



# Six Year Capital Plan 2015- 2020

November 2013

# Hocking College's Six-Year Capital Plan

2015-2020

## Introduction

With more than 50 associate degree programs to choose from, Hocking College offers nearly 4,500 students a quality educational experience that is flexible, affordable and applicable to their career goals. Set in the scenic town of Nelsonville, Ohio, the 2,300- acre institution is rich in history, nature, art and culture. Hocking College also has the Perry Campus located in New Lexington, Ohio and the Logan Campus in Hocking County. In addition to the college's on-campus residents, who attend Hocking from throughout the United States and around the world, local students commute from all over Southeastern Ohio.

Hocking College was founded in 1968, and served 234 students enrolled in 12 technical degree programs. The growth of the college in program offerings and enrollment has consistently surprised skeptics who, from the beginning, have said that a primarily rural area with a large university nearby could never support a technical college. Currently, few people in the area remain untouched by the college's programs and services.

Hocking College has a long history of serving the needs of Appalachian southeastern Ohio by providing quality education and improving the economic development of the region. The college impacts the local economy in several ways. First, the earnings of approximately 500 Hocking College faculty and staff, and the operating capital and expenditures of the college, are injected into the local community. Second, both residential and commuter students who travel to campus spend money locally. Finally, the majority of Hocking College graduates live within a 50-mile radius of the college. Therefore, the increased earning potential of the students who obtain a degree/certificate has a direct impact on the region.

Hocking College's Six-Year Capital Plan was created by analyzing the major initiatives of the college's Strategic Plan, Campus Master Plan and Master Technology Plan to ensure requested projects align with the college's vision.

In order to compile the list of projects to be submitted for capital funding, a cross-section of colleagues throughout campus provided consultation, including personnel from the IT Department, Campus Police, Academic Affairs, Physical Plant, Finance, Hospitality, Catering and Events, Library, Administrative Services, President's Office and Tri-County Adult Center.

The results of this collaboration have materialized in Hocking College's capital request to fund 23 projects over the next six years. Projects include: 1) the Workforce Development and Training Center renovation, at the current Inn at Hocking College; 2) replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years; 3) campus wide sidewalks and exterior lighting; 4) integrated security system; 5) library renovation; 6) music program facility renovation; 7) equine facility renovation.

## Higher Education Six-Year Capital Plan 2015-2020

Campus Name **HOCKING COLLEGE**

(highest priority first)

	BIENNIUM	UNIQUE PROJECT TITLE	STATE FUNDS	LOCAL FUNDS	OTHER FUNDS
	<b>2015</b>	<b>Total capital funds requested</b>	<b>\$5,982,000</b>		
Project 1	2015	Workforce Development and Training Center (WDTC) renovation	\$3,500,000		\$320,000 Appalachian Regional Commission (ARC) grant
Project 2	2015	Roof replacement (Light Hall)	\$400,000		
Project 3	2015	Chiller and associated plumbing replacement (Light and Oakley Halls)	\$350,000		
Project 4	2015	Integrated Security Solution (college-wide)	\$500,000		
Project 5	2015	Campus-wide sidewalk and exterior lighting renovation (Nelsonville Campus)	\$1,000,000	\$200,000 from HC Parking Auxiliary	
Project 6	2015	Music program renovation	\$232,000		
	<b>2017</b>	<b>Total capital funds requested</b>	<b>\$4,750,000</b>		
Project 7	2017	Chiller and associated plumbing replacement (Natural Resources)	\$100,000		
Project 8	2017	Roof replacement (Natural Resources Building)	\$100,000		
Project 9	2017	HVAC replacement (Public Safety Services)	\$150,000		
Project 10	2017	Library renovation	\$300,000		
Project 11	2017	HVAC replacement (Perry Campus)	\$200,000		
Project 12	2017	HVAC (Shaw)	\$250,000		
Project 13	2017	Roof replacement (Shaw)	\$90,000		
Project 14	2017	HVAC replacement (McClenaghan Center for Hospitality Training )	\$350,000		
Project 15	2017	HVAC replacement (Warehouse)	\$90,000		
Project 16	2017	Roof replacement (Warehouse)	\$70,000		
Project 17	2017	Replace steel roll up doors (Auto Petro/Fleet)	\$50,000		
Project 18	2017	Equestrian educational facilities renovation - Phase I	\$3,000,000		
	<b>2019</b>	<b>Total capital funds requested</b>	<b>\$4,630,000</b>		
Project 19	2019	Chiller and associated plumbing replacement (Davidson Hall)	\$100,000		
Project 20	2019	Roof replacement (Davison Hall)	\$250,000		
Project 21	2019	HVAC install (Auto Petro / Fleet)	\$30,000		
Project 22	2019	Roof replacement (Oakley Hall)	\$250,000		
Project 23	2019	Equestrian educational facilities renovation - Phase II	\$4,000,000		\$6,000,000 HC Foundation campaign
<b>Six-Year Total</b>			<b>\$15,362,000</b>	<b>\$200,000</b>	<b>\$6,320,000</b>

**Campus Name:** Hocking College

**Project Number:** 1

**Project Title:** Workforce Development and Training Center (WDTC) Renovation

**Biennium:** 2015

### **1. Project Description:**

In January 2012, Hocking College developed a unique partnership with neighboring Tri-County Adult Career Center to work collaboratively, rather than competitively, to expand local workforce development training opportunities to area business. The college and career center share a workforce training office and present themselves as one entity to the business community. This has created a single point of contact for area businesses to access staff training and continuing education.

Since its inception, the partnership has been actively planning to open a state-of-the art training facility for use by its business clients and the community at large. The purpose of the Workforce Development and Training Center (WDTC) is to help build the capacity of area companies and small businesses by providing them with a state-of-the-art facility specifically designed to meet their technology, training, continuing education, and conference space needs, while simultaneously enhancing the skills of the incumbent workforce in Appalachia.

To that end, in September 2012 partner Tri-County Adult Career Center was awarded an *Appalachian Regional Commission* federal grant totaling \$312,000.00 to fully equip the WDTC with wireless capability, 30 desktop computers, laptop cart, projectors, white boards, high tech lecterns, document camera, microphone system, video conferencing capabilities, copy machine and other related business training equipment and furnishings.

The training facility is a major part of Hocking College's renovation plan for renovating an existing building (Inn at Hocking College) in order to develop a state-of-the-art Workforce Development and Training Center. The WDTC will include amenities such as a computer lab, professional testing center, a board room, and flexible, multi-use spaces. By co-locating in the same building as Hocking College's Hospitality and Culinary Arts programs, the facility will allow business clients to have the advantage of on-site catering and studio apartments for their meetings and special events. The WDTC will employ staff dedicated to meeting the needs of the businesses utilizing the space.

## **2. Explain why this project is a priority:**

A number of elements combine to make this a priority project for Hocking College. Creating the Workforce Development and Training Center would satisfy the following three objectives in the college's 2010-2015 Strategic Plan:

- *Provide training services to the region's existing workforce and employers through an Office of Workforce Development*
- *Expand community and continuing education opportunities for life-long learners*
- *Foster collaborative partnerships with other institutions*

Additionally, funds awarded to Tri-County Adult Career Center by the *Appalachian Regional Commission* federal grant totaling \$312,000.00 were to be expended by August 2013. However, an extension has been granted assuming a February 2015 renovation completion. If this timeline is missed, the grant funds will be in jeopardy.

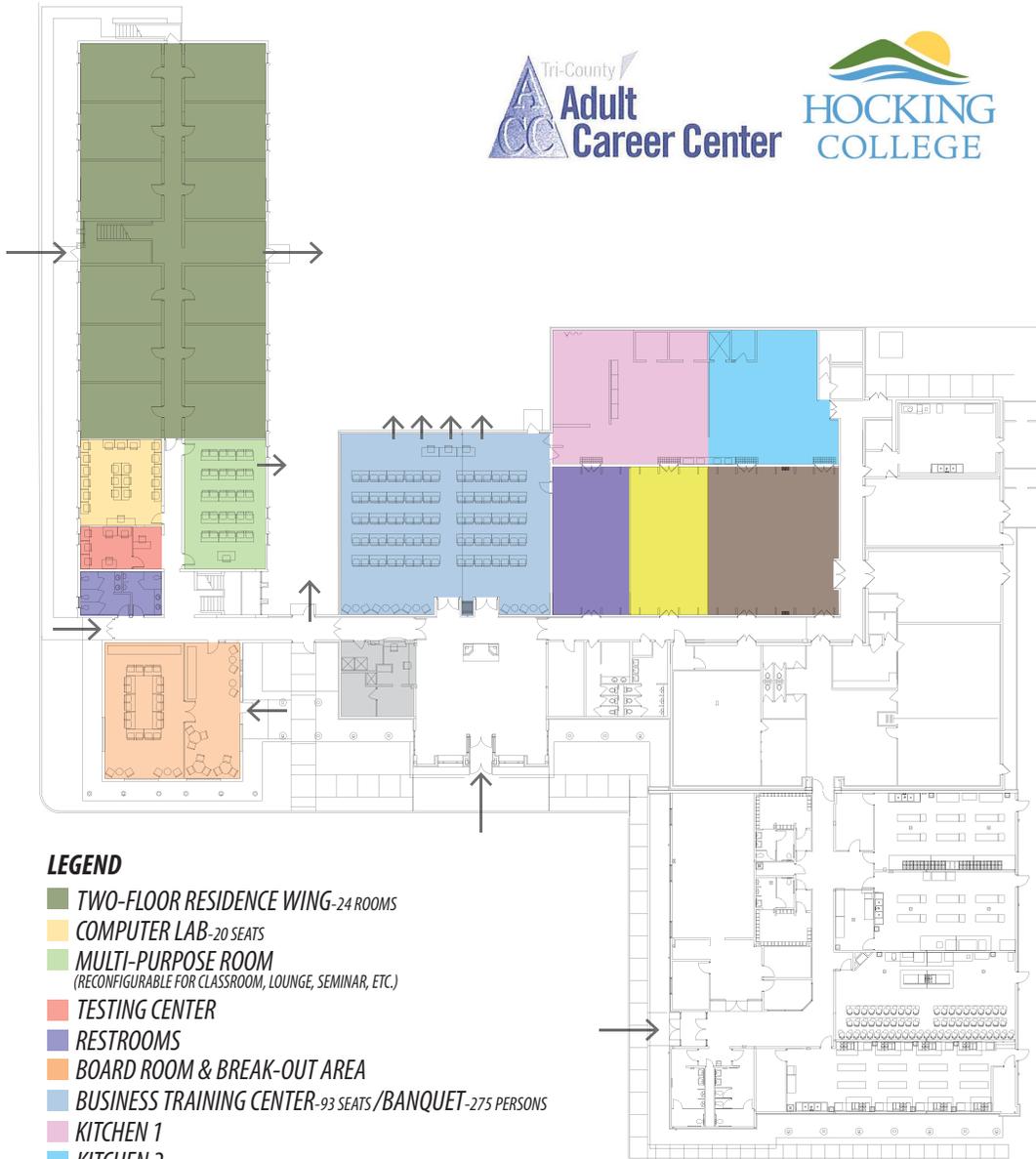
## **3. Explain how the project fits in with the Funding Commission's guiding principles:**

The renovation of the facility previously known as the Inn at Hocking College is a perfect fit with the Funding Commission's guiding principles.

### ***A. Investing in maintaining our existing facilities –***

Hocking College is requesting capital funds to renovate the 49,900 sq ft building previously known as the Inn at Hocking College, rather than construct a new building. The renovation project will allow the facility to service a greater purpose for the community and our students. The previous Inn at Hocking College has been at the center of local celebrations for decades hosting weddings, reunions, celebrations and serving as the primary meeting space in Nelsonville, Ohio. Now with a prime location directly off the new ST RT 33 bypass, the Workforce Development and Training Center renovation project will assist in meeting the demand associated with the severe shortage of large meeting/gathering spaces in surrounding counties.

In partnership with Tri-County Adult Career Center, Hocking College will create a Workforce Development and Training Center consisting of the following elements specified on the below conceptual drawing:



**LEGEND**

- TWO-FLOOR RESIDENCE WING-24 ROOMS
- COMPUTER LAB-20 SEATS
- MULTI-PURPOSE ROOM  
(RECONFIGURABLE FOR CLASSROOM, LOUNGE, SEMINAR, ETC.)
- TESTING CENTER
- RESTROOMS
- BOARD ROOM & BREAK-OUT AREA
- BUSINESS TRAINING CENTER-93 SEATS /BANQUET-275 PERSONS
- KITCHEN 1
- KITCHEN 2
- EXPANDED PASTRY KITCHEN
- BANQUET BREAK-OUT SPACE
- CAPSTONE KITCHENS
- BUSINESS TRAINING CENTER ADMIN.

**CONCEPT PLAN**

**WORKFORCE DEVELOPMENT &  
 TRAINING CENTER**

***B. Stimulate creativity by advancing strategic collaborations through partnerships both on campus and with others in the public and private sector.***

The vision for the Workforce Development and Training Center is that of a regional centerpiece for learning, collaborating, innovating and celebrating in an area that sorely lacks such a space. The synergy will come from the merging of business, community and higher education under the same roof.

In rural southeast Ohio, finding strategic ways to collaborate and partner is a way of life. In an area with limited resources, it is how we have always survived. It was in this spirit that the workforce development partnership between Hocking College and Tri-County Adult Career Center grew. The first of its kind in Ohio, our shared services model for collaboration is one that other public institutions of higher learning are considering replicating. The partnership not only saves money for both institutions, but also provides a single point of contact for businesses in the region when they need employee training. Having a physical home for the Business Training Center is the next step in our shared mission to advance regional economic development.

Part of the renovation will include a Pearson Vue testing center that will be open for the public to take professional certification tests. Hocking College is looking at ways to make their students more employable by attaching additional industry-recognized credentials to the student's course of study. Having the testing center on campus will enable students to take these certification exams and get their results quickly without undue travel and expense.

The college has many strong ties within the business community with still many opportunities yet to discover. The training center will provide a whole new context for exploring and expanding these partnerships that benefit both the business sector and the college. Our students will benefit tremendously from the hands-on experience gained from working in the center and interacting with its business clientele.

***C. Strengthen our ability to respond to new or increased workforce development opportunities in the state***

*“Appalachia is at risk of falling behind in the implementation and use of modern technology and telecommunications, necessary components of competitiveness in today's economy. In this time of economic challenges and rapid change in the way business is conducted worldwide, ARC is working to ensure that Appalachia's leaders and citizens have the capacity, capability, and resources they need to build and strengthen their local economies.”* Moving Appalachia Forward: Appalachian Regional Commission Strategic Plan 2011-2016, p. iv.

Our region of southeast Ohio is without a dedicated space for workforce development and business training. While there are a handful of places to hold meetings and trainings (restaurants, hotels, state parks), no facilities are designed with the technology needs of business as the driving concern. This fact became apparent in 2011 when a large corporation interested in locating in southeast Ohio wanted access to a training center for employee training and development, and we had no such facility. This was the impetus for the Tri-County Adult Career Center and Hocking College, along with other public and private partners, to begin planning the workforce-training center.

Not only will the creation of a workforce development and training center prepare us for the next company site visit, but also more importantly it provides us with a facility to support our existing businesses. Because we are in a rural area, retention of our current businesses is a major regional economic development strategy. A survey of our largest employers found that all were lacking space for trainings involving more than 12 people.

The workforce development and training center also allows us to support our smaller businesses by serving as the coordinators for a collaborative model of training on topics that are of common interest. We also have the ability to coordinate continuing education courses for our professionals saving them valuable time and money by eliminating the need to travel to a city.

In our distressed county, bordered by three other distressed counties, we strongly believe that this state-of-the-art training center is needed and aligns beautifully with the Funding Commission's Guiding Principles.

