



Our Commitment to Impact

The Pennsylvania State University's Strategic Plan for 2016 to 2025

strategicplan.psu.edu

THE UNIVERSITY'S VISION

Penn State will be a leader in research, learning, and engagement that facilitates innovation, embraces inclusion and sustainability, and inspires achievements that will affect the world in positive and enduring ways.

EXECUTIVE SUMMARY

The Pennsylvania State University's strategic plan for the five calendar years comprising 2016 through 2020 was the result of a broad and inclusive two-year process that involved unit-level planning for 48 academic and administrative units across the University, in concert with this overarching institutional plan. In 2019, a review was initiated in which implementation progress was assessed, and a decision to extend the plan timeline was made in order to continue the important work that the plan had initiated.

Penn State's vision, mission, and institutional values are interwoven throughout this plan, and they ultimately drive its success. Six foundations underpin all university endeavors and are considered fundamental to effective implementation. These foundations—**Enabling Access to Education, Engaging Our Students, Advancing Inclusion, Equity, and Diversity, Enhancing Global Engagement, Driving Economic Development, and Ensuring a Sustainable Future**—connect to, empower, and sustain our values as an institution.

Further, to advance Penn State's mission and vision for the next decade and beyond, the University is committed to empowering resilience as a unifying concept. Leveraging *Our Commitment to Impact*, Penn State is uniquely able to help individuals, our University community, and society to respond effectively to adversity and, even more impactfully, to "bounce forward," creating new solutions in response to complex challenges of the 21st Century. This concept shapes the thematic priorities and supporting elements and is further guided by the foundations that drive all the work of the University.

This Plan's five thematic priorities are:

- **Transforming Education.** Penn State will be a leader in the transformation of education, including enhancing access, as it fulfills its land-grant mission in a 21st-century context and continues to drive discovery-focused research across disciplines.
- **Enhancing Health.** Penn State will be a leader in promoting quality of life through comprehensive approaches to enhancing personalized and population health, achieved through a commitment to and investment in relevant research, education, clinical practice, and outreach.

- **Stewarding Our Planet’s Resources.** Penn State will be a leader in creating comprehensive solutions to mitigate the impacts of climate change and address the challenges of providing safe and abundant water, clean and renewable energy sources, and plentiful and nutritious food.
- **Advancing the Arts and Humanities.** Penn State will be a leader in the arts and humanities, utilizing them—along with the sciences and other disciplines—as agents of change in addressing complex global issues.
- **Empowering Through Digital Innovation.** Penn State will be a leader in preparing students for success in the digital age and use digitally optimized outreach to foster economic prosperity in communities across Pennsylvania and beyond.

This Plan’s supporting elements collectively comprise a focus upon and reinforce a concept of organizational excellence:

- **Organizational Processes.** Penn State will lead in the design, development, and deployment of effective and agile organizational processes that support the University’s mission and vision.
- **Infrastructure and Support.** Penn State will think creatively and act boldly to ensure that its academic infrastructure aligns with and supports the University’s mission and vision.
- **Constituent Outreach and Engagement.** Penn State will partner directly and effectively with our constituencies in sharing consequential research, creative works, and scholarship for impact.

During a time of rapid worldwide societal change, the University’s strategic plan is a powerful beacon that will guide the institution to achieve even more meaningful accomplishments and deliver more benefits to the constituencies it serves. Penn State is committed to this plan and on delivering on our University-wide commitment to impact. We look forward to future contributions that the extended plan will allow us to accomplish.

INTRODUCTION

This document articulates The Pennsylvania State University’s institution-wide strategic plan for the ten calendar years comprising 2016 through 2025.

This comprehensive plan, in which we identify our vision at a macro level and set a course for where we are headed, includes input from and work by a wide range of stakeholders, including trustees, faculty members, undergraduate and graduate students, staff members, academic and administrative leaders, and alumni. University-level planning was also informed by the strategic plans of each college, campus, and major administrative unit. Especially pivotal to the planning process were the energy, expertise, and insights of Penn State’s University Strategic Planning Council and the Implementation Oversight Committee — inclusive bodies charged by the President and chaired by the Executive Vice President and Provost.

Imperatives outlined by President Barron upon his arrival in 2014, ideas developed in the unit planning process, and opportunities identified by numerous committees regarding institutional priorities and operations formed the plan’s groundwork -- and substantial, constructive feedback was solicited and received throughout the planning and implementation cycles from numerous constituencies through multiple mechanisms. All feedback was carefully considered as the plan evolved.

In 2019, the strategic plan oversight committee began an assessment of the institutional strategic plan progress to date by the thematic priorities, supporting elements, and foundations. Looking to 2025, all those learnings guided revisions to the plan. This document contains those updates.

Ultimately, the notion of strategic planning—especially for a university—is not a static, specific-goal-driven process. We must be adaptive, using real-time information and developments as they become available to inform and guide us in the most effective direction for the University. This plan purposely does not identify specific initiatives to undertake or define metrics to measure success. These, along with detailed objectives and action items, will emerge and evolve during University-wide implementation. We expect these metrics to interact between the unit level plans and the institutional plan. Implementation ultimately will require understanding how specific efforts across departments, colleges, and other units align with the overarching strategies articulated herein. The strategic plan will be implemented through the work of the budget units, the strategic plan seed grants, signature initiatives, and the work of the strategic planning committees.

This plan begins with a reaffirmation of Penn State’s mission as the Commonwealth’s land-grant University. Core institutional values are stated, followed by an articulation of foundations that will support the plan’s implementation. Five thematic priorities follow—emerging strategic areas of emphasis where Penn State has identified significant opportunities to achieve enduring, positive impacts, but not to the exclusion or minimization of other important endeavors. Supporting elements identify areas in which operational attention will be required to achieve the plan’s vision.

THE UNIVERSITY’S MISSION

The Pennsylvania State University is a multi-campus, land-grant, public research University that educates students from around the world and supports individuals and communities through integrated programs of teaching, research, and service.

