

Penn State Harrisburg Strategic Plan

INTRODUCTION

Penn State Harrisburg has experienced dramatic growth and development since its founding in 1966. As recently as 25 years ago, more than half of our students were part-time graduate students, the college offered only upper division undergraduate courses, and 95 percent of our students were Pennsylvania residents. Today, we are a comprehensive college offering four-year undergraduate degrees in 37 academic majors, 33 master's degrees and three doctoral degrees; more than 80 percent of our students are undergraduates. We are the most diverse and fastest-growing among Penn State's Commonwealth Campuses, and our 5,000 students include more than 500 international students from 50 countries. In addition to resident instruction, World Campus enrollment is over 2,000.

Our strategic plan is pursued in the context of three broad and mutually reinforcing priorities set by the academic leadership and endorsed by the Board of Advisers. First is to maintain and enhance academic excellence, because the strength of our academic programs is the foundation for our success as an institution. Second is to strengthen faculty research and scholarship. Faculty-led research underpins academic excellence because new discoveries are directly incorporated into classroom learning and teaching, and by providing research experiences for students. Third is to pursue our strategic goals and objectives through public-private partnerships, because partnerships with government, industry, and the non-profit sector connect our education and research programs to real-world problems and ensure translation of research to application.

This document is a road map for positive change. Included in it are goals articulated after a series of deep conversations within each of the five academic schools and the administrative units on our campus, as well as across the schools and units. Stakeholders involved in these conversations included faculty, administration, staff, and student representatives. Goals range from school-specific ambitions to college-wide intentions. Key Performance Indicators and metrics reflect ways of measuring the progress towards implementation of these goals. These indicators also reflect the discussions which led us to believe that change was deemed necessary.

This is a Penn State Harrisburg document, and can be read as the culmination of a larger strategic planning discourse across the campus. At the same time, the plan is an outward-facing document written to be understood not only within the college, but also by broader external audiences throughout the University and beyond.

Penn State Harrisburg has clear potential for significant expansion of research and scholarly activity in the years ahead. We are recruiting and retaining outstanding research faculty and

staff, including many international and early-career scientists. More than \$20 million has been invested in research laboratories since 2005. Research development efforts are focused on three core strengths of the college: 1) state and local policy; 2) engineering and industry partnerships; and 3) health sciences. In parallel, we will pursue two cross-cutting initiatives aimed at enhancing Penn State's impact in our region. These are: 1) joint planning and action with the Penn State College of Medicine and Penn State Dickinson Law; and 2) redevelopment of the Meade Heights parcel as a public-private research and innovation hub on our campus.

Penn State Harrisburg values the fundamental worth of each and every community member and is committed to diversity, equity and inclusion (DEI) across the college. We are committed to honoring and celebrating diverse identities including, but not limited to, race/ethnicity, LGBTQ+, gender identity and expression, socioeconomic status, age, disability, religion/spirituality, veteran status, nation of origin, documentation status, personal appearance, and political beliefs. This commitment to DEI is central to our endeavors to enhance academic excellence, strengthen faculty research and scholarship, and pursue strategic goals through public-private partnerships. Academic excellence is achieved when we prepare students to become engaged citizens of the world. To do that, we must develop curricula that challenge stereotypes, presumptions, and unconscious biases. We must encourage the development of critical thinking skills and promote cross-cultural and cross-identity appreciation. We must foster respectful dialogue across differences and provide space for a free exchange of ideas and perspectives.

We are also committed to DEI as we work to strengthen faculty research and scholarship. A diversity of scholars inspires new lines of inquiry and methodological pluralism. These diverse viewpoints lead to advances in scholarship, innovative analyses, new discoveries and new solutions to the myriad problems facing the world. Locally, public-private partnerships will strengthen our workplace and our larger community. As such, we pledge to increase the diversity of the college's workforce, including faculty and staff. We plan to recruit, hire, retain and promote individuals from underrepresented groups in the U.S. We will do this in compliance with Affirmative Action policies. One goal is to improve the campus climate by creating a sense of belonging and safety for all of the members of the college community. We will accomplish this via cultural and institutional change. Specifically, we will begin with a focus on inclusive leadership through a newly approved position, an Assistant Dean of Diversity, Equity and Inclusion. These efforts are in line with our thematic priorities that include (1) transforming education, (2) stewarding our planet's resources, (3) enhancing health, (4) advancing arts and humanities, and (5) empowerment through digital innovation. The world is becoming increasingly diverse and globally connected. In order to provide education and conduct research to advance human welfare and address the world's problems, we must embrace diversity and engage intellectually across barriers created by differing identities.

Goal 1. Penn State Harrisburg will transform education with enhanced curricula, discovery-focused research, and collaborative partnerships.

