

Penn State Behrend Master Plan

September 28, 2016



- Master Planning Process
- Master Plan Vision and Primary Goals
- Space Assessment with identified needs to accommodate master plan goals
- Master Plan Program (Current, Future, and Long Term prioritization)
- Illustrated Campus Master Plan graphics



- Strategic Plan
- 10-Year Program Statement
- Establish Vision and Goals of the Master Plan
- Space Assessment (current space utilization)
- Evaluation of Existing and Projected Space Needs
- Draft Master Plan Program and Facility Plan
- Development of Three Tiers of Prioritization
- University Approval Process



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Establish a strategic vision for the physical plant

- Serve as a framework for thoughtful long-term decision-making
- Guide improvements to existing facilities and potential growth
- Depict a logical organization, with optimal adjacencies and opportunities for potential future projects
- Synchronize pedagogical objectives with facility development
- Identify optimal locations for programmatic elements Advance goals with each investment and design decision
- Make thoughtful decisions regarding day-to-day practical issues
- Manage annual investments in existing facilities

Plan ahead, identify priorities and align investment with long term view



A campus master plan is NOT a commitment of funds

- A master plan is not a commitment to invest, provide funding for, or design any individual project illustrated on the plan
- A master plan is not an implementation plan
- A campus master plan IS an "opportunities plan"
 - It defines opportunities for growth and accommodating change, if the need materializes
 - It does not include or suggest implementation goals and strategies or a specific timeline for new or renovated facilities



Current Priorities

Funds available from Capital Plan, campus, or donor

Future Opportunities

Beyond current Capital Plan, no predictable time frame

Long Term Possibilities

Decades in the future, yet informs decision-making



Penn State Behrend Vision and Master Plan Goals



PENN STATE BEHREND WILL BE:

- a premier destination, known nationally and internationally, for innovative teaching, research, and outreach;
- a transformative partner in the region and within the Penn State system;
- a recognized model for an engaged 21st century land-grant educational institution.



- 1. Expand and improve academic and student life facilities to achieve strategic growth of up to 5,500 on-campus students
- 2. Address challenges of pedestrian and vehicular circulation in and around campus, improve accessibility, and encourage alternative modes of transportation
- 3. Grow Behrend's role as a transformative partner in economic development and cultural offerings within the region
- 4. Sustain and promote the unique environmental character of campus as an academic, recreational, and community resource
- 5. Integrate environmental sustainability and stewardship principles in the planning, design, construction, and operation of campus buildings and grounds to improve the health and well-being of our community