Our instructional mission includes undergraduate, graduate, professional, continuing, and extension education, offered through both resident instruction and distance learning. Our educational programs are enriched by the talent, knowledge, diversity, creativity, and teaching and research acumen of our faculty, students, and staff.

Our discovery-oriented, collaborative, and interdisciplinary research and scholarship promote human and economic development, global understanding, and advancement in professional practice through the expansion of knowledge and its applications in the natural and applied sciences, social and behavioral sciences, engineering, technology, arts and humanities, and myriad professions.

As Pennsylvania’s land-grant university, we provide unparalleled access to education and public service to support the citizens of the Commonwealth and beyond. We engage in collaborative activities with private sector, educational, and governmental partners worldwide to generate, integrate, apply, and disseminate knowledge that is valuable to society.

INSTITUTIONAL VALUES

Six core institutional values, identified through Penn State’s Culture and Values Survey, sustain this strategic plan and offer essential context for the successful execution of Penn State’s mission.

- **Integrity.** We act with integrity in accordance with the highest academic, professional, and ethical standards.

- **Respect.** We respect and honor the dignity of each person, embrace civil discourse, and foster a diverse, inclusive, and safe community.
- **Responsibility.** We act responsibly and hold ourselves accountable for our decisions, actions, and their consequences.
- **Discovery.** Through advanced research and scholarship, we seek and create new knowledge and understanding, and foster creativity and innovation, for society's benefit.
- **Excellence.** We strive for excellence in all our endeavors as individuals, an institution, and a leader in higher education and research.
- **Community.** We work together for the betterment of our University, the communities we serve, and the world.

FOUNDATIONS

Foundations underpin everything Penn State does and are interleaved throughout this strategic plan. These foundations—**Enabling Access to Education, Engaging Our Students, Advancing Inclusion, Equity, and Diversity, Enhancing Global Engagement, Driving Economic Development, and Ensuring a Sustainable Future**—are not specific to or owned by certain programs or units, or by individual faculty and staff. Instead, these are the responsibility of all members of our University community. The foundations are woven throughout the thematic priorities and are essential in implementing each of them.

Enabling Access to Education

We will place pursuing and completing a Penn State education within reasonable reach for all potential students and their families. Many factors contribute to the ability to earn a Penn State degree and we must address them all if we are to increase access, especially for populations with historical barriers to entry. The importance of a college degree continues to grow, with numerous financial benefits and non-monetary advantages realized over one's lifetime.

Student debt and the cost of attendance have increased at troubling rates for a variety of reasons, including the substantial decline of funding for public universities in nearly every U.S. state. While gains have been realized in the number of individuals afforded the opportunity to pursue a higher education, gaps among individuals from varying socioeconomic, ethnic, and other demographic factors persist. Generating philanthropic support for scholarships remains a core institutional priority. Understanding and addressing trends in the costs of higher education and effecting sustainable budget management processes will be critical, as will be developing responsive and adaptive programs to ease students' transition to Penn State.

We must continue striving for efficiencies in our operations in ways that support the quality of a Penn State education. Given the large number of students who need financial aid and the socioeconomic challenges in communities throughout the Commonwealth, Penn State's ability to educate students for productive careers is crucial. Penn State's unique structure—one University, with campuses geographically distributed and a best-in-class World Campus—must be configured optimally to help enable access for potential students, both flexibly and at reasonable cost.

Engaging Our Students

Penn State will advance the power of participation and the spirit of innovation by connecting undergraduate and graduate students with engagement experiences that produce resilience and empower them to make a positive impact as citizens and leaders of the world.

Our commitment to enabling and facilitating student engagement at all Penn State campuses and the World Campus will bolster retention and graduation rates and reinforce engagement as an essential part of learning that equips our graduates to succeed in the rapidly evolving modern world.

Penn State will provide students access to meaningful experiences to enhance their educational journey in areas including, but not limited to, research, study abroad/study away, internships, student organizations, art and performances, community leadership, and service learning. By doing so, we help cultivate student growth in multicultural awareness, systems thinking, ethical reasoning, civic responsibility, and professional development. We are committed to providing access to these engagement experiences to all students with a desire to engage, explore, and grow beyond the classroom, regardless of their personal or family resources. Penn State students who capitalize fully on these opportunities will lead in building resilient communities dedicated to improving life for all.

Advancing Inclusion, Equity, and Diversity

As part of the University-wide strategic plan's commitment to transformative education, Penn State establishes four planning goals related to inclusion, equity, and diversity:

1. Foster a culture of respect and inclusion that values the experiences and perspectives of faculty, staff, and students;
2. Develop and implement curricula and scholarship that interrogate social issues and inspire social responsibility;
3. Evaluate and rectify organizational structures, policies, and practices that cause differential impact and limit access and opportunities for faculty, staff, and students at Penn State; and,
4. Recruit, support, and advance a diverse student body, faculty, and staff.

Inclusion, equity, and diversity are central to Penn State's obligation and commitment as a public institution of higher education to provide effective teaching for all people in our communities—from our Commonwealth, from across the United States, and increasingly from around the world. Students, faculty, and staff rightfully demand that Penn State demonstrate its commitment to diversity, equity, and inclusion across all of its campuses and in all aspects of the University including, and not limited to, research, student learning, co-curricular engagement, workplace environment, and community outreach.

Inclusion refers to the respectful treatment of all people with recognition for the multiplicity of identities and perspectives present in a diverse community. Equity requires attention to disparate impact, differential access and opportunities afforded to various communities, as well as structural and systemic barriers that limit potential and possibilities. Diversity refers to the numerical representation of faculty, staff, and students who hold different social identities, backgrounds, and experiences.

We will incorporate inclusion, equity, and diversity assertively into our research, teaching, learning, outreach, assessment, operations, and decision making at all levels of the University. We will foster and sustain an environment of respect and inclusion for faculty, staff, students, and members of the communities we serve; creatively provide programs and environments that embrace diversity that promote the acceptance and valuing of differences; be steadfast in our efforts to ensure equitable access to our facilities, programs, resources, and services; and advance our workforce by attracting and developing talented faculty, staff, and students from diverse backgrounds.