Penn State Harrisburg understands that transformation indicates change conveying significant advancement in the form or character of education. Transforming education creates a foundation in which each member of our community is accountable and answerable for their knowledge, and acts based upon responsibility to self and others. As a goal, the transformation of education is embedded throughout all Penn State Harrisburg initiatives. It is therefore understood that this is a unifying theme which resonates across all units of the college. That being said, this section of the Executive Summary of the Penn State Harrisburg Strategic Plan highlights the specific ways that we will pursue this goal. We will achieve this goal by pursuing **three objectives**:

- Develop and deliver *distinctive and effective curricula* to enhance applied learning.
- Expand and elevate *research and scholarly productivity* to facilitate discovery and the application of new knowledge.
- Seek out and actualize *collaborative partnerships* which will benefit our stakeholders, our community, the college, and the University as a whole.

Objective 1.1: Develop and deliver distinctive and effective curricula to enhance applied learning. This objective will be accomplished through six action items, with achievement of the desired outcomes determined by analysis of measurable factors. One element supporting success will be equipping students with tools required to engage. “Find Your Why. Start Your Journey,” a Student Engagement Network Course in Canvas, will equip them for success. All the action items below could have an element that focuses on global processes and systems.

Key Performance Indicators: Identification of an evaluative process to assess new program opportunities; list of new curricular offerings (e.g., majors, options, minors) developed and introduced; inventory of significant learning opportunities developed and delivered; List of labs and infrastructure added/updated to support new curricula or learning opportunities.

- **Action Item 1.1.1.** Create integrated undergraduate-graduate agreements (IUGs) with other Penn State colleges and campuses to help students maximize their education and progress efficiently toward degree completion.
- **Action Item 1.1.2.** Develop interdisciplinary programs whenever academically appropriate and with the intention of combining strengths to meet 21st Century market demands. Such programs will function across various units in areas such as artificial intelligence, healthcare supply chains, and STEAMM.
- **Action Item 1.1.3.** Respond to ongoing social, technological, and economic developments by establishing new degree programs in Enterprise Technology,

Physics, Human-Centered Design and Development, Cybersecurity Analytics and Operations, and Biotechnology.

- **Action Item 1.1.4.** Foster leadership development for students by valuing and utilizing real-world experiences that individually and collectively enhance individual, personal, and professional growth.
- **Action Item 1.1.5.** Establish a Center for Professional Sales and Marketing, which will complement existing and future academic programming and facilitate student and faculty career development.
- **Action Item 1.1.6.** Build labs that provide direct engagement with the technologies and practices of students' preferred career directions, such as a Usability/Behavioral Lab, Finance Lab, and Water Resource Lab. These could be designed with sustainability criteria.

Objective 1.2: Expand and elevate the research and scholarly productivity that facilitate both discovery and the application of new knowledge. This objective will be actualized by pursuing and accomplishing six action items. Progress will be measured in two ways: by effort-based evaluative components to continually improve efforts comprehensively in this area and by benchmarks indicating target accomplishment.

Key Performance Indicators: Measures of research and scholarly activity (e.g., publications, conference presentations, invited talks, etc.); List of significant research support obtained and used.

- **Action Item 1.2.1.** Expand federally-sponsored research through the development of pipelines to and partnerships with relevant agencies, such as the National Science Foundation, National Institutes of Health, National Endowment for the Arts, and the Department of Defense. This will augment Penn State Harrisburg's research facilities and staff.
- **Action Item 1.2.2.** Expand philanthropy-funded research opportunities from organizations such as the Rockefeller Foundation, the Bill and Melinda Gates Foundation, and the Guggenheim Foundation. This will expand and strengthen the research capabilities of Penn State Harrisburg's faculty.
- **Action Item 1.2.3.** Secure increased financial support for faculty research via partnerships with business and industry across the region, Commonwealth, and nation. This will deepen Penn State Harrisburg's connection to private sector institutions and generate growth opportunities.

- **Action Item 1.2.4.** Seek new internal seed grant opportunities through programs such as the college's new Exploration and Analysis Grants for Expanded Research (EAGER) program and seed grant programs of other Penn State units to nurture and develop research projects likely to culminate in valuable outcomes.
- **Action Item 1.2.5** Build faculty capacity to perform research by creating new fixed-term research faculty positions at all ranks, design and promote programs for post-doctoral scholars across academic units, and support development of new doctoral programs including funding to support doctoral student research assistantships, especially in science and engineering.
- **Action Item 1.2.6** Develop new research laboratories and facilities to accommodate expanded research programs, leveraging federal research facilities funding from NSF, NIH, and other agencies, Commonwealth funds, philanthropic foundations, donor contributions, and University funds.

Objective 1.3: Form collaborative partnerships which benefit our stakeholders, our community, the college, and the University. A major focus will be on potential positive outcomes that arise from these partnerships, described below in each action item. Objective 1.3 will be accomplished by fulfilling seven action items.