Space Assessment Summary



Space Assessment

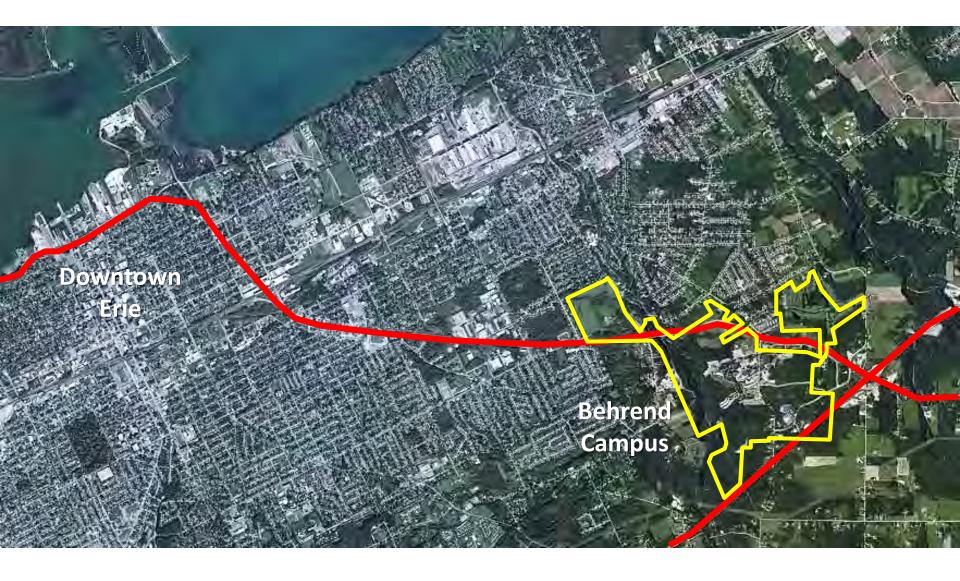
Academic Year Student HC	soc Doficio		2015 4327	future 5500			
Student HC	sos Doficio		4327	5500			
	sos Doficio						
	ocos Doficio						
	acos Doficio						
Core Academic ASF Spaces Deficiencies Comparisons (based on HC figures)							
			projected	projected			
	existing space asf		based on 2015 HC	based on target HC	required (- = overage)		
	space asi		2015 HC	larger HC	(- – Overage)		
Classrooms	41,639		41,353	52,563	10,924	significant need	
Class Labs	55,811		48,747	61,962	6,151	need	
Faculty Office	35,077		66,386	84,382	49 305	significant need	
	55,077		00,500	07,302		-	
Administration/Public Service	67,369		39,438	50,129	(17,240)	Includes 6,759 sf of unoccupied Fasenmyer	
Open Lab	27,604		8,654	11,000	(16,604)		
Library	45,095		45,095	45,095	0		
Library	+5,055		-5,055	+3,033	Ū		
General Use (Student Activities)	12,655		64,905	82,500	69,845	significant need	
TOTALS	285,250		314,578	387,632	101,975		
	,					gsf (@ 65% eff.)	



