, could be accommodated in room B109 (dedicated Senior College classroom). This would allow for a potential repurposing of room B207 (discussed in the targeted space recommendations section).





#### B106:

- Is: Computer Lab - CADD
- Becomes: Computer Lab – Multipurpose

## Recommendation 1

39

### Recommendation 1:

#### Challenge:

- Need for additional multipurpose **scheduled** computer labs for credit instruction. Existing Fall scheduling information identified these four rooms scheduled over 50 hours of daytime instruction.

#### Opportunity 1:

- CADD Lab currently located in Main B106 at 899 ASF and 18 stations, with low use in the Fall. Spring data is identified as higher use with an estimated 9 courses and associated hours.
- CADD software can be made available via the Cloud where students can login to access licenses at any computer terminal and that would allow B106 to be used for other purposes.
- Convert B106 to multipurpose computer lab to meet current instructional demand.

#### Opportunity 2:

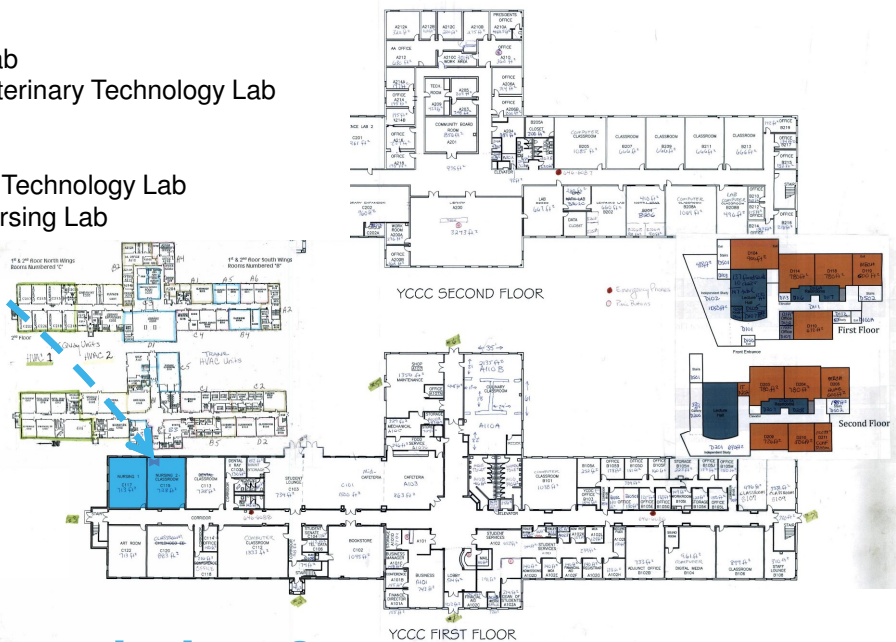
- Potentially meet additional credit-bearing need via open computer lab space, depending on student demand.

**C115:**

- /s: Nursing Lab
- Becomes: Veterinary Technology Lab

**C117:**

- /s: Veterinary Technology Lab
- Becomes: Nursing Lab



## Recommendation 2

**Recommendation 2:****Challenge:**

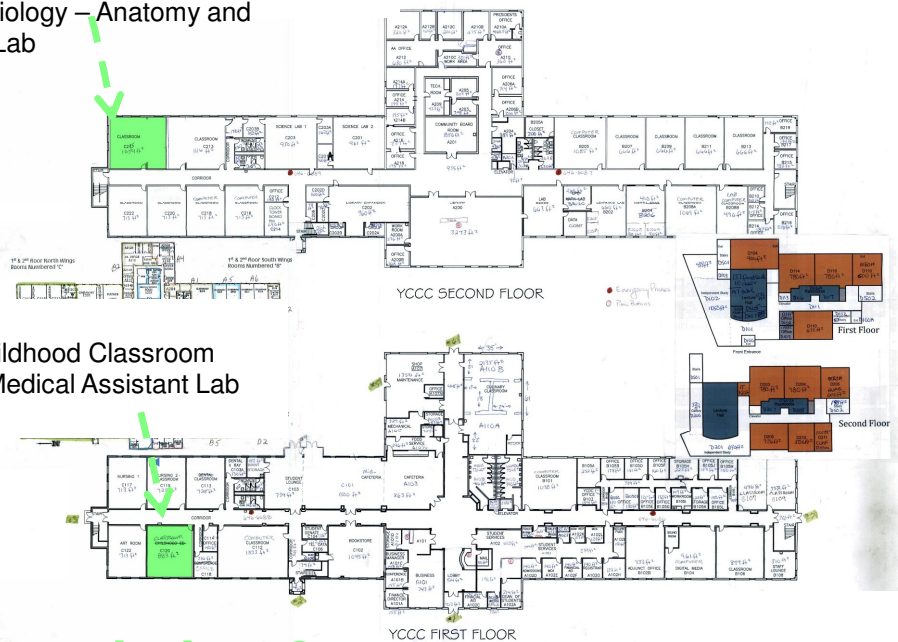
- Existing Nursing Lab (C115 – 728 ASF) is situated between the two Veterinary Technology Labs.

**Opportunity:**

- Swap Nursing Lab (C115 – 728 ASF) and Veterinary Technology Lab (C117 – 713 ASF) to allow for better synergy between Veterinary Technology spaces.
- Both spaces have sinks.

### C215

- /s: Medical Assistant Lab
- Becomes: Biology – Anatomy and Physiology Lab



### C117

- /s: Early Childhood Classroom
- Becomes: Medical Assistant Lab

## Recommendation 3

41

### Recommendation 3:

#### Challenge:

- Need additional Biology-Anatomy and Physiology Lab.

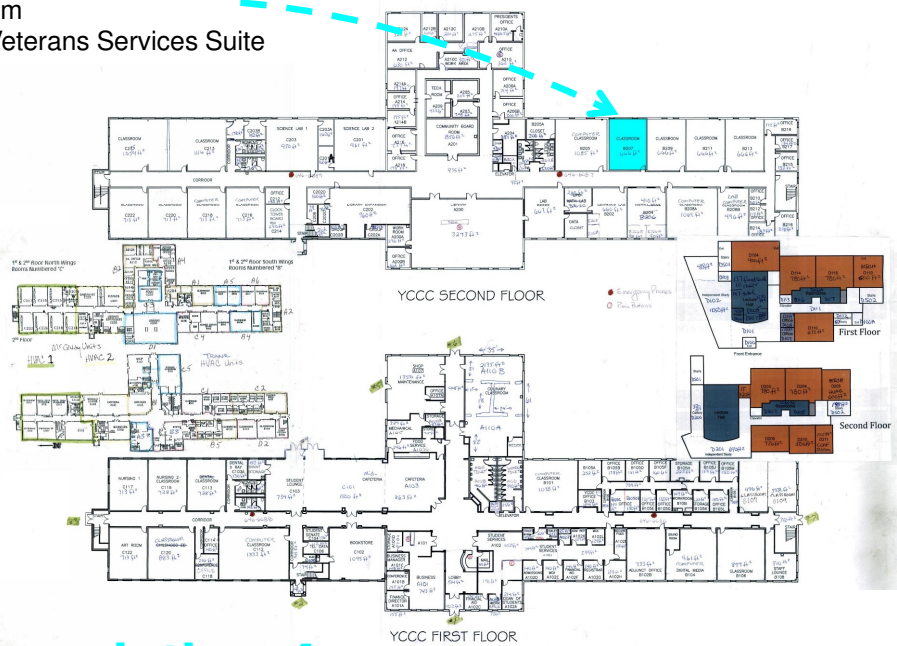
#### Opportunity:

- Finish teaching out Early Childhood Education and convert dedicated Early Childhood Education classroom (C120 – 833 ASF) to Medical Assistant Lab.
  - Similar to room C215, this room, C120, has a sink located within the instructional space, which would also limit renovation costs.
  - C120 would also allow for the Medical Assistant Program to be better collocated with the other vocational programs (Veterinary Technology and Nursing)
- Remodel the current Medical Assistant Lab (C215 – 1,054 ASF) into a Biology-Anatomy and Physiology Lab to meet instructional space needs.
  - Location of C215 would allow the new Anatomy and Physiology to be collocated with the other science department lab spaces.



**B207:**

- Is: Classroom
- Becomes: Veterans Services Suite



## Recommendation 4

42

**Recommendation 4:****Challenge:**

- Need space for Veterans Services.

**Opportunity:**

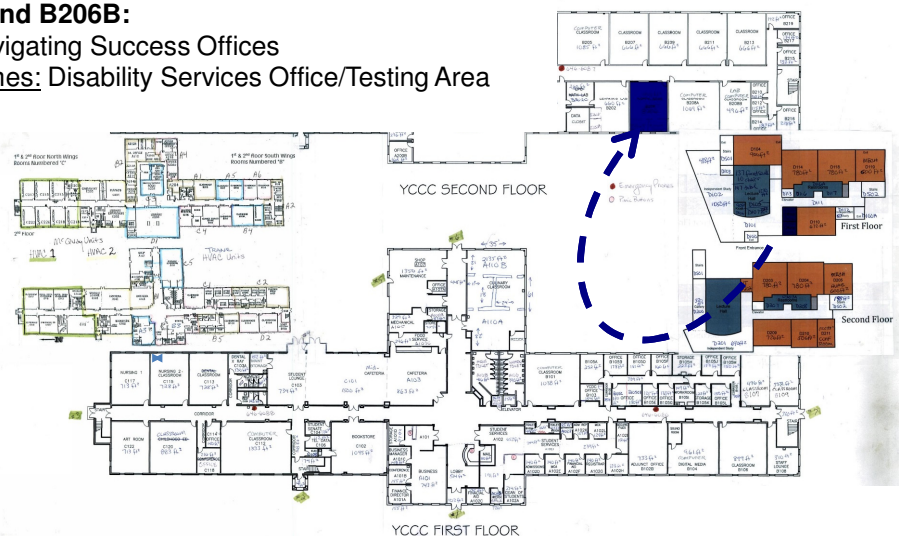
- Convert B207 to a dedicated Veterans' Lounge and build in an office and private meeting area.
  - The remaining classrooms can accommodate the B207 courses, while room B109 can take on the additional Senior College courses.
  - Provides quiet, dedicated space where staff can reach out and provide information.
  - Include microwave and soft seating,
  - Location would create synergy with new Disability Services suite, if it is assigned to B206.
  - Meeting area would support private meetings with Veteran Administrator.

## B206

- Is: Learning Center Study
- Becomes: Disability Services Study Area

## B206 A and B206B:

- Is: Navigating Success Offices
- Becomes: Disability Services Office/Testing Area



# Recommendation 5

43

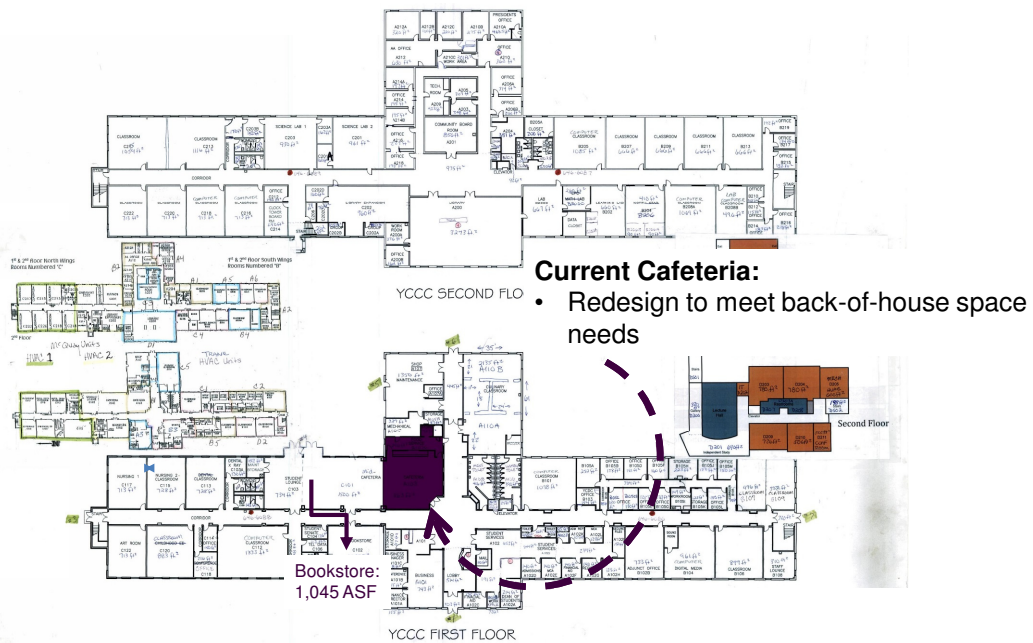
## Recommendation 5:

### Challenge:

- Disability Services located away from Main building.