Key Performance Indicators: List of new partnerships; List of significant achievements from partnerships both current and new.

- **Action Item 1.3.1.** Strengthen relationships with nearby Penn State partners – specifically, the College of Medicine in Hershey and Dickinson Law. Such partnerships will facilitate the building of a regional consortium which will grow and enhance Penn State Harrisburg's presence in Pennsylvania's Capital Region. These enhanced relationships will create an economy of scale in the region which leverages the Penn State name across a host of areas as a primary source for solving problems and improving lives in the Commonwealth. This vision is consonant with that outlined in One Penn State.
- **Action Item 1.3.2.** Establish mutually beneficial relationships with Capital Region secondary schools to open up research experiences and create matriculation pathways for the student population in this growing part of the Commonwealth. This will help to ensure that secondary school students, teachers, and administrators view Penn State's offerings in the Harrisburg area as crucial to the education and career plans of the region's students.

- **Action Item 1.3.3.** Create broad and strong networks of contacts within the Capital Region's health and associated medical care communities, ensuring that Penn State Harrisburg establishes itself as an integral part of healthcare initiatives in this area of Pennsylvania. A major outcome of this action item will be to link the campus with the College of Medicine as Penn State solutions to important health and medical questions.
- **Action Item 1.3.4.** Increase the role and visibility of Penn State Harrisburg as a source for policy research relevant to and desired by state government in Pennsylvania's capital city, Harrisburg. Connecting with government will create a synergy between the college and the Commonwealth in which each side sees the other as a partner in solving public policy problems.
- **Action Item 1.3.5.** Coordinate a pipeline of programs on diversity, inclusiveness, and equity which foster and support a college attendance culture among students from underrepresented groups. It is important to ensure that DEI is reflected at all levels of campus activity, from classrooms to research to student activities, in order to fully equip our students to flourish in the diverse future.
- **Action Item 1.3.6.** Develop Continuing Education programs and align research activities to address needs of government, industry, and non-profit partners, including exploration of new partnership ventures to achieve shared regional economic development goals. Here again, Penn State Harrisburg, should be seen as a resource available to assist community stakeholder institutions. Additionally, students on campus should see the abundance of partner institutions active in the Capital Region as offering a host of academic and pre-professional opportunities for community engagement.
- **Action Item 1.3.7.** Maximize partner relationships with other Penn State campuses, HACC, and neighboring educational institutions. These will help to ensure that Penn State Harrisburg increases the University's central position as a primary engine of education, opportunity, and attainment in the Capital Region. One Penn State provides a roadmap for this vision. Also, developments in other educational institutions – such as consolidations underway in the PASSHE – may provide opportunities for Penn State Harrisburg to expand its long-held tradition as a transfer destination for many students. This action item ensures that we will be ready to react to evolution in the Commonwealth educational environment.

Goal 2. Penn State Harrisburg will enhance health by using research, education, and outreach to promote both a higher quality of life and improved personalized and population health.

At Penn State Harrisburg, we understand that our goal of enhancing health must include activities which protect or improve the general condition of body and mind; which support a state of being free from disease and injury; and which foster conditions of well-being for individuals, communities, and society as a whole. To achieve this goal, Penn State Harrisburg is committed to investing in projects in the areas of research, education, and outreach. Specifically, we will achieve this goal by pursuing **two objectives**:

- Explore and develop new *health-related academic programs*.
- Expand *research and outreach* on health-related concerns.

Objective 2.1: Explore and develop new health-related academic programs. This objective will be achieved through six action items. Outcome measures can include monitoring number of students applying to/accepted to/graduating from the programs over time, as well as a study of employability outcomes.

Key Performance Indicators: List of new curricular offerings (e.g., majors, options, minors) developed and introduced; List of significant learning opportunities developed and delivered.

- **Action item 2.1.1.** Implement already-approved new undergraduate programs, including bachelor's degrees in Biobehavioral Health (BSED), Communication Sciences and Disorders (HUM), and Human-Centered Design and Development (SBA). Implementation of these new programs requires both the adoption of appropriate Penn State curricular offerings to support the programs and the hiring of exceptional faculty who are leaders in their fields, paying careful attention to diversity, equity, and inclusion. The college can then market these new programs to stakeholders, communities, as well as existing and prospective students.
- **Action item 2.1.2.** Explore and develop possible new programs within disciplines. Achieving this means focusing on adding new degree programs to Penn State Harrisburg's offerings at the doctoral, master's, bachelor's, major, minor, and certificate levels. The Strategic Plan envisions careful feasibility studies, including market analyses, intra-programmatic benchmarking, and development of P-3 proposals. Specifically, the college will explore adding B.S. programs in Nursing (BSED), Rehabilitation and Human Services (BSED), Physical Therapist Assistance (BSED), and Occupational Therapist Assistance (BSED); a Health Communications track within the existing Communications major (HUM); a Nurse Practitioner's program (BSED); an undergraduate

certificate program in Applied Behavioral Analysis (BSED); an undergraduate Minor in Global Health (BSED); IUG programs in all healthcare-related disciplines (BSED); an M.A. (or concentration) in Addictions Counseling (BSED) and in Geriatric Counseling (BSED); and an M.S. in Communications Sciences/Disorders in Speech Language Pathology (HUM).