**4. Explain the economic benefits to the state or region resulting from the project:**

This project will give our rural Appalachian companies access to state-of-the-art training and meeting facilities. It will provide them with a single point of contact for facilitating collaborative cross-company trainings on topics of common interest. Travel costs and time away from the office will be reduced with the ability to conduct video conferencing and with the expanded menu of local trainings. Employees will benefit personally and professionally by having such a facility in close proximity to their home and/or place of employment. Economic development professionals will be able to use the training center as a true regional asset in the recruitment of prospective companies to the region.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

- Businesses and their employees engaged in training (60 mile radius)
- Professionals taking certification exams and continuing education courses
- Students (Tri-County, Hocking College and Ohio University) taking their certification exams

- Hosts and attendees of meetings
- Students and faculty in Hospitality and Culinary Arts programs
- Community members in a 75-mile radius (weddings/reunions/celebrations)

**6. Provide a demonstration of the need for the project:**

The lack of, and need for, a professional, business-centric training center leapt to the forefront in the spring of 2011, when negotiating with a large company that was proposing to locate in Athens and create 300 jobs over three years. In their site selection criteria, an on-site workforce development-training center was an important factor, leading to efforts by Tri-County Adult Career Center and Hocking College to find a way to build and operate such a center.

When this particular company put its expansion plans on hold, the discussion about the need for a workforce development and training center continued, driven by our private-sector partner. Parties to the discussion included the Athens County Economic Development director, Tri-County Adult Career Center, six major companies (employing 770 people in total), area businesses, and Buckeye Hills Hocking Valley Regional Development District.

The conclusion was that there is a need for, and strong support for, a workforce development and training center as a tool for business retention, expansion and attraction. Although they desperately need it, local companies simply do not have the space and resources necessary to house and equip state-of-the-art training and meeting space. This economic development tool has never been available to assist our region's existing or prospective companies.

All of the companies were interested in collaborative training as a cost-sharing measure. The companies would like to conduct training, but the cost of sending their employees to Columbus or other locations is prohibitive. They were supportive of having a single point of contact who could facilitate group training schedules across companies on topics of common interest such as customer service, hazmat, Microsoft Office, human resources and compliance training.

Professionals in the insurance, realty and legal professions all expressed frustration about the need to travel to Columbus to receive quality continuing education hours and were enthusiastic about having a local training facility offering this type of training. There was agreement that such training would draw professionals from surrounding counties who would much rather travel to Nelsonville than to a larger city.

**7. Describe, in detail, the location the project: (see attached campus map)**

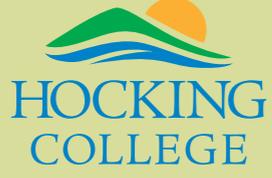
Located directly off the new ST RT33 Nelsonville bypass, the facility to be renovated is adjacent to the main Hocking College campus located at 3301 Hocking Parkway,

Nelsonville, Ohio 45764. The Workforce Development and Training Center will be co-located with the McCleneghan Center for Hospitality Training.

**8. The benefits expected to result from the project:**

Multiple audiences in the rural Appalachian region of southeastern Ohio will benefit as a result of this project. The business community will benefit from having a state-of-the-art training facility in close proximity to their employees; private and public employers will benefit from increased collaboration opportunities through strengthening relationships within the business community and the Office of Workforce Development; Hocking College Culinary and Hospitality students will gain valuable hands-on experience by providing catering services; community members will once again have a facility where they can host celebrations and civic meetings; and finally, Hocking College will benefit by accomplishing three objectives in the college's 2010-2015 Strategic Plan.

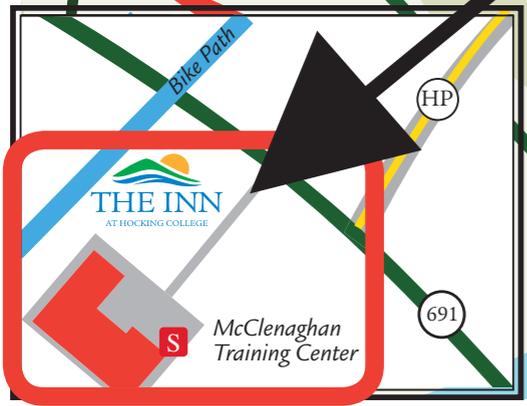
# Workforce Development and Training Center (WDTTC) Renovation



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		Project Location
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 2

**Project Title:** Roof Replacement (Light Hall)

**Biennium:** 2015

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all roof replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the Built-Up Roofing (BUR) system on Light Hall. Installed in 1974, the 82,465 sq ft roof on Light Hall is 10 years deferred and in desperate need of replacement. Over the past three years, the roof developed major leaks causing damage to the roof insulation, classrooms, walls, overhead lights and the overall foundation of the building. Roofing contractors have been hired to repair the roof on four separate occasions but new leaks continue to be discovered. It is no longer efficient or cost effective to continue to repair the leaks. A total roof replacement is necessary to ensure a safe environment for our campus community.

**2. Explain why this project is a priority:**

Light Hall is the central academic and administrative building on Hocking College's Nelsonville campus. All 4,500 current students and countless perspective students and their families rely on the services provided in this building. Light Hall is home to the President's Office; Provost's Office; Vice President of Administrative Services; Vice President of Fiscal Operations; Chief Information Officer; Payroll; Human Resources; Financial Aid; Registrar; Admissions; Institutional Research; Marketing and Public Relations; TRIO; Access Center; Counseling Center; cafeteria; general use classrooms; and computer labs. This is a priority project because the roof continues to leak and the

longer it goes without replacement, the more damage the water causes to the walls, lights, insulation and overall building foundation.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the roof on Light Hall would have a positive economic impact on the state and region.

- Roofing companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing roof leaks (staff overtime, supplies, materials, contractor costs) will decrease once a new roof is installed, allowing for more efficient use of operating funds.
- Replacing damaged classroom equipment caused by roof leaks will cease to be an issue, resulting in cost savings for the college.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Light Hall roof replacement. As the central academic and administrative building on Hocking College's Nelsonville campus, every student, faculty, staff and visitor to campus visits Light Hall and will benefit from this project.

**6. Provide a demonstration of the need for the project:**

Light Hall roof was installed in 1974 and is 10 years deferred. The roof is in critical physical condition with multiple leaks and structural issues. The student-learning environment is constantly interrupted when leaks in the roof require classrooms to be closed and equipment replaced due to the damage caused by the aging roof. The longer

the roof remains in its current state, the more costly the replacement and associated damage is likely to be.

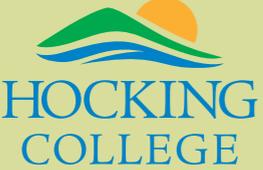
**7. Describe, in detail, the location the project:** *(see attached campus map)*

Light Hall is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Light Hall roof replacement is one of six-roof replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new Duro-Last roofs vs. the current Built-Up Roofing (BUR) system, Carlisle or EPDM rubber membrane roofs that exist across campus. Duro-Last is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, that is perfect for commercial and industrial buildings with flat or low-sloped roofs. It is the highest Energy Star rated roof, with it being 86% reflective even after three years. A Duro-Last Roof is custom-made, precision fabricated, and resistant to fire, chemicals, grease, high winds, and punctures. It is energy-efficient, leak-proof, durable, long-lasting, and recyclable. Solar photovoltaic (PV) panels and green roofs can be installed on top of it. Once installed, it is virtually maintenance-free. Many Duro-Last roofs have 30 years of reliability and durability. The longevity and low maintenance of these roofs allow the college to concentrate on other deferred maintenance projects across campus.

# Roof Replacement (Light Hall)



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		Project Location
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 3

**Project Title:** Chiller and Associated Plumbing Replacement (Light and Oakley Hall)

**Biennium:** 2015

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the chiller and associated plumbing system serving Light and Oakley Halls servicing 120,390 sq ft. collectively between the two buildings.

The main chiller unit was installed in 1999; however, the operating valves and associated plumbing were put in when the building was originally constructed in 1974. This 25 year deferred system is in critical need of replacement. Over the past three years, the chiller system experienced major mechanical failures causing two compressors and 20 condenser fans to malfunction, resulting in debris collecting in the condenser section of the system. The build-up of debris causes the unit to produce higher than normal pressure. When the condenser pressure elevates above normal, the chiller system begins to lose efficiency and results in a complete system failure when the load is greatest and cooling the environment is most needed on hot days.

On this out of date system, most of the control valves are nonfunctional and all valves around the air handlers are inoperable, making the system impossible to repair. Specialized contractors have been hired to repair the chiller on four separate over the past year but new mechanical failures continue to be discovered. It is no longer efficient or cost effective to continue to repair this system that consistently fails when the outside air temperature rises high enough to require air conditioning in the buildings. A total chiller

and associated plumbing replacement is necessary to ensure a safe and comfortable environment for our campus community.

**2. Explain why this project is a priority:**

Light and Oakley Halls are the central academic and administrative buildings on Hocking College's Nelsonville campus. All 4,500 current students and countless perspective students and their families rely on the services provided in this building. Light Hall is home to the President's Office; Provost's Office; Vice President of Administrative Services; Vice President of Fiscal Operations; Chief Information Officer; Payroll, Human Resources; Financial Aid; Registrar; Admissions; Institutional Research; Marketing and Public Relations; TRIO; Access Center; Counseling Center; cafeteria; general use classrooms; computer labs. This is a priority project because the continued system failures have proven to be so extensive that repairs are no longer an option. A total chiller and associated plumbing replacement is necessary to ensure a safe and comfortable environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the chiller and associated plumbing servicing Light and Oakley Halls would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.

- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Light and Oakley Halls chiller and associated plumbing replacement. As the central academic and administrative buildings on Hocking College's Nelsonville campus, every student, faculty, staff and visitor to campus will benefit from this project.

**6. Provide a demonstration of the need for the project:**

The main chiller unit servicing Light and Oakley Halls was installed in 1999; however, the operating valves and associated plumbing were put in when the building was originally constructed in 1974. This 25 year deferred system is in critical need of replacement. The system consistently experiences major mechanical failures and is in critical physical condition with multiple compressor failures and valves nonfunctional.

Over the past three years, the chiller system has experienced major mechanical failures causing with failures of two compressors and 20 condenser fans resulting in debris collecting in the condenser section of the system. The build-up of debris causes the unit to produce higher than normal pressures. When the condenser pressure elevates above normal, the chiller system begins to lose efficiency and results in a complete system failure when the load is greatest and cooling the environment is most needed on hot days.

Most of the control valves are nonfunctional and all valves around the air handlers are inoperable making the system impossible to repair. Specialized contractors have been hired to repair the chiller on four separate occasions over the past year, but new mechanical failures continue to be discovered. It is no longer efficient or cost effective to continue to repair this system that consistently fails when the outside air temperature rises high enough to require air conditioning in the buildings. A total chiller and associated plumbing replacement is necessary to ensure a safe and comfortable environment for our campus community.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal

devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. Light and Oakley Halls also have hot water radiant heating on the perimeter, as typical for the era when the buildings were built. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. 75% of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

Light and Oakley Halls are located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Light and Oakley Halls chiller and associated plumbing replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 a year on Electric, \$200,000 in Gas and \$150,000 in Water and Sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campuses gas. In this day of tightening budgets and shrinking resources Hocking College is looking at every possible opportunity to reduce energy consumption and at lowering the cost of operating as much as possible.

Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. The College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years the College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the College.

The needed capital dollars necessary to make the chiller/HVAC efficiency improvement far exceeded the operating budget dollars available.

# Chiller and Associated Plumbing Replacement (Light and Oakley Hall)



**Campus Name:** Hocking College

**Project Number:** 4

**Project Title:** Integrated Security Solution (college-wide)

**Biennium:** 2015

### **1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities while ensuring a safe and healthy environment for our campus community. For this specific project description, Hocking College is seeking capital funds to implement a college-wide integrated security solution. From door access control; video surveillance; mass notifications; one ID card initiative and centralized point of sales (POS) systems, the proposed integrated security solution will better position the college to be able to provide services more effectively to students and staff. A unified campus ID that incorporates security and retail operations using a centralized system, will offer students the reassurance that campus police have strategically placed security cameras that help deter criminal activities, all while delivering relevant information to the key stakeholders using updated technology.

This project will integrate security features designed to keep the campus community protected while providing a one card solution for students and staff. Through collaboration between the Hocking College Police Department (HCPD) and Office of Information Technology, the college will be able to provide enhanced security, communication, protection, and card services to students, faculty, and staff on the Nelsonville campus, Logan and New Lexington campuses as well as the Early Learning Center.

The following goals will be realized by transitioning to an integrated security solution:

- A One-card initiative would allow students, faculty and staff to use one campus card for external door access control, web payment for refilling cards, copiers, internal/external food services, vending and laundry.
- Consolidate and centralize system governance.
- Standardize hardware (ie. Door readers, software, cameras) and vendors
- Secure all relevant systems within OIT server farm.
- Establish procedures in card creation and management.
- Develop strategies to enhance security to all Hocking College exterior and priority doors including additional areas (ex. OIT, Cashiers Records).
- Consolidate POS systems into one centralized system.
- Ensure POS software is up-to-day and PCI compliant

## **2. Explain why this project is a priority:**

As part of 2011- 2015 Master Technology Plan, the college committed to cleaning up the data infrastructure, creating efficiencies, and eliminating risks. The integrated security solution project will allow the college to move forward with addressing security related aspects within this initiative: *Eliminate risk through increased emphasis on security, system redundancy, and ongoing efforts to implement best practices.*

Hocking College's door access control and ID card systems are over 13 years old. Due to the age of these systems, hardware has become end of life. Unsupported software presents major challenges when attempting to integrating new software and technology with old services. These systems are currently stored in a non-secured environment. Creating an opportunity for potential security breaches and other data inconsistencies. The college's decentralized door access system has approximately 29 electronic door locks, within eight different buildings. All or most of which the hardware has been deemed end of life by the vendor. The college currently has over eight different security camera systems, which consist of 108 individual cameras and seven separate recording devices. Separate applications are required to monitor each of the various systems creating administrative inefficiencies. Finally, student meal plans currently use the CBORD application while separate point of sale (POS) systems are used at Rhapsody Restaurant and the Inn at Hocking College. The Rhapsody and Inn POS systems are over 13 years old and running outdated technology. By incorporating updated POS software and hardware within the integrated security solutions project, we can empower student and staff services through the use of the standard campus card at retail locations while ensuring our retail transactions are secured, and PCI complaint using updated software and hardware.

## **3. Explain how the project fits in with the Funding Commission's guiding principles:**

A college-wide integrated security solution directly aligns with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Creating an integrated security solution college-wide would have a positive economic impact on the state and region.

- Vendors would benefit from being awarded the contracts. Including vendors providing integrated security solutions, architectural firms and engineers.
- Hocking College's costs associated with continuously repairing broken and outdated equipment will decrease once a new integrated system is installed, allowing for more efficient use of operating funds.
- Replacing damaged door components will cease to be an issue, resulting in cost savings for the college.
- Local businesses, that supported the Hocking One card initiative, could see additional traffic. Partnerships would have to be established between the vendor and Hocking College.
- Emergency management service (EMS) responders would have more reliable access, for emergency situations, to buildings that are utilizing the access control systems.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested college-wide integrated security system. The Hocking College Police Department will benefit by having an integrated security system feeding into dispatch where they can monitor and view surveillance video as needed in order to protect the campus community. Additionally, regional EMS responders will have more reliable access to campus security and other campus resources.

**6. Provide a demonstration of the need for the project:**

Installing an integrated security system is critical to maintaining a safe campus. All of the current door access control hardware has exceeded a reasonable life cycle. Parts have become obsolete and are increasingly unavailable. The point of sale (POS) systems are out-of-date and present challenges when integrating with the college's business processes. Security and PCI compliance concerns remain high as these POS systems are out-of-date. The integrated video surveillance system is a critical life safety issue as the current systems do not communicate to each other making monitoring and investigations ineffective.