Enhancing Global Engagement

Penn State is a global institution that integrates varied perspectives across all components of its mission. An enhanced focus on global engagement leverages our resources with those of other leading institutions around the world to create new knowledge and address significant global challenges, prepare our students to live in a global society, and improve the lives of our community at scales from the local to the global.

Continuing to build a Global Penn State will include enhancing global competencies through real and virtual opportunities for student, faculty, and staff engagement with the international community; internationalizing the University by bringing non-U.S.-born students and scholars to our campuses; and establishing a global network of partnerships that enables the University to pursue its mission worldwide. The Global Engagement Network—with its pillars of global citizenship for students, faculty, and staff and global leadership in scholarship and international engagement—provides a strategic focal point and support infrastructure for many global activities. In addition, Penn State’s World Campus will continue to attract place-bound learners from around the globe, significantly increasing the University’s global footprint.

Driving Economic Development

Penn State’s educational programs, research, and outreach will make measurable and meaningful differences in economic development for our communities, from local to global. By leveraging our size, broad research strengths, research parks, LaunchBox innovation hubs, and economic development assets, Penn State will drive job creation, economic development, and student career success. We will accelerate the transfer of new ideas into useful products and processes in areas such as energy, food and nutrition, environmental protection, health care, manufacturing, educational technologies, medical devices, and pharmaceuticals.

Penn State is a substantial contributor to the Commonwealth’s economy. Its annual \$6.8 billion operating budget (as of 2019-2020) is leveraged into statewide economic activity that considerably exceeds this amount, and Penn State has now surpassed \$950 million in annual research-related expenditures (2017-2018). The University is positioned to have an even larger, more positive economic impact in the coming years. True to our mission of research for the public good, we will embrace innovation and develop strategies to promote economic development and a culture that encourages and rewards entrepreneurship—not only in fields such as science, technology, engineering, and math, but also in the arts, health and human development, education, and emerging disciplines. Working with legislators, business leaders, communities, and other partners, we are prepared to make short- and long-term investments that will benefit generations of Pennsylvanians.

Ensuring a Sustainable Future

Penn State will confront the global challenges of climate change and sustainability directly and assertively in all their complexity—from feeding a growing population to preserving Earth’s resources to ensuring water and energy security across Pennsylvania. We must build resilient systems that will drive us to a more sustainable state. As an institution of higher learning and research, Penn State has a moral responsibility to embody and communicate an evidence-based worldview that strives for environmental, human, and economic vitality, both now and in the future.

Penn State must lead by example and help our students—who are tomorrow’s leaders—to promote sustainability and become advocates for change for the public good. We will establish a common understanding of sustainability and climate literacy to prepare all members of the Penn State community to be

effective citizens in a climate-altered world. Penn State already has vast interdisciplinary talent in areas relating to climate change, sustainability, environmental stewardship, and social justice, and we have the scale and reach to effect meaningful, measurable change.

Our commitment is to a holistic institutional sustainability aligned with the UN Agenda 2030 and Sustainable Development Goals and reflecting globally shared values among students, faculty, staff, alumni, research organizations, and corporate and political leaders. We will—even more comprehensively, systematically, and cohesively—integrate sustainability into our research, teaching, outreach, and operations. In addition, we must lead with innovative and aggressive programs institutionally to reduce our impact on the environment by waste elimination and fostering resilient, equitable, thriving communities in Pennsylvania and around the globe.

THEMATIC PRIORITIES

This plan highlights five thematic priorities: **Transforming Education, Enhancing Health, Stewarding Our Planet’s Resources, Advancing the Arts and Humanities, and Empowering through Digital Innovation.**

These strategic areas of focus embody existing and emerging strengths and opportunities identified during Penn State’s planning process. Each represents a breadth and depth of expertise and interest across multiple Penn State units where the University is well positioned (with continued commitment and strategic investment of resources) for profound and measurable contributions. The themes intersect with unit plans and pull from the human capital, infrastructure, and programs they represent. By focusing on synergistic energy and resources they will enable a previously unimagined Penn State impact.

These areas of focus are not intended to exclude or minimize the importance of the University’s many other endeavors and enterprises, including fundamental and applied research across a variety of disciplines, which remain at the core of our enterprise. Rather, they are areas of opportunity that we believe merit more attention and investment in the near term. They do not replace or diminish the importance of and investment in any other institutional priorities.

The thematic priorities are visionary, not prescriptive. A strategic plan for an academic institution must serve as a consensus-driven beacon for future directions, but without the rigidity that can stifle innovation and the emergence of new and unimagined opportunities. In this plan, that vision is impact, and these themes provide paths to achieving it in selected areas where Penn State has expertise and assets. Interwoven with them are the foundations, which provide a scaffold upon which they rest and a common framework for implementation.

Further, to advance Penn State’s mission and vision for the next decade and beyond, the University is committed to empowering resilience as a unifying concept. Leveraging *Our Commitment to Impact*, Penn State is uniquely able to help individuals, our University community, and our society to respond effectively to adversity and, even more impactfully, to “bounce forward,” creating new solutions in response to complex challenges of the 21st Century. This unifying concept shapes the thematic priorities and supporting elements and is further guided by the foundations that drive all the work of the University.

Universities must be agents of social adaptation and transformation, developing critically engaged citizens whose endeavors will support the public good, now and into the future. Penn State has the breadth, depth, and reach to empower resilient solutions across the full range of contemporary challenges, including addressing economic and social inequalities and injustices, promoting healthcare affordability, ensuring global food security and sustainable energy transitions, and combating climate change. Penn State welcomes this

higher calling, ensuring that institutions of higher learning will continue to play pivotal roles in driving personal and societal resilience.

Our land-grant mission, uniting our teaching, research, and service activities, provides an unrivaled platform for empowering resilient solutions. By tapping into these strengths across the University to address resilience challenges, Penn State will facilitate new partnerships and foster new communities of learning and adaptation, helping individuals and communities everywhere be more resilient. Our ultimate goal is to empower our students, faculty, staff, and community to fearlessly and confidently innovate new solutions to challenges of the Anthropocene, ensuring a sustainable future for us all.