- **Action item 2.1.3.** Position the college to serve the Capital Region by exploring and developing new interdisciplinary programs. This initiative implies expanding dialogue among the five schools at Penn State Harrisburg (SPA, BSED, SBA, SSET, and HUM) with a focus on program development opportunities. Market analyses, benchmarking, and development of P-3 proposals will be the concrete outcomes of these dialogues, resulting in new interdisciplinary programs in the following areas: Health Information option (SSET and SBA); Bioinformatics option in the Computer Science major (SSET and SBA); Healthcare Informatics Program (SSET and SBA); Healthcare Management Program (SBA and BSED); Healthcare Supply Chains Program (SBA and SPA); and Health Care Administration Enhancements Program (SPA, BSED, SPA, HUM).
- **Action item 2.1.4.** Explore and develop new interdisciplinary programs with the College of Medicine and Dickinson Law. Effective programmatic partnerships offer promising possibilities for synchronous growth and improvement. A positive step would be an expansion of dialogue regarding program development opportunities. Combining insights and support via market analyses, benchmarking, and P-3 proposals will advance this initiative.
- **Action item 2.1.5.** Explore and develop interdisciplinary programming within the college library. Penn State Harrisburg’s library continues to function as a major college unit advancing scholarship, research, and student success. The library will develop and conduct annual workshops on health literacy, with attention focused on health disparities related to race, ethnicity, and gender. The library will also use endowments from the Highmark Blue Shield Education Fund and the Capital Blue Cross Health Education Fund to purchase new materials supportive of interdisciplinary studies.
- **Action item 2.1.6.** Explore and develop interdisciplinary programming with the Office of Physical Plant, specifically related to sustainability enhancements across the college. This can be accomplished by facilitating collaboration between campus leadership and unit members to explore creation of a “Living Laboratory” where sustainability measures can be researched, tested, demonstrated, and integrated into curricula. These include carbon neutrality, climate resilience, and

environmental justice. Another step is encouraging cooperation between campus leadership and unit members to facilitate establishment of an Energy Resource Database usable by students, faculty, and staff in support of teaching, scholarship, and service. This database should be secure and searchable by Penn State Harrisburg community members, containing information such as figures regarding utilities and water usage as well as Leadership in Energy and Environmental Design (LEED) information pertaining to campus buildings.

Objective 2.2: Expand research and outreach on health-related issues. This objective will be attained via four action items. e Progress can be ascertained through outcome-oriented benchmarks. Good health intersects with many Penn State strategic priorities and also with many desired policy outcomes. This is another area in which Penn State Harrisburg aims to be a leader. Key Performance Indicators: List of significant research support obtained and applied; List of new partnerships; List of significant achievements from partnerships both current and new.

- **Action item 2.2.1.** Develop collaborative health-related proposals. Penn State Harrisburg will take four steps to accomplish this initiative: 1) Work together with the College of Medicine and Dickinson Law to develop collaborative health-related research projects. 2) Establish collaboration between Penn State Harrisburg academic schools to develop health-related research proposals specifically aimed at assisting marginalized communities. 3) Leverage resources in the Office of Research and Outreach to seek partnerships with Penn State Harrisburg institutes and centers at University Park, including the Clinical and Translational Science Institute (CTSI), Social Science Research Institute (SSRI), Institute for State and Regional Affairs (ISRA), and the Douglas W. Pollock Center for Addictions Outreach (PCAOR).
- **Action item 2.2.2.** Expand outreach to the Capital Region healthcare community. This initiative will be attained through working with regional partners to explore the establishment of a consortium for greater Harrisburg; through the building of broader networks of contacts across academic, professional, and service sectors of the local economy; and through a partnership among relevant college academic schools and the Office of Development and Alumni Relations to identify, contact, and maintain functioning relationships with leaders in the area healthcare community, including alumni and donors.
- **Action item 2.2.3.** Cultivate student health and safety. To accomplish this objective, Penn State Harrisburg will enhance the Center for Fitness and Wellness and provide students with consultative, investigative, educational, and professional services as well as treatment and care aimed at enhancing

knowledge, well-being, advocacy, and self-care. The college will also develop and provide quality programming to promote students' holistic health, while providing quality programming regarding risk reduction to public health threats such as COVID-19. Rates of student participation and surveys to measure student satisfaction can provide outcome-related data helpful for measuring success in achieving the targets inherent in this action item.