The following represents offenses reported to the Hocking College Police Department (January 01, 2011 through October 27, 2013). An integrated security system will assist HCPD in solving and deterring these Clery Act reportable crimes:

- Theft - over \$1000 = 18
- Theft- under \$1000 = 170
- Burglary = 2
- Breaking & Entering = 8
- Criminal Mischief = 29
- Vandalism = 10
- Criminal Damaging = 14
- Suspicious Person(s) = 24\*

\*Suspicious person(s) is not a Clery reportable crime, but we have a greater chance of finding out who is responsible for the aforementioned crime(s) on our property.

**7. Describe, in detail, the location the project: (see attached campus map)**

Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

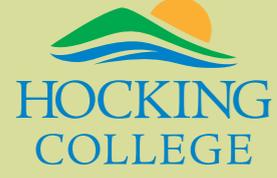
Hocking College's Logan campus at 30140 Isles Road, Logan, OH 43138

Hocking College's Perry Campus at 5454 St Rt 37, New Lexington, OH 43764

**8. The benefits expected to result from the project:**

An integrated security system college-wide would provide many benefits to the campus community: enhance security provisions to identified exterior and priority doors with updated and reliable technology; consolidate and upgrade video camera and recording hardware to better assist in providing enhanced security offerings campus-wide; one campus card for students and staff; consolidated systems that require less administrative overhead to maintain and manage; Standardized software and hardware for security cameras, allowing campus safety to monitor and investigate from a single source; vendor standardization resulting in bill consolidation and less administrative internal processing.

# Integrated Security Solution



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 5

**Project Title:** Campus-Wide Sidewalks and Exterior Lighting Renovation (Nelsonville Campus)

**Biennium:** 2015

### **1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities and external infrastructure. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs.

Hocking College is seeking capital funds to replace all the sidewalks, handrails and exterior lights on the main campus in Nelsonville, OH. The existing sidewalks and handrails are original to the buildings, which began to be constructed in 1974, and are no longer safe or accessible for the diverse population the college serves. Sidewalk widths vary from 3 feet to 6 feet wide. The college intends to make all new sidewalks eight feet wide allowing for greater student and emergency response access. Sections of the sidewalk network are fragmented and not connected. This disconnection creates an unsafe environment, as accessibility is limited and trip hazards exist. Many of the sidewalks are nothing more than gravel pathways with sides constructed of rotted railroad ties.

The exterior lighting across campus has never been redesigned or upgraded in the college's nearly 50-year history. Many lights are in desperate need of replacement. The current lights servicing the campus pathways and parking lots are either high-pressure sodium or metal halide lights. Each of the lights is decades old and original to the sidewalk and building insulations. LED lights are much more energy efficient and would illuminate the campus property in a manner allowing for maximized safety and security for the entire campus community. There are many dark areas on campus that make the students and staff feel unsafe walking in certain areas. This campus-wide sidewalks and exterior lighting renovation project would provide for increased safety on campus and is considered a critical life/safety renovation project.

**2. Explain why this project is a priority:**

The campus-wide sidewalks and exterior lighting renovation is a priority project because these elements are a critical to health and safety concerns. Many of the existing sidewalks date back to 1974, are too narrow for today's student population, and present many trip hazards due to years of shifting ground. Sidewalk widths vary from three feet to six feet wide. The college intends to make all new sidewalks eight feet wide allowing for proper student and emergency response access, and adhering to all ADA standards. Due to their age, many of the exterior light bases have deteriorated to the point that they are no longer safe and must be replaced immediately in order to maintain a safe environment. Over the years the college has expanded its parking lots on campus without adding the appropriate number of lights. This project is a critical life/safety issue, and as such, has been categorized as a priority for capital funding in 2015 biennium.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Campus-wide sidewalks and exterior lighting renovations directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Providing a safe and secure environment for the students, faculty, staff and visitors impacts everything the college represents. It is critical to the future stability of the college that we maintain safe infrastructure and foundational elements of our property. This critical core component allows the population we serve to pursue their educational goals on a safe, well lit, campus.

Hocking College has a long history of serving the needs of Appalachian southeastern Ohio by providing quality education and improving the economic development of the region. The college impacts the local economy in several ways. First, the earnings of approximately 500 Hocking College faculty and staff, and the operating capital and expenditures of the college, are injected into the local community. Second, both residential and commuter students who travel to campus spend money locally. Finally, the majority of Hocking College graduates live within a 50-mile radius of the college.

Therefore, the increased earning potential of the students who obtain a degree/certificate has a direct impact on the region.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

All visitors and the entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested campus-wide sidewalks and exterior lighting renovations project.

**6. Provide a demonstration of the need for the project:**

The existing sidewalks and handrails are original to the buildings, which began to be constructed in 1974, and are no longer safe or accessible for the diverse population the college serves. Sections of the sidewalk network are fragmented and not connected. This disconnection makes for an unsafe environment as accessibility is limited and trip hazards exist. Many of the sidewalks are nothing more than gravel pathways with sides constructed of rotted railroad ties.

The exterior lighting across campus has never been redesigned or upgraded in the college's nearly 50-year history. Many lights are in desperate need of replacement. The current lights servicing the campus pathways and parking lots are either high-pressure sodium or metal halide lights. Each of the lights is decades old and original to the sidewalk and building insulations. LED lights are much more energy efficient and would illuminate the campus property in a manner allowing for maximized safety and security for the entire campus community. There are many dark areas on campus that make the students and staff feel unsafe walking in certain areas. This campus-wide sidewalks and exterior lighting renovation project would provide for increased safety on campus and is considered a critical life/safety renovation project.

**7. Describe, in detail, the location the project: (see attached campus map)**

The campus-wide sidewalks and exterior lighting renovations projects are located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Hocking College community will benefit greatly from this project. Upon completion of the sidewalk, handrails and exterior lighting renovation, all campus-wide sidewalk pathways will be connected, ADA compliant, free from trip hazards, and wide enough for emergency responders to use as a primary pathways when close proximity and direct building access is required. Additionally, the college will install new

telecommunication and network conduit under the sidewalks. The current conduit pathways average 20-years old. Installing new conduit pathways simultaneous to new sidewalks will allow for future expansion of the college-wide network infrastructure.



**93780.27 square feet of sidewalks**

**Legend**

- HCLampPost**
  - No Lamps
  - ◻ Lamps
- HCSidewalks** ◻
- HCBuildings** ◻

1 inch = 300 feet

**Campus Name:** Hocking College

**Project Number:** 6

**Project Title:** Music Program Renovation

**Biennium:** 2015

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for renovation and enhancements of existing buildings to strengthen academic quality and provide a safe learning environment for students, faculty and staff. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place the entire equestrian educational facilities renovation out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to renovate a space for the music degree program. The goal of this project is the renovation of the 2,500 sq ft existing space located on the main campus of Hocking College in Nelsonville, OH. A preliminary scope of work will consist of:

- Verifying the existing building and site utilities (gas, electric, HVAC, fire protection, sanitary sewer, and telephone/data) for reuse
- Relocating the existing School of Music program (Music Management with Specialization in Production) from Washington Hall in downtown Nelsonville to the main campus
- Design a new academic laboratory to include a large practice room, multiple individual practice rooms, a control room, and necessary academic support spaces
- Provide sound isolation for the recording studio classrooms

**2. Explain why this project is a priority:**

The current music program is housed in an off-campus location at Washington Hall in downtown Nelsonville, OH. The off-campus classroom location provides some

challenges for transporting students, security the building, integration of the program into other curricular areas, utilizing efficiencies in scheduling and sharing facility space. The renovation and relocation will bring this vital program to the main campus, creating a presence that will enhance student life and activities for students. It will also provide a more high profile presence that will result in shared programming, an integration of work experiences on campus, as well as an integration of the campus radio station with other program areas. Additionally, the more prominent location of the radio station will in turn provide greater communication to the school and community at large.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

The Music program renovation project directly aligns with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Help build world-class programs.*

**4. Explain the economic benefits to the state or region resulting from the project:**

The Music program renovation project would have a positive economic impact on the state and region.

- Creates an on-site presence that will bring potential students and community members onto campus.
- Opens potential opportunities for campus wide events such as concerts, festivals, workshops, community outreach and other events that provide an outlet for new students and visitors to the area.
- Enables the college to capitalize on the use of the campus radio station for promotion of the college.
- Enables the college to utilize the radio station to enhance student opportunity and provide an avenue for businesses to utilize the station for promotion of business and community events.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The Music program, consisting of 200 students and five staff, will directly benefit from the requested renovation project.

**6. Provide a demonstration of the need for the project:**

The Music program has a history of solid enrollment and graduate job opportunities in the field or related fields as a result of their training at Hocking College. Maintaining its standard of engaged, hands-on, and laboratory based learning, the music program has demonstrated that this approach is valuable to students in their training and subsequent work in the music production and business industry. This unique program will benefit from a space that is on campus and is customized to the current trends in the market and workplace.

The program outcomes require students to have real world, hands-on experiences. The current off-campus facility does not lend itself to having students generate the same type of opportunities that will be possible when the program is housed on campus in a renovated, centrally located space.

The campus radio station can become an integral part of the music program when it is centrally located with the music production and business facilities. The integration of the station with business and production management provides a very important and unique set of circumstances for students to experience all aspects of the field in a comprehensive way, unlike the current scenario where these various components of the program are segregated.

**7. Describe, in detail, the location the project: (see attached campus map)**

The music program will be relocated to Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

It is anticipated that students will benefit from this new facility because space and equipment will be updated. The renovation will create a more engaging learning space, thus drawing more public relations and attention to campus life. It will also enable the campus radio station to become a more important and powerful tool, both as a laboratory environment and for communications. In addition, the renovation will ensure that the uniqueness of the music program continues to provide opportunities for students and an enhanced presence on the campus. The music program trains students in business and production. The current facility is off-campus, resulting in logistical challenges for equipment and related activities that are occurring in the music building. Moving the facility to campus will allow students to pursue related opportunities on campus in the business and production fields. The business students will be able to plan and present on-

campus activities that will be monitored and produced by the production students. The enhancement this alone can provide presents some great opportunities for students to utilize their talents in a visible way, and still receive the hands-on training and real world experience for which the college is known.

# Music Program Renovation



LEGEND

<ul style="list-style-type: none"> <li>1 Light Hall (JL)</li> <li>2 Oakley Hall (OAKL)</li> <li>3 Student Center (SCTR)</li> <li>4 Shaw Lab (SHAW)</li> <li>5 Davidson Hall (DVD) Library/Bookstore</li> <li>6 Public Safety Services (PSS)</li> <li>7 Visual Arts Center (VAC)</li> <li>8 Natural Resources (NR)</li> <li>9 Horse Barn (NNR)</li> <li>10 Horse Barn (NR/NNR)</li> <li>11 Farrier Sciences</li> <li>12 Campus Police</li> <li>13 Hocking Heights</li> <li>14 Downhour Hall</li> </ul>	<ul style="list-style-type: none"> <li>15 North Hall</li> <li>16 Burn Tower</li> <li>17 Campus Greens Office</li> <li>18 Warehouse &amp; Mailroom</li> <li>19 Robbins Crossing</li> <li>20 Early Learning Center</li> <li>The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training</li> <li>21</li> <li>22 Nature Center (HVNC)</li> <li>23 Summit Residence Hall</li> <li>24 Sycamore Residence Hall</li> <li>25 Fleet Garage (IEC)</li> <li>26 Law Enforcement Range (RANGE)</li> </ul>	<ul style="list-style-type: none"> <li><span style="border-bottom: 2px dashed red; width: 20px; display: inline-block;"></span> Railroad Tracks</li> <li><span style="border-bottom: 4px solid green; width: 20px; display: inline-block;"></span> Bike Path</li> <li><span style="border-bottom: 4px solid black; width: 20px; display: inline-block;"></span> Bridge</li> <li><span style="border-bottom: 2px solid blue; width: 20px; display: inline-block;"></span> US Route 33</li> <li><span style="border-bottom: 2px solid green; width: 20px; display: inline-block;"></span> State Route 691</li> <li><span style="border-bottom: 2px solid yellow; width: 20px; display: inline-block;"></span> Hocking Parkway</li> <li><span style="border: 1px solid blue; padding: 2px;">F</span> Parking (Faculty &amp; Staff)</li> <li><span style="border: 1px solid red; padding: 2px;">S</span> Parking (Student)</li> <li><span style="border: 1px solid blue; padding: 2px;">V</span> Parking (Visitor)</li> <li><span style="border: 1px solid blue; padding: 2px;">CP</span> Campus Police</li> </ul>
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Project Location

**Campus Name:** Hocking College

**Project Number:** 7

**Project Title:** Chiller and Associated Plumbing Replacement (Natural Resources Building)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the chiller and associated plumbing system in the Natural Resources Building servicing 29,905 sq ft.

The main chiller, a Trane RTA two circuit unit, was installed in 1990 and will be at the end of its life cycle when funding is requested in biennium 2017. A total chiller and associated plumbing replacement are necessary to ensure a safe and comfortable environment for our campus community.

**2. Explain why this project is a priority:**

Hocking College is the number one producer of natural resource conservationists across the country. The Natural Resources Building is critical to the educational mission and consistently remains one of our largest academic schools. The Natural Resources Building chiller and associated plumbing replacement are a priority project in biennium 2017, as the system will have exceeded its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Chiller replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the chiller and associated plumbing servicing the Natural Resources Building would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The School of Natural Resources consistently represents one of the largest enrollments averaging 1,300 students. These students along with 75 faculty members will directly benefit from the requested Natural Resources Building chiller and associated plumbing replacement.

**6. Provide a demonstration of the need for the project:**

The Natural Resources chiller and associated plumbing replacement are needed in biennium 2017, as the system will have exceeded its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. 75% of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

The Natural Resources Building is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Natural Resources chiller and associated plumbing replacements are one of nine-chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 a year on Electric, \$200,000 in Gas and \$150,000 in Water and Sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campuses gas. In this day of tightening budgets and shrinking resources Hocking College is looking at every possible opportunity to reduce energy consumption and at lowering the cost of operating as much as possible.

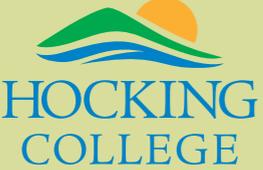
Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. The College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing

a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years the College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the College.

The needed capital dollars necessary to make the chiller/HVAC efficiency improvement far exceeded the operating budget dollars available.

# Chiller and Associated Plumbing Replacement (Natural Resources Building)



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		<b>Project Location</b>
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



Hocking River

691

33

Athens

Hocking Parkway

Columbus & Lancaster

To The Inn

Bike Path

HP

691

Fleet Garage

Tennis Courts

Loop Road- One Way

Starbrick Memorial

Shelter House

33

Columbus & Lancaster

HP

691

HP

F

S

V

CP

Project Location

**Campus Name:** Hocking College

**Project Number:** 8

**Project Title:** Roof Replacement (Natural Resources Building)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all roof replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the Built-Up Roofing (BUR) System on the Natural Resources Building. Installed in 1995, the 29,905 sq ft roof on Natural Resources Building is three years deferred. Over the past three years, the roof developed major leaks causing damage to the roof insulation, classrooms, walls, overhead lights and the overall foundation of the building. Roofing contractors have been hired to repair the roof on four separate occasions, but new leaks continue to be discovered. It is no longer efficient or cost effective to continue to repair the leaks. A total roof replacement is necessary to ensure a safe environment for our campus community.