Transforming Education

Penn State will be a leader in the transformation of education, including enhancing access, as it fulfills its land-grant mission in a 21st-century context and continues to drive discovery-focused research across disciplines.

Making a comprehensive and useful education accessible to citizens of the Commonwealth of Pennsylvania and beyond was core to Penn State's founding mission. Today, this "comprehensive and useful education" encompasses many traditional topics such as the physical sciences and mathematics, as well as emerging issues such as climate change; food, water, and cyber security; sustainability; political instability; terrorism; displaced populations; and global cooperation. As a world-renowned, land-grant, public research institution, Penn State has a pre-eminent global role in addressing these challenges by producing a new generation of leaders. This will require Penn State to use its size, scope, reach, intellectual capital, and resources to help transform education, making it accessible to all sectors of society. We will show by example what it means to be a land-grant university in the 21st century and facilitate the education of enlightened graduates who are prepared for meaningful careers.

As well, Penn State is and will continue to be a global university that must also consider the needs of prospective students from around the United States and the rest of the world. Our structure -- one University, with physical campuses geographically distributed and an online World Campus -- creates a scope unique among institutions of higher education. The commitment of the entire Penn State community to our educational mission enables us to achieve meaningful and measurable impacts in this area.

Advance the frontiers of knowledge.

Research impact in the sciences, engineering, and mathematics remains vital to Penn State's mission and vision, and the University will continue to invest aggressively in these areas. Areas of study in which we are already world class—the aforementioned disciplines among others—will continue to grow, evolve, and thrive. Transformative knowledge creation in myriad disciplines will further elevate Penn State's status as a top-echelon institution of higher learning that continues to emphasize discovery through meaningful, curiosity-based research and study. Penn State will advance the frontiers of knowledge through interdisciplinary collaboration — working seamlessly across disciplines and structures of the University as a distinguishing attribute.

Foster a curriculum that integrates multiple modes of delivery, while leveraging online capabilities and enhanced and emerging digital learning options.

Penn State is well situated to provide opportunities for students to pursue education in a manner and context that best meets their varied needs. Penn State provides a physical presence near most residents of Pennsylvania and, through the World Campus, students can receive online instruction in key fields from

almost anywhere. In the next five years, Penn State will further develop a culture and curriculum that facilitates the ability of students to seamlessly access courses across resident, online, and blended instructional modes. The hallmark of transforming education, consistent with one of the guiding principles of One Penn State 2025, is the ongoing commitment to a shared and coherent curriculum accessed across the University and in multiple modes of delivery.

Support and empower our outstanding faculty and staff.

Our 21st century land-grant University will require faculty to possess the skills and tools necessary to meet changing pedagogical needs, infused with creative approaches to teaching, research, and scholarship. University organizations, institutes, and support units will work with faculty and staff to articulate, implement, assess, and continuously improve excellence in teaching and student learning outcomes, including the effective use of advanced learning technologies to enhance the teaching-learning enterprise. We will be known as a leading research university whose faculty embraces teaching as integral to its charge and receives resources to support success. Our faculty and staff will be known as exemplary research mentors, instilling the value and discipline of research in our undergraduate and graduate students, and preparing the next generation of independent researchers.

Prepare our students for success in their careers and in life.

In higher education, the quality and effectiveness of our work profoundly and substantively impacts our students. A key role of any university is to ensure that our students receive an education that effectively prepares them not only for the modern workforce, but also for the challenges they will encounter during their lives. The foundation of a strong integrative general education program will be combined with disciplinary training and engaged learning. Moreover, Penn State will remain committed to providing an array of co-curricular opportunities and career preparation services that will enhance students' readiness to succeed. The University will be a leader in student engaged scholarship, providing students opportunities to apply their learning in capstone and real-world settings and creating the next generation of accomplished professionals, entrepreneurs, volunteers, community leaders, and resilient lifelong learners. As resilient learners, our graduates will stay connected to the University throughout their lifetimes, consistent with the guiding principles of One Penn State 2025.

Partner more effectively with pre-college educators.

Pursuing a college degree can be daunting for students who are underprepared in primary and secondary education. Dismantling barriers to that pursuit will require fortification of current partnerships and creation of meaningful new ones with PreK-12 educators. Such changes will ensure a continuous flow from one academic experience to another—creating a more seamless PreK-16-and-beyond approach to student learning—and make a college education more accessible to and affordable for all individuals. Penn State, in partnership with pre-college educators, will be a leader in promoting the value and expectations of and pathways to a college education. Penn State's extraordinary capability in communications, outreach, bridge, and financial literacy program development will prepare pre-college students of the Commonwealth to make informed decisions regarding college readiness, acquire leadership skills, navigate financial aid, earn scholarships, and manage money in advance of entering college.

Enhancing Health

Penn State will be a leader in promoting quality of life through comprehensive approaches to enhancing personalized and population health, achieved through a commitment to and investment in relevant research, education, clinical practice, and outreach.

The centerpiece of this vision is recognition of the multiple factors that contribute to overall health—including individual biology and behaviors, the environment and contexts in which people live and work, the quality of their health care, and public health policies and programs. By striving to understand people in all their complexity and the environmental and social determinants of health, we can leverage that knowledge to create innovative programs, policies, products, and practices for research, education, engagement, and patient care that will improve health and well-being.

We use the descriptor “personalized health” in a holistic fashion to include all aspects of individual health (including physical, mental, and emotional health, among others), while “population health” refers to the broad, holistic health outcomes of groups of individuals (such as people at a workplace or the population of a U.S. state, a nation, or geographic region). Penn State, in partnership with Penn State Health, will play critical roles in addressing important trends in understanding, managing, and promoting health.

The complexity of health insurance offerings and health care options requires consumers to make educated, thoughtful decisions and prioritize their own health and wellness. Likewise, pressures will intensify for health care providers to focus on disease prevention and improving health care value.