- **Action item 2.2.4.** Enhance environmental health and sustainability. The college will empower and assist the Office of Physical Plant by researching and implementing emerging technologies and practices related to energy conservation, water protection, and waste reduction; by identifying priority investments on campus; and by forging partnerships with regional and global sustainability experts. Low-mow zones and the creation of a tree inventory will nurture a thriving campus ecosystem providing hands-on learning opportunities for students. Other steps include assisting Information Technology Services (ITS) to reduce the campus server footprint and enhancing SSET's efforts to upgrade the Drinking Water Pilot Lab and to create a Water Resource Lab. Working with the Sustainability Institute is one way to assist in accomplishing targets within this action item.

Goal 3. Penn State will steward our planet's resources by becoming a leader in creating comprehensive solutions to mitigate the dangers of climate change and address the challenges of providing safe and abundant water, clean and renewable energy sources, and plentiful and nutritious food.

Penn State Harrisburg will take a leading role in stewarding our planet's resources in concert with the college's Sustainability Framework. A whole-college approach to sustainability, this Sustainability Framework rests on four pillars: Research for Sustainability, Teaching and Learning for Sustainability, Sustainable Operating Practices, and Community Engagement and Partnerships for Sustainability. As with good health, sustainability intersects with many desired outcomes for the Commonwealth, ranging from active transportation, clean drinking water, clean air, healthy food, and public safety. All of these point to important policy outcomes. By accomplishing this goal, the college will play a visible, positive leadership role in improving life across the region and state. Penn State Harrisburg will achieve this goal by pursuing **four objectives:**

- Improve *campus operations and facilities* with an integrated focus on sustainability and resilience.
- Expand and deepen the *student education experience* at Penn State Harrisburg through education in sustainability theory and practice.

- Encourage *research and scholarship* which emphasize strategic directions and incorporate the sustainability principle.
- Ensure productive *engagement with the community* and region in sustainability and resource management.
- Accomplish *measurable outcomes* such as carbon footprint reduction, cost savings, and other ways to show positive evolution towards campus sustainability.

Objective 3.1: Improve campus operations and facilities with an integrated focus on sustainability and resilience. This objective will be accomplished via three action items.

Key Performance Indicators: List of facility additions, updates, and improvements related to sustainability; List of achievements and developments related to sustainability; List of updates and improvements related to improving resilience of college operations; Assessment of capabilities by the Crisis Management Team.

- **Action Item 3.1.1.** Maintain and improve our facilities and identify sustainability enhancements. The college will investigate emergent technologies related to energy, water, and waste management. Promising investments will be identified and prioritized. Penn State Harrisburg will also evaluate campus ground operations for sustainability enhancements. These enhancements will be implemented to nurture a thriving campus ecosystem that provides hands-on student learning opportunities. We will also establish an Energy Research Database for students, faculty, and staff to be consulted in research, teaching, and learning.
- **Action Item 3.1.2.** Demonstrate integrated design, resource conservation, and renewable materials through the Academic Learning Center Project (ALC). Penn State Harrisburg will explore the creation of a “living laboratory” in which sustainability measures can be studied and demonstrated in order to provide a nexus for research, teaching, learning, and outreach. Further, the campus will pursue LEED Platinum Certification and integrate progressive building sustainability design concepts that enhance teaching and learning.
- **Action Item 3.1.3.** Maintain and improve the operational resilience of campus assets and procedures. The college will work to analyze and better understand how all relevant areas (technology, data, third parties, facilities, operations, and people) impact critical capabilities and controls. Additionally, through the efforts of the Crisis Management Team, we will develop cross-functional specialized expertise to evaluate and measure college resilience in light of specific risk factors, with a focus on integration, measurement, and preparedness. The current COVID-19 pandemic provides a stark example of how vital such steps are.

Objective 3.2: Expand and deepen the student education experience at Penn State Harrisburg through education in sustainability theory and practice. This objective will be accomplished by meeting four action items. An important gauge of progress on these action items will be evaluative metrics examining student responses.

Key Performance Indicators: List of curricular updates or new co-curricular opportunities developed and introduced related to this area; List of significant learning opportunities developed and delivered related to this area.

- **Action Item 3.2.1.** Foster opportunities within the academic curriculum for learners to achieve a breadth of knowledge that enables a systems-approach to sustainability. This can be achieved by checking existing General Education courses related to sustainability to ensure that they are being offered to and promoted among students. Also, Penn State Harrisburg will review and refine the existence of sustainability concepts and applications within academic offerings. The college will also ensure that, whenever academically appropriate, elective and interdomain course offerings include sustainability elements.
- **Action Item 3.2.2.** Create opportunities for engaged learning that incorporate sustainability. Penn State Harrisburg will accomplish this by encouraging student projects (research, service learning, capstone, and outreach) and internships related to sustainability. We will also develop and publicize on-campus sites for sustainability initiatives (such as the Smart Home Research Initiative, the Lower Susquehanna Initiative, and the PA Recycling Markets Center).
- **Action Item 3.2.3.** Generate opportunities for engaging students in co-curricular activities in diverse areas of sustainability. This initiative is met by developing on-campus programming (including First-Year Seminar activities) related to sustainability. Further, the college will also support student and student groups (classes and clubs) that participate in regional or national events and programs related to sustainability.
- **Action Item 3.2.4.** Pursue research to support a whole-campus approach to sustainability. Attaining this final action item will be made feasible by ensuring that vital areas of the college are systematically mindful of sustainability. This includes, but is not limited to, research and educational grants, contracts, project sponsorships through development, and community partnerships.