**2. Explain why this project is a priority:**

Hocking College is the number one producer of natural resource conservationists across the country. The Natural Resources Building is critical to the educational mission and consistently remains one of our largest academic schools. This is a priority project because the roof continues to leak, and the longer it goes without replacement, the more damage the water causes to the wall, lights, insulation and overall building foundation.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the roof on the Natural Resources Building would have a positive economic impact on the state and region.

- Roofing companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing roof leaks (staff overtime, supplies, materials, contractor costs) will decrease once a new roof is installed, allowing for more efficient use of operating funds.
- Replacing damaged classroom equipment caused by roof leaks will cease to be an issue, resulting in cost savings for the college.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The School of Natural Resources consistently represents one of the largest enrollments averaging 1,300 students. These students along with 75 faculty members will directly benefit from the requested Natural Resources roof replacement.

**6. Provide a demonstration of the need for the project:**

The Natural Resources Building roof was installed in 1995 and is three years deferred. The roof is in critical physical condition with multiple leaks and structural issues. The student-learning environment is constantly interrupted when leaks in the roof require classrooms to be closed, and equipment replaced due to the damage caused by the aging

roof. The longer the roof remains in its current state, the more costly the replacement and associated damage is likely to be.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

The Natural Resources Building is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Natural Resources Building roof replacement is one of six-roof replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new Duro-Last roofs vs. the current Built-Up Roofing (BUR) system, Carlisle or EPDM rubber membrane roofs that exist across campus. Duro-Last is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, that is perfect for commercial and industrial buildings with flat or low-sloped roofs. It is the highest Energy Star rated roof, with it being 86% reflective even after three years. A Duro-Last Roof is custom-made, precision fabricated, and resistant to fire, chemicals, grease, high winds, and punctures. It is energy-efficient, leak-proof, durable, long-lasting, and recyclable. Solar photovoltaic (PV) panels and green roofs can be installed on top of it. Once installed, it is virtually maintenance-free. Many Duro-Last roofs have 30 years of reliability and durability. The longevity and low maintenance of these roofs allow the college to concentrate on other deferred maintenance projects across campus.

# Roof Replacement (Natural Resources Building)



**Campus Name:** Hocking College

**Project Number:** 9

**Project Title:** HVAC Replacement (Public Safety Services)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the HVAC system in the Public Safety Services building servicing 15,824 sq ft.

The current two stage direct expansion McQuay unit will be at the end of its life cycle when funding is requested in biennium 2017. The college intends to install a new multistage DX unit to ensure a safe and comfortable environment for our campus community.

**2. Explain why this project is a priority:**

The Public Safety Services building is home to the Fire and Emergency Services, Police Science and Social Services, Corrections and Criminal Justice degree programs. The HVAC system replacement is a priority project in biennium 2017, as the system will have exceeded its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

HVAC replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the HVAC system in the Public Safety Services building would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Public Safety Services HVAC replacement.

**6. Provide a demonstration of the need for the project:**

The Public Safety Services building is home to the Fire and Emergency Services, Police Science and Social Services, Corrections and Criminal Justice degree programs. The HVAC system replacement is a priority project in biennium 2017, as the system will have extended its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. 75% of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

The Public Safety Services building is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Public Safety Services HVAC system replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 a year on Electric, \$200,000 in Gas and \$150,000 in Water and Sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campuses gas. In this day of tightening budgets and shrinking resources Hocking College is looking at every possible opportunity to reduce energy consumption and at lowering the cost of operating as much as possible.

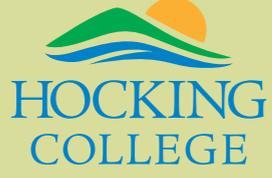
Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. The College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient

chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years the College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the College.

The needed capital dollars necessary to make the chiller/HVAC efficiency improvement far exceeded the operating budget dollars available.

# HVAC Replacement (Public Safety Services)



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		Project Location
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 10

**Project Title:** Library Renovation

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. For this specific project description, Hocking College is seeking capital funds to renovate the Library. The project indicated is to update the layout and finishes of the current Library in Davidson Hall. It serves the entire campus and has not been renovated since the building was constructed in 1995. The method of learning and use of collective spaces in a collegiate setting has changed dramatically since that time. While Hocking College has made minor adjustments over the years, the space is not being utilized to its fullest potential. The college is looking to increase capacity in the existing classrooms to allow for additional learning stations, expand upon and more clearly define the group and quiet study areas, provide the students with a small café (to serve beverages and sandwiches) and update the finishes.

**2. Explain why this project is a priority:**

The Library was built in 1995 and has not been renovated or improved since that time. Libraries have dramatically changed in the last several years, and in order to better serve the faculty, students, and staff of Hocking College, it is important that the Library evolves and changes to meet the needs of today's students and faculty. A survey of students, faculty, and staff, conducted in 2012, identified several areas of need and ideas for improvements. As the college focuses more resources on student completion, the Library is without a doubt a significant asset in student achievement, retention, and recruitment. The renovation project will make the Library a more attractive learning hub and center of academic research and collaborative learning for all Hocking College students, faculty and staff.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

This renovation project directly aligns with the Higher Education Capital Funding Commission's guiding principles:

- *Help build world-class programs*
- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Increases Ohio's competitive advantage by capitalizing on our existing strengths.*
- *Stimulate creativity by advancing strategic collaborations through partnerships, both on campus and with others in the public and private sector.*

Renovating Hocking College's Library represents a continued investment in the most critical component of academic support services for students, faculty and staff. The statewide library network system is an existing strength in Ohio. Hocking College is a member of OhioLINK, providing evidence that the institution values collaboration and partnerships as critical to student success.

**4. Explain the economic benefits to the state or region resulting from the project:**

The Library provides resources for students and faculty in over 50 different technologies. It serves the entire population of Hocking College and, as a public institution, the general public as well. A stronger, more modern library that effectively supports student learners and faculty would translate into more students completing their degrees, moving on to full-time employment and becoming productive, contributing members of the State and regional economy.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students and the general public will directly benefit from the Library renovation.

**6. Provide a demonstration of the need for the project:**

The Library, as currently configured, does not utilize its available space to the fullest potential. Some areas are severely underutilized, while others could benefit from being repurposed to add new services that have been requested by students and faculty. The Library currently lacks adequate group study space as well as quiet-study areas designed to support an uninterrupted learning environment. Students and faculty have requested food and beverage services in the Library. Many libraries now offer small cafés similar to those found in bookstores. The project, in general, would bring the Library into the

21<sup>st</sup> century and provide an atmosphere similar to other colleges across the state and nation who have completed similar renovation projects.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

The Library is located on the first floor of Davidson Hall on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

Hocking College believes many benefits for the students; faculty, staff and community will be realized by renovating the campus Library. As a critical partner in supporting student success, the Library environment has the potential to actually increase the reading abilities and comprehension skills of everyone it serves. The renovation project will provide:

- Better use of existing Library space fostered by maximizing resources and programming capabilities
- While the library café will serve the entire campus population, those most directly impacted are the over 2,000 student in the Schools of Nursing, Allied Health, and Public Safety Services who will have convenient access to the Library café.
- Increased student achievement and retention through the development of well designed group and individual study spaces
- Expansion and improvement of technology available
- Enhanced and expanded access to digital resources
- Expanded digital library services for online students
- Increased use of the Library

# Library Renovation



LEGEND

<ul style="list-style-type: none"> <li>1 Light Hall (JL)</li> <li>2 Oakley Hall (OAKL)</li> <li>3 Student Center (SCTR)</li> <li>4 Shaw Lab (SHAW)</li> <li>5 Davidson Hall (DVD) Library/Bookstore</li> <li>6 Public Safety Services (PSS)</li> <li>7 Visual Arts Center (VAC)</li> <li>8 Natural Resources (NR)</li> <li>9 Horse Barn (NNR)</li> <li>10 Horse Barn (NR/NNR)</li> <li>11 Farrier Sciences</li> <li>12 Campus Police</li> <li>13 Hocking Heights</li> <li>14 Downhour Hall</li> </ul>	<ul style="list-style-type: none"> <li>15 North Hall</li> <li>16 Burn Tower</li> <li>17 Campus Greens Office</li> <li>18 Warehouse &amp; Mailroom</li> <li>19 Robbins Crossing</li> <li>20 Early Learning Center</li> <li>21 The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training</li> <li>22 Nature Center (HVNC)</li> <li>23 Summit Residence Hall</li> <li>24 Sycamore Residence Hall</li> <li>25 Fleet Garage (IEC)</li> <li>26 Law Enforcement Range (RANGE)</li> </ul>	<ul style="list-style-type: none"> <li> Railroad Tracks</li> <li> Bike Path</li> <li> Bridge</li> <li> US Route 33</li> <li> State Route 691</li> <li> Hocking Parkway</li> <li> Parking (Faculty &amp; Staff)</li> <li> Parking (Student)</li> <li> Parking (Visitor)</li> <li> Campus Police</li> </ul>
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Project Location

**Campus Name:** Hocking College

**Project Number:** 11

**Project Title:** HVAC Replacement (Perry Campus)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the HVAC system at the Perry Campus (New Lexington, OH) building servicing 20,971 sq. ft.

The current heat pump system unit will be at the end of its life cycle when funding is requested in biennium 2017. The college intends to install a more energy efficient unit to ensure a safe and comfortable environment for our campus community.

**2. Explain why this project is a priority:**

The Perry Campus HVAC system replacement is a priority project in biennium 2017, as the system will have exceeded its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

HVAC replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the HVAC system at the Perry Campus would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire Perry Campus community, consisting of 500 students and 38 staff, will directly benefit from the requested Perry Campus HVAC replacement.

**6. Provide a demonstration of the need for the project:**

The Perry Campus is home to 500 students earning degrees in Business Management, Opticianry, Health Information Management, Heavy Equipment, and Social Services, Corrections and Criminal Justice. The HVAC system replacement is a priority project in biennium 2017, as the system will have exceeded its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for

heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. Seventy-five percent of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls, and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project:**

The Perry Campus is located at 5454 St. Rt. 37, New Lexington, OH 43764

**8. The benefits expected to result from the project:**

The Perry Campus HVAC system replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 annually on electric, \$200,000 on gas and \$150,000 on water and sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campus's gas. In this day of tightening budgets and shrinking resources, Hocking College is looking at every possible opportunity to reduce energy consumption and lower operating costs. Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. Hocking College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years Hocking College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the college.

The needed capital dollars necessary to make the HVAC efficiency improvement far exceed the operating budget dollars available.

**Campus Name:** Hocking College

**Project Number:** 12

**Project Title:** HVAC Replacement (Shaw Building)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the HVAC system in the Shaw building, servicing 14,952 sq. ft.

The current five-rooftop units will have exceeded their life cycle by five years, and are in critical need of replacement during the 2017 biennium. The college intends to install a highly energy efficient HVAC system that is specifically designed for a computer lab and server room facility.

**2. Explain why this project is a priority:**

The Shaw building HVAC system replacement is a priority project in biennium 2017 as the system will have exceeded its life cycle by five years by the time funding is available. Shaw houses the heart of Hocking College's campus network. The main server room contains all campus-wide servers for computing resources, including the Student Information System (SIS) system. The computer infrastructure in this building controls all network connectivity. If the HVAC system is not replaced in 2017, the primary network switch that is located in Shaw could be damaged causing the entire campus data network and phone operations to be compromised. For these reasons, it is critical to replace the HVAC system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's

assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

HVAC replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the HVAC system in the Shaw building would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The Shaw building is home to the School of Computer Science and Hocking College's campus-wide network operations. The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Shaw HVAC system replacement. The facility is a critical component of the college as it houses the campus-wide computer network and telephone systems. Every student, faculty, staff and visitor to campus will benefit from this project, which will ensure our information technology infrastructure remains protected and guarded against mechanical failures and damaged equipment.

**6. Provide a demonstration of the need for the project:**

The Shaw building houses the heart of Hocking College's campus network. The main server room contains all campus-wide servers for computing resources, including the Student Information System (SIS) system. The computer infrastructure in this building controls all network connectivity. If the HVAC system is not replaced in 2017 and mechanical failures continue to become routine, the primary switch that is located in Shaw could be damaged causing the entire campus data network and phone operations to be compromised. For these reasons, it is critical to replace the HVAC system in 2017 before major system failures present themselves and foundational issues appear as a result of neglect.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. Seventy-five percent of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls, and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project: (see attached campus map)**

The Shaw building is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

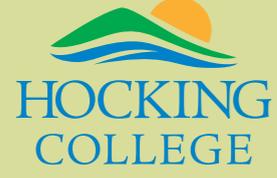
The Shaw HVAC system replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 annually on electric, \$200,000 on gas and \$150,000 on water and sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campus's gas. In this day of tightening budgets and shrinking resources Hocking College is looking at every possible opportunity to reduce energy consumption and lower operating costs. Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. Hocking College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years Hocking College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the college.

The needed capital dollars necessary to make the chiller/HVAC efficiency improvement far exceed the operating budget dollars available.

# HVAC Replacement (Shaw Building)



LEGEND

<ul style="list-style-type: none"> <li>1 Light Hall (JL)</li> <li>2 Oakley Hall (OAKL)</li> <li>3 Student Center (SCTR)</li> <li>4 Shaw Lab (SHAW)</li> <li>5 Davidson Hall (DVD) Library/Bookstore</li> <li>6 Public Safety Services (PSS)</li> <li>7 Visual Arts Center (VAC)</li> <li>8 Natural Resources (NR)</li> <li>9 Horse Barn (NNR)</li> <li>10 Horse Barn (NR/NNR)</li> <li>11 Farrier Sciences</li> <li>12 Campus Police</li> <li>13 Hocking Heights</li> <li>14 Downhour Hall</li> </ul>	<ul style="list-style-type: none"> <li>15 North Hall</li> <li>16 Burn Tower</li> <li>17 Campus Greens Office</li> <li>18 Warehouse &amp; Mailroom</li> <li>19 Robbins Crossing</li> <li>20 Early Learning Center</li> <li>21 The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training</li> <li>22 Nature Center (HVNC)</li> <li>23 Summit Residence Hall</li> <li>24 Sycamore Residence Hall</li> <li>25 Fleet Garage (IEC)</li> <li>26 Law Enforcement Range (RANGE)</li> </ul>	<ul style="list-style-type: none"> <li> Railroad Tracks</li> <li> Bike Path</li> <li> Bridge</li> <li> US Route 33</li> <li> State Route 691</li> <li> Hocking Parkway</li> <li> Parking (Faculty &amp; Staff)</li> <li> Parking (Student)</li> <li> Parking (Visitor)</li> <li> Campus Police</li> </ul>
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Project Location

**Campus Name:** Hocking College

**Project Number:** 13

**Project Title:** Roof Replacement (Shaw)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all roof replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the EPDM rubber membrane roof on Shaw. Installed in 1983, the 14,952 sq ft roof on Shaw is will be five years deferred by the time funding is available in 2017 biennium.

**2. Explain why this project is a priority:**

Shaw roof replacement is a priority project in biennium 2017 as the life cycle of the roof will be five years past by the time funding is available. Shaw houses the heart of Hocking College's campus network. The main server room contains all campus-wide servers or computing resources, including the Student Information System (SIS) system. The computer infrastructure in this building controls all network connectivity. If the roof is not replaced in 2017 and leaks begin to become routine, the primary network switch that is located in Shaw could be damaged causing the entire campus data network and phone operations to be compromised. For these reasons, it is critical to replace the roof in 2017 before major leaks present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the roof on Shaw would have a positive economic impact on the state and region.

- Roofing companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with routine maintenance and repair will decrease once a new roof is installed, allowing for more efficient use of operating funds.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

Shaw is home to the School of Computer Science and Hocking College's campus-wide network operations. The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Shaw roof replacement. The facility is a critical component of the college as it houses the campus-wide computer network and telephone systems. Every student, faculty, staff and visitor to campus will benefit from this project, which will ensure our information technology infrastructure remains protected and guarded against roof leaks and damaged equipment.