### Opportunity:

- B206 is a 410 ASF study space used by the Learning Center, while B206A and B206B are two offices identified as Navigating Success. Per conversations with the College, Navigating Success has been phased out, and office space does not need to be relocated.
- For consideration, the conversion of former Disability Services offices (Pratt and Whitney D108 and D109, 240 ASF):
  - **Scenario 1:**
    - **Option:**
      - Convert to Workforce Development space.
    - **Challenge:**
      - Would need additional ASF. Approximately 350 ASF for two full-time personnel and meeting space.
      - Possibly recapture other space in Pratt and Whitney for expanded need. Challenge in that these offices are adjacent to one of the highest use classrooms.
  - **Scenario 2:**
    - **Option:**
      - Convert to huddle rooms that provide drop-in tutoring and breakout study space with writable walls, technology, and glass fronts to allow for visibility in and out of the space.
    - **Challenge:**
      - No identified unit or “monitor” in Pratt and Whitney.



## Recommendation 6

44

### Recommendation 6:

#### Challenge:

- Cafeteria:
  - The existing cafeteria is roughly 1,255 ASF between the kitchen/prep area and the main dining area (excludes the Mid-Café). Of this, 863 ASF is coded to the dining area and only 391 ASF is coded to the kitchen/prep area.
  - The existing kitchen/prep area is undersized by 50% at a minimum. The back-of-the house with storage should be approximately 600 ASF presuming that food production and service remains as it is and there is no goal to expand services or food offerings.
  - This presumes the dining area is correctly sized to the population currently being served. Growth or changes in services will require additional review.
- Student Space:
  - Existing space is slightly fragmented between Student Government Association, the recreation/lounge area, and the collocation next to a meeting room.

#### Opportunity:

##### Option 1:

- Redesign existing space to better serve back-of-house functions.
  - Is there opportunity to expand “back” and subsume what is currently coded as storage and facilities?
  - How much space is gained should the prep/kitchen “bump out” into dining area – staying within the “tile footprint”?

**Option 2a:**

- Bookstore
  - Downsize the bookstore and sell only Veterinary Technology clothing, general supplies, etc. Books would be on-line orders and would be picked up by the students. (This may impact need for additional space in central receiving.)
  - Move the smaller footprint to where student recreation room is currently located.
  - Move the recreation space to the former bookstore, adjacent to the SGA.
- Renovate and expand the cafeteria and seating areas to support lounge space.

**Option 2b:**

- Bookstore
  - Relocate the bookstore in its entirety (space TBD).
  - Move the recreation space to the former bookstore, adjacent to the SGA.
  - Put Veterans' Lounge in the recreation space.
- Renovate and expand the cafeteria and seating areas to support lounge space.



Instructional Space at the Sanford campus was analyzed separately.

# Instructional Space Use

Type/ Building and Room	Discipline	Room Count	ASF	Seats	ASF/ Seat	Weekly Hours	% Hours	% Seats Occupied
<b>Classrooms</b>								
Sanford A (109)	Classroom	1	296	12	24.7	10.82	42%	58%
<b>Classroom Total</b>		<b>1</b>	<b>296</b>	<b>12</b>	<b>24.7</b>	<b>10.82</b>	<b>42%</b>	<b>58%</b>
<b>Specialized Instructional</b>								
Sanford B (108)	Precision Machining	1	8,361	12	696.8	13.32	51%	92%
Sanford C (110)	Computer Lab	1	457	12	38.1	8.32	32%	83%
<b>Specialized Instructional Total</b>		<b>2</b>	<b>8,818</b>	<b>24</b>	<b>367.4</b>	<b>21.64</b>	<b>42%</b>	<b>88%</b>



The Sanford site reflects YCCC turning back to the roots of community colleges by providing community outreach, services, and training.

YCCC is in the process of adding three new spaces that will be used for community and workforce training.

- RA will provide a review of Sanford's space use after a year's worth of scheduling data is available.





# **York County Community College Master Plan: Space Utilization and Needs Analysis**

DRAFT | April 2019



# Appendices

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Wells: General-Purpose Classrooms | Day

Wells: General-Purpose Classrooms | Evening

Wells: Dedicated Classrooms | Day

Wells: Dedicated Classrooms | Evening

Wells: Specialized Instructional | Day

Wells: Specialized Instructional | Evening

Sanford: Dedicated Classrooms | Day

Sanford: Dedicated Classrooms | Evening

Sanford: Specialized Instructional | Day

Sanford: Specialized Instructional | Evening



# Appendices

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Wells: General-Purpose Classrooms | Day



Building	Room	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
Main	B207	BIO 136 01 LC	Human A & P II (w/lab)				5	21%	2.50	
<b>Main</b>	<b>B207 Total</b>			<b>666</b>	<b>24</b>	<b>27.8</b>	<b>5</b>	<b>21%</b>	<b>2.50</b>	<b>10%</b>
Main	B209	BIO 230 01 LC	Microbiology w/Lab				13	54%	2.50	
Main	B209	MAT 109 01 LC	Elements of Mathematics				17	71%	2.50	
Main	B209	MAT 127 02 LC	College Algebra				24	100%	2.50	
Main	B209	MAT 227 01 LC	PreCalculus				6	25%	2.50	
<b>Main</b>	<b>B209 Total</b>			<b>666</b>	<b>24</b>	<b>27.8</b>	<b>60</b>	<b>63%</b>	<b>10.00</b>	<b>38%</b>
Main	B211	CJS 125 01 LC	Criminal Law				17	71%	2.50	
Main	B211	CJS 150 01 LC	Emergency Tele-communicator Basic				14	58%	2.50	
Main	B211	MAT 122 01 LC	Finite Math				21	88%	2.50	
Main	B211	MAT 210 02 LC	Introduction to Statistics				11	46%	2.50	
<b>Main</b>	<b>B211 Total</b>			<b>666</b>	<b>24</b>	<b>27.8</b>	<b>63</b>	<b>66%</b>	<b>10.00</b>	<b>38%</b>
Main	B213	BIO 106 03 LC	General Biology I (w/Lab)				20	83%	2.50	
Main	B213	MAT 122 02 LC	Finite Math				24	100%	2.50	
Main	B213	MAT 127 01 LC	College Algebra				18	75%	2.50	
Main	B213	MAT 127 04 LC	College Algebra				20	83%	2.50	
Main	B213	MAT 220 01 LC	Trigonometry				9	38%	2.50	
<b>Main</b>	<b>B213 Total</b>			<b>666</b>	<b>24</b>	<b>27.8</b>	<b>91</b>	<b>76%</b>	<b>12.50</b>	<b>48%</b>
Main	C220	SPE 101 02 LC	Oral Communications				18	75%	2.50	
Main	C220	SPE 101 03 LC	Oral Communications				18	75%	2.50	
Main	C220	SPE 101 05 LC	Oral Communications				16	67%	2.50	
<b>Main</b>	<b>C220 Total</b>			<b>713</b>	<b>24</b>	<b>29.7</b>	<b>52</b>	<b>72%</b>	<b>7.50</b>	<b>29%</b>
Main	C222	CHM 104 01 LC	Chemistry for Health Sciences				20	83%	2.50	
Main	C222	CHM 106 01 LC	General Chemistry I				19	79%	2.50	
Main	C222	HIS 125 01 LC	US Civil Rights				19	79%	2.50	
Main	C222	HUM 110 01 LC	World Religions				23	96%	2.50	
Main	C222	PHI 102 02 LC	Ethics and Contemporary Society				23	96%	2.50	
Main	C222	PSY 230 02 LC	Abnormal Psychology				13	54%	2.50	
<b>Main</b>	<b>C222 Total</b>			<b>713</b>	<b>24</b>	<b>29.7</b>	<b>117</b>	<b>81%</b>	<b>15.00</b>	<b>58%</b>
<b>Main Total</b>				<b>4,090</b>	<b>144</b>	<b>28.4</b>	<b>388</b>	<b>70%</b>	<b>57.50</b>	<b>37%</b>
Pratt and Whitney	D110	BUS 115 01 LC	Management I				18	75%	2.50	
Pratt and Whitney	D110	CUL 102 01 LC	Introduction to Culinary Arts				16	67%	2.50	
Pratt and Whitney	D110	ECO 120 01 LC	Microeconomics				17	71%	2.50	
Pratt and Whitney	D110	POS 115 01 LC	Topics: Congress&MidTermElections				15	63%	2.50	
Pratt and Whitney	D110	PSY 101 03 LC	Introduction to Psychology				22	92%	2.50	
Pratt and Whitney	D110	PSY 101 04 LC	Introduction to Psychology				24	100%	2.50	
Pratt and Whitney	D110	SOC 101 02 LC	Introduction to Sociology				24	100%	2.50	
Pratt and Whitney	D110	SOC 101 03 LC	Introduction to Sociology				21	88%	2.50	
Pratt and Whitney	D110	SOC 210 02 LC	Social Problems				15	63%	2.50	
<b>Pratt and Whitney</b>	<b>D110 Total</b>			<b>672</b>	<b>24</b>	<b>28.0</b>	<b>172</b>	<b>80%</b>	<b>22.50</b>	<b>87%</b>



Building	Room	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
Pratt and Whitney	D114	CJS 102 01 LC	Ethics & Leadership in CJ				9	38%	2.50	
Pratt and Whitney	D114	CUL 104 01 HY	Food Service Sanitation				9	38%	2.66	
Pratt and Whitney	D114	PSY 101 02 LC	Introduction to Psychology				23	96%	2.50	
<b>Pratt and Whitney</b>	<b>D114 Total</b>			<b>780</b>	<b>24</b>	<b>32.5</b>	<b>41</b>	<b>57%</b>	<b>7.66</b>	<b>29%</b>
Pratt and Whitney	D118	CAD 115 01 LC	Blueprint Reading				17	71%	2.50	
Pratt and Whitney	D118	CAD 115 02 LC	Blueprint Reading				18	75%	2.50	
Pratt and Whitney	D118	CJS 105 01 LC	Topics: Offender, Reentry & Transition				6	25%	2.50	
Pratt and Whitney	D118	HUS 101 01 HY	Introduction to Human Services				17	71%	1.25	
Pratt and Whitney	D118	PSY 210 01 LC	Psychology Across the Lifespan				16	67%	2.50	
Pratt and Whitney	D118	PSY 228 01 HY	Addiction and Substance Abuse				10	42%	1.25	
Pratt and Whitney	D118	SOC 101 04 LC	Introduction to Sociology				21	88%	2.50	
<b>Pratt and Whitney</b>	<b>D118 Total</b>			<b>780</b>	<b>24</b>	<b>32.5</b>	<b>105</b>	<b>63%</b>	<b>15.00</b>	<b>58%</b>
Pratt and Whitney	D203	BUS 110 02 LC	Introduction to Business				24	100%	2.50	
Pratt and Whitney	D203	CJS 101 01 LC	Introduction to Criminal Justice				12	50%	2.50	
Pratt and Whitney	D203	ENG 112 01 LC	Literature and Writing				22	92%	2.50	
Pratt and Whitney	D203	PSY 101 07 LC	Introduction to Psychology				23	96%	2.50	
<b>Pratt and Whitney</b>	<b>D203 Total</b>			<b>780</b>	<b>24</b>	<b>32.5</b>	<b>81</b>	<b>84%</b>	<b>10.00</b>	<b>38%</b>
Pratt and Whitney	D209	MAT 092 01 LC	Introduction to Algebra				18	75%	2.50	
Pratt and Whitney	D209	MAT 098 01 LC	Intermediate Algebra				13	54%	2.50	
Pratt and Whitney	D209	MAT 098 02 LC	Intermediate Algebra				14	58%	2.50	
Pratt and Whitney	D209	MAT 098 03 LC	Intermediate Algebra				15	63%	2.50	
<b>Pratt and Whitney</b>	<b>D209 Total</b>			<b>726</b>	<b>24</b>	<b>30.3</b>	<b>60</b>	<b>63%</b>	<b>10.00</b>	<b>38%</b>
Pratt and Whitney	D210	MAT 092 02 LC	Introduction to Algebra				17	94%	2.50	
Pratt and Whitney	D210	MAT 092 03 LC	Introduction to Algebra				18	100%	2.50	
Pratt and Whitney	D210	MAT 092 05 LC	Introduction to Algebra				17	94%	2.50	
<b>Pratt and Whitney</b>	<b>D210 Total</b>			<b>506</b>	<b>18</b>	<b>28.1</b>	<b>52</b>	<b>96%</b>	<b>7.50</b>	<b>29%</b>
<b>Pratt and Whitney Total</b>				<b>4,244</b>	<b>138</b>	<b>30.8</b>	<b>511</b>	<b>73%</b>	<b>72.66</b>	<b>47%</b>
<b>Grand Total</b>				<b>8,334</b>	<b>282</b>	<b>29.6</b>	<b>899</b>	<b>72%</b>	<b>130.16</b>	<b>42%</b>