Objective 3.3: Encourage research and scholarship which emphasize strategic directions and incorporate the sustainability principle. These aims are conceived as flowing from and

consonant with those listed in Objective 3.2. Implementation tasks for the action items will help to determine how each comes to fruition. This objective will be met via eight action items.

Key Performance Indicators: Measures of research and scholarly activity (e.g., publications, conference presentations, invited talks, etc.) related to this area; List of significant research support obtained and used related to this area.

- **Action Item 3.3.1.** Establish a Sustainability Council to promote and guide research and scholarship related to sustainability.
- **Action Item 3.3.2.** Leverage the Recycling Markets Center (RMC) to identify and implement sustainability-related research opportunities.
- **Action Item 3.3.3.** Increase opportunities for interdisciplinary capstone projects, thereby assisting students and faculty in addressing sustainability problems.
- **Action Item 3.3.4.** Explore the establishment of a “smart home” and “aging-in-place” research initiative. This is a health-directed focus.
- **Action Item 3.3.5.** Evaluate a water treatment and conservation research initiative. This is an engineering-related focus.
- **Action Item 3.3.6.** Assess the viability of a renewable energy production and management initiative. This is an engineering-related focus.
- **Action Item 3.3.7.** Explore establishing an environmental sustainability policy research initiative. This is a public policy thrust.
- **Action Item 3.3.8.** Identify opportunities for energy efficiency and resource conservation in all laboratory operations and incorporating this into proposals for new labs.

Objective 3.4: Ensure productive engagement with the community and region in sustainability and resource management. Three action items support attainment of this objective. The University’s Sustainable Communities Collaborative model and the U.N.’s Sustainable Development Goals provide a helpful framework to implement this objective. Also, these action items can and should include local-to-global themes, carrying their salience beyond campus in keeping with Penn State’s vision.

Key Performance Indicators: List of new partnerships; List of significant achievements from partnerships both current and new; List of significant outreach or education events done.

- **Action Item 3.4.1.** Provide technical assistance on sustainable resource management practices to businesses and non-profit organizations through centers such as the RMC.
- **Action Item 3.4.2.** Conduct community outreach and education events, such as Science on Tap. This is an outreach program that sponsors several community events throughout the year on various topics in the sciences.
- **Action Item 3.4.3.** Build partnerships within the region and community to share knowledge and identify needs and opportunities pertaining to sustainability.

Goal 4. Penn State Harrisburg will be a leader in the arts and humanities, promoting them in research, in the classroom, throughout the college, and in the local community.

This goal articulates Penn State Harrisburg’s aspiration to enlarge the presence of the arts and humanities on campus and within the region. We believe that the arts and humanities enrich campus life for all students, faculty and staff while they simultaneously prepare students to think critically, communicate effectively, and appreciate and respect cultures different from their own. We will strive to deploy the arts and humanities to improve the education of all students; contribute to the campus and local community, as arts offerings can be a key educational outreach; increase diversity, equity, and inclusion on campus; and prepare students for career success. Measuring the outcomes from accomplishing the objectives listed can be done by study of student/faculty surveys during/after each cultural event, performance, outreach, and research support action. This will help to gauge the impact of broadening and deepening the Humanities’ footprint. To these ends, the college Strategic Plan identifies **two objectives**:

- Promote the arts and humanities both by *locating funds* to generate research, creative production, and cultural programming and by *increasing access* to our research and programming in communities on and off campus.
- Use the arts and humanities to *enhance education* for all students.

Objective 4.1: Promote the arts and humanities both by locating funds to generate research, creative production, and cultural programming and by increasing access to our research and programming in communities on and off campus. This objective will be accomplished through three action items.

Key Performance Indicators: List of visiting scholars; List of support provided (e.g., fellowships, research support, event support); List of significant cultural events; List of significant outreach developments.

Action Item 4.1.1. Support research in arts and humanities by funding a post-doctoral fellowship in American Studies (HUM), by sponsoring visiting scholars (HUM), by funding doctoral research (HUM), and by supporting faculty research and creative production. These initiatives will be achieved by working with both the Office of Research and Outreach and the Development Office, which strives to match faculty projects with interested donors. A connection to the College of Arts and Architecture should be forged, allowing the School of Humanities to benefit from learning about their successes in leveraging sustainability and global challenges in the arts curriculum.