**6. Provide a demonstration of the need for the project:**

Shaw houses the heart of Hocking College's campus network. The main server room contains all campus-wide servers or computing resources, including the Student Information System (SIS) system. The computer infrastructure in this building controls all network connectivity. If the roof is not replaced in 2017 and leaks begin to become routine, the primary switch that is located in Shaw could be damaged causing the entire campus data network and phone operations to be compromised. For these reasons, it is

critical to replace the roof in 2017 before major leaks present themselves and foundational issues appear as a result of neglect.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

Shaw is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Shaw roof replacement is one of six-roof replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new Duro-Last roofs vs. the current Built-Up Roofing (BUR) system, Carlisle or EPDM rubber membrane roofs that exist across campus. Duro-Last is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, that is perfect for commercial and industrial buildings with flat or low-sloped roofs. It is the highest Energy Star rated roof, with it being 86% reflective even after three years. A Duro-Last Roof is custom-made, precision fabricated, and resistant to fire, chemicals, grease, high winds, and punctures. It is energy-efficient, leak-proof, durable, long-lasting, and recyclable. Solar photovoltaic (PV) panels and green roofs can be installed on top of it. Once installed, it is virtually maintenance-free. Many Duro-Last roofs have 30 years of reliability and durability. The longevity and low maintenance of these roofs allow the college to concentrate on other deferred maintenance projects across campus.

# Roof Replacement (Shaw Hall)



## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		Project Location
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				

**Campus Name:** Hocking College

**Project Number:** 14

**Project Title:** HVAC Replacement (The McClenaghan Center for Hospitality Training)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the HVAC system at the McClenaghan Center for Hospitality Training servicing 28,000 sq. ft.

The current system unit will be at the end of its life cycle when funding is requested in biennium 2017. The college intends to install a more energy efficient unit to ensure a safe and comfortable environment for our campus community.

**2. Explain why this project is a priority:**

The McClenaghan Center for Hospitality Training HVAC system replacement is a priority project in biennium 2017, as the system will have exceeded its life cycle. The current system serves the Culinary Arts academic classrooms, which are made up of demonstration kitchens, meat and poultry labs, pastry classrooms and a chocolate kitchen. Additionally, the students operate a restaurant and catering kitchen in the building as part of their academic experience. Temperature control is critical to maintaining the safety of the food products. It is important to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

HVAC replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the HVAC system at the McClenaghan Center for Hospitality Training would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

As the central academic facility for the Culinary Arts program and restaurant servicing the campus, the entire Hocking College community, consisting of 500 employees and 4,500 students, will directly benefit from the requested McClenaghan Center for Hospitality Training HVAC system replacement.

**6. Provide a demonstration of the need for the project:**

The McClenaghan Center for Hospitality Training is home to 350 students earning degrees in Culinary Arts, Hotel/Restaurant Management and Baking. Their hands-on practical training is received through learning in real-world simulated classrooms, as well as a restaurant and catering operation serving the entire community. The HVAC system replacement is a priority project in biennium 2017, as the system will have

exceeded its life cycle. It is critical to replace the system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. Seventy-five percent of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls, and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project:** *(see attached campus map)*

The McClenaghan Center for Hospitality Training is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The McClenaghan Center for Hospitality Training HVAC replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 annually on electric, \$200,000 on gas and \$150,000 on water and sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campus's gas. In this day of tightening budgets and shrinking resources, Hocking College is looking at every possible opportunity to reduce energy consumption and lower operating costs. Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are

available. Hocking College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years Hocking College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the college.

The needed capital dollars necessary to make the HVAC efficiency improvement far exceed the operating budget dollars available.

# HVAC Replacement (McClenaghan Center for Hospitality Training)



**Campus Name:** Hocking College

**Project Number:** 15

**Project Title:** HVAC Replacement (Warehouse)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the HVAC system at the Warehouse. The three split systems in the building service a total of 7,308 sq. ft. and was installed in 1972. The air conditioning units are paired up with low efficient gas furnaces in each of the three sections of the building. This 25 year deferred system is in critical need of replacement.

**2. Explain why this project is a priority:**

The Warehouse is a structure critical to ensuring streamlined, campus-wide operations. All deliveries for Hocking College's three campuses are received and inventoried at the Warehouse; student and college-wide mail services also operate out of this facility. Additionally, the building serves as the primary records retention repository, allowing Hocking College to have a secure building to store institutional records in accordance with Ohio's Records Retention law.

It is important to replace the HVAC system in 2017 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

HVAC replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the HVAC system at the Warehouse would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Warehouse HVAC system replacement.

**6. Provide a demonstration of the need for the project:**

The Warehouse HVAC system was installed in 1972 and will be 25 years deferred at the time funding is allocated in biennium 2017. The HVAC system is in critical physical condition with multiple system failures and structural issues. The risk of permanent damage to the college's institutional records is of great concern. The longer the roof remains in its current state, the more costly the replacement and associated damage will be.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. Seventy-five percent of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls, and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project: (see attached campus map)**

The Warehouse is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Warehouse HVAC system replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

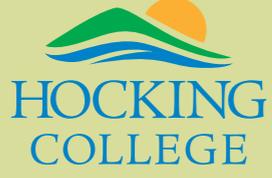
Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 annually on electric, \$200,000 on gas and \$150,000 on water and sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campus's gas. In this day of tightening budgets and shrinking resources Hocking College is looking at every possible opportunity to reduce energy consumption and lower operating costs. Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. Hocking College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy

without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years Hocking College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the college.

The needed capital dollars necessary to make the HVAC efficiency improvement far exceed the operating budget dollars available.

# HVAC Replacement (Warehouse)



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		Project Location
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 16

**Project Title:** Roof Replacement (Warehouse)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all roof replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace EPDM rubber membrane roof on the Warehouse. Installed in 1972, the 7,308 sq ft roof on the Warehouse will be 14 years deferred by the time funding is allocated in biennium 2017. The roof is in desperate need of replacement. Over the past three years, the roof developed major leaks causing damage to the roof insulation, walls, overhead lights and the overall foundation of the building. Roofing contractors have been hired to repair the roof on four separate occasions, but new leaks continue to be discovered. It is no longer efficient or cost effective to continue to repair the leaks. A total roof replacement is necessary to ensure a safe environment for our campus community.

**2. Explain why this project is a priority:**

The Warehouse is a structure critical to ensuring streamlined, campus-wide operations. All deliveries for Hocking College's three campuses are received and inventoried at the Warehouse; student and college-wide mail services also operate out of this facility. Additionally, the building also serves as the primary records retention repository, allowing Hocking College to have a secure building to store institutional records in accordance with Ohio's Records Retention law.

This is a priority project because the roof continues to leak, and the longer it goes without replacement, the more damage the water causes to the wall, lights, insulation and overall building foundation. If damaged due to a roof leak, many of the institutional records stored in the Warehouse would be irreplaceable.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the roof on the Warehouse would have a positive economic impact on the state and region.

- Roofing companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing roof leaks (staff overtime, supplies, materials, contractor costs) will decrease once a new roof is installed, allowing for more efficient use of operating funds.
- Replacing damaged equipment caused by roof leaks will cease to be an issue, resulting in cost savings for the college.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Warehouse roof replacement.

**6. Provide a demonstration of the need for the project:**

The Warehouse roof was installed in 1972 and will be 14 years deferred at the time funding is allocated in biennium 2017. The roof is in critical physical condition with multiple leaks and structural issues. The risk of permanent damage to the college's

institutional records is of great concern. The longer the roof remains in its current state, the more costly the replacement and associated damage is likely to be.

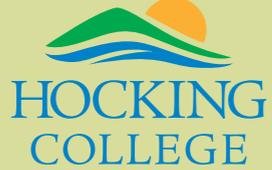
**7. Describe, in detail, the location the project:** *(see attached campus map)*

The Warehouse is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Warehouse roof replacement is one of six-roof replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new Duro-Last roofs vs. the current Built-Up Roofing (BUR) system, Carlisle or EPDM rubber membrane roofs that exist across campus. Duro-Last is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, that is perfect for commercial and industrial buildings with flat or low-sloped roofs. It is the highest Energy Star rated roof, with it being 86% reflective even after three years. A Duro-Last Roof is custom-made, precision fabricated, and resistant to fire, chemicals, grease, high winds, and punctures. It is energy-efficient, leak-proof, durable, long-lasting, and recyclable. Solar photovoltaic (PV) panels and green roofs can be installed on top of it. Once installed, it is virtually maintenance-free. Many Duro-Last roofs have 30 years of reliability and durability. The longevity and low maintenance of these roofs allow the college to concentrate on other deferred maintenance projects across campus.

# Roof Replacement (Warehouse)



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall	---	Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower	—	Bike Path
3	Student Center (SCTR)	17	Campus Greens Office	—	Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom	33	US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing	691	State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center	HP	Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training	F	Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)	S	Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall	V	Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall	CP	Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 17

**Project Title:** Auto Bay Door Replacements (Auto Petro/Fleet Building)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs.

For this specific project description, Hocking College is seeking capital funds to replace the commercial rolling steel garage doors at the Auto Petro/Fleet building. Currently, the four auto bay areas serve as classroom laboratories for the Heavy Equipment Operations students as well as the operational areas for the campus Fleet. The bay doors experiencing mechanical failures are only 10' wide, preventing the students and staff from mechanically servicing some of the vehicles and equipment in the facility.

**2. Explain why this project is a priority:**

The Auto Petro/Fleet building is a structure critical to ensuring streamlined, campus-wide operations. The garage-like facility serves as academic classrooms for Hocking College's Heavy Equipment Operations degree program as well as hands-on training laboratories through Fleet Operations. Hocking College's fleet inventory consists of 80 cars, 12 vans, 7 busses and 40 pieces of heavy equipment. It is important to replace the commercial rolling steel garage doors in order to ensure a continued safe environment for our students, faculty and staff.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Replacing the commercial rolling steel garage doors at Auto Petro/Fleet directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Help build world class programs*
- *Focusing on maintaining the investments the state has already made in existing campus facilities.*

- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the commercial rolling steel garage doors at the Auto Petro/Fleet building would have a positive economic impact on the state and region.

- Door companies in the region awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing the doors (staff overtime, supplies, materials, contractor costs) will decrease once the new doors are installed, allowing for more efficient use of operating funds.
- Installing more energy efficient doors will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Auto Petro/Fleet commercial rolling steel garage doors replacements.

**6. Provide a demonstration of the need for the project:**

The Auto Petro/Fleet building is a structure critical to ensuring streamlined, campus-wide operations. The garage-like facility serves as academic classrooms for Hocking College's Heavy Equipment Operations degree program as well as hands-on training laboratories through Fleet Operations. Hocking College's fleet inventory consists of 80 cars, 12 vans, 7 busses and 43 pieces of heavy equipment. It is important to replace the commercial rolling steel garage doors in order to increase thermal efficiency and ensure a continued safe environment for our campus community.

**7. Describe, in detail, the location the project: (see attached campus map)**

The Auto Petro/Fleet building is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Auto Petro/Fleet commercial rolling steel garage doors replacements will benefit the Heavy Equipment Operations degree program and Fleet Operations. The new auto bay

doors will permit the student, faculty and staff to learn about and repair larger pieces of heavy equipment, which do not fit through the current doors.

# Auto Bay Door Replacements (Auto Petro/Fleet Building)



**Campus Name:** Hocking College

**Project Number:** 18

**Project Title:** Equestrian Educational Facilities Renovation (Phase I)

**Biennium:** 2017

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for renovation and enhancements of existing buildings to strengthen academic quality and provide a safe learning environment for students, faculty and staff. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place the entire equestrian educational facilities renovation out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to renovate the equestrian educational facilities on the main campus. Hocking College's School of Natural Resources currently has 12 programs including associate degree programs in Farrier Science, Equine Health and Complementary Therapies and Wilderness Horsemanship. The campus is home to more than 50 horses, enabling students to gain hands-on practical experience in each equine discipline.

The Equine Health and Complementary Therapies Program focuses on the health care component of the horse industry. The program was developed to meet the industry demand for qualified horse care technicians. Students develop skills in traditional health care such as nutrition, anatomy and physiology, broodmare and foal care and non-traditional complementary therapies. In addition to traditional health care, Hocking's program includes the newer disciplines of equine acupressure and massage. This unique component teaches students proper massage techniques for applying pressure to and kneading muscles that are prone to fatigue and stress. Courses such as equine business management, equine marketing and brochure development and accounting provide them with a solid business background. Students gain valuable hands-on experience throughout the program. In broodmare classes, they find themselves scheduled on an all-night foal watch. In health care, they are performing many of the functions of a veterinarian assistant.

Hocking College offers one of only a few farrier science associate degree programs in the United States. The Farrier Science and Business program offers a unique combination of farrier skills and business management. Students have the best of two worlds - working around horses and owning their own business. They learn the newest and safest techniques for shoeing horses while developing skills on both gas and coal forges as well as corrective farrier skills and shoeing for performance. Classes such as care and handling, gait analysis, and nutrition provide each student with a solid background in horse care.

Many farriers are self-employed. The business portion of this program provides students with not only basic business skills such as management and accounting, but also marketing and brochure development and business skills specific to the equine industry. Prior to completing their degree, students develop a business plan to get them started in establishing a successful farrier business.

There are very few associate degree programs in the United States like the Wilderness Horsemanship degree at Hocking College. While most horse programs focus on the show industry, Hocking's program focuses on the backcountry industry and equine health. Students gain practical experience in working with horses, mules, and people in wilderness settings. Driving wagons through various terrain, learning riding techniques and the proper use and repair of equipment are essential elements of this unique hands-on degree program.

Over the past three years, the School of Natural Resources has averaged more than 1,300 students, or 20% of total enrollment.

In 2011, Davis Wince, Ltd. and Populous completed an Equine Facilities Master Plan for Hocking College, which prioritized the most immediate needs for the equine academic programs. Phase I represents the highest priority in order to allow the Equine Programs to provide a safe environment for the students, staff, public and equine. These proposed improvements address the need to provide deferred maintenance and minimal functional enhancements to the existing facilities and new ancillary facilities that will improve the instructional environment.

The equestrian educational facilities renovation scope of work represents the highest priority, which allows the equine degree programs to provide a safe environment for the students, staff, public and equine. The proposed improvements address the need to provide much needed deferred maintenance and minimal functional improvements to the existing facilities and new ancillary facilities that will make a significant improvement to the instructional environment. Renovation of the existing facilities are required to enhance the health and safety of the students, faculty and equine population in terms of life safety, fire protection and increased accessibility to instructional environments. The

renovated facilities will also address much needed indoor riding environments during inclement weather and unsuitable trail conditions.

Renovation Scope of Work in Priority Order (see attached map)

Building 18

Construct new necropsy/equine anatomy building to function as an anatomy and healthcare education classroom/lab

Building 4

Construct new hay bedding / equipment storage building

Building 16

Construct new leather shop classroom and equine maintenance building to enhance safety and accessibility

Building 2

- Renovate existing riding barn to house foaling functions, faculty offices and improve safety by removing hay storage above stalls
- Add broodmare stalls under existing southwest covered equipment area
- Convert current leather classroom to broodmare viewing room and student lounge
- Add faculty offices in loft
- Add Equine Shower Facility near proposed connector

Building 17

- Construct new covered outdoor arena/connector to function for equine massage classes, covered riding arena and toilet facilities
- Install new fencing and lighting
- Add covered pole barn structure
- Enclose heated connector for massage classes in inclement weather

Building 5

Renovate farrier building to expand farrier and horseshoeing learning labs for increased safety and accessibility.