Master Plan Graphic Illustrations



Regional Context





Campus Context: Existing



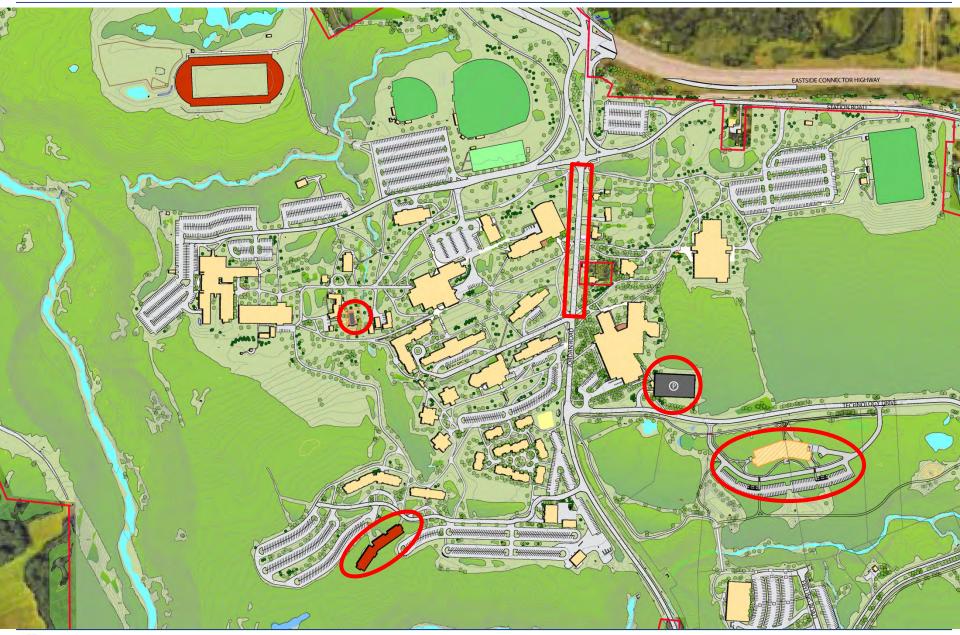


Existing Campus





Current Priorities



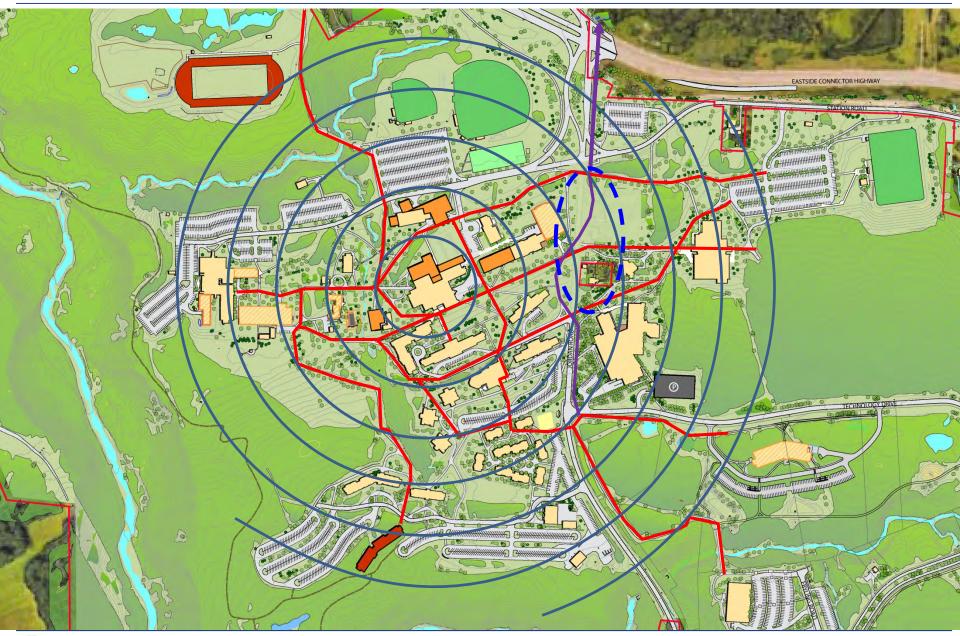


Future Opportunities





Pedestrian-Centered Campus



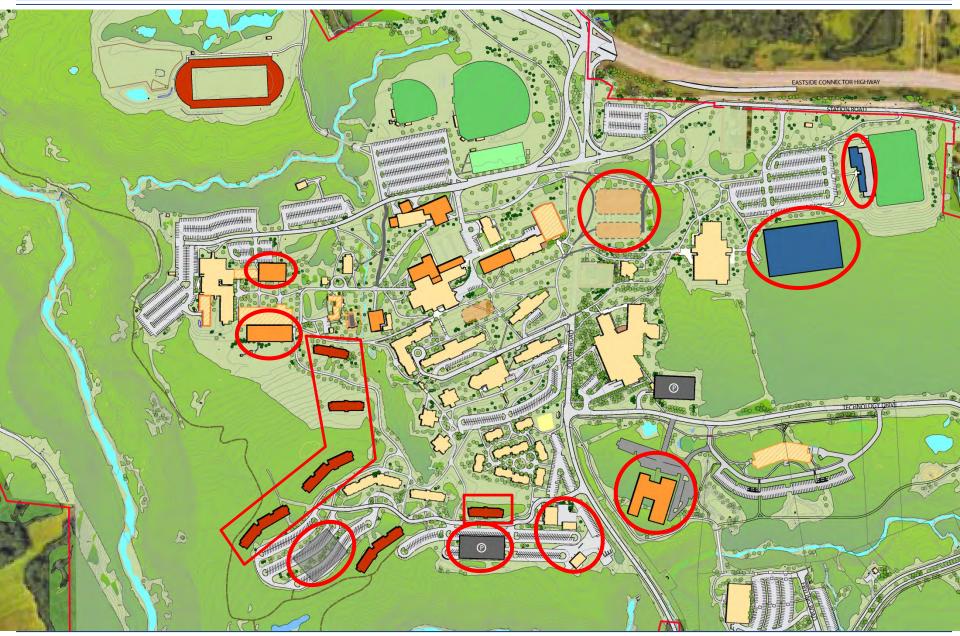


Vehicular Circulation





Long Term Possibilites





Space Summary

Existing campus space Space need for 5,500 students Space deficit for 5,500 students		gsf gsf (based on Univ. gsf Space Model)	
	- ,	0	
Advanced Manufacturing and Innovation Center	36,000	gsf (Univ. portion)	
Trippe Residence Hall	71,000	gsf	
Erie Hall Renovation and Addition	33,500	gsf	
Fasenmyer Hall Infill	8,500	gsf	
Kochel Center Addition	20,000	gsf	
Reed Union Building Expansion	50,000	gsf***	
Administration Building / Glenhill Annex	16,000	gsf	
[Demo: trailers, building = approx. loss of 29,900 gsf total]		<u>205,100 gsf</u>	
Soccer/Lacrosse Complex	16,000	gsf	
Future Housing Expansion (850 add'l beds)	241,400	gsf	
Multi-purpose Fieldhouse	120,000	gsf	
Building 6 in Knowledge Park	46,800	gsf (Univ. portion)	
Academic Expansion Sites	~70,000	gsf	
Building Opportunity Sites	699,300	gsf	
MP Space Summary	495,300	gsf net gain	





Penn State Behrend Master Plan

September 28, 2016



<u>Completing construction of the Advanced Manufacturing and Innovation Center</u> (AMIC) in Knowledge Park

- 60,000 gsf, 2 story complex withe open-laboratory concept
- Co-locates the college (classrooms, faculty member and staff offices, and laboratories) and industry (offices, laboratories, and production space) in the same building
- Approximately 60 percent of the facility for University use (36,000 gsf)
- Accommodates growth in School of Engineering and aligns research and resources with the region's new product development needs, responds to the needs of regional manufacturers, fosters innovation, and capitalizes on the knowledge and capabilities of Penn State, in conjunction with the Greater Erie Industrial Development Corporation (GEIDC)
- It is anticipated that more than 200 private-sector positions will be added to Knowledge Park as a result of AMIC



Construction of Trippe Residence Hall

- Design and Construct 250-bed Student Housing at location determined during on-going project design process