The aging of the worldwide population is a demographic development that puts unprecedented pressures on global health care systems. World travel and the frequent interaction of humans and animals may foster the emergence of new threats, calling for community and health system preparedness and resilience. Scientific progress in the areas of “omics” (such as genomics, nutrigenomics, metabolomics, and proteomics) and technology developments will enable health care providers and prevention scientists to pinpoint disease outbreaks geographically and tailor clinical treatment and health interventions to specific communities and individuals, leading to more effective and efficient use of resources.

The focus on personalized and population health is broadly applicable, relevant for: children, for whom preventing disease offers great potential immediately and in terms of long-term health; adolescents and young adults, who are establishing lifestyles and preparing to become parents to the next generation; older adults, whose health problems collectively put the most pressure on health care resources; and socioeconomically vulnerable groups who too often lack access to quality medical care. A focus on personalized and population health capitalizes on our highly collaborative and interdisciplinary research environment and builds on recent Penn State investments in key areas such as genomics, demography and population health, cancer, cardiovascular disease, neurosciences, health symptoms and environmental exposures, health disparities, infectious disease, and real-time collection of data on daily health-related experiences.

Advance discovery in personalized and population health.

Penn State will be a leader in collaborative, interdisciplinary research on personalized and population health, with robust activities ranging from basic to applied science. This leadership includes research on environmental and social contexts and social determinants of health and how they intersect with biological determinants of health.

Create innovative academic programs in personalized and population health.

Penn State will create innovative, interdisciplinary, and joint professional-graduate and postgraduate programs that focus on personalized and population health. Research and graduate education go hand in hand. A vibrant cadre of scholars engaged in interdisciplinary research in this area will help to unite faculty from different academic units and campuses around the themes of personalized and population health and facilitate the creation of curricular options focused on both.

Build synergistic partnerships to influence population health.

We will increase Penn State's engagement as a partner across the Commonwealth in improving health care and health-related outcomes. An ongoing, collaborative relationship will help address Pennsylvania's health-related challenges, including, but not limited to, childhood obesity, addiction, and community health disparities, and drive analysis of state health data and translation of research findings into public education programs, outreach, and best practices.

Facilitate wellness within the Penn State community.

Because our University is only as strong as its people, we will invest in innovative, multi-pronged, institution-wide health initiatives that inspire faculty, staff, and students to focus proactively on their physical, mental, and emotional wellness. The effort across all Penn State campuses will encourage faculty, staff, and students alike to pursue recommended preventive health care services and educate them about behaviors (such as physical activity, healthy eating and drinking, smoking prevention and cessation, and stress management) that experts agree promote health and prolong life.

Inform governmental health policy.

Evidence-based health policy is essential for effective efforts to enhance the health of individuals and populations. Penn State will provide leadership in conducting policy-relevant health research and in training public health practitioners who understand the importance of evidence for public health policy and practice.

Stewarding Our Planet's Resources

Penn State will be a leader in creating comprehensive solutions to mitigate the impacts of climate change and address the challenges of providing safe and abundant water, clean and renewable energy sources, and plentiful and nutritious food.

"Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the commonwealth shall conserve and maintain them for the benefit of all the people." – The Constitution of the Commonwealth of Pennsylvania, Article I, Section 27

With service to the citizens of the Commonwealth as an institutional commitment, we embrace the challenge articulated so clearly in our Constitution. Climate change is recognized worldwide as one of the most important issues of our time and Penn State will be a leader in addressing and solving this challenge. In addition, with a projected global human population of 8 billion by 2040, food and water consumption are expected to increase by 50 percent and energy requirements by even more. Urgent research, development, and implementation needs exist regarding water, energy, and food, and there are even more pressing challenges in effectively, ethically, economically, and sustainably managing the interactions among them (for example, energy consumption for water desalination, or the use of crops for biofuels). Because of Penn State's

expertise and resources, including its extension program, profound opportunities exist for the University to lead by example and address these challenges in economical and sustainable ways that respect, protect, and adapt to the environment for future generations and set the stage for future national and global priority setting.

Drive fundamental science relevant to critical problems.

The world faces pressing fundamental science and engineering questions, the solutions to which underpin the development of enabling technologies. Across a range of topics—water purification and desalination, energy recovery, genetic crop analysis, stress-tolerant food production, better understanding of the human microbiome, responsible energy production from unconventional gas and oil reserves, and many more—Penn State faculty will perform the fundamental research necessary to help develop urgently needed new technologies.

Develop technologies for implementation.

Penn State will explore and pursue enabling physical, biological, agricultural science, and engineering technologies that encompass environmental, economic, policy, and sustainability considerations. They include water filtration and irrigation; power management; green building design; energy production, distribution, efficiency, and storage; critical mineral extraction from coal and coal-associated waste; and crop precision application, storage, and refrigeration.

Improve modeling capability.

Current and future indicators will be critical to identifying problems, establishing collaborative research and implementation priorities, tracking trends, and identifying leaders and best practices. Penn State will aim to provide predictive models of the water-energy-food triad that include interactions with environmental, economic, social, public policy, geological, geophysical, and climate-related systems.

Fully engage our research infrastructure.

Institutes, colleges, campuses, centers, laboratories, and libraries at Penn State offer personnel and unique infrastructure to address research opportunities related to stewarding Earth's resources. All will have important roles in resolving fundamental, technological, and integrative questions associated with water, energy, and food.

Forge broad and relevant partnerships.

Research partnerships, funding sources, and end users are three stakeholder communities essential to making significant inroads against challenges related to water, energy, and food. Penn State will compile a comprehensive inventory of stakeholders (including industry, government, and international organizations) and engage them to drive success.

Advancing the Arts and Humanities

Penn State will be a leader in embracing the vital role of the arts and humanities, utilizing them—along with the sciences and other disciplines—as agents of change in addressing complex global issues.

Like its strongest peers, Penn State has vibrant arts and humanities programs that are meaningful to its students and the broader community, and these will be strengthened further. We will encourage and promote fundamental inquiry, discovery, and understanding in these disciplines and selectively invest to bring more

programs into the top tier, increasing the impact of already prominent programs. We also aim to promote a greater understanding of the work being done and highlight the impact of work in progress.