Building 3

Renovate colt training barn with round pen and paddock to expand colt stalls, colt training and instructional labs with increased safety and accessibility

Building 6

Renovate farrier shelter and day pen for outside equine and horseshoeing services with increased safety and accessibility

Phase II of the master plan includes a new equine health care facility and a multi-use arena that can serve both equine and non-equine activities, serving both collegiate and

community needs. The master plan calls for the multi-use arena to have a seating capacity of 300 along with ten stalls and a 20,000 square foot floor. Hocking College is not requesting capital funds for Phase II. The college is working to solicit private gifts through the Hocking College Foundation.

**2. Explain why this project is a priority:**

This project is a priority because many of our current barns serving the equine programs are in desperate need of repair and/or replacement. This project will provide much needed deferred maintenance and minimal functional improvements to the existing facilities and new ancillary facilities that will make a significant improvement to the instructional environment.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

The Equestrian educational facilities renovation project directly aligns with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Help build world-class programs*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Stimulate creativity by advancing strategic collaborations through partnerships, both on campus and with others in the public and private sector.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Renovating the equine educational facilities would have a positive economic impact on the state and region.

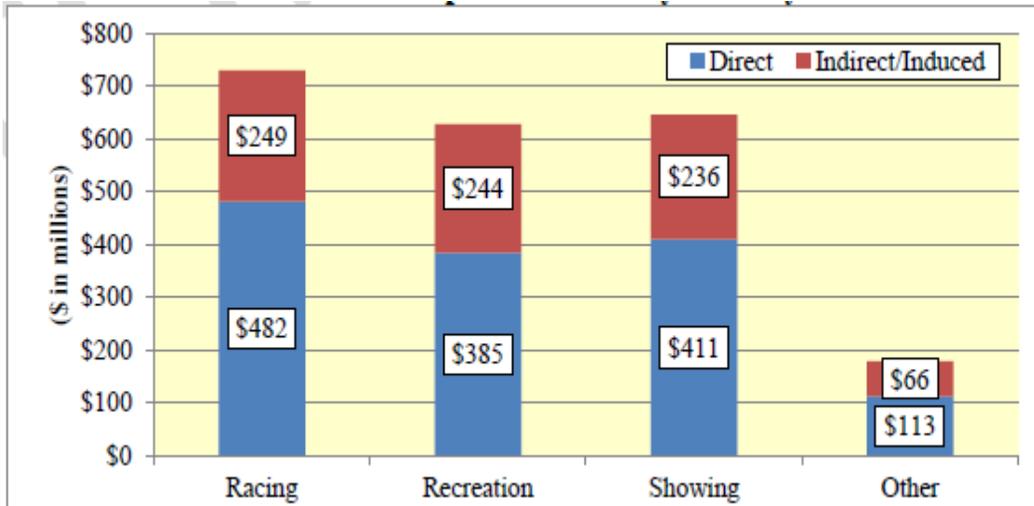
The American Horse Council (AHC) Foundation commissioned a study in 2004 to estimate the economic impact of the horse industry on the U.S. Approximately 27,950 horse owner/industry suppliers participated in the survey process with 18,650 individuals providing complete and useable surveys. Additional surveys were received from horse show organizers and racetrack representatives. The AHC study estimated that there were more than 9.2 million horses in the U.S., approximately 2.7 million of which participated in horse shows and other competitions. This study estimated that there were approximately 306,900 horses in Ohio. This source also estimated that nearly two million

people own horses, with another two million involved as volunteers or through a family affiliation.

The AHC study estimated the total (i.e., direct, indirect, and induced) impact generated by the horse industry to be \$101.5 billion in the U.S. and \$2.2 billion in Ohio, more than one-half of which was attributable to horse racing and recreation.

Source: 2005 AHC Study.

### Direct and Total Impact on GDP by Activity - Ohio

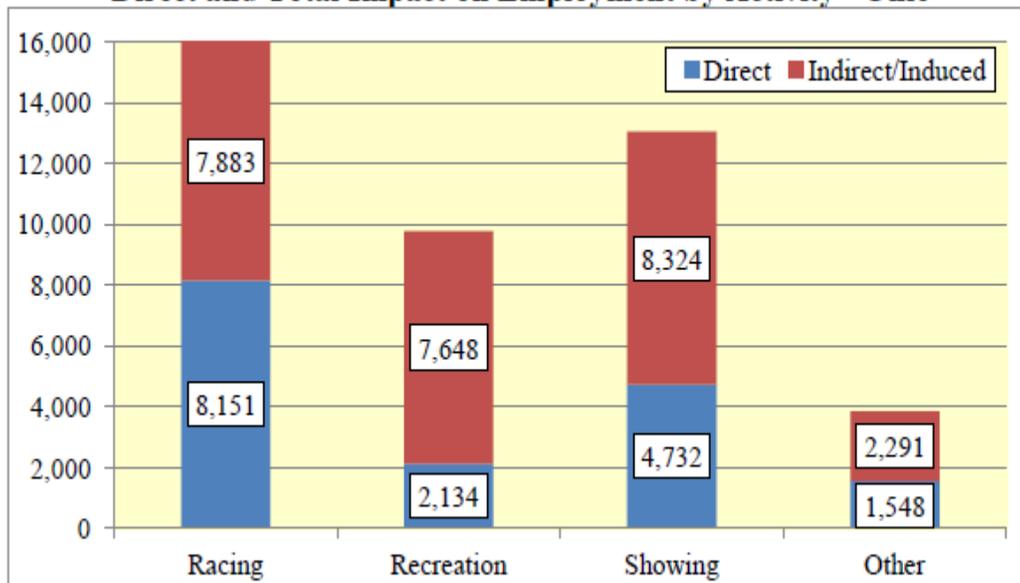


Source: 2005 AHC Study.

The AHC study also estimated that the horse industry sustains 1.4 million full-time equivalent (FTEs) jobs in the U.S. and over 42,700 FTEs in Ohio.

Source: 2005 AHC Study.

### Direct and Total Impact on Employment by Activity - Ohio



Source: 2005 AHC Study.

Lastly, the AHC study estimated that annual taxes paid by the horse industry were approximately \$1.9 billion in the U.S and \$81 million in Ohio. At both the national and State levels, the majority of taxes were paid to state governments, followed by the federal and local governments, respectively. Irrespective of the method used for quantification, the breadth and diversity of the equine industry are substantial. Data from the USDA 2007 Census indicates that while the equine inventory in Ohio decreased, the inventory in surrounding states increased between 2002 and 2007 providing a potential target job market for Hocking College graduates.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The School of Natural Resources consistently represents one of the largest enrollments averaging 1,300 students. These students along with 75 faculty members will directly benefit from the requested equestrian educational facilities renovation. Students graduating from the equine programs are employed on ranches, training facilities in Ohio, farrier services, racetracks and at a variety of other horse industry jobs. Therefore, the overall number of individuals who will benefit from the project has an industry-wide reach. Any development project is somewhat dependent on the attributes of the industry as a whole. This section summarizes key trends in the equine industry used to guide decisions regarding the equine programs and associated renovations at Hocking College.

Although several sources indicate that the U.S. equine population has been trending upward, the actual number of equine in the U.S. varies significantly based on the different methodologies/ definitions used to calculate the inventory.

The American Horse Council (AHC) Foundation commissioned a study in 2004 to estimate the economic impact of the horse industry on the U.S. Approximately 27,950 horse owner/industry suppliers participated in the survey process with 18,650 individuals providing complete and useable surveys. Additional surveys were received from horse show organizers and racetrack representatives. The AHC study estimated that there were more than 9.2 million horses in the U.S., approximately 2.7 million of which participated in horse shows and other competitions. This study estimated that there were approximately 306,900 horses in Ohio. This source also estimated that nearly two million people own horses, with another two million involved as volunteers or through a family affiliation.

The National Agricultural Statistics Service (NASS), which is an agency of the U.S. Department of Agriculture (USDA), estimated that the U.S. inventory of horses and ponies was 4.0 million in 2007, an increase of 11% from 2002. According to the same source, the U.S. equine inventory has nearly doubled between 1992 and 2007.

Note: Equine inventory includes horses and ponies only. Sources: NASS; USDA.

**6. Provide a demonstration of the need for the project:**

The School of Natural Resources is a flagship division of Hocking College. The 12 academic programs within the school educate students from all over the county to become natural resource advocates, protectors of our wildlife and technicians in the equine industry. This project is needed to ensure Hocking College continues to provide a world-class education in safe and accessible facilities. There is a need for the project because many of our current barns serving the equine programs are in desperate need of repair and/or replacement. This project will provide much needed deferred maintenance and minimal functional improvements to the existing facilities and new ancillary facilities that will make a significant improvement to the instructional environment.

**7. Describe, in detail, the location the project: (see attached campus map)**

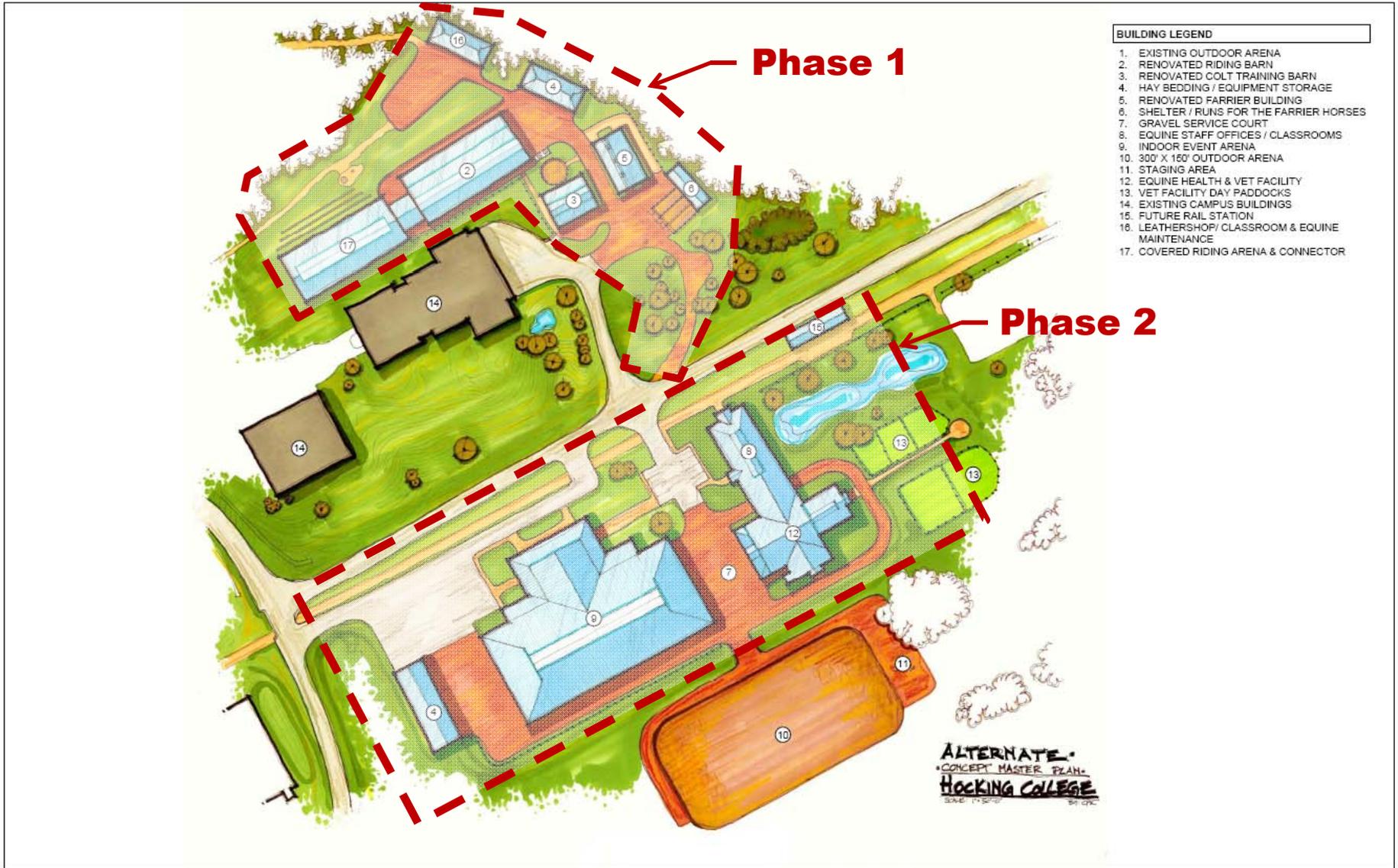
The School of Natural resources is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The following benefits are expected to result from the equestrian educational facilities renovation project:

- To design/build a facility that is updated and more competitive with equine facilities at other colleges.
- To have the ability to expand academic programming to include services to the mentally and physically challenged.
- To improve safety by providing a designated riding area, rather than forcing instructors to give riding lessons in the barn and placing students on the trails before the instructors feel they are ready.
- To improve accessibility by making the new facilities handicapped accessible. Improvements such as wheelchair ramps may also be made to existing structures/facilities to increase accessibility and safety for everyone. The existing wood steps are of great concern to the staff and students because they are difficult to maintain and very unsafe.
- To extend the times that certain class can be scheduled. Currently, some classes cannot be held during the winter months due to inclement weather conditions. An indoor arena will allow instructors to hold these classes regardless of the weather.
- To help the local environment by reducing trail overuse.
- To build sustainable structures that are functional and require as little maintenance and ongoing investment as possible, while maintaining an appearance that is aesthetically pleasing.

# Master Plan



# Equestrian Educational Facilities Renovation (Phase I)



**Campus Name:** Hocking College

**Project Number:** 19

**Project Title:** Chiller and Associated Plumbing Replacement (Davidson Hall)

**Biennium:** 2019

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the chiller and associated plumbing system in the Davidson Hall servicing 39,483 sq ft.

The main chiller, a Trane RTA two circuit unit, was installed in 1995 and will be at the end of its life cycle when funding is requested in biennium 2019. A total chiller and associated plumbing replacement are necessary to ensure a safe and comfortable environment for our campus community.

**2. Explain why this project is a priority:**

Davidson Hall is home to the School of Nursing, the School of Allied Health, the College Bookstore and the college Library. Davidson Hall chiller and associated plumbing replacements are a priority project in biennium 2019, as the system will have exceeded its life cycle. It is critical to replace the system in 2019 before major mechanical failures present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Chiller replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the chiller and associated plumbing servicing Davidson Hall would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Davidson Hall chiller replacement.

**6. Provide a demonstration of the need for the project:**

Davidson Hall is home to the School of Nursing, the School of Allied Health, the College Bookstore and the college Library. Davidson Hall chiller and associated plumbing replacements are a priority project in biennium 2019, as the system will have exceeded its life cycle. It is critical to replace the system in 2019 before major mechanical failures present themselves, and foundational issues appear as a result of neglect.

The college HVAC systems are not interconnected and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. 75% of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project: (see attached campus map)**

Davidson Hall is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Davidson Hall chiller and associated plumbing replacement is one of nine chiller/HVAC system replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 a year on Electric, \$200,000 in Gas and \$150,000 in Water and Sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campuses gas. In this day of tightening budgets and shrinking resources Hocking College is looking at every possible opportunity to reduce energy consumption and at lowering the cost of operating as much as possible.

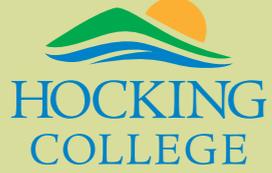
Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. The College is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing

a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years the College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the College.

The needed capital dollars necessary to make the chiller/HVAC efficiency improvement far exceeded the operating budget dollars available.