- Parking for new beds accounted for during previous Ohio Hall construction



REDC Parking Deck Expansion

- Addition of 2 levels to REDC Deck for approximately 120 additional spaces
- Project being initiated to relieve parking stress at upper end of campus



Initiate discussions with Township to improve campus vehicular and pedestrian circulation

- Determine steps required to close portion of Jordan Road to eliminate safety concern related to high-traffic pedestrian crossing of steep portion of Jordan Road
- Engage in discussions regarding bicycle and shuttle amenities and programs
- Refer to 2011 traffic study as a starting point
- See Future Opportunities item related to transportation goals



Aesthetic improvements to campus

- Development of Campus Exterior Architectural Plan (CEAP) Phase II and subsequent implementation of recommendations (campus beautification items)
- Glenhill Pool improvement options have been developed to Improve aesthetics, accessibility, safety, and usefulness of this open space adjacent to historic structure that serves as home to campus administration



Student Recreation Center / Erie Hall Renovation and Addition

- Addresses overcrowding of athletic and recreational facilities in Junker Center
- Co-location of an improved and expanded Health and Wellness Center to adequately serve students
- Feasibility study identified potential expansion and renovation of Erie Hall, which is outdated and in need of renovation (33,500 gsf of additional space)
- Facilities for strength training, cardiovascular health, "studio" activities (e.g., yoga, spinning, and Zumba), intramural activities, and locker rooms
- May serve as home to the baseball, softball, track and field, and tennis programs to include a training room, coaches' offices, locker rooms, and batting cages
- Opportunity to improve visual impression of campus from main campus approach of visitors and prospective students
- Central and easily accessible campus location
- New recreational facilities has been identified as the number one priority by students in research conducted by the college's Student Facility Fee (SFF) committee (potential funding from student fees)
- Master planning process has identified a significant need of General Purpose/Student Activity space