# Appendices

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Wells: General-Purpose Classrooms | Evening



Building	Room	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
Main	B207	MAT 092 04 LC	Introduction to Algebra				15	63%	2.50	
Main	B207	MAT 109 02 LC	Elements of Mathematics				22	92%	2.50	
Main	B207 Total			666	24	27.8	37	77%	5.00	39%
Main	B209	CUL 231 01 HY	Culinary Operations II				11	46%	1.25	
Main	B209 Total			666	24	27.8	11	46%	1.25	10%
Main	B211	MAT 098 04 LC	Intermediate Algebra				15	63%	2.50	
Main	B211	MAT 098 05 LC	Intermediate Algebra				6	25%	2.50	
Main	B211	PSY 101 06 LC	Introduction to Psychology				21	88%	2.50	
Main	B211 Total			666	24	27.8	42	58%	7.50	59%
Main	B213	BIO 250 01 LC	Human Pathophysiology				7	29%	2.50	
Main	B213	MAT 127 03 LC	College Algebra				22	92%	2.50	
Main	B213 Total			666	24	27.8	29	60%	5.00	39%
Main	C220	BUS 230 01 LC	Principles of Marketing				6	25%	2.50	
Main	C220 Total			713	24	29.7	6	25%	2.50	20%
Main	C222	BIO 126 01 LC	Human A & P I (w/lab)				10	42%	2.50	
Main	C222	HIS 120 01 LC	US History II 1877 to present				17	71%	2.50	
Main	C222	SCI 101 01 LC	Intro to Environmental Science				19	79%	2.50	
Main	C222	SOC 232 02 LC	Death & Dying				8	33%	2.50	
Main	C222 Total			713	24	29.7	54	56%	10.00	79%
Main Total				4,090	144	28.4	179	57%	31.25	41%
Pratt and Whitney	D110	NS	Not Scheduled				0	0%	0.00	
Pratt and Whitney	D110 Total			672	24	28.0	0	0%	0.00	0%
Pratt and Whitney	D114	THE 123 01 LC	Introduction to Theater				10	42%	2.50	
Pratt and Whitney	D114 Total			780	24	32.5	10	42%	2.50	20%
Pratt and Whitney	D118	NS	Not Scheduled				0	0%	0.00	
Pratt and Whitney	D118 Total			780	24	32.5	0	0%	0.00	0%
Pratt and Whitney	D203	NS	Not Scheduled				0	0%	0.00	
Pratt and Whitney	D203 Total			780	24	32.5	0	0%	0.00	0%
Pratt and Whitney	D209	NS	Not Scheduled				0	0%	0.00	
Pratt and Whitney	D209 Total			726	24	30.3	0	0%	0.00	0%
Pratt and Whitney	D210	NS	Not Scheduled				0	0%	0.00	
Pratt and Whitney	D210 Total			506	18	28.1	0	0%	0.00	0%
Pratt and Whitney Total				4,244	138	30.8	10	42%	2.50	3%
Grand Total				8,334	282	29.6	189	56%	33.75	22%



# Appendices

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Wells: Dedicated Classrooms | Day





Building	Room	Department	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
<b>Credit-Bearing Instruction</b>											
Main	C113	Veterinary Technology	VET 224 02	HY Clinical Methods II				5	21%	1.25	
<b>Main</b>	<b>C113 Total</b>				<b>728</b>	<b>24</b>	<b>30.3</b>	<b>5</b>	<b>21%</b>	<b>1.25</b>	<b>5%</b>
Main	C120	Early Childhood Education	ART 123 01	HY Introduction to Painting				10	50%	3.33	
Main	C120	Early Childhood Education	ECE 101 01	LC Intro to ECE: The Child's Learning E				4	20%	2.50	
Main	C120	Early Childhood Education	ECE 190 01	LC Guidance of Young Children				4	20%	2.50	
Main	C120	Early Childhood Education	VET 101 02	LC Intro to Veterinary Technology				21	105%	2.50	
<b>Main</b>	<b>C120 Total</b>				<b>883</b>	<b>20</b>	<b>44.2</b>	<b>39</b>	<b>49%</b>	<b>10.83</b>	<b>42%</b>
<b>Main Total</b>					<b>1,611</b>	<b>44</b>	<b>36.6</b>	<b>44</b>	<b>42%</b>	<b>12.08</b>	<b>23%</b>
<b>Noncredit-Bearing Instruction</b>											
Main	B107	Training									
<b>Main</b>	<b>B107 Total</b>				<b>496</b>	<b>20</b>	<b>24.8</b>				
Main	B109	Senior College									
<b>Main</b>	<b>B109 Total</b>				<b>538</b>	<b>20</b>	<b>26.9</b>				
<b>Main Total</b>					<b>1,034</b>	<b>40</b>	<b>25.9</b>				
<b>Grand Total</b>					<b>2,645</b>	<b>84</b>	<b>31.5</b>				



# Appendices

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Wells: Dedicated Classrooms | Evening



Building	Room	Department	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
Credit-Bearing Instruction											
Main	C113	Veterinary Technology	NS	Not Scheduled					0	0%	0.00
Main	C113 Total				728	24	30.3	0	0%	0.00	0%
Main	C120	Early Childhood Education	ECE 255 01 LC	Practicum I				1	5%	2.00	
Main	C120	Early Childhood Education	EDU 105 01 LC	Introduction to Exceptionality				10	50%	2.50	
Main	C120	Early Childhood Education	EDU 215 01 LC	Classroom and Behavior Management				8	40%	2.50	
Main	C120 Total				883	20	44.2	19	32%	7.00	55%
Main Total					1,611	44	36.6	19	32%	7.00	28%
Noncredit-Bearing Instruction											
Main	B107	Training									
Main	B107 Total				496	20	24.8				
Main	B109	Senior College									
Main	B109 Total				538	20	26.9				
Main Total					1,034	40	25.9				
Grand Total					2,645	84	31.5				





# Appendices

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Wells: Specialized Instructional | Day



Building	Room	Discipline	Course	Title	ASF	Stations	ASF per Station	Enrollment	% Stations Occupied	Weekly Hours	% Hours
Main	A110A	Culinary Lab	CUL 143 01 LB	Artisan Breads				5	50%	5.50	
Main	A110A	Culinary Lab	CUL 241 01 LB	European Pastry				10	100%	7.16	
Main	A110A Total				668	10	66.8	15	75%	12.66	49%
Main	A110B	Culinary Lab	CUL 106 02 LB	Foundational Culinary Techniques				14	100%	6.66	
Main	A110B	Culinary Lab	CUL 146 01 LB	Garde Manger				9	64%	7.16	
Main	A110B	Culinary Lab	CUL 200 01 LB	Topics: Cuisine Southeast Asia				9	64%	2.50	
Main	A110B Total				735	14	52.5	32	76%	16.32	63%
Main	B101	Computer Lab - Multipurpose	ENG 095 01 LB	Reading & Writing Workshop				17	85%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 095 02 LB	Reading & Writing Workshop				17	85%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 01 LB	College Composition				20	100%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 02 LB	College Composition				20	100%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 04 LB	College Composition				19	95%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 07 LB	College Composition				18	90%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 08 LB	College Composition				17	85%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 10 LB	College Composition				17	85%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 11 LB	College Composition				17	85%	2.50	
Main	B101 Total				1038	20	51.9	162	90%	22.50	87%
Main	B104	Computer Lab - Digital Media	MUL 110 01 LB	Digital Imaging				16	76%	2.50	
Main	B104	Computer Lab - Digital Media	MUL 126 01 LB	Typography				12	57%	2.50	
Main	B104	Computer Lab - Digital Media	MUL 180 01 LB	2D Game Design				8	38%	2.50	
Main	B104	Computer Lab - Digital Media	MUL 225 01 LB	3D-Modeling and Character Animation				11	52%	2.50	
Main	B104	Computer Lab - Digital Media	MUL 230 01 LB	Computer Animation				10	48%	2.50	
Main	B104 Total				961	21	45.8	57	54%	12.50	48%
Main	B106	Computer Lab - CADD	ARC 106 01 LB	Introduction to Architecture				16	89%	2.50	
Main	B106	Computer Lab - CADD	CAD 102 04 LB	Computer-Aided Drafting & Design I				15	83%	2.50	
Main	B106	Computer Lab - CADD	CAD 204 01 LB	Solid Modeling II				10	56%	2.50	
Main	B106 Total				899	18	49.9	41	76%	7.50	29%
Main	B205	Computer Lab - Multipurpose	ENG 101 06 LB	College Composition				14	70%	2.50	
Main	B205	Computer Lab - Multipurpose	HUM 105 01 LC	Introduction to American Studies				19	95%	2.50	
Main	B205	Computer Lab - Multipurpose	PHI 102 01 LC	Ethics and Contemporary Society				13	65%	2.50	
Main	B205	Computer Lab - Multipurpose	PHY 151 01 LB	General Physics I				15	75%	4.16	
Main	B205 Total				1085	20	54.3	61	76%	11.66	45%
Main	C112	Computer Lab - Multipurpose	ACC 111 02 LC	Accounting I				21	105%	2.50	
Main	C112	Computer Lab - Multipurpose	ENG 101 05 LB	College Composition				19	95%	2.50	
Main	C112	Computer Lab - Multipurpose	ENG 101 22 LB	College Composition				20	100%	2.50	
Main	C112	Computer Lab - Multipurpose	MAS 115 01 LC	Medical Office Administration				9	45%	2.50	
Main	C112 Total				1333	20	66.7	69	86%	10.00	38%
Main	C117	Veterinary Technology	ACM 101 01 LC	Introduction to Animal Care & Mgmt				17	71%	2.50	
Main	C117	Veterinary Technology	VET 101 01 LC	Intro to Veterinary Technology				20	83%	2.50	
Main	C117	Veterinary Technology	VET 110 01 LC	Animal Nutrition				14	58%	1.67	
Main	C117	Veterinary Technology	VET 215 02 LC	Laboratory Animal Medicine				16	67%	1.00	
Main	C117	Veterinary Technology	VET 225 01 LB	Clinical Methods II Laboratory				7	29%	3.00	
Main	C117	Veterinary Technology	VET 225 02 LB	Clinical Methods II Laboratory				4	17%	2.75	
Main	C117	Veterinary Technology	VET 225 04 LB	Clinical Methods II Laboratory				5	21%	2.00	
Main	C117	Veterinary Technology	VET 230 02 LC	Veterinary Clinical Pathology				8	33%	0.75	
Main	C117	Veterinary Technology	VET 231 02 LB	Veterinary Clinical Pathology Lab				8	33%	1.83	
Main	C117	Veterinary Technology	VET 231 03 LB	Veterinary Clinical Pathology Lab				9	38%	1.25	
Main	C117 Total				713	24	29.7	108	45%	19.25	74%