# Chiller and Associated Plumbing Replacement (Davidson Hall)



MAIN CAMPUS MAP

## LEGEND

- |    |  |    |  |  |                           |
|----|--|----|--|--|---------------------------|
| 1  | Light Hall (JL)                          | 15 | North Hall   |  | Railroad Tracks           |
| 2  | Oakley Hall (OAKL)                       | 16 | Burn Tower   |  | Bike Path                 |
| 3  | Student Center (SCTR)                    | 17 | Campus Greens Office   |  | Bridge                    |
| 4  | Shaw Lab (SHAW)                          | 18 | Warehouse & Mailroom   |  | US Route 33               |
| 5  | Davidson Hall (DVD)<br>Library/Bookstore | 19 | Robbins Crossing   |  | State Route 691           |
| 6  | Public Safety Services (PSS)             | 20 | Early Learning Center  |  | Hocking Parkway           |
| 7  | Visual Arts Center (VAC)                 | 21 | The Inn at HC (INN)/<br>The McClenaghan Center for<br>Hospitality Training |  | Parking (Faculty & Staff) |
| 8  | Natural Resources (NR)                   | 22 | Nature Center (HVNC)   |  | Parking (Student)         |
| 9  | Horse Barn (NNR)                         | 23 | Summit Residence Hall  |  | Parking (Visitor)         |
| 10 | Horse Barn (NR/NNR)                      | 24 | Sycamore Residence Hall  |  | Campus Police             |
| 11 | Farrier Sciences                         | 25 | Fleet Garage (IEC)   |  | Project Location          |
| 12 | Campus Police                            | 26 | Law Enforcement Range (RANGE)  |  |                           |
| 13 | Hocking Heights                          |    |  |  |                           |
| 14 | Downhour Hall                            |    |  |  |                           |



**Campus Name:** Hocking College

**Project Number:** 20

**Project Title:** Roof Replacement (Davidson Hall)

**Biennium:** 2019

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all roof replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the EPDM rubber membrane roof on Davidson Hall. Installed in 1995, the 39,483 sq ft roof on Davidson Hall will be six years deferred at the time funding is requested in biennium 2019.

**2. Explain why this project is a priority:**

Davidson Hall is home to the School of Nursing, the School of Allied Health, The College Bookstore and the college Library. Davidson Hall roof replacement is a priority project in biennium 2019 as the life cycle of the roof will be six years past by the time funding is available. It is critical to replace the roof in 2019 before major leaks present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*

- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the roof on Davidson Hall would have a positive economic impact on the state and region.

- Roofing companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with routine maintenance and repair will decrease once a new roof is installed, allowing for more efficient use of operating funds.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Davidson Hall roof replacement.

**6. Provide a demonstration of the need for the project:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Davidson Hall roof replacement. This building is home to the School of Nursing, School of Allied Health, library and college bookstore. Every student, faculty, staff and visitor to campus visits Davidson Hall and will benefit from this project.

**7. Describe, in detail, the location the project: (see attached campus map)**

Davidson Hall is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Davidson Hall roof replacement is one of six-roof replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new Duro-Last roofs vs. the current Built-Up Roofing (BUR) system, Carlisle or EPDM rubber

membrane roofs that exist across campus. Duro-Last is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, that is perfect for commercial and industrial buildings with flat or low-sloped roofs. It is the highest Energy Star rated roof, with it being 86% reflective even after three years. A Duro-Last Roof is custom-made, precision fabricated, and resistant to fire, chemicals, grease, high winds, and punctures. It is energy-efficient, leak-proof, durable, long-lasting, and recyclable. Solar photovoltaic (PV) panels and green roofs can be installed on top of it. Once installed, it is virtually maintenance-free. Many Duro-Last roofs have 30 years of reliability and durability. The longevity and low maintenance of these roofs allow the college to concentrate on other deferred maintenance projects across campus.

**Campus Name:** Hocking College

**Project Number:** 21

**Project Title:** HVAC Replacement (Auto Petro/Fleet Building)

**Biennium:** 2019

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all chiller/HVAC replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to install a HVAC system at the Auto Petro/Fleet building. Currently, there is no air conditioning in the building and each of the auto bays is heated individually by gas, ceiling mounted area heaters. The building is not on a centralized temperature controlled system making for an uncomfortable learning and operational environment for the students, faculty and staff.

**2. Explain why this project is a priority:**

The Auto Petro/Fleet building is a structure critical to ensuring streamlined, campus-wide operations. The garage-like facility serves as academic classrooms for Hocking College's Heavy Equipment Operations degree program as well as hands-on training laboratories through Fleet Operations. Hocking College's fleet inventory consists of 80 cars, 12 vans, 7 busses and 40 pieces of heavy equipment. It is important to install a HVAC system in order to regulate the temperature and ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

HVAC system replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Installing a HVAC system at the Auto Petro/Fleet building would have a positive economic impact on the state and region.

- HVAC companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with continuously repairing nonfunctional systems (staff overtime, supplies, materials, contractor costs) will decrease once a new chiller and associated plumbing is installed, allowing for more efficient use of operating funds.
- Installing more energy efficient chillers/HVAC systems will reduce the college's operating expenditures dedicated for utility costs.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Auto Petro/Fleet HVAC installation.

**6. Provide a demonstration of the need for the project:**

The Auto Petro/Fleet building is a structure critical to ensuring streamlined, campus-wide operations. The garage-like facility serves as academic classrooms for Hocking College's Heavy Equipment Operations degree program as well hands-on training laboratories through Fleet Operations. Hocking College's fleet inventory consists of 80 cars, 12 vans, 7 busses and 40 pieces of heavy equipment. It is important to install a HVAC system in order to regulate the temperature and ensure a continued safe environment for our campus community.

The college HVAC systems are not interconnected, and each facility has its own heating/cooling plant or forced air system, geothermal system, radiant system or other form of heating and cooling. Most have centralized gas fired hot water boilers for heating and chillers to supply chilled water for cooling. Centralized air handlers

condition the air and the air is distributed via ductwork to the various zones terminal devices such as ceiling diffusers and variable air volume boxes, with and without reheat capability. The systems are of varying age and design.

The main operating system on the campus is a Building Automation System as manufactured by Automated Logic Corporation. Seventy-five percent of the HVAC equipment on the main campus is on previous generation automation software and systems with varying levels of controllability. Most of the HVAC units on the automation system are controlled with simply a start/stop capability and scheduling, while others have full DDC control with energy efficient control strategies. The areas, which are not on the Automated Logic control system, are either on programmable thermostats or older pneumatic controls, and these controls do not have the full capability of the newer systems.

**7. Describe, in detail, the location the project: *(see attached campus map)***

The Auto Petro/Fleet building is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Auto Petro/Fleet HVAC installation is one of nine chiller/HVAC system projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these projects, all buildings on the main campus in Nelsonville, OH will have new HVAC systems.

Energy is a major operating cost at Hocking College. Hocking College currently spends over \$900,000 annually on electric, \$200,000 on gas and \$150,000 on water and sewer services. In addition, Hocking College also has gas wells that are producing approximately 20% of the main campus's gas. In this day of tightening budgets and shrinking resources, Hocking College is looking at every possible opportunity to reduce energy consumption and lower operating costs. Balancing the implementation costs of an energy conservation project, such as replacing all chiller/HVAC systems, with the long-term benefits presents a particular challenge, as a limited amount of resources are available. The college is most interested in any new system installation that has immediate impact on the environmental comfort levels experienced by the campus community. The desire to install even greater energy efficient chillers/HVAC systems are critical as the future depends on making radical changes in the way we use energy. The long-term focus is on sustainability, which means providing a campus that uses energy without jeopardizing the future generations and the earth as a whole. Our long-term plan is to work towards 100% sustainability.

Over the years Hocking College has made a substantial investment in focusing on maintaining the investments the state has already made in existing campus facilities. Energy expenditures have been steadily increasing since 2004 due to price increases and growth of the college.

The needed capital dollars necessary to make the HVAC efficiency improvement far exceed the operating budget dollars available.

# HVAC Replacement (Auto Petro/Fleet Building)



**25 Fleet Building**

## LEGEND

1	Light Hall (JL)	15	North Hall	---	Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower	—	Bike Path
3	Student Center (SCTR)	17	Campus Greens Office	—	Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom	33	US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing	691	State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center	HP	Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training	F	Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)	S	Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall	V	Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall	CP	Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 22

**Project Title:** Roof replacement (Oakley Hall)

**Biennium:** 2019

**1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for replacement and/or repair of all main campus roofs and HVAC systems, which are in different ranges of deferred maintenance years. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place all roof replacement projects approved for each biennium out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to replace the Carlisle roof on Oakley Hall. Installed in 1975, the 37,685 sq ft roof on Oakley Hall will be 12 years deferred by the time funding is received in 2019 biennium.

**2. Explain why this project is a priority:**

Oakley Hall is connected by a walkway to Light Hall, Hocking College's main academic and administrative building on the Nelsonville campus. All 4,500 current students and countless perspective students and their families rely on the services provided in this building. Oakley roof replacement is a priority project in biennium 2019 as the life cycle of the roof will be 12 years past by the time funding is available. It is critical to replace the roof in 2019 before major leaks present themselves, and foundational issues appear as a result of neglect. As a good steward of the State's assets, the replacement is necessary to ensure a continued safe environment for our campus community.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

Roof replacements directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

Replacing the roof on Oakley Hall would have a positive economic impact on the state and region.

- Roofing companies, architecture firms and engineers awarded the contract would realize the benefit of receiving revenue from the project.
- Hocking College's costs associated with routine maintenance and repair will decrease once a new roof is installed, allowing for more efficient use of operating funds.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Oakley Hall roof replacement.

**6. Provide a demonstration of the need for the project:**

The entire campus community, consisting of 500 employees and 4,500 students, will directly benefit from the requested Oakley Hall roof replacement. As the building is connected by a walkway to the central academic and administrative building on Hocking College's Nelsonville campus, every student, faculty, staff and visitor to campus visits Oakley Hall and will benefit from this project.

**7. Describe, in detail, the location the project: (see attached campus map)**

Oakley Hall is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The Oakley Hall roof replacement is one of six-roof replacement projects included in Hocking College's 2015-2020 Six-Year Capital Plan. Upon completion of these

projects, all buildings on the main campus in Nelsonville, OH will have new Duro-Last roofs vs. the current Built-Up Roofing (BUR) system, Carlisle or EPDM rubber membrane roofs that exist across campus. Duro-Last is a strong, reinforced thermoplastic single-ply membrane, PVC or CPA, that is perfect for commercial and industrial buildings with flat or low-sloped roofs. It is the highest Energy Star rated roof, with it being 86% reflective even after three years. A Duro-Last Roof is custom-made, precision fabricated, and resistant to fire, chemicals, grease, high winds, and punctures. It is energy-efficient, leak-proof, durable, long-lasting, and recyclable. Solar photovoltaic (PV) panels and green roofs can be installed on top of it. Once installed, it is virtually maintenance-free. Many Duro-Last roofs have 30 years of reliability and durability. The longevity and low maintenance of these roofs allow the college to concentrate on other deferred maintenance projects across campus.

# Roof Replacement (Oakley Hall)



MAIN CAMPUS MAP

## LEGEND

1	Light Hall (JL)	15	North Hall		Railroad Tracks
2	Oakley Hall (OAKL)	16	Burn Tower		Bike Path
3	Student Center (SCTR)	17	Campus Greens Office		Bridge
4	Shaw Lab (SHAW)	18	Warehouse & Mailroom		US Route 33
5	Davidson Hall (DVD) Library/Bookstore	19	Robbins Crossing		State Route 691
6	Public Safety Services (PSS)	20	Early Learning Center		Hocking Parkway
7	Visual Arts Center (VAC)	21	The Inn at HC (INN)/ The McClenaghan Center for Hospitality Training		Parking (Faculty & Staff)
8	Natural Resources (NR)	22	Nature Center (HVNC)		Parking (Student)
9	Horse Barn (NNR)	23	Summit Residence Hall		Parking (Visitor)
10	Horse Barn (NR/NNR)	24	Sycamore Residence Hall		Campus Police
11	Farrier Sciences	25	Fleet Garage (IEC)		Project Location
12	Campus Police	26	Law Enforcement Range (RANGE)		
13	Hocking Heights				
14	Downhour Hall				



**Campus Name:** Hocking College

**Project Number:** 23

**Project Title:** Equestrian Educational Facilities Renovation (Phase II)

**Biennium:** 2019

### **1. Project Description:**

Hocking College is committed to concentrating state and local resources on maintenance and repair of current facilities. This strategy provides the foundation for evaluating repair, renovation and construction projects across campus. To assist in our efforts, the college MARS Whitestone facility forecasting software is used as one of our planning tools incorporating facility condition assessment, asset tracking and life cycle costs. This predictive modeling tool provides the college with data necessary for forecasting facility maintenance and repair, operations, deferred maintenance and capital replacement costs. Hocking College's 2015-2020 Six-Year Capital Plan provides for renovation and enhancements of existing buildings to strengthen academic quality and provide a safe learning environment for students, faculty and staff. In an effort to reduce construction costs and generate ongoing efficiencies, the college intends to place the entire equestrian educational facilities renovation out to bid as one package.

For this specific project description, Hocking College is seeking capital funds to renovate the equestrian educational facilities on the main campus. Hocking College's School of Natural Resources currently has 12 programs including associate degree programs in Farrier Science, Equine Health and Complementary Therapies, and Wilderness Horsemanship. The campus is home to more than 50 horses, enabling students to gain hands-on practical experience in each equine discipline.

The Equine Health and Complementary Therapies program focuses on the health care component of the horse industry. The program was developed to meet the industry demand for qualified horse care technicians. Students develop skills in traditional health care such as nutrition, anatomy and physiology, broodmare and foal care, and non-traditional complementary therapies. In addition to traditional health care, Hocking's program includes the newer disciplines of equine acupressure and massage. This unique component teaches students proper massage techniques for applying pressure to and kneading muscles that are prone to fatigue and stress. Courses such as equine business management, equine marketing and brochure development and accounting provide them with a solid business background. Students gain valuable hands-on experience throughout the program. In broodmare classes, they find themselves scheduled on an all-night foal watch. In health care, they are performing many of the functions of a veterinarian assistant.

Hocking College offers one of only a few farrier science associate degree programs in the United States. The Farrier Science and Business program offers a unique combination of farrier skills and business management. Students have the best of two worlds - working around horses and owning their own business. They learn the newest and safest techniques for shoeing horses while developing skills on both gas and coal forges as well as corrective farrier skills and shoeing for performance. Classes such as care and handling, gait analysis, and nutrition provide each student with a solid background in horse care.

Many farriers are self-employed. The business portion of this program provides students with not only basic business skills such as management and accounting, but also marketing and brochure development, and business skills specific to the equine industry. Prior to completing their degree, students develop a business plan to get them started in establishing a successful farrier business.

There are very few associate degree programs in the United States like the Wilderness Horsemanship degree at Hocking College. While most horse programs focus on the show industry, Hocking's program focuses on the backcountry industry and equine health. Students gain practical experience in working with horses, mules, and people in wilderness settings. Driving wagons through various terrains, learning riding techniques and the proper use and repair of equipment are essential elements of this unique hands-on degree program.

Over the past three years, the School of Natural Resources has averaged more than 1,300 students, or 20% of total enrollment.

In 2011, Davis Wince, Ltd. and Populous completed an Equine Facilities Master Plan for Hocking College, which prioritized the most immediate needs for the equine academic programs. Phase II of the master plan includes a new equine health care facility and a multi-use arena that can serve both equine and non-equine activities, and serve both collegiate and community needs. The master plan calls for the multi-use arena to have a seating capacity of 300 along with ten stalls and a 20,000 square foot floor. Hocking College is requesting that a portion of this project be funded with capital funds while the college commits to soliciting private gifts through the Hocking College Foundation for the largest portion of the project.