Convert Reed Union Parking Lot to Central Campus Greenspace

- Creation of iconic central campus landscape between Reed Union, Erie Hall, and Metzger Building
- Retain service access, bus drop-off, ADA parking, and visitor parking
- Evaluate parking re-allocation and need to additional parking to meet demand
- Supports Goal 4 to sustain and promote unique environmental character of campus as an academic, recreational, and community resource



<u>Renovation/repurposing of Fasenmyer Hall (mezzanine in-fill)</u>

- Add approx. 8,500 gsf by decking the former high-bay plastics lab in the Fasenmyer Building (currently used for storage) to create additional classrooms and specialty laboratory spaces to accommodate growing science and health-related programs
- Project includes total of 11,240 asf of renovated and new space for larger, more efficient general-purpose classrooms, a specialized nursing classroom, multiple tiered classrooms for 80-100 students, faculty offices, and an administrative home for the nursing program
- Renovation of this space, in conjunction with repurposing of existing space in the Science Complex (OBS, Benson, Prischak, and Hammermill) would provide the college with the facilities necessary to implement strategic initiatives that include:
 - Expansion of the Nursing program
 - Addition of health-related programs
 - Addition of an interdisciplinary Environmental Science program
 - Improved common area through renovation of the Roche Hall common space for use as a student lounge (including new stairway in atrium area)
- First necessary step in replacing classroom capacity that will be lost due to the planned renovation to follow in the Otto Behrend Science (OBS) and Nick buildings



Additions on Kochel Center to address Humanities & Social Sciences space needs

- Approximately 20,000 gsf on 2 levels
- Primarily offices for Humanities & Social Sciences offices and teaching support spaces to help consolidate school leadership, faculty, and staff



Renovation of classrooms in the Otto Behrend Science and Nick buildings

- Upgrade dated and non-compliant classroom furniture, which may potentially reduce seating capacity by nearly 50 percent per classroom
- Consider size adjustments to provide more smaller classrooms per Classroom Utilization Summary



Lilley Library Renovations

- Conversion and update of existing library space to Knowledge Commons type spaces to meet the needs of students
- Wider variety of study options: group study, private study, presentation practice, etc.
- Feasibility study completed



Implement Wintergreen Gorge improvements (master plan / grant funding)

- Completed Trail Sustainability Master Plan for the Wintergreen Gorge to serve as guide to manage the various habitats found along Fourmile Creek and provide access to visitors that minimizes impact
- Pursue grant funding with cooperation of Harborcreek Township and community organizations



Reed Union Building expansion (international cultures center, student clubs, etc.)

- Approximately 50,000 gsf on 3 levels
- Student activity areas to include a variety of student lounge spaces for individual or small group use, small meeting rooms, student club office and workspace, computer lounge, gaming lounge, Student Life offices
- Accommodate space needs of International Cultures Center and student service space
- Bookstore and retail offerings possibly reconfigured
- Several larger meeting rooms, potentially including a space that could be utilized as a black box theater
- Multipurpose Auditorium (12,500 gsf) with flexible, tiered space for studentcentered activities
- Expansion of food service options



Glenhill Farmhouse renovation

• Renovations needed to address code, access, and HVAC concerns

Administration Building / Glenhill Annex

- Approximately 16,000 gsf on 2 levels
- Primarily for general campus support and offices
- Removal of temporary annex trailers



Improve campus vehicle and pedestrian traffic circulation (initiate discussions/planning during current) [See traffic study]

- Determine potential for closure of Jordan Road from College Drive to Aquarius Drive to eliminate safety concern related to high-traffic pedestrian crossing of steep portion of Jordan Road and vehicular egress from College Drive (Refer to 2011 traffic study as a starting point)
- Pedestrian connections to unify facilities across former Jordan Road divide
- Pedestrian connection to Hudson Lofts and across Bayfront Connector toward University Gates, Kanty prep, and Golf Course
- Expand shuttle service to support additional off-campus housing
- Engage in discussions regarding bicycle and shuttle amenities and programs (bike routes, covered bike parking, bike share, safe bicycling training, etc.)
- Encourage a variety of travel options to get to and from campus that will minimize capital expenditures for new parking facilities and reduce the environmental impact of transportation