The arts and humanities offer timely answers to timeless questions. They can embody and make public our highest aspirations for ourselves and for our world. They foster imagination and innovation, which form the essential foundation of all human thought and the scientific and social progress (and sometimes regression) that follow from it. In times of shared success or times of conflict and fear, the arts and humanities are critical to our understanding of and balance among values, including choices we must inevitably make as individuals and as part of society. Also, in an increasingly diverse world, the arts and humanities play essential roles in preparing educated, empathetic, and globally engaged people who can, in turn, drive improved quality of life, inclusive community growth, and beneficial economic development.

Penn State will take a leadership role in using the arts, design, and the humanities—as it does with its many other strong disciplines—to help enhance personal experience and to address social and political challenges. While technology can open exciting new vistas, human values and aspirations determine how technologies are used, how new resources generated from technologies are allocated, and how we think about the opportunities and problems that new technologies raise. The arts and humanities help us to consider values of equality, freedom, privilege, and diversity; individual and communal good; ethical decision-making; and other choices intrinsic to group decisions. These values are critical to other priority areas of this strategic plan, including health, education, stewardship of our resources, and sustainability. Likewise, complex problems, whether local, regional, or global, require creative solutions involving multiple perspectives, and the arts and humanities promote the development of important skills in problem solving, communication (including across cultures), collaboration, creativity, and empathy, all of which are essential in 21st-century higher education and the world beyond.

Strategically strengthen the arts and humanities through investments in selected areas.

Penn State has substantial resources for and faculty strength to support the arts and humanities. We will continue to strengthen those areas and explore and support others that will encourage basic research along with innovation and economic development, wide-ranging intellectual discourse, student engagement with diverse communities locally and abroad, and actions that expand our understanding of societal and global issues. Support for the arts and humanities also requires faculty expertise throughout those fields and recognition of the roles that humanities-oriented library resources and arts-oriented institutes, centers, and venues play in our lives—including, for example, performance and visual arts spaces for academic programs that function as labs for arts students.

Invest in Penn State as a cultural destination and enhance personal engagement in the arts.

Penn State's campuses serve as prominent cultural venues in Pennsylvania, and we will continue to elevate the institution's cultural reputation and profile. Cultural programs, bringing outstanding scholars and performers and new perspectives, enhance economic development in our communities and should be integrated with Penn State's approach to local innovation centers (e.g., LaunchBoxes). Penn State will continue to invest and reinvest in such facilities, as needed, to ensure they are modern, functional, and integrated into the educational and research fabric of the University. This investment will raise awareness of Penn State's role as a cultural hub, serve as a magnet for faculty and students, and benefit the entire Commonwealth. We will expand the range and diversity of our programming and service in the humanities and the performing and visual arts and ensure that every Penn State student will have meaningful experiences through personal engagement in these areas.

Prepare students with the skills to work together to develop ethically and historically informed solutions to our most pressing problems.

As a public research institution, Penn State embraces its responsibility to deliver educational experiences that prepare students to be leaders in their communities and to be global citizens. Although culturally beneficial learning occurs across a wide range of disciplines across the curriculum, the co-curriculum, and outreach, the arts and humanities are fundamental for building cross-cultural understandings. We aim to empower arts and humanities faculty and academic units to build further connections for greater impact across the University. We must enhance students' creative and humanistic skills through more opportunities to practice the arts and design disciplines, and to participate in informed discussions and decision-making processes through our humanities programs. We will support collaborations with departments and colleges throughout the University in more seamlessly integrating arts practice, diverse cultural knowledge, and humanities perspectives into their programs and co-curricular experiences.

Empowering through Digital Innovation

Penn State will prepare students for success in the digital age and use digitally optimized outreach to foster economic prosperity in communities across Pennsylvania and beyond.

Penn State will be a leader among institutions of higher education, extending our impact and responding to the potential of technologies to help us enable learning, facilitate research, and serve communities outside our gates and across the globe. To this end, Penn State must increase its capacity to provide faculty, students, and staff with high-quality, physical and virtual educational environments that combine technologies in new and powerful ways; develop and share digital assets that increase learning outcomes, improve communities, and strengthen the workforce; push the capacity of digital tools and technologies to empower research addressing the world's most pressing challenges; and expand creative frontiers in the arts and humanities.

The ability to use data and computational tools to solve many of the world's most significant problems has never been greater, and Penn State is positioned to play a leadership role in mapping a revolutionary global digital future. Penn State will develop interdisciplinary approaches and partnerships to resolve pressing global issues, using technology and teams with the expertise to confront persistent and emerging problems of regional and global significance, and to expand creative frontiers in the arts and humanities. Penn State will meet the needs of small businesses and entrepreneurs by providing innovative solutions in ways that engage students in the problem-solving process. A digitally powerful Penn State will connect students, teachers, and researchers with unprecedented capabilities to extract insights from diverse digital data sets to address critical challenges. Penn State will use technology and its physical presence throughout the Commonwealth to fully realize its unique standing as one University, geographically and virtually distributed and to broaden the impact of its significant research, teaching, and engagement resources.

Create digital solutions to new and emerging challenges.

Penn State will use information technologies and its presence throughout the Commonwealth to fully realize its unique standing as one University, geographically and virtually distributed, and to broaden the impact of its significant research, teaching, and engagement resources. The ability to use data and computation to solve many of the world's most significant problems has never been greater. Penn State will develop interdisciplinary approaches and partnerships to confront persistent and emerging problems of regional and global significance. We will establish Penn State's status as a global leader in digital discovery, innovation, and creativity. Penn State will leverage its interdisciplinary strengths, combined with leading-edge information

technologies, to create powerful new solutions for existing and emerging challenges while also advancing the state of the art for the underlying technologies.

Living with digital innovation.

The ability to use information technologies to solve many of the world's most significant problems has never been greater, with the resulting solutions having the potential to both improve and disrupt the workplace and communities. Penn State will go beyond simply developing these solutions. We will play a leadership role in understanding the impact of such solutions on the workforce and communities. By doing so, we can identify and mitigate unintended negative consequences. In this way, Penn State will meet the needs of small businesses, entrepreneurs, and communities by providing innovative and effective solutions.