Action Item 4.1.2. Support faculty cultural event programming, especially in the area of diversity/equity/inclusion. This initiative will be achieved by working with the Development Office, which can connect faculty proposals for cultural events with those donors who have expressed interest in the topics to be addressed.

Action Item 4.1.3. Centralize cultural programming by deploying a “Cultural Events Team” to centralize campus programming in the arts, humanities, and diversity/equity/inclusion and to effectively advertise cultural programming to the campus community, external community, and alumni. The “Cultural Events Team” would work with the many units on campus that schedule cultural events: the five academic schools, library, Center for Holocaust and Jewish Studies, International Programs, Student Life, Diversity and Educational Equity Committee (DEEC), Penn State Harrisburg Reads, Division of Student Affairs, and the Kulkarni Theatre. Careful measurements of attendance and involvement can assess student engagement here.

Action Item 4.1.4. Engage in outreach to area high schools by locating funding for and then launching Penn State Harrisburg’s Holocaust, Genocide, and Human Rights Education initiative. This initiative involves faculty, graduate students, and the Center for Holocaust and Jewish Studies designing training modules and curriculum for use with local high school educators who must teach these subjects in accordance with Pennsylvania Act 70 (2014).

Objective 4.2: Use the arts and humanities to enhance education for all students. Assess student evaluations to provide a window into the efficacy of efforts to enhance their engagement. Develop a comprehensive system for supporting future student employment in arts and humanities, beginning by surveying alumni with an eye towards assessing their college experiences. This objective will be accomplished through two action items.

Key Performance Indicators: List of new curricular offerings (e.g., majors, minors) developed and introduced; List of significant learning opportunities developed and delivered.

- **Action Item 4.2.1.** Expand the role of the arts, humanities, and diversity in educating all Penn State Harrisburg students. This initiative can be attained through increasing student participation at cultural events; encouraging Study Abroad course enrollment; planning for a Media Lab in Communications;

improving composition instruction through placement and assessment; and exploring potential curricular additions such as a minor in Graphic Design, a minor in Arts, a Sports Journalism track, and a master's in Professional Writing.

- **Action Item 4.2.2.** Ensure success for students studying in humanities fields. This objective can be attained by launching a “Professional Pathways in the Humanities” project to expose Penn State Harrisburg students to careers in arts and humanities fields; by instituting a Professional Development Workshop series for graduate students to help them publish and launch careers; and by leveraging the library’s resources and expertise for student benefit through workshops and internships that teach valuable skill sets in archiving, preservation, and digital Humanities. Student Engagement Network can assist in incorporating standards of excellence to assure the worth of these engagement experiences.

Goal 5. Penn State Harrisburg will, through digital innovation, become a leader in preparing students for success in the digital age and will use digitally optimized outreach to foster economic prosperity in communities across Pennsylvania and beyond.

In public discourse, digital transformation is often referred to as “The Fourth Industrial Revolution.” At Penn State Harrisburg, we understand it to be a digitally-enabled, continuous, strategic undertaking to significantly improve educational and commercial processes and to enhance stakeholder engagement in these processes. Digital transformation includes the use of new, emergent, and changing digital technologies to solve problems at the personal, institutional, and social levels. Serving the aim of digital transformation is digital innovation, broadly conceived as a product, process, or model perceived as new, requiring significant changes on the part of adopters, and embodied in information technology. Specifically, it is the area of information science that refers to new combinations of digital and physical components to produce novel products and services and to embed computer and communication technology into traditionally non-digital products, services, and activities. Recognizing the centrality of these developments in the 21st Century, Penn State Harrisburg empowers through digital innovation by preparing students for success in the digital age and by using digitally optimized outreach to foster economic prosperity and social success in communities across the Commonwealth and beyond. Penn State Harrisburg will achieve this goal by pursuing **two objectives**:

- Enhance teaching, learning, and research by increasing *digital fluency*.
- Advance collaboration and cooperation through *digital innovation*.

Objective 5.1: Enhance teaching, learning, and research by increasing *digital fluency*. In order to achieve this objective, Penn State Harrisburg identifies five action items.

Key Performance Indicators: List of digital infrastructure additions, updates, and improvements; List of new curricular offerings (e.g., majors, options, minors) developed and introduced; List of new or improved digital tools or trainings related to teaching or research.