Phase II scope of work represents the highest priority to allow the Equine Program to provide a safe environment for the students, staff, public, and equine and facilitate growth of current equine programs and growth into equine health. The proposed improvements address the need to provide essential deferred maintenance and minimal functional improvements to the existing facilities and new ancillary facilities resulting in significant improvement to the instructional environment. Further, the proposed improvements are

critical for the equine program to successfully continue the transition from quarters to semesters that took place in 2012. The improvements listed below are anticipated for the 2015 to 2016 budget year. Renovations of the existing facilities are required to enhance the health and safety of the students, faculty and equine population in terms life safety, fire protection, and increased accessibility to instructional environments. The renovated facilities will also address much needed indoor riding environments during inclement weather and unsuitable trail conditions. Phase II scope of work represents the highest priority to allow the Equine program to provide a safe and accessible environment for the students, staff, public and equine. The proposed new equine health center will be a state of the art facility complex that will address the Equine program's growth, and provide a safe environment to hold classes conducting in-depth education on equine health, rehabilitation and complementary therapies. The facilities will include classrooms and an examination area for anatomy, lameness and reproduction evaluation, and will house an area for an equine treadmill, breeding stocks and other related equipment for rehabilitation and reproduction. The new complex will also include an indoor riding arena that will serve as a staging area for many of the current classes, and also serve outside complimentary interests related to the equine industry including therapeutic riding events, health clinics and other community events. The facility will also serve other academic programs within the college. Currently, without an indoor arena, harsh and inclement weather conditions can sometimes limit the students riding time, and the current trail system is suffering from overuse as the equine program has continued to grow. The new facility will be handicap accessible, as current facilities do not meet handicap needs. This new center will allow the program to expand by offering community services to the mentally and physically challenged clients. This new center will become an important marketing tool for the entire college by drawing the general public to campus and providing an economic boost to this region. This center will also draw a new group of potential students to other equine program. The current facilities are outdated and have not kept up with the level of other equine facilities at other colleges. The improvements listed below are anticipated for the 2019 to 2020 budget year.

- Building 12 - New Equine Health Center
- Building 8 - New Equine Classroom Building
- Building 9 - New Indoor Event Arena
- Building 4 - Hay Bedding/Equipment Storage Building

**2. Explain why this project is a priority:**

This project is a priority because many of our current barns serving the equine programs are in desperate need of repair and/or replacement. This project will provide much needed deferred maintenance and minimal functional improvements to the existing facilities and

new ancillary facilities that will make a significant improvement to the instructional environment.

**3. Explain how the project fits in with the Funding Commission's guiding principles:**

The Equestrian educational facilities renovation project directly align with the Higher Education Capital Funding Commission's guiding principles:

- *Focusing on maintaining the investments the state has already made in existing campus facilities.*
- *Help build world-class programs*
- *Reflect the needs of today's student by strengthening their learning environments, ensuring their safety and encouraging new degree and certificate completion opportunities.*
- *Stimulate creativity by advancing strategic collaborations through partnerships, both on campus and with others in the public and private sector.*
- *Encourage joint efforts to reduce construction costs and generate ongoing efficiencies.*

**4. Explain the economic benefits to the state or region resulting from the project:**

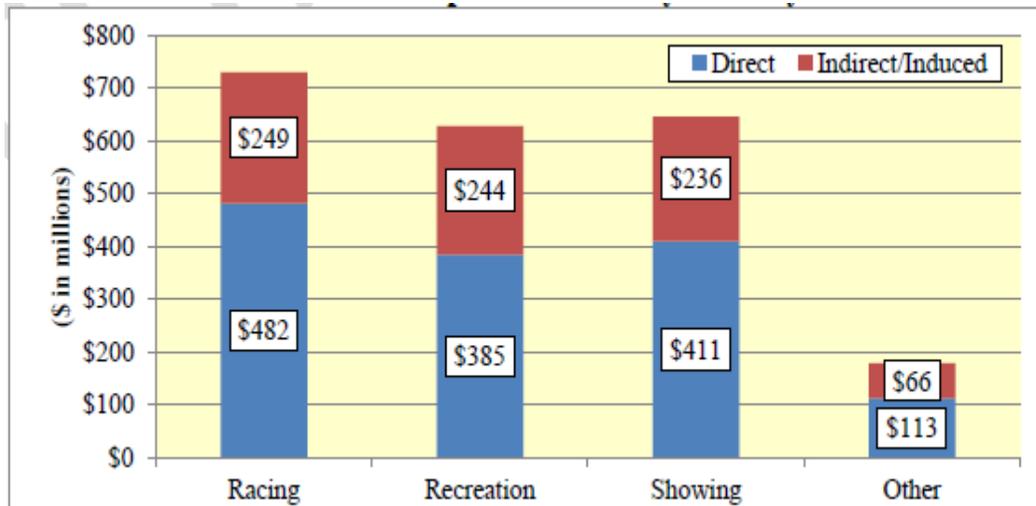
Renovating the equine educational facilities would have a positive economic impact on the state and region.

The American Horse Council (AHC) Foundation commissioned a study in 2004 to estimate the economic impact of the horse industry on the U.S. Approximately 27,950 horse owner/industry suppliers participated in the survey process with 18,650 individuals providing complete and useable surveys. Additional surveys were received from horse show organizers and racetrack representatives. The AHC study estimated that there were more than 9.2 million horses in the U.S., approximately 2.7 million of which participated in horse shows and other competitions. This study estimated that there were approximately 306,900 horses in Ohio. This source also estimated that nearly two million people own horses, with another two million involved as volunteers or through a family affiliation.

The AHC study estimated the total (i.e., direct, indirect, and induced) impact generated by the horse industry to be \$101.5 billion in the U.S. and \$2.2 billion in Ohio, more than one-half of which was attributable to horse racing and recreation.

Source: 2005 AHC Study.

### Direct and Total Impact on GDP by Activity - Ohio

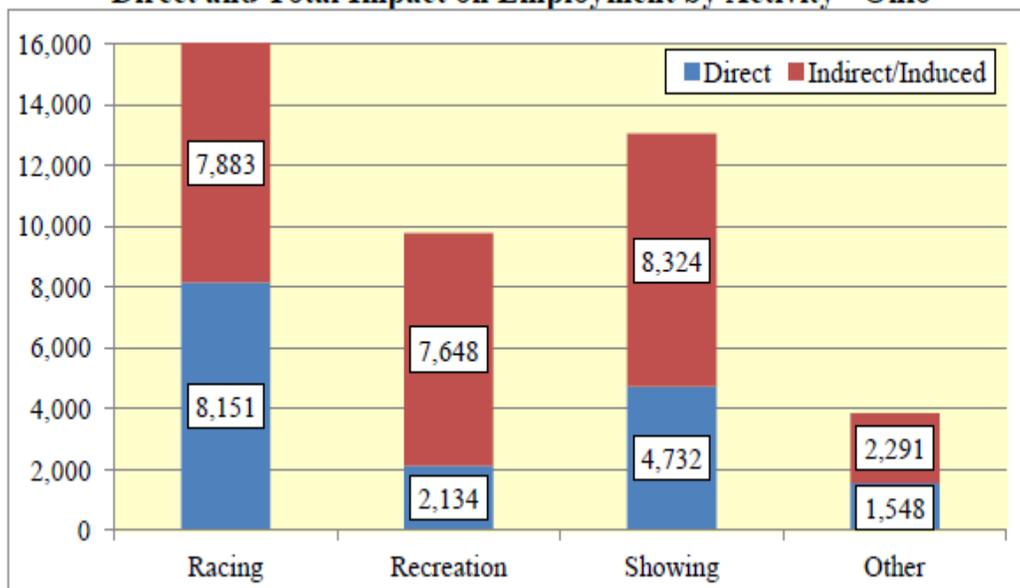


Source: 2005 AHC Study.

The AHC study also estimated that the horse industry sustains 1.4 million full-time equivalent (FTEs) jobs in the U.S. and over 42,700 FTEs in Ohio.

Source: 2005 AHC Study.

### Direct and Total Impact on Employment by Activity - Ohio



Source: 2005 AHC Study.

Lastly, the AHC study estimated that annual taxes paid by the horse industry were approximately \$1.9 billion in the U.S and \$81 million in Ohio. At both the national and State levels, the majority of taxes were paid to state governments, followed by the federal and local

governments, respectively. Irrespective of the method used for quantification, the breadth and diversity of the equine industry is substantial. Data from the USDA 2007 Census indicates that while the equine inventory in Ohio decreased, the inventory in surrounding states increased between 2002 and 2007 providing a potential target job market for Hocking College graduates.

**5. Describe the estimated number of individuals who will benefit from the project in terms of its proposed use:**

The School of Natural Resources consistently represents one of the largest enrollments averaging 1,300 students. These students along with 75 faculty members will directly benefit from the requested equestrian educational facilities renovation. Students graduating from the equine programs are employed on ranches, training facilities in Ohio, farrier services, racetracks, and at a variety of other horse industry jobs. Therefore, the overall number of individuals who will benefit from the project has an industry-wide reach. Any development project is somewhat dependent on the attributes of the industry as a whole. This section summarizes key trends in the equine industry used to guide decisions regarding the equine programs and associated renovations at Hocking College.

Although several sources indicate that the U.S. equine population has been trending upward, the actual number of equine in the U.S. varies significantly based on the different methodologies/ definitions used to calculate the inventory.

The American Horse Council (AHC) Foundation commissioned a study in 2004 to estimate the economic impact of the horse industry on the U.S. Approximately 27,950 horse owner/industry suppliers participated in the survey process with 18,650 individuals providing complete and useable surveys. Additional surveys were received from horse show organizers and racetrack representatives. The AHC study estimated that there were more than 9.2 million horses in the U.S., approximately 2.7 million of which participated in horse shows and other competitions. This study estimated that there were approximately 306,900 horses in Ohio. This source also estimated that nearly two million people own horses, with another two million involved as volunteers or through a family affiliation.

The National Agricultural Statistics Service (NASS), which is an agency of the U.S. Department of Agriculture (USDA), estimated that the U.S. inventory of horses and ponies was 4.0 million in 2007, an increase of 11% from 2002. According to the same source, the U.S. equine inventory has nearly doubled between 1992 and 2007.

Note: Equine inventory includes horses and ponies only. Sources: NASS; USDA.

**6. Provide a demonstration of the need for the project:**

The School of Natural Resources is a flagship division of Hocking College. The 12 academic programs within the school educate students from all over the country to become natural resource advocates, protectors of our wildlife and technicians in the equine industry. This project is needed to ensure Hocking College continues to provide a world-class education in safe and accessible facilities. There is a need for the project because many of our current barns serving the equine programs are in desperate need of repair and/or replacement. This project will provide much needed deferred maintenance and minimal functional improvements to the existing facilities and new ancillary facilities that will make a significant improvement to the instructional environment.

**7. Describe, in detail, the location the project: (see attached campus map)**

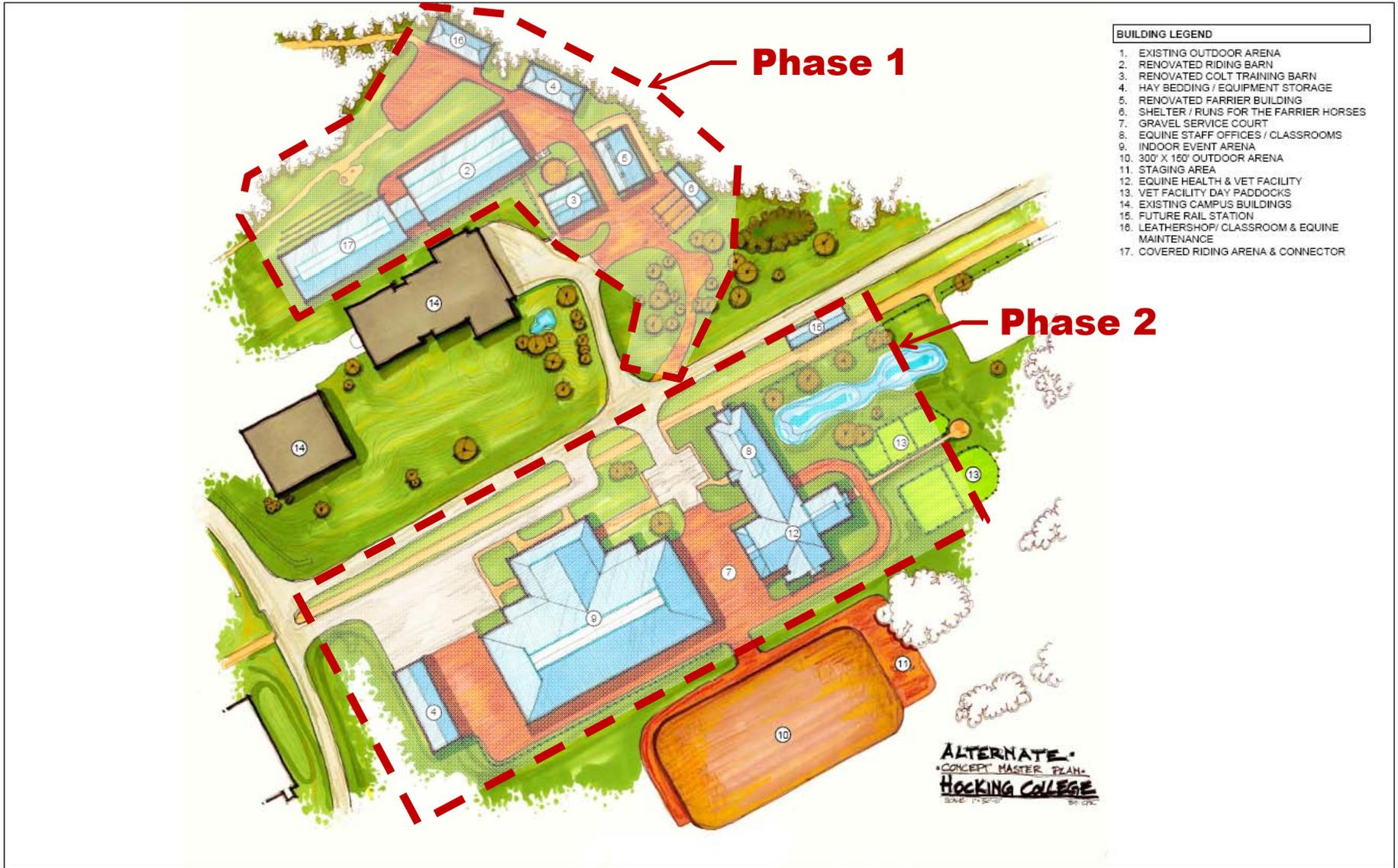
The School of Natural resources is located on Hocking College's main campus at 3301 Hocking Parkway, Nelsonville, OH 45764.

**8. The benefits expected to result from the project:**

The following benefits are expected to result from the equestrian educational facilities renovation project:

- To design/build a facility that is updated and more competitive with equine facilities at other colleges.
- To have the ability to expand academic programming to include services to the mentally and physically challenged.
- To improve safety by providing a designated riding area, rather than forcing instructors to give riding lessons in the barn and placing students on the trails before the instructors feel they are ready.
- To improve accessibility by making the new facilities handicapped accessible. Improvements such as wheelchair ramps may also be made to existing structures/facilities to increase accessibility and safety for everyone. The existing wood steps are of great concern to the staff and students because they are difficult to maintain and very unsafe.
- To extend the times that certain class can be scheduled. Currently, some classes cannot be held during the winter months due to inclement weather conditions. An indoor arena will allow instructors to hold these classes regardless of the weather.
- To help the local environment by reducing trail overuse.
- To build sustainable structures that are functional and require as little maintenance and ongoing investment as possible, while maintaining an appearance that is aesthetically pleasing.

# Master Plan



# Equestrian Educational Facilities Renovation - Phase II