Building	Room	Discipline	Course	Title	ASF	Stations	ASF per Station	Enrollment	% Stations Occupied	Weekly Hours	% Hours
Main	C122	Art - General	ART 120 01 LB	Introduction to Drawing				12	92%	2.75	
Main	C122	Art - General	ART 120 02 LB	Introduction to Drawing				12	92%	3.33	
Main	C122	Art - General	ART 126 02 LB	Foundations of Design				11	85%	2.50	
Main	C122	Art - General	ART 126 03 LB	Foundations of Design				11	85%	2.50	
Main	C122	Art - General	ART 131 01 LB	Introduction to Sculpture				11	85%	2.50	
Main	C122	Art - General	ART 132 01 LB	Introduction to Illustration				8	62%	1.25	
Main	C122	Art - General	ART 200 01 LB	Topics: Large Scale Sculpture				12	92%	2.50	
Main	C122 Total				713	13	54.8	77	85%	17.33	67%
Main	C201	Biology - Anatomy and Physiology	BIO 104 01 LC	Overview of Human A & P				14	88%	2.50	
Main	C201	Biology - Anatomy and Physiology	BIO 124 01 LC	Animal Anatomy and Physiology I				20	125%	2.50	
Main	C201	Biology - Anatomy and Physiology	BIO 124 02 LC	Animal Anatomy and Physiology I				12	75%	2.50	
Main	C201	Biology - Anatomy and Physiology	BIO 125 01 LB	Animal Anatomy and Physiology Lab				9	56%	1.25	
Main	C201	Biology - Anatomy and Physiology	BIO 125 02 LB	Animal Anatomy and Physiology Lab				11	69%	1.25	
Main	C201	Biology - Anatomy and Physiology	BIO 125 03 LB	Animal Anatomy and Physiology Lab				12	75%	1.83	
Main	C201	Biology - Anatomy and Physiology	BIO 126 02 LC	Human A & P I (w/lab)				14	88%	2.50	
Main	C201	Biology - Anatomy and Physiology	BIO 127 02 LB	Human A & P I Lab				14	88%	1.83	
Main	C201	Biology - Anatomy and Physiology	BIO 134 01 LC	Animal Anatomy and Physiology II				14	88%	2.50	
Main	C201	Biology - Anatomy and Physiology	BIO 135 01 LB	Animal Anatomy & Physiology II Lab				14	88%	1.83	
Main	C201	Biology - Anatomy and Physiology	BIO 137 01 LB	Human A & P II Lab				5	31%	1.83	
Main	C201	Biology - Anatomy and Physiology	BIO 231 01 LB	Microbiology Lab				13	81%	1.84	
Main	C201 Total				961	16	60.1	152	79%	24.16	93%
Main	C203	Biology - General	BIO 107 01 LB	General Biology I Lab				15	94%	1.83	
Main	C203	Biology - General	BIO 107 02 LB	General Biology I Lab				5	31%	1.83	
Main	C203	Biology - General	SCI 100 01 LC	Topics in Sci: Sustainable Eating				15	94%	2.50	
Main	C203 Total				930	16	58.1	35	73%	6.16	24%
Main	C213	Chemistry - General	CHM 107 01 LB	General Chemistry I Lab				11	92%	1.83	
Main	C213	Chemistry - General	CHM 107 02 LB	General Chemistry I Lab				8	67%	1.83	
Main	C213 Total				1116	12	93.0	19	79%	3.66	14%
Main	C215	Medical Assistant	MAS 105 01 LC	Medical Terminology				22	92%	2.50	
Main	C215	Medical Assistant	MAS 120 01 LC	Medical Law & Ethics				11	46%	2.50	
Main	C215	Medical Assistant	MAS 205 01 LC	Medical Insurance & Coding				7	29%	2.50	
Main	C215	Medical Assistant	MAS 250 01 LC	Clinical Procedures II				8	33%	2.50	
Main	C215	Medical Assistant	MAS 251 01 LB	Clinical Procedures II Laboratory				8	33%	1.83	
Main	C215 Total				1054	24	43.9	56	47%	11.83	46%
Main	C218	Computer Lab - Multipurpose	CIS 115 01 LB	Software Applications				16	80%	2.50	
Main	C218	Computer Lab - Multipurpose	CIS 115 02 LB	Software Applications				18	90%	2.50	
Main	C218	Computer Lab - Multipurpose	CIS 115 03 LB	Software Applications				16	80%	2.50	
Main	C218	Computer Lab - Multipurpose	CIS 115 05 LB	Software Applications				18	90%	2.50	
Main	C218	Computer Lab - Multipurpose	CIS 118 02 LB	Information Technology Fundamentals				14	70%	2.50	
Main	C218	Computer Lab - Multipurpose	WEB 131 02 HY	Web Development I				16	80%	1.25	
Main	C218 Total				713	20	35.7	98	82%	13.75	53%
Main Total					12919	248	52.1	982	70%	189.28	52%
Grand Total					12919	248	52.1	982	70%	189.28	52%

# Appendices

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Wells: Specialized Instructional | Evening





Building	Room	Discipline	Course	Title	ASF	Stations	ASF per Station	Enrollment	% Stations Occupied	Weekly Hours	% Hours
Main	A110A	Culinary Lab	CUL 143 01 LB	Arisan Breads	668	10	66.8	5	50%	1.66	13%
Main	A110A Total							5	50%	1.66	13%
Main	A110B	Culinary Lab	CUL 146 01 LB	Garde Manger				9	64%	7.16	
Main	A110B	Culinary Lab	CUL 200 01 LB	Topics: Cuisine Southeast Asia				9	64%	4.66	
Main	A110B Total				735	14	52.5	18	64%	11.82	93%
Main	B101	Computer Lab - Multipurpose	ENG 101 03 LB	College Composition				20	100%	2.50	
Main	B101	Computer Lab - Multipurpose	ENG 101 09 LB	College Composition				15	75%	2.50	
Main	B101 Total				1,038	20	51.9	35	88%	5.00	39%
Main	B104	Computer Lab - Digital Media	ART 136 01 LB	Digital Photography				18	86%	2.50	
Main	B104	Computer Lab - Digital Media	MUL 130 01 LB	Motion Graphics				11	52%	2.50	
Main	B104 Total				961	21	45.8	29	69%	5.00	39%
Main	B106	Computer Lab - CADD	NS	Not Scheduled				0	0%	0.00	
Main	B106 Total				899	18	49.9	0	0%	0.00	0%
Main	B205	Computer Lab - Multipurpose	CAD 115 05 LC	Blueprint Reading				11	55%	2.50	
Main	B205	Computer Lab - Multipurpose	ENG 101 14 LB	College Composition				8	40%	5.34	
Main	B205 Total				1,085	20	54.3	19	48%	7.84	62%
Main	C112	Computer Lab - Multipurpose	ACC 111 01 LC	Accounting I				13	65%	2.50	
Main	C112	Computer Lab - Multipurpose	BIO 106 02 LC	General Biology I (w/Lab)				17	85%	2.50	
Main	C112 Total				1,333	20	66.7	30	75%	5.00	39%
Main	C117	Veterinary Technology	VET 120 01 HY	Veterinary Pharmacology				10	42%	1.25	
Main	C117	Veterinary Technology	VET 215 01 LC	Laboratory Animal Medicine				13	54%	2.50	
Main	C117	Veterinary Technology	VET 215 02 LC	Laboratory Animal Medicine				16	67%	1.50	
Main	C117	Veterinary Technology	VET 220 01 LC	Large Animal Management				14	58%	1.25	
Main	C117	Veterinary Technology	VET 220 02 HY	Large Animal Management				14	58%	1.25	
Main	C117	Veterinary Technology	VET 224 01 LC	Clinical Methods II				11	46%	2.50	
Main	C117	Veterinary Technology	VET 225 02 LB	Clinical Methods II Laboratory				4	17%	0.25	
Main	C117	Veterinary Technology	VET 225 04 LB	Clinical Methods II Laboratory				5	21%	1.00	
Main	C117	Veterinary Technology	VET 230 01 LC	Veterinary Clinical Pathology				9	38%	2.50	
Main	C117	Veterinary Technology	VET 230 02 LC	Veterinary Clinical Pathology				8	33%	1.75	
Main	C117	Veterinary Technology	VET 231 03 LB	Veterinary Clinical Pathology Lab				9	38%	0.58	
Main	C117 Total				713	24	29.7	113	43%	16.33	129%
Main	C122	Art - General	ART 120 01 LB	Introduction to Drawing				12	92%	0.58	
Main	C122	Art - General	ART 132 01 LB	Introduction to Illustration				8	62%	1.50	
Main	C122 Total				713	13	54.8	20	77%	2.08	16%
Main	C201	Biology - Anatomy and Physiology	BIO 125 01 LB	Animal Anatomy and Physiology Lab				9	56%	0.58	
Main	C201	Biology - Anatomy and Physiology	BIO 125 02 LB	Animal Anatomy and Physiology Lab				11	69%	0.58	
Main	C201	Biology - Anatomy and Physiology	BIO 127 01 LB	Human A & P I Lab				10	63%	1.83	
Main	C201 Total				961	16	60.1	30	63%	2.99	24%
Main	C203	Biology - General	BIO 107 03 LB	General Biology I Lab				12	75%	1.83	
Main	C203	Biology - General	BIO 107 04 LB	General Biology I Lab				5	31%	1.83	
Main	C203 Total				930	16	58.1	17	53%	3.66	29%
Main	C213	Chemistry - General	NS	Not Scheduled				0	0%	0.00	
Main	C213 Total				1,116	12	93.0	0	0%	0.00	0%
Main	C215	Medical Assistant	MAS 151 01 LB	Clinical Procedures I Laboratory				9	38%	1.83	
Main	C215 Total				1,054	24	43.9	9	38%	1.83	14%
Main	C218	Computer Lab - Multipurpose	CIS 170 01 LB	Problem Solving and Programming				18	90%	3.00	
Main	C218 Total				713	20	35.7	18	90%	3.00	24%
Main	Total				12,919	248	52.1	343	53%	66.21	37%
Grand Total					12,919	248	52.1	343	53%	66.21	37%



# Appendices

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Sanford: Dedicated Classrooms | Day



Building	Room	Department	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
Sanford	A (109)	Precision Machining Technology	PMT 210 01 LB	Precision Machining III				7	58%	6.66	
Sanford	A (109)	Precision Machining Technology	PMT 215 01 LB	CNC Programming and Operations II				7	58%	4.16	
Sanford	A (109) Total				296	12	24.7	14	58%	10.82	42%
Sanford Total					296	12	24.7	14	58%	10.82	42%
Grand Total					296	12	24.7	14	58%	10.82	42%





# Appendices

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Sanford: Dedicated Classrooms | Evening



Building	Room	Department	Course	Title	ASF	Seats	ASF per Seat	Enrollment	% Seats Occupied	Weekly Hours	% Hours
Sanford	A (109)	Precision Machining Technology	PMT 210 02 LB	Precision Machining III				9	75%	6.66	
Sanford	A (109)	Precision Machining Technology	PMT 215 02 LB	CNC Programming and Operations II				10	83%	4.16	
Sanford	A (109) Total				296	12	24.7	19	79%	10.82	85%
Sanford Total					296	12	24.7	19	79%	10.82	85%
Grand Total					296	12	24.7	19	79%	10.82	85%



# Appendices

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Sanford: Specialized Instructional | Day