- **Action item 5.1.1.** Build an effective digital culture that embraces digitalization and transformation. This can be achieved by creating a viable and vibrant set of core digital values, which will facilitate the development of new opportunities for students, faculty, staff, and stakeholders to be exposed to new and emergent technologies.
- **Action item 5.1.2.** Develop a more robust digital infrastructure. This initiative requires planning and the creation of a host of new campus facilities and opportunities. The first creation will be an on-campus learning space dedicated to immersive technologies. This will be accompanied by the opening of a communications media lab to better serve the existing Communications program as well as other academic units. A finance lab will also be established to better serve the School of Business. An on-line language lab will empower all students discharging their curricular language requirements. Creation of a virtual/augmented reality lab will further serve students. Establishing a Center for the Study of Professional Sales, with a sharp focus on this specific area within the field of business, will be another plus factor enhancing student success across a variety of majors. Developing and implementing an online wayfinding tool also contributes to the attainment of this action item. Incorporating two dashboards into unit work and programming is another step towards campus-wide enhancement, as is expanding open access educational opportunities. Facilitating the electronic deposit of Penn State Harrisburg master's papers and undergraduate theses is another step toward goal attainment. Designing both a teaching and learning suite marks the final measure which will enable attainment of this second objective in pursuit of the overall goal. In the event that the COVID/post-COVID environment proves limiting in terms of additional hires, at the very least the organized examination of these opportunities and the preparation of specific plans to enact them will position Penn State Harrisburg for future action.
- **Action item 5.1.3.** Develop academic programs that confront persistent and emerging problems of community, regional, state, national, and global significance. These include establishing new degrees, such as B.S. programs in Cybersecurity Analytics and Operations, Human-Centered Design and Development, and Enterprise Technology Integration. Besides these degrees, new academic options in Data Science and Mathematical Data Science will be implemented. At the graduate level, a new M.S. in Mathematical Data Sciences

will prove a valuable addition. Also valuable will be feasibility studies for a Health Informatics option and a Bioinformatics option in Computer Science. Revisions to existing degree programs include the B.S. in Information Sciences, to exceed IS2020 ACM-AIS Exploratory Task Force Recommendations and 2020 AACSB Curriculum Standards. The M.S. in Information Systems will be revised to exceed the MSIS 2016 Global Competency Model of Graduate Programs in Information Systems and 2020 AACSB Curriculum Standards.

- **Action item 5.1.4.** Continue to improve teaching and learning via digital enhancement. This initiative will be attained by leveraging digital assets to facilitate personalized learning at all levels in the college. New capabilities which could be developed include the capacity to teach lab classes remotely (a COVID-19 relevant need) and the ability to administer assessments remotely while effectively guaranteeing academic integrity. In this way, students and faculty will be prepared for transitions to remote learning during crises. Use of Starfish will be extended to incorporate Starfish Analytics, thereby better ensuring student success. In a COVID/post-COVID teaching environment, when remote learning became a new norm, it is worth making a systematic evaluation of how this development reduces carbon footprint going forward. Lessons learned might be codified as new expectations.
- **Action item 5.1.5.** Improve research and discovery with digital tools. The first step towards attaining this objective is to build a usability/behavioral lab. To ensure success, Penn State Harrisburg will acquire licensing for virtual assessment tools. We will enhance current computing facilities to improve research and instruction at all levels. The college will also analyze the feasibility of establishing new research labs/centers which advance the goal.

Objective 5.2. Foster collaboration and cooperation through digital innovation, including through connections with the Office of the Senior Vice President for Commonwealth Campuses, other Commonwealth Campuses, and Penn State partners in the region. This objective will be accomplished through six action items.

Key Performance Indicators: List of new curricular offerings (e.g., majors, options, minors) developed and introduced; List of new partnerships; List of significant achievements from partnerships both current and new; Measures of effectiveness of digital marketing initiatives.

- **Action Item 5.2.1.** Develop interdisciplinary programmatic offerings. Some programs can be built on existing joint/concurrent degree offerings with the College of Medicine and Dickinson Law. We will also explore the creation of a

healthcare supply chain concentration/option, establish a graduate health informatics concentration, and create a B.S. in artificial intelligence.

- **Action Item 5.2.2.** Develop interdisciplinary co-curricular programs. This will be met by exploring three possible additions: ESports programming for students, a Game Development minor, and a Center for Service-Learning.
- **Action Item 5.2.3.** Explore personalized learning programs. This will be attained by studying the feasibility of stackable microlearning credentialing for certificates in the following fields: Digital Transformation, Cybersecurity, Business Analytics, and Digital Health.
- **Action Item 5.2.4.** Enhance regional partnerships by forming or strengthening relationships with the Penn State Commonwealth Campuses; with Harrisburg Area Community College (HACC) and other feeder institutions; and with the University Libraries' Special Collections and its Office of Preservation, Conservation, and Digitization.
- **Action Item 5.2.5.** Enhance stakeholder engagement by leveraging social media platforms to strengthen connections with current students, alumni, donors, business/industry partners, and local government.
- **Action Item 5.2.6.** Enhance digital marketing with a two-pronged effort that will expand data-driven advertising campaigns and explore advanced audience targeting through the use of analytics, especially for graduate programs.