Develop a more robust digital infrastructure and culture.

Penn State will invest in state-of-the-art digital infrastructure and culture that seamlessly facilitates and enhances collaboration across units. These efforts must meet the needs of students and other stakeholders with strong digital competencies while also supporting those who need to better develop such competencies. With openness to the use of technology, innovation, and an unwavering focus on learning outcomes, quality and rigor will, and must, remain hallmarks of a Penn State education.

Make online education and personalized learning central to our 21st-century land-grant mission.

Penn State has been at the forefront of education and access since the emergence of the land-grant movement. While the strategic and operational means of realizing the land-grant mission will continue to evolve, the University remains committed to that historically powerful ideal. We will develop and leverage digital assets to facilitate personalized learning that optimizes individuals' educational experiences and enables deeper engagement. We will use learning analytics and adaptive learning in innovative, ethically sound ways to strengthen the teaching and learning experience and outcomes.

Drive economic development.

Penn State will drive economic development in the Commonwealth, as well as in regional, national, and international industry, through facilitated access to and use of the University's digital assets. A digitally agile and effective Penn State will use its powerful resources to enhance global well-being, while building capacity for transformative discovery, creativity, student learning, and engagement.

SUPPORTING ELEMENTS

This plan identifies important elements that must be in place for Penn State to pursue its thematic priorities, and to support its mission and vision. The supporting elements are classified as **Organizational Processes**, **Infrastructure and Support**, and **Constituent Outreach and Engagement**. All contribute to the central concept of **Organizational Excellence**, defined as our efforts to establish a consistent framework for the delivery of initiatives related to moving the University forward.

Organizational Processes

Penn State will lead nationally in the design, development, and deployment of effective and agile organizational processes that support the University's mission.

Strategy should drive organizational processes, not vice versa. The following steps address the planning and development of new processes, the alignment and integration of current processes through system-level

approaches, and continuing improvement and innovation—all geared to promote quality education, scholarly and creative endeavors, and service.

Improve the design, oversight, integration, and effectiveness of organizational processes.

Penn State will continue to systematically and strategically identify key processes that drive value creation and employ leading-edge principles of process design and control to optimize effectiveness and efficiency. The University will increase service quality by continuing to improve the enterprise systems that make up the backbone of business processes. Penn State will manage budgets and resource allocation to provide necessary stability while aligning the allocation of resources and incentives with institutional priorities.

Establish processes for continual institutional assessment, improvement, and innovation, including more systematic reviews of administrative and academic organizational performance and financial stewardship.

Penn State also will identify and implement best practices through benchmarking with peer institutions, affiliates, and industry networks, and create productive mechanisms for regular stakeholder feedback on services and process improvements. The University will continue to develop and implement business intelligence tools and techniques to promote intelligent, data- and evidence-driven analysis and decision making. Penn State also will promote innovation to strengthen institutional capability while effectively managing risk and ensuring legal and regulatory compliance.

Develop a culture of academic business modeling to support innovation.

The University will encourage faculty, staff, and students to pursue new and innovative ideas that will advance academic and operational excellence. When new innovations or opportunities emerge and initial investments are warranted, multi-year plans that provide realistic, well-defined metrics, and targets that contribute to operational excellence will be required.

Constituent Outreach & Engagement

Penn State will partner directly and effectively with our constituencies in sharing consequential research, creative works, and scholarship worldwide.

Penn State already excels in constituent outreach and engagement, and many Penn State academic programs are ranked among the United States' best. The World Campus provides virtual access to students in all 50 U.S. states and more than 80 countries. Penn State's Global Engagement Network of regional partnerships enables the University to pursue globally its tripartite mission of teaching, research, and service. Penn State's large and engaged alumni base provides opportunities for outreach and engagement in every corner of the world. The Penn State campuses, Penn State Extension, and technology-transfer programs also provide access and influence across Pennsylvania, serving as a significant economic force advancing the Commonwealth's long-term vitality by educating students and providing training programs to support business, agriculture, and communities. We will explore further opportunities to translate Penn State's accomplishments more effectively to benefit the constituencies we have committed to serve.

Focus on impact through partnerships.

More than ever before, Penn State will partner with industry, government, and relevant communities to promote the simultaneous pursuit of human health and well-being, environmental quality, and economic security for current and future generations. All our foundations and thematic priorities require effective internal and external partnerships if we are to succeed.

Provide expanded access to Penn State resources.

Penn State does an extraordinary job through outreach and Extension of providing access to our intellectual capital and practical resources. Nevertheless, we will do more. Penn State is rightly seen as a resource to the community, the Commonwealth, and the nation, and we will continue to expand and enhance access.

Promote contributions through strategic communication.

News regarding Penn State's accomplishments may still fail to reach many of our constituents. As people are increasingly distracted and overwhelmed by new forms of communication, we will develop methods to convey the positive impacts of University programs more effectively. We will be systematic in our strategy development and use of contemporary communication and marketing vehicles.

Streamline translation of Penn State discoveries.

We will leverage the unique Penn State educational model to strengthen the communities we serve and be a leader in technology transfer and commercialization across the Commonwealth and beyond. Ensuring that our discoveries and creative works find their way to communities (consistent with our mission of research for the public good) demands that we do what is necessary to maximize the likelihood of meaningful translation to the marketplace, policy environment, or community at large.

Support economic development and community renewal.

Penn State will put critical resources, knowledge, and experience to work on the problems of local (and global) communities. With 24 campuses around the Commonwealth, we have a unique presence in, and commitment to, these campuses' communities. Our health as an institution is drawn from the well-being of these communities, and we have a crucial responsibility to them.

Infrastructure & Support

Penn State will think creatively and act boldly to ensure that its academic infrastructure aligns with and supports the University's mission and vision.