Building	Room	Discipline	Course	Title	ASF	Stations	ASF per Station	Enrollment	% Stations Occupied	Weekly Hours	% Hours
Sanford	B (108)	Precision Machining Technology	PMT 110 01 LB	Precision Machining I				12	100%	6.66	
Sanford	B (108)	Precision Machining Technology	PMT 110 02 LB	Precision Machining I				10	83%	6.66	
<b>Sanford</b>	<b>B (108) Total</b>				<b>8,361</b>	<b>12</b>	<b>696.8</b>	<b>22</b>	<b>92%</b>	<b>13.32</b>	<b>51%</b>
Sanford	C (110)	Computer Lab - Multipurpose	PMT 125 01 LB	Principles of CNC				11	92%	4.16	
Sanford	C (110)	Computer Lab - Multipurpose	PMT 125 02 LB	Principles of CNC				9	75%	4.16	
<b>Sanford</b>	<b>C (110) Total</b>				<b>457</b>	<b>12</b>	<b>38.1</b>	<b>20</b>	<b>83%</b>	<b>8.32</b>	<b>32%</b>
<b>Sanford Total</b>					<b>8,818</b>	<b>24</b>	<b>367.4</b>	<b>42</b>	<b>88%</b>	<b>21.64</b>	<b>42%</b>
<b>Grand Total</b>					<b>8,818</b>	<b>24</b>	<b>367.4</b>	<b>42</b>	<b>88%</b>	<b>21.64</b>	<b>42%</b>





# Appendices

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Sanford: Specialized Instructional | Evening



Building	Room	Discipline	Course	Title	ASF	Stations	ASF per Station	Enrollment	% Stations Occupied	Weekly Hours	% Hours
Sanford	B (108)	Precision Machining Technology	PMT 110 03 LB	Precision Machining I				5	42%	6.66	
Sanford	B (108) Total				8,361	12	696.8	5	42%	6.66	53%
Sanford	C (110)	Computer Lab - Multipurpose	PMT 125 03 LB	Principles of CNC				9	75%	4.17	
Sanford	C (110) Total				457	12	38.1	9	75%	4.17	33%
Sanford Total					8,818	24	367.4	14	58%	10.83	43%
Grand Total					8,818	24	367.4	14	58%	10.83	43%







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# PARKING ASSESSMENT Summary of findings

## 1. Existing Conditions

- a. 38 Standard Parking Stalls
- b. 4 Accessible Stalls

## 2. Off-Street Parking Zoning Requirements

1. Schools other than Listed = 1 per each 2 Students, Plus 1 for each Employee



# PHASE ONE UPDATES

# PARKING ASSESSMENT Summary of findings

## 1. Field Survey

- On-Site Counts Performed at 30 Min Intervals
- Vehicles Monitored for Duration of Stay
- Conducted on a “busy” day with 3 Programs Scheduled Concurrently (Needs to be verified)

## 2. Findings

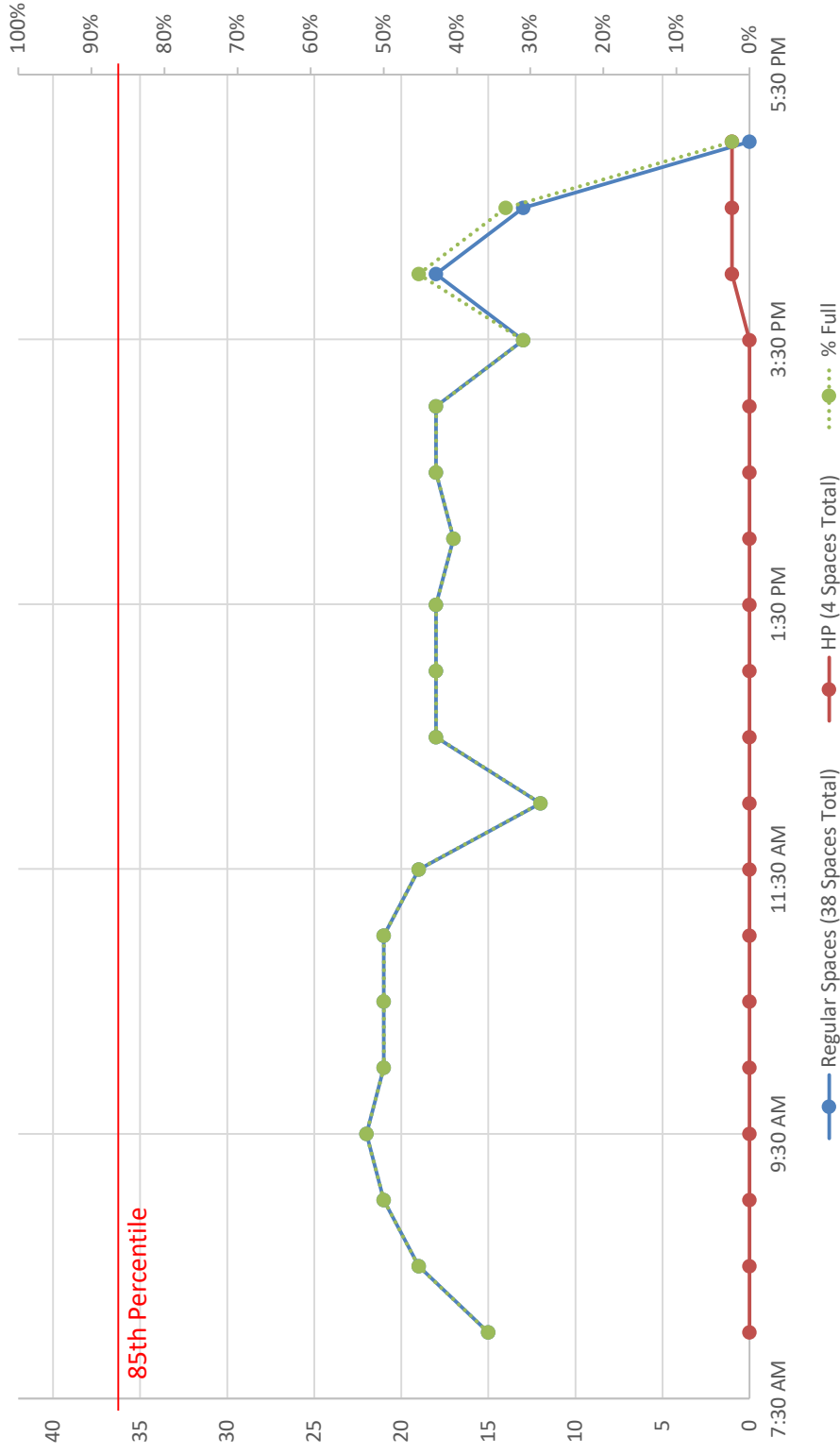
- Peak demand of 22 spaces (9AM)
- Adequate parking for current demand and future use
- Ratio: 1 Space/56 SQ FT (Classroom & Instruction ASF)

Hour	Data Collection Times		Regular Spaces (38 Spaces Total)	HP (4 Spaces Total)	% Full
	# spaces	Start Time	End Time		
8:00 AM		7:59 AM	8:02 AM	0	36%
8:30 AM		8:30 AM	8:32 AM	0	45%
9:00 AM		9:02 AM	9:04 AM	0	50%
9:30 AM		9:31 AM	9:33 AM	0	52%
10:00 AM		10:01 AM	10:03 AM	0	50%
10:30 AM		10:30 AM	10:32 AM	0	50%
11:00 AM		11:00 AM	11:02 AM	0	50%
11:30 AM		11:30 AM	11:32 AM	0	45%
12:00 PM		12:05 PM	12:07 PM	0	29%
12:30 PM		12:33 PM	12:35 PM	0	43%
1:00 PM		1:00 PM	1:02 PM	0	43%
1:30 PM		1:32 PM	1:34 PM	0	43%
2:00 PM		2:00 PM	2:02 PM	0	40%
2:30 PM		2:30 PM	2:32 PM	0	43%
3:00 PM		3:00 PM	3:32 PM	0	43%
3:30 PM		3:31 PM	3:32 PM	0	31%
4:00 PM		4:02 PM	4:04 PM	1	45%
4:30 PM		4:33 PM	4:35 PM	1	33%
5:00 PM		4:50 PM	4:52 PM	1	2%

# PHASE ONE UPDATES

# PARKING ASSESSMENT Summary of findings

Parking Demand vs Supply (February 26, 2019)



## PHASE ONE UPDATES

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# **Security Master Plan (SMP)**



**York County Community College  
Wells and Sanford, Maine**

**Report Prepared by:  
Pamela Perini Consulting  
*Pamela Perini, PSP***

**May 14, 2019**

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## **1. Confidentiality**

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## **2. Introduction/Preface**

Pamela Perini Consulting is an independent Security Consulting Firm located in Waltham MA with over 35 years of professional experience in security planning, threat and vulnerability assessment and analysis, risk mitigation, systems evaluation, systems design and integration, systems specifications, infrastructure, cost analysis, vendor evaluation, system and vendor selection, construction administration, system commissioning and system testing. Pamela Perini, owner and principal consultant, is a certified PSP (Physical Security Professional) with ASIS International, is CPTED (Crime Prevention Thru Environmental Design) certified, holds OSHA10 Construction certified, and holds many FEMA certifications ranging from Active-Shooter to National Incident Management Systems (N.I.M.S) to Cybersecurity.

The primary intent of the Security Master Plan DRAFT is to provide the York County Community College with a set of guidelines and recommendations for the selection, implementation, management and operation of programmatic, procedural, physical, electronic, environmental and behavioral security modifications designed to minimize risk and maximize the protection of the Colleges employees, students, property and information. It is also the intent to potentially define campus standards and guidelines for systems and hardware to be retrofitted, or added, as the campus continues to grow. There is opportunity for economies of scale with labor and materials, and continuity of systems will allow for uniformity and remote access. Some of these opportunities will require further assessments and analysis.

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The Security Master Plan uses Vulnerability/Risk Analysis as a foundation for developing guidelines and recommendations, and incorporates an assessment of current threats faced by YCCC. The Vulnerability/Risk Analysis is further used to define the priorities for a set of risk mitigation recommendations. To develop the Security Assessment, Pamela Perini Consulting has performed site surveys and interviews, analyzed crime index data, reviewed the relevant technologies, and assessed the campus facilities physical environment with respect to the safety and security of students, faculty, staff, visitors and property.

A final goal and objective of the Security Master Plan Draft, is to provide Safety and Security Program to be presented as a marketing tool to speak of the campus's preparedness. Preparedness will show potential students that the campuses are a safe and secure educational environment. Safe and secure environments are germane to the learning process and all students, faculty and staff deserve a safe and secure environment for 21<sup>st</sup> century learning.

### Sources of Information

To achieve the goals of the Security Master Plan Draft, Pamela Perini Consulting utilized data gathered from three primary sources: crime statistics, site surveys, and interviews. The information collected is utilized throughout this report and is applicable to each of the subsequent sections. This Section details the relevance of the data as well as the processes used to gather this data.

Crime Statistics are representative of crime levels in the areas surrounding the College campuses that were collected from a CAPIndex report. The purpose of this report is to provide a benchmark to utilize as a metric. This methodology should also be utilized moving forward to measure against past, current and future trends in crime in the area moving forward. It is recommended that a report be run every year to measure unanticipated trends. Using the Uniform Crime Reporting Index (UCR) that is encapsulated in the CAPIndex, the information along with other methods gives the report an unbiased view of the local crime. Pamela Perini Consulting typically utilizes this CAPIndex which extrapolates crime threat probabilities relevant to the campus. The statistical data includes an analysis of local, county and neighborhood crime levels compared to state and national incident statistic averages. This data is used in conjunction with the survey findings and interview data to provide a baseline for the Vulnerability/Risk Analysis.

The CAPIndex (reports provided under separate cover) unveiled a fairly low incident of crime on both the York County Community College Wells and Sanford, ME campuses. This however does not relieve the institution of liability and responsibility for those crimes that have **LOW PROBABILITY WITH HIGH CONSEQUENCE**. Risk is always fluid and unpredictable. We cannot foresee what will happen given different variables of a different day or hour. The best we can do is to prepare as best we can for those incidents that may not be foreseeable and somewhat predictable.