Soccer/Lacrosse Complex

- Second phase of the complex to provide locker rooms, athletic training space, and coaches' offices to fully realize men's and women's lacrosse programs.
- 12,920 ASF: 5,100 for team support, strength training, and athletic training space; 5,040 for team locker rooms, toilet rooms/showers and officials' locker rooms; 1,700 for field support storage and maintenance equipment; 1,080 for coaches' offices



Engineering and Industrial Partnership Center: Building 6 in Knowledge Park (programmed)

- 118,000 gsf total; approx..46,800 gsf for University use (~40%)
- Expansion of open-laboratory collaborations with industry (beyond space in the new AMIC building, which it is anticipated, will be at capacity within five to seven years)
- Bringing industry and academia together for research and development while providing students with relevant learning opportunities
- Open-laboratory pods for industry-academic collaborations in such areas as manufacturing and automation, nano-commercialization, materials science, digital science and technology, and security
- Enables growth in engineering at the undergraduate and graduate levels



Parking facilities to address campus needs

- Potential decking of existing surface parking areas to meet parking need
- As potential parking expansion continues to be limited on campus, satellite parking and shuttle service should be enhanced as needed



Housing expansion to add 1,000 on-campus beds

- Trippe Hall will bring the on-campus residential inventory to 1,900 students
- Desire to house a minimum of 50 percent of the student body on campus (or 2,750)
- Considerations would need to be made for additional food service facilities as Dobbins Dining Hall will have reached its operating capacity with the construction of Trippe Hall
- Current H&FS financial commitments constrain funding of housing for 15+ years
- Evaluate private-sector housing impact on campus need



Multi-purpose Fieldhouse

- Indoor turf field for varsity athletic practice, competition, recreation, event use, indoor track (field dimension 360x210; overall building 410x260; approx. 120,000 gsf)
- Mezzanine-level track for recreational use
- Minimal restroom and lobby facilities (determine feasibility of utilizing Junker locker/shower facilities)



Additional athletic facilities to support current and future programs

- Addition of bleachers, locker rooms, coaches' offices, and training facilities for track and field
- Baseball Field Restrooms and batting cage



General Academic Building(s)

- Two sites noted for academic and general student space accommodation
- Building site east of Nick: 15,000 gsf/level, 30,000 gsf at two levels
- Behrend Science Building Addition: 22,500 gsf/level, 45,000 at two levels
- Develop a program that identifies academic units and functions to be housed as part of site alternative validation
- Anticipated building program to include classrooms, class labs, faculty offices, support spaces, student general use space



Maintenance and Operations Expansion

- Expand and improve maintenance and operations facilities to meet growing service demand of expanding campus
- Evaluate existing and alternative site locations



- Digital Media, Arts and Technology (DMAT) Center (need/demand currently lacking)
 - Multipurpose facility that integrates visual and performing arts with STEM disciplines <u>and</u> technologies
 - School of Humanities and Social Sciences
- Future Building Opportunity
 - Flexible building sites that can be adjusted based on future identified needs to accommodate campus growth
 - Possible Long-Term Possibilities include:
 - Allied Health programs
 - Nursing, Psychology, Allied Health Sciences, Health Care Policy and Administration, and a Master of Health Administration
 - Center for Immersive Learning and Entrepreneurship (Black School of Business)
 - Space for student consulting teams, a business accelerator program, student/faculty member start-ups, and classes in an integrated setting offering a platform for learning innovations based on industry projects, new ventures, and service learning
 - Possible Knowledge Park location



Strategic Acquisitions and Divestitures

- Consider acquisition of additional parcels to meet needs for continued campus growth
- Evaluate existing campus property holdings to determine long-term strategic value
- Ensure that near-term property transactions and development opportunities are aligned with long-term campus and University goals
- Consider influence of non-University investments adjacent to campus (housing, retail, commercial, etc.)