Infrastructure is more than a university's land, buildings, and equipment, though all are important. Penn State's infrastructure—hard and soft, academic and administrative—plays a critical role in the functioning of the University and in the creation of knowledge. People, money, space, information technology (IT), physical plant, enterprise systems, business processes and services, curricular workflow, pedagogy, and human resource services all constitute our core academic infrastructure. Enlightened academic infrastructure is critical to advancing our mission and seamless harmonization across this complex landscape is critical to our effectiveness and efficiency. Penn State will act boldly to make necessary strategic investments in infrastructure to enhance quality and achieve further excellence in support of the University's strategic priorities.

Prioritize investment in our people.

Our faculty and staff are indispensable to our effectiveness as an institution, and Penn State's human resources are considerable. With thousands of faculty and staff distributed across 24 campuses, nothing is accomplished at Penn State without their commitment and hard work. Our ability to recruit and retain the best and most diverse talent demands that we pursue enlightened, state-of-the-art practices in human resource management and remain committed to supporting and enhancing this most vital resource.

Invest in resources creatively and systematically.

We will identify areas in which investment may be required to provide new physical infrastructure or to complement and enhance existing investments, as facilities' inevitable obsolescence hinders Penn State's ability to properly educate students and conduct research. We also will undertake a structured and coordinated approach to research and academic infrastructure with the proportional commitment of additional resources to mechanisms (such as institutes) that cross traditional academic units in high-priority areas.

Drive innovation and discovery.

We will encourage and facilitate robust collaboration to drive innovative thinking across all domains. Investment in programs and infrastructure where Penn State can have meaningful impact will support discovery, research, curricular and pedagogical innovation, and engagement.

Build and manage state-of-the-art information technology.

Given the nature of information technology in ensuring Penn State's operational and strategic future, enlightened investment in and support of technological infrastructure is essential. New IT strategy, the most recent IT assessment, as well as various other reviews and committee assessments, provide excellent frameworks that guide investments necessary to have Penn State be a leader among peers.

Align fundraising to address specific needs.

Penn State will adopt models that encourage development for strategic, cross-unit, collaborative big ideas, fully integrating with and leveraging the University's fundraising campaign. Key stakeholders will help to identify what needs should be prioritized and decision makers will be empowered to proceed accordingly.

IMPLEMENTATION

Strategic planning strengthens Penn State's ability to make informed and often difficult choices and to allocate resources according to evidence, judgment, and priorities. The process involves not only reducing unnecessary expenditures, but also finding new sources of revenue. While this plan purposely articulates strategic goals and not specific initiatives, programs, or topics to accomplish them, we have identified several broad approaches to implementation that support this plan.

Invest thoughtfully based on the University's mission, foundational principles, strategic priorities, and institutional and unit plans.

Resource allocation must be aligned with priorities identified in this institutional plan, as well as those in unit plans. Chief among these is the pursuit of Penn State's mission, as well as integration across multiple dimensions of that mission. To the extent that new initiatives or proposed programs support our strategic directions, they can expect to be prioritized for support, both in principle and in resource allocation. Priority will be given to maintaining robust and critical operational activities, but this plan will guide new investments.

Use planning as the basis for academic and administrative ventures.

Developing a culture of business planning over multiple years for all ventures is crucial for management of resource allocations. Plans should reflect expectations for both sources (as appropriate) and uses of funds, with clear understanding reached on long-term sustainability. As important as it is to launch new programs, it is equally important to have strong governance, management oversight, and a clear appreciation for conditions under which programs will be eliminated and the investment reallocated.

Seek positions of meaningful impact and leadership.

Penn State must be active in identifying areas where it can have a maximum positive impact and emerge as a visible leader. This identification has very practical implications not only for the impact of our work, but also for our ability to attract external resources and investment. Emergence as a leader engenders further opportunities for broader and deeper results.

Understand changing dynamics and their potential implications.

Penn State is subject to both internal and external realities that challenge the ways in which we do business constantly. We cannot simply respond to developments that have a potential to impact the University; we must anticipate challenges and constantly position ourselves to respond to them as opportunities.

Leverage existing resources and strengths.

There are areas where Penn State still needs to grow its presence and available resources. However, the University is strong in many areas that can now be leveraged to maximum effect. We must ensure that our existing resources are wholly and synergistically utilized. New initiatives will be expected to engage those resources to the extent feasible and reasonable, with additional investment anticipated to complement and leverage them.

Seek innovative partnerships.

Despite the massive enterprise that we represent, Penn State simply cannot do it all alone. Partnerships with other universities—as well as with individuals, companies, and other not-for-profit and for-profit organizations—will accelerate innovation and bolster funding for ongoing research and creative activity. Our institution is a magnet, and we must take full advantage of our ability to attract partners to maximize our potential for impact.

CONCLUSION: FROM PLAN TO IMPLEMENTATION TO IMPACT

Penn State's extensive, ongoing, institution-wide planning experience rivals that of any other major U.S. university. For more than three decades, Penn State has continued a commitment to strategic management both for the University as a whole, and for all academic and administrative units. This strategic plan extends that action- and impact-oriented approach.

Penn State is at an exciting juncture. We are well situated to advance our position among the world's top research universities. This revised plan lays out the basis for action toward that end from 2016 through 2025. Penn State will continue to work with all its stakeholders to develop specific plans, programs, and initiatives that support the University's mission, vision, foundations, and thematic priorities. These efforts will include identification of clear goals and metrics to assess when they have been accomplished.

As an extraordinary, 21st-century, global institution, Penn State has an impressive depth, breadth, and variety of collaborative talent across disciplines, along with tremendous resolve and energy. With all key stakeholders working together, the elements are in place for Penn State to dramatically extend its reach and impact through teaching and learning, research, and service.

This publication is available in alternative media on request.

The Pennsylvania State University is committed to equal access to programs, facilities, admission, and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information, or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University's educational mission, and will not be tolerated. Direct all inquiries regarding the nondiscrimination policy to: Dr. Suzanne Adair, Associate Vice President for Affirmative Action, Affirmative Action Office, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901; Email: sca917@psu.edu; Tel: 814-863-0471.

Comments and suggestions are welcome. Contact strategicplan@psu.edu or 814-863-8721.

Copyright 2020, All Rights Reserved