Clery Act statistics are specific crime statistics data reported to the Federal Government in compliance with the 34 CFR 688.46. The Clery Act requires all college and universities receiving federal financial aid funding keep, and disclose

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crime statistics on campus and in the surrounding area in an Annual Campus Security Report issued to the US Department of Education by October 1 each year. The Clery Report for the campus too showed low crime. Here again it is the low probability high consequence crime that needs to be prepared for. Mental Health and the associated safety and security risks, brings about its own set of unpredictability that needs to be prepared and trained for.

### **RISK IS FLUID and unpredictable.**

Surveys provided key information used in the preparation of the Security Master Plan Draft report. This survey process provided data collected regarding current threats and vulnerabilities on each campus (It is recommended that the Campuses develop a full threat assessment program for annual checks).

Surveys with Mark Pederson onsite, and phone surveys included:

- An examination of the campuses, its buildings, structures, athletics facilities, and parking areas together with review of the currently implemented risk mitigation measures, which was used to assess the extent of applied physical security methods and their effectiveness.
- A lighting and landscaping survey conducted to evaluate the quality and consistency of each on campuses, from a safety and security perspective.
- A very high-level review of the safety and security Policies and Procedures.
- Interviews with available stakeholders.

The survey process examined the site location, vehicular access to or approach to the sites, parking, the architectural configurations of site buildings and structures, and access to and security of athletic and ancillary facilities. Additionally, for systems, an evaluation of the existing systems that are utilized on the campuses, the infrastructure used for their function, and their effectiveness and cost effectiveness. Where utilized the main systems evaluated included Access Control, CCTV and Intrusion Detection. The campuses also utilize Mass Notification System for emergency communications. The methodology employed by Pamela Perini Consulting in conducting the assessment for the physical site, building, lighting and landscaping for systemic protection is based on the principles of CPTED (Crime Prevention Through Environmental Design) along with ASIS International's ASIS GDL FPSM (Facilities Physical Security Measures Guidelines). The focus and basis of any Physical Security Program should be Concentric Circles of Protection and particularly on College Campuses, the CPTED principal of Natural Surveillance. Concentric Circles of Protection is based on varying levels of protection originating at the external area. It is a layering approach to stop or slow down an adversary. Examples may include access control to the building entry points, emergency exit only hardware on perimeter doors, interior motion detection and/or glass break detection for after hours, and interior access control and alarm doors protecting sensitive internal areas like IT spaces.

The CPTED principal of Natural Surveillance focuses on people's ability to view the space around them. When visibility is high, the likelihood of crime drops as there is an overall campus awareness. The Natural Surveillance concept also brings into effect the use of night time lighting or reviewing the planting of trees that may

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decrease line of sight as they mature. These exterior conditions of lighting and landscaping need to be continually assessed in order to evaluate their effectiveness.

To accomplish the goal of the Master Planning process, the Security Master Plan will begin with an explanation of the high-level data Pamela Perini Consulting was able to derive through the interview and survey process.

York County Community College engaged Harriman for their expertise and assistance in writing the Campus Master Plan. Harriman in turn hired Pamela Perini, PSP, and Pamela Perini Consulting as the resident expert for Security Consulting on their Master Plan for the Security portion of the plan. This report focuses on the security program and provides security recommendations for both Wells Maine and Sanford Maine Campuses of the York County Community College.

### **Introduction of York County Community College**

Community Colleges have unique challenges as it relates to their student population. The faculty and staff have limited exposure to the student population, and are sometimes unable to fully assess the student's capacity or risk to the institution. The higher educational environment typically has their student body living on campus. The Community College environment provides for a more transient population whereas the students do not live on campus. The following are identified by the York County Community College:

**YCCC's Mission** - York County Community College provides academic, career, and transfer programs while serving to advance cultural, economic, and workforce development in York County and the State of Maine.

**YCCC's Vision** - At York County Community College, we celebrate each student's individual success. While we recognize academic progress as an important part of their journey, we appreciate the value of life experience, personal development, self-awareness and the pursuit of learning.

Connections and individual attention are at the heart of our relationships with students. Whether they spend a semester or several years at our college, students will leave knowing they have been part of a community that has invested in them as a whole person. We are committed to empowering each student to achieve their full academic potential and accomplish their personal goals.

### **YCCC's Core Values**

- *Accountability*  
We are responsible to our community and we consider the impact of our actions and decisions through transparency and inclusion.
- *Innovation*  
We promote curiosity and discovery by supporting continuous growth with particular emphasis on new educational strategies, emerging technologies, and organizational development.
- *Cooperation*

We value collaboration through mutual contribution and collective efforts by combining the talents, experience, and skills of the College community.

- *Empowerment*

We appreciate and value the inherent potential of our community and YCCC makes a conscious commitment to assist people in achieving their academic, personal and professional goals through intellectual engagement.

### **YCCC's History**

York County Community College was established in 1994 as York County Technical College (YCTC) by the 116th Maine Legislature. In 1995, YCTC opened with an enrollment of 156 students as well as three associate degree programs and two certificate programs. In December 1995, YCTC earned candidacy accreditation status from the New England Association of Schools and Colleges. Full accreditation status was obtained in 1999. In November 1997, YCTC began classes in a new building. In later years, the building was expanded. YCTC changed its name to York County Community College in July 2003.

The main campus of YCCC is located at 112 College Drive in Wells, Maine. There are currently two buildings on this campus. The main building is a two-story 77,000 square foot building, and the second (and new) building is the 18,000 sq. ft. Pratt & Whitney building. The Wells campus sits on 84 wooded acres of land. The Wells campus is accessible from Route 1, Route 109 and the Maine Turnpike, Exit 19. College Drive is located off of Chapel Road. The new remote campus is the Sanford Campus. There is a single facility on the Sanford Campus that houses their precision machinery certification program. The Sanford Campus building is currently going thru a fit out of the building to add classroom space.

York County Community College is one of seven colleges in the Maine Community College System. YCCC is a two-year public institution. The college serves approximately 1700 credit students in Wells, ME and Sanford, ME. YCCC students are also at area high schools, are non-credit/workforce students or are enrolled online.

## **3. Acknowledgements**

Pamela Perini Consulting is very thankful, and quite grateful to those that participated in the interview process, and provided information regarding the operations at both the Wells and the Sanford Campuses. Most specifically, we would like to thank Mark Paradis, Safety & Security Manager, who was kind enough to escort PPC around both campuses, as well as provide information and data, and inform us of the various process and policies that the campus currently functions under.

## **4. Executive Summary**

Pamela Perini Consulting was engaged by Harriman to assess existing Security Program conditions and provide a Security Master Plan draft report. The process

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would include a high-level assessment of existing conditions of the two campuses. The most effective way for the York County Community College to build a long-term Security Master Plan and Program is to create a physical and logical security committee team. The team should consist of various members of the Community College campuses that represents Security, IT, Facilities, Capital Planning and Construction, and the Finance and Administration Department. While developing the team, it is equally important that the number of members be limited. Typically, no more than eight (8) members should be assembled for the program.

The security master plan's development should outline the operational aspects of the Campus Safety and Security, along with long-term systems information and compatibility, communication infrastructure, product obsolescence and life cycle, long term costs on materials and labor, and many other items including guard services and security staff. It should be noted that although security technology is important to the enhanced reactive response to issues and concerns on campus, it does not function exclusively without a programmatic view of policy, processes, training and the like. It is also noted that communication with outside agencies (Local First Responders, Police/Fire, MEMA and FEMA as examples) is critical, and their involvement in the planning process is germane to its success.

The Committee needs to understand and assess current vulnerabilities and risks, the current measures in place to mitigate the risks, and how to measure the effectiveness of the implemented measures. Pamela Perini Consulting has conducted interviews and discussed daily routines of faculty, staff, students, visitors, contractors, delivery services and the like with Mark Paradis, Security Director, as a critical segment of the overall design of a campus Security Master Plan. Site visits and previews were also done as an important part of gauging the campus functions and temperament.

The interviews with Mark and staff were valuable in assessing the overall campus security program. These interviews and discussions provided valuable insight into the effectiveness of current physical security measures in place, and how they align with the perceived level of vulnerability and risk.

## **5. Risks, Hazards & Threats**

Risk and the reduction of risk are key goals for any thriving and growing organization. When reviewing risks, there are a number of actions that may be taken: we can eliminate the risk, we can mitigate the risk, we can transfer the risk through methods like insurance, and we can accept the risk. These risk decisions made by upper management that may have consequences that may be small or sometimes quite large. Prioritization of safety/security remediation measures are based on risk analysis and a course of action acceptable by York County Community College administration and management.

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When assessing these risks, outside resources such as CAP Index Inc. were utilized to provide crime forecasting models, as well as loss mitigation solutions designed to accurately identify the risk of personal and property crimes. Although this forecasting tool is an industry standard and shows the limited risk associated with the York County Community College Campus locations, it does not take into consideration the various mental health and welfare crimes.

The expansion of the York County Community College Campus is a factor of consideration for the Security Master Plan. As noted, there are challenges with system compatibility, enterprise management and additional labor costs associated with inefficiency if not planned correctly. Understanding the campus' long-range plan for construction is critical in the overall security master plan. The security director or the security administrator, needs to also understand how new sites (like Sanford) new buildings, parking lots, garages, walkways, roadways and other projects, will affect the current physical, operational and logical security master plan. The same planning practices should apply for any changes in the student and faculty population/make-up, an increase in faculty and staff numbers, and increased vehicle traffic.

With the convergence of Physical, Logical and Operational Security, it is increasingly important that these components of the overall Security Master Plan be assessed collectively as well as independently. Integration of the three are terrifically important because of the convergence of their functions. A largely relevant Security challenge with most growing Community College Campuses, is found in the prior implementation of the Security Programs and Security Systems. There typically, as in here, is a lack of a cohesive planning and systemic continuity. This provides for a disconnected physical security program that is unmanageable from a single location. The integration of existing security systems hardware/software into new security platforms can be a challenge. With IP and cloud-based technology in Security Systems, the Security Director and others, needs a clear understanding of the current design of systems, the supporting infrastructure, and the security goal of adding any hardware and software.

Security technology's compatibility from building to building, campus site to campus site, and accessibility from remote locations is critical for a Security Department Director and staff to manage. Additionally, the interoperability and compatibility of existing and new systems is critical as the campus, buildings and systems expand and grow. Many security systems of the past have limited or no ability to integrate with today's physical security products, and as technology continues to evolve, the integration and convergence of these technologies is paramount in the continuous evolution of campus physical security systems and the overall programs.

Additionally, the security staffing is always a business challenge for the security department. Assessing the needs of the two campus sites and gauging the needs of the campus becomes a budgeting challenge due to recurring costs. Building a case for need is as important as the need itself. The new Pratt & Whitney

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Building with its auditorium and open classrooms, provides the perfect venue for events. The Pratt & Whitney building currently has organizations booking the space out thru October of 2019. With this new interest, the Security of the Campus should be reassessed for safety and security staffing, particularly on weekends.

It is critical to understand changes to the Campus customers, and make the necessary budgeting changes for new building designs, purchase of new property, and the increase of traffic and personnel. Documenting responsibility, service and deliverables will assist in setting the groundwork of the return on investment (ROI) and temper the overall approval process with new security staff. The justification of increased Security Budgets and numbers are far more acceptable with hard numbers and increased hard needs.

The campuses have not provided for a Security Operations Center, but instead has opted for the Security Directors office to have access to local Video systems, and security related tasks to be performed out of his office. A Campus Operations Center is something to consider as the campus continues to grow. The current utilization of the Security Directors office works today, but as the College expands, Security Staff is added and systems grow, there will be a requirement to house a Security Operations Facility.

Another important function of the campus Security Operations Center would be to effectively manage, respond to or deliver information to areas of the campus and other security staff who are responding to critical issues, alarms or disturbances. Evacuations and lockdowns are examples of conditions that require active response from a Security Operations Center.

The York County Community College Wells and Sanford Campuses infrastructures are areas within the campus that rely on the continuous, reliable operation of a complex set of interdependent infrastructures: electric power, gas, transportation, water, communications and more. This infrastructure is critical to the Campuses daily operation and function. Disruption and/or failure in any connection of the campuses systems, could create disruption of the entire campus systems. Many of these systems are known to be vulnerable to physical and cyber threats, and failures may create vulnerabilities that leave the campus open for overall attack.

Another primary goal of the York County Community College Security Master Plan is to validate the operation and consistency of the overall security program, security processes, security systems, and protection of assets. The Security Master Plan should be a fluid document that is augmentable to current risks, vulnerabilities and threats. The Plan should be subjected to a rigorous annual review process that will identify and quantify its effectiveness. Auditing the Security Master Plan annually creates active involvement of the security team and each department throughout the campus, to collectively review the campus safety and security.

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## **6. Key Findings and Recommendations**

The high-level vulnerability/risk/threat assessment and observations provided a number of deficiencies for consideration. The observations provided by Pamela Perini Consulting will assist in identifying threats, and thereby provide viable mitigation solutions to increase safety and security on the campuses. Here again to repeat Risk is fluid and unpredictable, and no measure will mitigate risks, vulnerabilities and threats 100%. The Campus decision makers do have options when addressing the threats, risks and vulnerabilities. They are; accept the risk, mitigate the risk, transfer the risk, provide other measures to address the risk like insurance.

Included among the specifically identified deficiencies that have risk or increase the campuses vulnerability, and recommendations include (in no particular order):

### **Wells**

- There is a lack of connection (and limited communication) between Physical and Logical Security on Campus
    - The current configuration of these functions is not connected but needs to be. There is correlation between physical and logical security that needs to span IT, Security and Operations/Facilities. Without this connection, the management of the security systems is costly. All of the systems require infrastructure/IT, network connectivity, electricity and integration. Access Control door require electrified locking hardware that is typically managed by facilities. There is relationship between these software/hardware components that needs to be assessed and strengthened.
  - The best-case scenario from a building access control standpoint is to have a single means of ingress/entrance to any one building. This is the only way to control who comes into the building. Controlling buildings to limit entrance will also allow the campus to know who is on campus. It is an auditing tool for any required muster reports. Additionally, it is difficult to control unwanted persons on the campuses that may be under restraining or harassment orders. Controlling entrance into buildings through a single door set will allow for better control.
  - Increasing Access Control in general on the campus will provide for less needed key control. When access control doors are added to any facility there is a lower need for keys. This allows the campus to again better control who has access to buildings, and locations, and when. Should keys go missing on campus, costly re-keying is not required.
  - There is a disconnect of building systems from building to building that is very costly. It becomes costly from a long-term management standpoint.
    - Security Director (Mark Paradis), is required to drive from building to building to retrieve video for forensic activities (post incidents.)
  - There is a lack of written policy as I have seen.
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- The signage coming into both campuses lacks clarity. Additionally, the main entrances to all facilities is very poor. Way-finding to and on both campuses is lacking.
- The Campuses should consider large format LCD Monitors at the main entrances of all buildings. This sends a message of safety and security on the campus.
- Detailed signage for parking needs improvement.
- There is a lack of video surveillance cameras for to high value/high attractive nuisance targets, and building perimeters.
- The campus should consider adding IR cameras in the Pratt and Whitney Building Auditorium. This space has large groups gathering inside, and IR Cameras would prove visual inside the space under low light conditions, and in the case of an emergency incident.
- The local Police and Fire cannot have access to a single video system of the Wells campus with its current configuration. The Camps needs to truly assess this and make change that will provide for a single video system with remote access for local first responders.
- “My YCCC” is the internal platform by which many student, faculty and staff communications and functions are controlled. The Campus should consider a series of required videos for incident training that would be added for onboarding and introductions to campus safety & security. FEMA provides many great free online videos.
- Security landscaping guidelines and recommendations should be developed as the potential for ramming the new Pratt & Whitney building, by accident or intentionally, is high. There are a number of vulnerable approaches to the new building.
- It was suggested that the night time lighting is insufficient and needs to be assessed.
- Detailed criteria and guidelines for all building, parking and site location selection of electronic security components and devices needs development.

### **Sanford**

- Here again the Sanford campus has no continuity of systems and does not work in conjunction with Wells. A lack of centralized control is costly to the campuses.
  - The Parking at the Sanford campus is not labeled and way-finding is lacking.
  - Tool theft happens and there is no video surveillance to speak of inside the building.
  - The opportunity for more industrial type risks and accidents is high given the certification program and the dangerous automated equipment. The student training at the Sanford campus should be reviewed.
  - The perimeter lighting is poor.
  - The Sanford campus cannot perform a lock down from a single location.
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Safety and security should be a priority for the Wells and the Sanford Campuses as well as the local community. As a result of attacks on college and K-12 campuses, there are heightened concerns for security even in rural communities. These threats coupled with the potential of natural disasters, especially in coastal communities where tides are rising, destruction of property and other acts of nature have renewed our view of locations and the community's ability to react to these threats. Heightened awareness is necessary for students, faculty, staff and first responders.

There are many potential threats, risks and critical incidents could include accidents, natural disasters, sabotage, civil unrest, hazardous materials spills, criminal activity, or acts of terrorism. Regardless of the cause, critical incidents require swift, decisive action to protect life and property.

To establish the importance of safety, security and emergency preparedness in all aspects of the YCCC organization, the campuses should develop more of a written Safety, Security and Emergency Preparedness Plan that is enforced. The Institution will be able to make informed decisions that are appropriate for students, faculty and staff and community regarding the development and implementation of a comprehensive security and emergency preparedness program.

### **7. Multi Phased Implementation**

Pamela Perini Consulting recommends that the York County Community College develop and conduct an independent review of requirements for systems, and develop a guideline for the various campus security systems. By developing this list, the campus will be able to implement the standards over time. The systems to be included should will be Access Control, CCTV, Intrusion Detection and Campus Mass Notifications as deemed necessary.

It is unrealistic to assume the Institution would have funding available for a project to replace all systems at one point in time. It is however recommended for ALL projects moving forward, whether they be new construction, renovation or fit out, that there be a security component added to the project. Servers, switches and racks can easily be justified in any project and it would behoove the institution to include security components in every project, at the very least as an alternate deduct. The Security and Safety of the students, faculty, staff and visitors is a soft marketing point that will bring students and workers to enjoy the campus. It is the responsibility of the York County Community College to provide a safe and secure environment where 21<sup>st</sup> century learning may take place. A stable environment in a world of instability is comforting to students, and will make parents feel more comfortable with sending their children to this Community College

The CCTV system of the Sanford campus currently is not functioning properly. The classroom fit out project is the perfect opportunity to add a new video system. Pre-wiring with category 6+ cable to the IT closet would allow the campus to proceed

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## **Security Master Plan Report York County Community College**

later with the video system installation. Additionally, there will be lifts in the space and mounting cameras will be easily done.

The Intrusion detection system of the Main Wells campus building is on its at its end of life. Having continuity of Intrusion Detection Systems will allow the services to be performed internally without requiring assistance. The proper selection of the system is required for this. Some manufacturers (the Intrusion Detection System in the New Pratt & Whitney Building), will not assist owners in programming their own systems and require that a vendor program simple tasks like adding a user code. These systems are typically far less money at installation, but are very costly during the life expectancy.

The Access Control System that was installed at the Pratt & Whitney Building again is a single independent system that cannot be expanded upon. The goal of any Access Control System should be to have a single cost-effective platform that all campuses and buildings are controlled by that has a single head end. This provides for economies of scale in parts and labor, and is far more manageable from an auditing and monitoring standpoint.

The end point here being if the campus developed a list for security systems continuity, any architect would have the needed information to ensure the systems were extended to any new space. At the very least prep work should be done in any construction. It is far less costly to prepare for the system than it is to install the full system post construction.

## **8. Prevention**

Preparation and Prevention work hand in hand. The best means to prevent is to prepare and build awareness. While safety addresses the day-to-day issues of educating students safely and without accident, security deals with the entire educational environment and the potential for threats against it. Security also includes the York County Community Colleges community at large, and the response within the community to environmental hazards, criminal or terrorist acts, or natural disaster.

The York County Community College should perform an annual threat and vulnerability assessment to provide a framework by which to analyze the likelihood of hazards and threats damaging critical assets. Included in this assessment will be:

- Historical analysis
- Physical surveys
- Expert evaluation
- Scenario analysis

Pamela Perini Consulting recommends that the Institution look to FEMA for a list of recommended assessment items. Threat and Vulnerability Assessments will offer YCCC the ability to re-identify critical assets, along with new assets, and their

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vulnerabilities to threats. The annual occurrence will also allow the institution to develop and implement countermeasures, and to monitor and improve program effectiveness. The annual exercise will also identify which assets can they least afford to lose, whose responsibility is it to protect the assets, where do they assume total liability for risk, and where can they transfer risk to others, or mitigate risk through insurance.

Many of the standard Threats and Vulnerabilities assessed by most on an annual basis may include:

### **A. ACTS OF NATURE**

- Floods caused by heavy rain, storm surge, rapid snowmelt, ice jams, dam breaks or levee failures and can result in loss of life damage to facilities, danger to vehicles on roadways and loss of power and communications.
- Winter weather can cause power failures, make roads dangerous or impassable, cause sidewalk hazards, and affect the ability for the campus to function.
- Tornado/hurricanes have the potential to cause flying debris, down trees and/or power lines, make roadways impassable or dangerous, damage facilities or vehicles and threaten the safety of passengers and employees.
- Thunderstorms may trigger flash flooding, be accompanied by strong winds, hail or lightening, can possibly cause power or communication system outages, damage facilities and equipment and make roads dangerous or impassable.
- Earthquake (although unlikely) has the potential to cause extensive damage to buildings, water systems power systems, communications systems roads, bridges and other transportation infrastructure.

### **B. CRITICAL INFRASTRUCTURE**

- Power outages whether short or long in duration, can impact overall ability to operate the campuses and limit functional nature of equipment and facilities.
  - Computer crashes/cyber-attacks cause loss of critical data and negatively impact the ability to function from an educational standpoint, functional standpoint (utilities and systems) as well as a financial standpoint.
  - Communication system failure can have serious effects on the ability to deliver service and keep students, faculty, staff, employees and visitors informed of incidents and out of harm's way.
  - Facility loss, loss of administrative, maintenance, or operations facilities—whether caused by structural collapse, presence of toxic materials, violation of municipal codes, or significant events on neighboring properties can hamper the ability to sustain services at the campuses.
  - Staff shortage caused by labor disputes, poor human resource management, or regional employee shortages. Can have immediate impacts on ability to deliver service, and longer-term impacts on facility and equipment resources.
  - Employee malfeasance illegal and illicit behavior by agency employees, particularly when in uniform or on duty, can seriously damage intangible assets such as organizational image and employee morale.
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### **C. HAZARDOUS MATERIALS**

- Bloodborne pathogens exposure can put drivers, passengers, maintenance employees and bus cleaners at risk of contracting disease.
- Toxic material spills fall into four basic categories: blister agents such as solvents; cardio-pulmonary agents such as chlorine gas; biological agents such as anthrax; and nerve agents such as Sarin.
- Fuel related events include accidental release of natural gas and petroleum, rupture of pipelines, and fire and explosion involving alternative fuel use.

### **D. CRIMINAL ACTIVITY**

- Trespassing and penetrating of organizational security system can increase vulnerability to criminal mischief, theft, workplace violence, and terrorist attack.
- Vandalism/Criminal mischief includes graffiti, slashing, loitering, or other such events that damage property, facilities, assets and/or organizational image.
- Theft and burglary include loss of assets due to break-in to facilities and into vehicles as well as employee theft, and can threaten information assets, property assets, and organizational image.
- Workplace violence includes assaults by employees on employees, students, faculty, staff and visitors, and includes menacing, battery, sexual assault, and murder.
- Commandeered a vehicle is the taking of a vehicle to perpetrate a crime including ramming a building.

### **E. TERRORISM**

- Dangerous mail with chemical, biological, radiological and explosive devices delivered through the mail put the lives at risk.
- Suicide bombers internationally have been common terrorist threats. American transit systems and facilities near such transportation systems are not immune.
- Improvised Explosive Devices (IED). Activities could involve the use of conventional weapons and improvised explosive devices or bombs on transit vehicles, within transit facilities or within the environment of the transit service area, putting the lives of transit employees, passengers and community members at risk. Such events could require the use of transit vehicles in evacuation activities.
- Weapons of mass destruction is the use of chemical; biological or radiological weapons could cause massive loss of life involving everyone in the community and lead to destruction.

The recommended changes and enhancements within this document are focused on the Campuses Security Master Plan components that include electronic, programmatic, and physical security elements and are intended to lower the likelihood of incidents. The goal of the recommendation listing is to provide the District with a system to evaluate specific operational and procedural

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## **Security Master Plan Report York County Community College**

enhancements as well as to delineate specific locations where new security devices will be installed utilizing an objective ranking system.

Security measures for mitigating Risks or Threats may include:

- 1) Electronic Security Measures (i.e. access control, CCTV, intrusion detection)
- 2) Physical Measures (i.e. fencing or bollards, locked doors, window guards)
- 3) Process or Policy Measures (i. e. vetting of students or vendors, lock down policies and procedures, student, faculty or staff hand books and training)
- 4) Insurance
- 5) Accepting the Risk or threat.

## **9. Response**

Responding to incidents should be trained for, and drills and exercises should be done throughout the course of the educational year. Preparing for incident response is critical to response success. FEMA provides a number of free published documents that can assist the institution in planning for incident response, and performing exercises. Utilizing the Incident Command System model (N.I.M.S. or National Incident Management System) will allow the institution to have common language and practices with local first responders.

### **Internal and External Contact Information**

YCCC should maintain an accurate and up-to-date internal and external contact list information on key staff and board members required to respond to safety and security emergencies. This list should be reviewed annually for accuracies and changes.

### **Emergency Response Team Roster**

York County Community College should maintain an accurate and up-to-date roster that includes contact information of the incident management team in advance of any incident. This team should be based on the Incident Command System (ICS) model as outlined by FEMA, and includes representation from each area of the organization.

### **Phone Trees**

York County Community College should maintain an accurate and up-to-date call tree with staff names and phone numbers. The call tree enables everyone in the organization to be contacted quickly, with each staff member having to make no more than a couple of calls.

### **Delegation of Authority**

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York County Community College should have a plan to ensure continuity of management throughout any emergency incident. The succession plan provides for automatic delegation of authority in cases where:

- The Emergency Response Coordinator (ERC) or other agency incident response personnel are no longer able to perform incident-related duties due to injury, illness or exhaustion/rest and recuperation.
- A member of the incident response team is temporarily unable to perform incident-related duties due to loss of radio or phone service.
- Regular members of the agency incident response team are unavailable due to travel (e.g., vacation, professional development, etc.)

The succession plan designates the next most senior leader required to manage temporary duties normally assigned to higher-level personnel.

### **Coordinating with Stakeholders**

York County Community College should always proactively coordinate with local emergency management, law enforcement and other first responders in preparing for an integrated response to emergencies and security related events. The Security Team should meet on a regular basis with local emergency management staff, local law enforcement and other first responders, and reviews local and state agency emergency plans to ensure that the campuses are integrated into these plans. The campuses should be prepared to play its defined role in any emergency.

### **Coordination with Emergency Management**

Effective emergency response does not happen by accident. It is the result of planning, training, exercising, and intra/interagency cooperation, coordination and communication. Integration into the local community's emergency planning process is central to the success of the York County Community Colleges Security Master Plan. YCCC needs to fulfill all Security Master Plan functions including threat mitigation, consequence management planning, exercising and training, and post-incident analysis.

### **Exercises and Drills**

Practice is important in any Emergency Management Plan. YCCC should be committed to holding on campus response exercises and participating in community emergency response exercises. This commitment requires the transportation system and community public response agencies to plan and conduct increasingly challenging exercises over a period of time.

Exercises should range from table top to full-scale simulated incidents that tests one or more functions in a time-pressured realistic situation that focuses on policies, procedures, roles and responsibilities. It includes the mobilization of emergency personnel and the resources appropriate to the scale of the mock incident. Functional exercises measure the operational capability of

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emergency response management systems in an interactive manner resembling a real emergency as closely as possible.

### **9. Recovery**

The Security Master Plan would typically outline such detail as getting things back together after an emergency, incident or disaster can be a difficult process. The disaster recovery process, which includes establishing continuity of operations, resumption of normal operations, preparation of an after-action report, counseling for impacted students, faculty and staff, and the initiation of long-term recovery is a detailed process in and of itself. FEMA provides basic recommendations that are for consideration in recovery plans.

#### **Continuity of Operations**

After an emergency, the York County Community College management will evaluate the status of its assets, the condition of the campuses and community environment, and the needs of its customers. Upon the completion of that evaluation, steps are taken to restore to function as soon as is practical and possible and within the constraints of environmental realities, resource availability and safety considerations.

#### **Business Resumption**

Clean up and Inspection; York County Community College representation should inspect facilities, vehicles and organizational assets and property for damage or need for cleanup after an emergency. The purpose of this activity is to restore the campus and its assets to the state that existed before the emergency. Some recovery activities may be immediate while others may be long term (e.g., replacement of vehicles or facilities). The College needs to remember that although physical loss has costs, there is also “soft costs” associated with branding and the public persona associated with the College. Being prepared for emergency events, as well as the aftermath of business continuity challenges, puts emphasis on how the college will rebuild with the business continuity plan, and return the campus to its prior condition. Resiliency will prevail.

#### **Documentation of all Resources Including Vehicle Use**

After an emergency, York County Community Colleges planning and management documents should be utilized as resources after the event. The status and the condition of any property should begin the process of maintaining assets and bringing them back in service. Upper management should have assets documents that would be utilized for accounting of assets and condition/depreciation.

#### **Make Necessary Insurance Contacts**

The York County Community College management should review its insurance policies and coverage, and make contact with its insurance carriers to ensure timely reimbursement response. If the choice of risk transfer by way of insurance

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was utilized, proper process and documentation will be required. Additionally, the college should make appropriate changes to future insurance policies as may be deemed appropriate based on an evaluation of new risks, the effectiveness of the current policy, and its existent coverage. The annual risk and vulnerability assessment review will prepare the institution before this occurs

#### **Follow up Debriefing**

In order to mitigate the possible negative psychological effects of an emergency, the YCCC staff involved in emergency incidents should meet to discuss response activities and to process emotional issues that may arise. The management and administration should ensure the availability of support services to all parties who may have been directly or secondarily impacted by the event, including family members of all employees involved.

#### **After Action Report**

Following an incident, YCCC management and administration need to complete a report to assess the responses of personnel during the incident. This information is used to modify policies, provide additional training, and give feedback to those involved to enhance future incident responses. This report focuses on such issues as the emergency notification process, the establishment of incident command, the incident communication system and strengths and weaknesses of the response effort.

#### **Crisis Counseling**

In order to mitigate the possible negative psychological effects of an emergency or incidents of violence on York County Community College's campus, faculty, staff and students, it is recommended that when preparing counseling that there is the probability of Post-Traumatic Stress Disorder and the administration should ensure that the availability of support services to all parties who may have been directly or secondarily impacted by an event.

York County Community College mental health professionals should commit to providing such support including a mandatory post-incident debriefing, making referrals to professional counseling resources, being an empathetic good listener and doing anything else that can provide assistance to those involved in emergencies or incidents of violence. Consideration is given to the possible impact on York County Community College personnel's family members as well.

#### **Long Term Recovery**

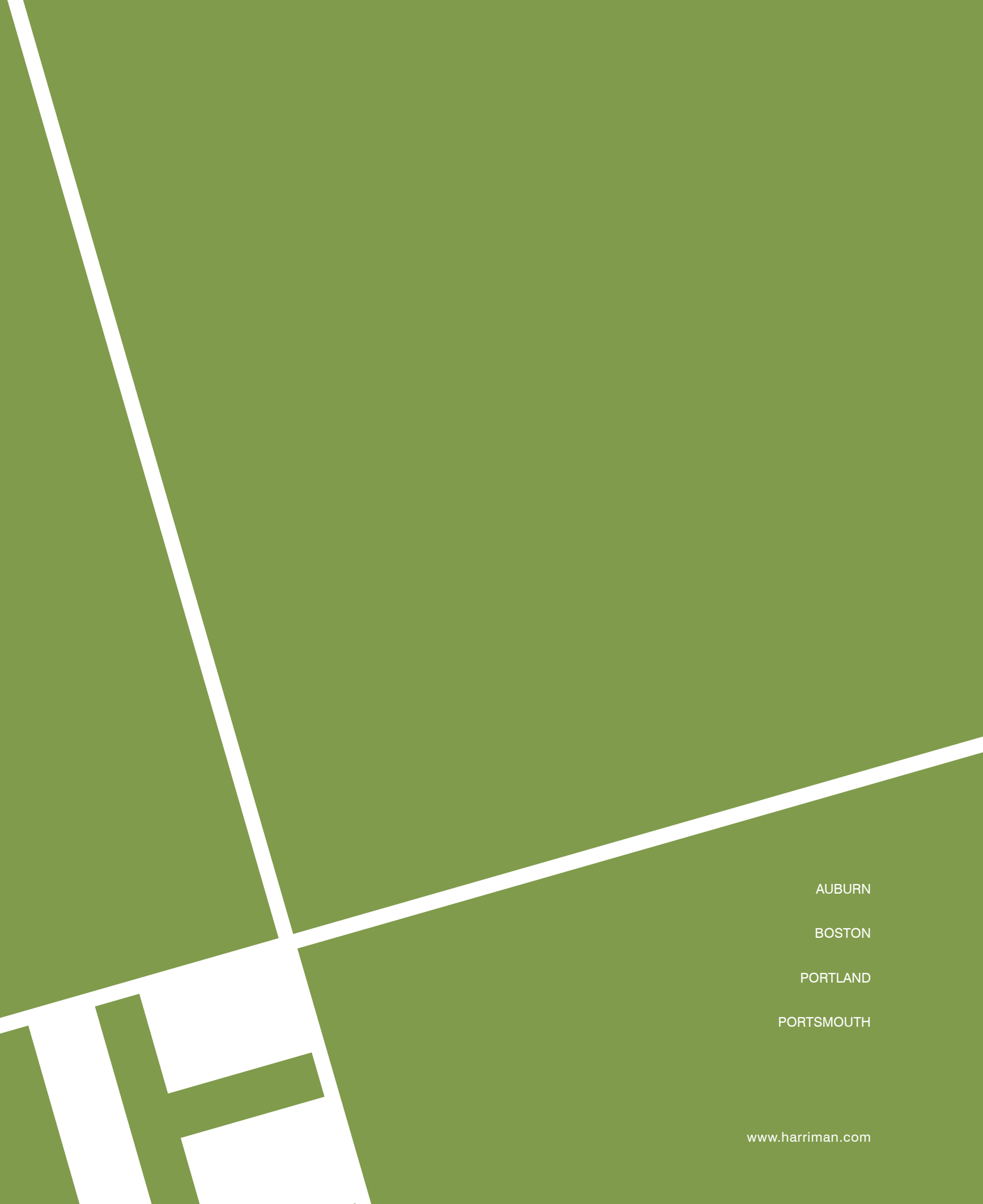
The goal of long-term recovery is to ensure that The York County Community College, and the surrounding community, emerges from crisis even stronger than it was before an event. York County Community Colleges long term recovery initiatives include the following steps:

- Analyzing the After-Action Report and developing long term recovery strategies based on the assessments contained in the report.
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- Determining the financial impact of the emergency on the educational institution and budget for recovery, including insurance reimbursement and non-reimbursement issues, and federal and state financial assistance opportunities.
  - Building relationships with emergency management and first responders based on FEMA standards, and coordinated interagency reaction to the event.
  - Initiating public relations activities to rebuild confidence of customer and the community as a whole.
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